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AMERICAN FARMER:

A MONTHLY JOURNAL DEVOTED TO

AGRICULTURE AND HORTICULTURE,

DOMESTIC AND RURAL ECONOMY.

ILLUSTRATED WITH NUMEROUS ENGRAVINGS OF

FARM BUILDINGS, IMPLEMENTS, DOMESTIC ANIMALS,

FRUITS, FLOWERS, SHRUBS, &c.

ESTABLISHED 1866.

VOLUME I.

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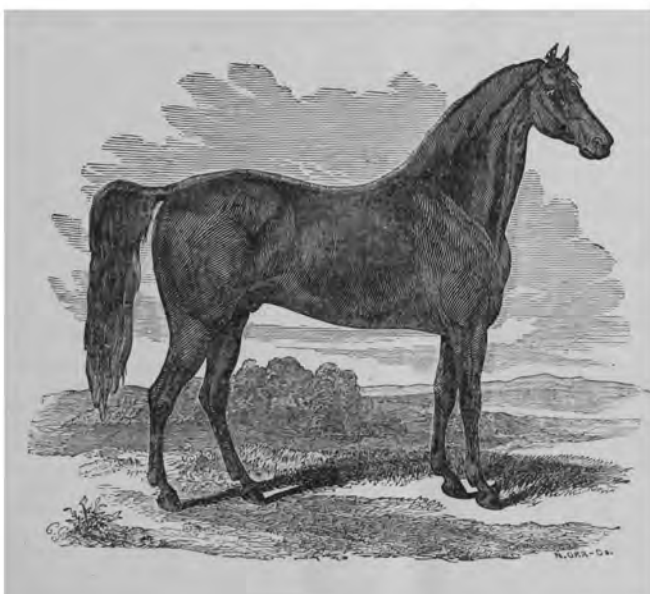

VOLUME I. ROCHESTER, N. Y., JANUARY, 1866. No. 1.

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Volume One, for 1866.

One Dollar a Year, in Advance.

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JOHN TURNER,

Publisher and Proprietor, Rochester, N. Y.

THE FARMER AND THE FARM.

WE have all entered upon a New Year—turned over a new leaf in the book of time—commenced a history for another year; yet the influence of this record upon the future of the actors will be far more enduring, and its effects upon the world for good or evil may be felt when even their names are forgotten. How important then, that this record of our words and acts—this index of our ruling motives, our inner life—should be such as to indicate our gradual improvement in all that is good and true and noble. This is essential to our own happiness, and the good of all within the reach of our influence. It is well we have these land marks—these way-stations on the track of time, where we can stop for a moment to take a note of the extent of our travels and whither they are tending. They afford a good opportunity to take a new start for the future. Wise is he who learns by the past how to act in the present.

We hear much in agricultural addresses and read more in the agricultural press about the Improvement of the Farm. This is all right and proper, but is hardly commencing at the right end of the subject. The maker, of course, must be superior to the object made. The farming is good or bad according to the course pursued by the farmer. If our buildings are inconveniently arranged, in bad taste, roughly and unsubstantially made, and we wish improvement, it would be folly to spend much time talking about improved buildings. We must obtain better architects and mechanics, or set about improving those we have. To a similar suggestion we once heard a farmer remark, that the great difficulty was to have the mass of farmers feel the necessity of improvement. Our idea of improved farming is simply this—the *improved* secures a greater amount of cash for the labor and capital expended than the old system. If it does not accomplish this, it is no improvement. Now, there are very few farmers anxious to labor for one dollar a day if they can earn two, or even willing to expend their strength and that of their sons and wives upon the farm, and after all expenses are paid lay by a hundred dollars or so in the season, when by a little better management they could have saved a thousand. If farmers are not badly slandered they love money as well as other people, and we think will take a little trouble and adopt any new plans that appear feasible, for the purpose of obtaining it. If this is not the case, then indeed they sadly need improving.

We have no sympathy with the too common talk, whether oral or written, that characterizes American farmers as less intelligent than mechanics, merchants, or even the farmers of Europe, so often held up to us as examples worthy of all imitation. Having seen a little of the farmers of other countries, we think we may say with safety that there are no farmers in the world superior to American farmers in general intelligence as well as in a knowledge of their profession. If it is asked, if they do not blindly follow old practices, or are led unthinkingly by example, we say not more so than the most of farmers of England. The uniformity of practice there seemed to us very marked—the rotations almost the same, turnips grown and fed in the same manner, manures applied in the same way. Here and there, of course is an exception, but there is far less of independent thought and action than among American farmers.

The objector may say, how is it then with our mechanics, and manufacturers, and men of science. Our mechanics have their superiors nowhere, our professors of science have made their mark in the world, our manufacturers are beginning to excel in almost all departments, while our inventors and mechanics together have produced implements that have astonished the agriculturists of Europe. But where or when was our agriculture praised or imitated? Those who have not learned how slow knowledge is gained in regard to agriculture, have learned but little of the subject. We have not space to show why this is necessarily so, but may do so in another number. We will at present allude simply to one or two facts. The mechanic, the inventor, or the manufacturer, can make a hundred experiments in a year, the agriculturist but one; even this sole experiment may be affected by season, climate or accident, such as storms, &c., so as to be worthless, and in any event needs frequent repetition. Again, experiments of the greatest value in our Southern States, or in California, are entirely useless in the Northern States. Each section must learn for itself. Knowledge gained in the agricultural profession is not showy—not brilliant—it will not attract the attention of the world, while it advances its best interests. If our mechanics and inventors have astonished the agricultural world with their beautiful and useful implements, who, we ask, have encouraged them in this work? Who purchased and used them when made? American farmers, of course. The inventor is never far in advance of the demand; indeed demand is the mother of invention. We say this much, lest some of our readers should obtain the idea, from what we may now or hereafter write, that we belong to the class of croakers who are constantly harping upon the blindness or ignorance of American farmers, and contrasting them unfavorably with other classes.

To return to the subject of improvement of which there is very great need in many, we repeat, all improvement must commence with the man, then the work is thorough and general. He must obtain new ideas, new motives, become in fact an improved edition of his former self, and all around will feel the charm of improvement. This improvement will be first felt, not in the barn-yard or the field, but in the house. The companion of his joys and sorrows, particularly the latter, will feel more joy and less sorrow than ever before. He will feel as much pleasure in having his wife look pleasant, cheerful, happy and neatly dressed, as he does in having his favorite team fat, sleek and in heart. Indeed, so great *may* be the improvement—in fact, we have seen it so in extreme cases—that the farmer may feel as much annoyed at seeing his wife look care-worn, haggard, hopeless and poorly dressed, as he would at seeing his horses rough, over-worked and half starved. The children, too, feel the change in kinder treatment, more care for their education and other important interests. The house and the garden change, as if by magic. The little flower beds of wife and the girls is no longer a nuisance and a trouble, subject to unkind remarks; a manly hand assists the weaker ones, and receives in return the young hearts' gratitude and pleasant smiles. With a heart light and happy—conscious of a noble effort at well-doing, the improved farmer pursues his course and everything prospers under his well directed efforts.

THE FARMER'S WINTER.

Farmers, generally, regard their winter months as lost time—because they are able to perform so little productive labor. They can neither plow, nor sow, nor plant, nor cultivate their crops, nor reap their harvests—but their labor, now-a-days, when there is no more forests to destroy, consists mainly in feeding out to their stock a portion of the products of their summer's labor, and in cutting and preparing fuel for the family. But those who know how to make the most of time and opportunity, will make the winter's leisure as profitable as the summer's toil.

Without reference to the valuable mental improvements which the farmer may make through the long winter evenings, he may so improve this season of leisure as to add greatly to the productiveness of his farm. He can make his plans for the future—determine what crops he will cultivate, and what fields are in best condition for growing the different crops—consult his neighbors—the best agricultural journals—and all sources of information, and, if possible, make improvements in his methods of culture—his system of farming.

He may review his past labors and see if he has not been raising some crops that did not pay. We have no doubt that most farmers are raising some crops, from year to year, that do not pay the cost of production, in blissful ignorance of the fact, for the reason that they do not keep accounts with their crops, and bring them to a *reckoning*. They continue to grow certain crops, because they always have grown them, and their fathers did before them, without *knowing* whether they are a source of profit or loss to them. Any merchant or manufacturer who should do business on such a loose system, or want of system, would soon find his effects in the hands of the Sheriff, and himself earnestly seeking employment.

It is seldom that two farmers, even in the same neighborhood, can pursue the same system of cropping with profit, owing to a difference in soils. One

may have a moist, heavy soil, on which oats, barley, grass, and similar crops will flourish, and the other a light, dry soil, better adapted to potatoes, Indian corn, &c. Farmers should study their soils carefully, and ascertain what crops they are best adapted to. Now is the time to do it—when work is not crowding—when every day's labor is not requiring the undivided attention, leaving no time for retrospective or prospective thought.

The farmer who improves the winter's leisure in gathering information—in thinking, planning, and resolving, will, in his prosperous career, leave far behind, him who neglects to improve his mind, and who never *looks ahead.*

SHOCKING CORN.

EDITORS FARMER:—I shall be happy through the columns of your new monthly to revive and discuss with a writer from Northumberland, Pennsylvania, the best methods, old or new, of harvesting and saving the corn crop. In my communication in the September number of the old *Genesee Farmer* I simply suggested some general principles upon which to base operations in this line of work, and in what Mr. S. has said in reply I fail to see any answer to my positions or any better mode proposed. In fact I do not see that he even attempts to offer any arguments *vs.* my theory, only that 'tis old, saying if we had had it twenty years ago, &c., to all of which I will simply say that when we arrive at a point where men are *born educated farmers* then it will cease to be necessary for them *to learn.* But while we continue to be born in ignorance, I think that valuable information will not become obsolete. In conclusion then let me say, I did not intend to give more than the form, and order, or style in which to do this work, and to make it profitable and economical in time, and saving of the crop, which I am satisfied will gain both, far better than the style Mr. S. has given. Then there are other advantages in my style over his, which I shall be happy to give you at a future time if Mr. S. will respond. I like variety, not for its sake alone, but because by it we learn, and it then really becomes the spice of life.

Yours truly,

JUNIUS.

December, 1865.

BRUISES AND FELONS.—Hot, fresh-made brine, will relieve a bruise or a felon. The sooner applied the better. Keep using it three or four times a day, until the soreness is all removed.

A FARMER returning home in his wagon, after delivering a load of corn, is a more certain sign of national prosperity, than a nobleman riding in his chariot to the opera.—*Germantown Telegraph.*

INSURANCE OF FARM BUILDINGS.

WE are confident that too many farmers neglect to insure their buildings. In cities and towns the man who does not insure his property is the exception and is generally considered improvident. It is true that farm buildings are less liable to be destroyed by fire than those in cities, but it is equally true that when once on fire there is but very little hope of saving them. A careless smoker, throwing his unburned but fired tobacco upon a bunch of hay or straw, the dropping of a candle, the explosion of a lamp, have caused the destruction of many barns and sheds containing not only the hay and grain of a whole season's labor, but valuable animals, and the choicest of the farm machinery. Many a house has been burned from explosions of kerosene lamps, and from careless use of matches among children. It is useless to enumerate all the chances of disastrous fires, even in the country, where also incendiarism is not unknown.

It is the duty of the provident farmer to take all possible precautions against loss by the great devouring element, for he has no steam fire engines and finely organized fire department to work against its ravages. A few buckets of water thrown by his own hands, or, possibly, the aid of a few neighbors is all that he has to oppose it.

We have no particular insurance company to name in this connection, nor is this item suggested by any agent or person connected with an insurance company. We merely write it because we wish to awaken our readers, who have no insurance upon their property, to a realizing sense that it is better to pay a small tax, annually, to a reliable organization of this kind, which in case of fire will step in and bear the loss, than to withhold it from parsimonious motives and, possibly, in a single night be stripped of one half their worldly possessions.—*Prairie Farmer.*

BEST VARIETIES OF FOWLS.—The *Scottish Farmer* gives the following estimates as to the value of several varieties of fowls:

For chickens for the table—Nothing like the Dorkings.

For size of egg—Nothing equal to the Spanish; but they do not lay very regularly.

For number of eggs—Nothing like the Hamburghs, but the size of egg is small compared to the Spanish. The Hamburghs lay about eleven months in the year, and never sit.

For eggs during very hard frost and snow—There are nothing like Brahmas. Hard weather does not seem to affect them, and they always look well and "saucy-like," let the cold be ever so severe.

THE creative power of manure multiplies its value many times.

NOTES FOR THE MONTH, BY S. W.

THEN AND NOW.

THE early settlement of Seneca county was in the day of small things, before canals and railroads were born. After the farmers had subdued the immense forest and began to have surplus products to sell, the prices were naught. I have seen the plumpest of wheat sold at 31 cents a bushel, pork at $2 the 100, in the dressed hog, dressed chickens at six cents each, and good roll butter at eight cents a pound. Next to wheat, oats were the only cash crop, as they were in demand for the numerous stage horses, and the great number of Canistoga six-horse teams and movers teams that then thronged the great western turnpike road. Every farmer and farmer's wife in those days dressed in the family home-spun, save now and then a cambric or calico dress bought by the toiling matron with the avails of many churnings. Of course they had to dispense with nearly all imported luxuries, crust coffee, except at harvest time, and then coffee without sugar among the Germans. Among the Yankees a quarter of a pound of skin tea was the maximum, and then the woman often said she wanted it only for company (visitors.) But all that is changed now, and the farmer's daughter talks more of music and a piano, than of the spinning wheel, now obsolete and gone. Instead of a few groceries sold at the dry goods stores as of old, there are now more grocery than dry goods stores; and the latter are a long range of deep and showy marts of fashion, compared with the little shops where tea, molasses and whisky were kept, cheek by jowl with calico and cambric. More pounds of tea, coffee and sugar are sold now to farmers in a day, than the same number of farmers would buy in three months forty-five years ago. Since that time our rural population have colonized nearly as much as they have increased, as Michigan and the west can testify. But the late and present enormous prices of agricultural products tell the story why farmers are more luxurious in their living than they were in the early day of low prices and small things. Wheat $2.50 per bushel, corn a dollar, slaughtered hogs 16 cents a pound, butter 44 cents, chickens 18 cents, and fresh beef still dearer. Within the last month flour has declined more than a dollar per barrel in New York, while the millers here have advanced the price fifty cents a barrel. Their excuse is, that the farmers will not sell their wheat even at the New York quoted prices, and the bread eaters must pay the extortion.

A GREAT CORN CROP.

JOS. WRIGHT has just done husking his great crop of dent corn; he has grown nearly two thousand bushels of ears on twelve acres, and what must appear strange even to those farmers who are not slovenly, you could not find a soft ear in the whole field. The ears were from sixteen to twenty round, many of which shelled a heaped pint. He has grown this corn the past eight seasons with entire success, and having found by experiment that it yields one-third more than flint corn with the same tillage, he now imports his seed from Illinois every year and will evermore eschew the flint varieties. Such success in corn growing in Western New York may seem strange to a farmer who never planted or manured a well underdrained field, and who in consequence has soft ears enough in his crop of the little eight rowed to keep his fatting hogs through the fall months.

HOW MUCH PORK FOR A BUSHEL OF CORN.

It is said that a bushel of corn will make ten pounds of pork, and if the corn is ground and cooked it will make one-third more, particularly if fed warm. An experienced farmer says, if you boil the corn until it cracks open, and feed both corn and the water it is boiled in, it will do as well as boiled meal, thus saving toll and the expense of going to the mill.

HORSE CHESTNUT.

Aesculus Hippocastanum. Although this tree is not valuable as constructive timber, it is of very rapid and beautiful growth, makes a capital shade and one of the quickest and best of screens for an exposed location, when planted thickly in a row for that purpose; its foliage and flowers are of great beauty, and its fallen leaves, large and bright as they are, will be eagerly devoured by cattle long after other deciduous leaves are decayed and inedible. The nuts of the horse-chestnut vegetate very quickly, sending strong roots into the ground, and a plant three feet high the first season on a fertile mellow soil. Unlike the Spanish Chestnut it will grow more rapidly on a tenacious than on a light sandy loam.

CLOVER HAY.

Why is it that farmers almost invariably neglect to cut and cure clover in the bloom, before the blossom has dried up and decayed? I cut a small patch of clover on the 20th of June and cured it in cocks. It took three days, and then a light sifting of air-slacked lime was applied to it to absorb moisture. But it was as much better than the clover hay I have since bought, as green tea is better than huckleberry leaves, if a cow's testimony may be taken in the premises.

Waterloo, N. Y.

MEADOWS should be cleaned of all bushes, rocks stones, and other rubbish which may interfere with the mowing machine during the operations of another season.

THE HONEY BEE.

Within the past year I have received numerous letters from various persons, all of them professing to be bee keepers, or else wishing to become such; I have also had numberless visitors to my apiary, who came for the purpose of obtaining information as to my mode of management. From my observation of all these sources, I am led to the opinion that even among intelligent, well informed people, there is great ignorance of the natural history of the bee, and also with regard to the discoveries and improvements in bee keeping which have been made within the last twenty-five years.

It has been well observed, "study the theory if you would not be a bungler,—for practice is nothing but applied theory." When a man tells me "he doubts if there is such a thing as a queen bee, but rather thinks every worker raises a few young ones in the season for it," I am not surprised to hear that though he "has kept bees twenty years, he never had *luck* with them, and thinks the country too much settled up for bees to do well." If another, several steps farther advanced in the knowledge of the subject, "does not know who DZRIEZON is, or what his theory is, and doubts very much if it is right to make artificial swarms, because it is contrary to notions," I am sure that before he succeeds in the business he must "study the theory."

There used to be an excuse for erroneous opinions and inadequate knowledge concerning this insect, for its habits and history were surrounded by mystery and superstition; and no amount of study and observation could penetrate into hives which were as a sealed book to all.

This day has however long gone by, and now all the principal and essential facts respecting the bee, are as well understood as any other branch of natural history; and the means of acquiring this knowledge are within the reach of all.

Throughout the Western States a vast source of wealth lies neglected. In all this region honey producing trees and plants abound. From the first blossoms of the willow in the Spring, comes a succession of them, only closing with the brilliant asters and golden rod, which last until frost; many of them being unknown farther east. Our soil also is admirably adapted to the cultivation of the rape, mustard, borage, buckwheat and Swedish white clover, plants all rich in honey. The reports of the yield obtained from colonies of bees in a single season when properly managed, certainly ought to convince all that this is one of the most profitable branches of horticulture when well understood.

I have thought that a narrative of the advances made both in theoretical and practical bee keeping in Germany and this country, with a plain statement of the main facts as now admitted by all apiarians and upon which all bee keeping must be based to be successful, would be a profitable introduction to some hints as to the best way of keeping bees, so that they will every year, whatever the season, yield a rich return for the care bestowed on them. The business requires but little capital and so little strength, that it may be made an agreeable recreation for the man of toil and a most remunerative employment for women and invalids.

DZRIEZON, of Germany, some twenty-five years ago propounded a new theory regarding bees, confirming many things set down as facts by HUBER, yet differing from that wonderful man, in some important particulars. So far as his views were novel, they were deduced from his own observations during a life time of experience.

Some of the ablest natural historians and practical bee keepers differed from his theory, and a vigorous strife was waged on controverted points. The German Bienenzeitung, or bee journal, was made the medium of the controversy, which did not cease until the Italian bee was successfully introduced into Germany. This distinct species of the insect furnished the means of conclusively settling disputed points, and DZRIEZON'S theory was triumphantly sustained; his enemies becoming his warmest friends.

A few naturalists who held out longer, were obliged next to yield, overwhelmed with evidence, and now there is neither doubt nor cavil respecting the important points of this theory—it being accepted by all as beyond dispute.

In a scientific point of view, this subject is full of interest. The laws of instinct which govern these wonderful little insects, are like those of all other animated things, peculiar to themselves, differing from those which govern anything else. They are simple and when well understood, one can manage bees in almost any way he pleases, so long as he does not *go counter to their instinct;* but they are fixed and immutable, and when we deviate from them in the slightest particular, we are sure to repent of it, for loss must follow. We must study the theory then, before we can rightly apply the practice.—*Cor. Prairie Farmer.*

MANURING TREES.—Now is a good time to put some manure round your fruit trees. The early spring rains will carry the soluble elements into the soil and cause them to start with fresh vigor in early spring and summer. Apple trees will send out their roots a great distance for food. We recently cut off roots a distance of forty feet from an apple tree. Thus a single tree may extend its roots across the diameter of a circle two hundred and fifty feet in circumference.

THE CATTLE PLAGUE AND THE PRICE OF MEAT IN ENGLAND.

The maintenance of the present extravagant prices of meat seems a curious anamoly in a population like that of London, where all classes have daily access to the various facts that should influence the state of the markets for the necessaries of life. Every family in the metropolis, and also in most of our principal towns, is now patiently submitting to an extra charge for all the animal food they consume, ranging at least from 1d. to 8d. per lb., and in many cases experiencing serious privation on pretext of scarcity, which can be shown by official statements, not only not to exist, but to be the very reverse of the fact.. It is ascertained that the number of cattle that have perished from the disease, or been slaughtered as a precaution, from the date of the recognized commencement of the rinderpest, has been about 16,000; while, on the other hand, the excess of importations of living animals during the first nine months of the present year, compared with the same period of last year, has been as follows:—Oxen, bulls, and cows, 46,576; calves, 4,666; sheep and lambs, 184.891; and swine and hogs, 32,662. Thus of cattle alone there has been an extra supply of exactly three times the amount that have been sacrificed through the plague. And even this circumstance indicates only in a slight degree the preposterous nature of the exactions now prevelant in the trade, since there can be little doubt that the decrease in consumption which has been consequent on the existing prices, has actually lessened the demand by far more than the whole number of animals thus lost. It is also to be noticed, that large as has been the number of animals imported this year, as compared with last, the excess has ben very much greater as compared with 1863. Under these circumstances it is evident the public will have only themselves to blame if they permit the current charges any longer to be imposed upon them. If the graziers and butchers, could have carried their point by stimulating the first alarm to the desired hight, so as to induce the Government to enter upon the folly of ordering not only an indiscriminate slaughter of all animals attacked, but of totally prohibiting the introduction of any further foreign supply, they would doubtless have had the advantage of a period during which the population must have been compelled to take their choice of starving or of paying any prices exacted; but we are, happily, not in this position, and the exercise of a little firmness and intelligence is all that is required to place the matter forthwith on a proper footing.—*Foreign Paper.*

UNLEACHED ASHES AS A MANURE.

Unleached ashes, in my humble opinion, are of far more value than many people imagine. I have used ashes as a manure every year since I commenced farming, and so satisfied am I of their fertilizing value, that I would not sell a bushel for twice or thrice the price paid for them at the asheries. I will give a little of my experience in the use of them as a fertilizer, as the best I can say in their favor. The greatest increase caused by the use of them that I have known, by actual measure, was on potatoes, used as a top-dressing in the year 1846. After dressing my corn with ashes that year, I had one bushel left, which I put on eight rows of potatoes, which yielded, at digging time, one bushel more to the row than any other rows in the field. It was a sod land, turned over in the spring and planted without manure of any kind. I have no doubt that the one bushel of ashes increased my crop of potatoes eight bushels. The rows were about fourteen rods long.

For corn, I think ashes and plaster, mixed at the rate of two parts of ashes and one of plaster, and a small handful of the mixture put into each hill, is the best way to use them. This mixture I prefer to either, alone or both, used as a top-dressing. I think it has made one-half difference in the value of a piece of corn, judging from one row left without the ashes and plaster, not from actual measurement. It was on ground without manure of any other kind. Ashes alone, as a top-dressing, are very beneficial to corn. After it has come up, I find where I have used it so, the stalks are larger and taller, the ears longer and better filled out, and the corn sounder and some earlier.

On grass, such as meadow, if it has run out, so that it yields but light crops, a dressing of ashes, fifteen or twenty bushels to the acre, has increased the crop of hay two, three, or even four-fold, and, for several years after, good crops of grass have been obtained.

I have never used ashes on wet land, nor with any other manure except plaster.—I. RANDALL, *in Wisconsin Farmer.*

HOW TO CUT AND TRIM PORK.

The following directions, says the Baltimore *Sun*, may be found useful at the killing season:

Have the hog laid on his back on a stout table. Clean the carcase of the leaf fat. Take off the feet at the ankle joints. Cut the head off close to the shoulders, separating the jowl from the skull, and open the skull lengthwise on the under side, so as to remove the brains fully. Remove the backbone in its whole length, and with a sharp knife cut off the skin—then the fat, leaving only about one inch of fat on the spinal column. The middlings or sides are now cut from between the quarters, leaving the shoulders square shaped, and the ham pointed, or it may be rounded to suit your fancy. The ribs are next removed, partially or entirely from the sides. The trimmings or fat from the hams, and flabby parts of the sides, are rendered up with the backbone strips for lard. The sausage meat is cut off from the leaf fat and ribs; and other lean pieces are used for the same purpose. The thick part of the backbone that lies between the shoulders is called the chine; it is cut from the tapering bony end, and the latter part called the backbone by way of distinction. The backbone should be used while fresh: the chine is better after being smoked.

THE GUINEA FOWL---ITS VALUE AND USEFULNESS.

WRITTEN FOR THE AMERICAN FARMER, BY C. N. BEMENT.

FROM the earliest to the present time, but few farmers have patronized the Guinea Fowl, and wherever found on the farmer's premises, their owners seem to speak of them in the spirit of ignorance, which actuated Barnaby Googe when he mentioned them some three centuries ago, as the "outlandish birds called Ginny Cocks." This neglect we consider very undeserved, for they are of all known birds perhaps the most prolific layers of excellent eggs. Week after week and month after month, sees no, or very rare intermission of the daily deposit. Even the process of moulting is sometimes insufficient to draw off the nutriment the creature takes to make feathers instead of eggs, and the poor thing will sometimes go about half naked in the chilly autumnal months, like a fowl that had escaped from the cook to avoid a preparation for the spit; unable to refrain from its diurnal visit to the nest, and consequently unable to furnish itself with its winter clothing. As the body of a good cow is a distillery for converting all sorts of herbage into milk, and nothing else, or as little else as possible, so the body of the Guinea Hen is a most admirable machine for producing eggs out of insects, vegetables, grain, garbage, or whatever an omnivorous creature can lay hold of.

"I have been informed," says Buffon, "that it is wild in the Isle of France, and there lays ten or twelve eggs on the ground, in the woods; whereas, those that are domestic in St. Domingo, seek the hedges and bushes to deposit their eggs, laying 100 or 150, provided that one be left constantly in the nest." These eggs are smaller in proportion than those of an ordinary hen, and their shell is much harder, and though small, are well flavored and numerous.

"The Pintado (Guinea) Cock," Dampier says, "breeds also with the common hen, but is a kind of artificial union which requires attention to bring about. They must be bred together from their infancy, and the hybridous intercouse gives birth to a bastard progeny, and of an imperfect structure, and disavowed, as it were, by nature. Their eggs are destitute of the prolific power, and the race is extinguished in the death of the individuals."

We have heard complaints of "bad" that is unfertile eggs, which are laid by Guinea hens, but this only seems because those who keep them are probably ignorant of the fact that they pair like pigeons, and that very rarely indeed does the male bird prove unfaithful to his mate. This is no drawback upon their being kept for the purpose of profit, since the male of the second year is excellent as a table bird, and should be slaughtered in the spring to make room for a youthful successor.

Whatever number of Guinea fowls are kept, there should be an equal number of each sex, for as we have already stated, they pair like pigeons. The desirability of having the males and hens in similar numbers, renders the inquiry important—how to distinguish the one from the other?

There is but one unerring characteristic, namely: the hen only utters the well-known cry of "come-back." The note, or wail, for it is mournful, of the male bird, is totally different. He has only the harsh shrill cry of alarm, which, however, is also common to the female. He has a somewhat larger wattles than his mate, and runs on tiptoe, with a mincing gait, which the hen never imitates; but her "come-back" cry is the only unmistakeable mark of distinction.

The Guinea hen is an exceedingly noisy bird and for this reason, some have termed it *gallus clamorous*. Its cry is sharp, and by its continuance, becomes so annoying and troublesome, that though their flesh is very tender and delicate, and much superior to that of the ordinary poultry, most of the American farmers have given up breeding them.

They are very prolific layers, as before stated, and very uncontrollable in the selection of their nests. By this propensity, they occasion some inconvenience; but it has been aptly asked—"What does it matter whether you get one egg a day or seven at the end of the week?" Besides, nest hunting is good fun for the young folks, and sometimes for the master or mistress, too.

The hen usually selects the dry bank and behind some dense bush, often a cluster of current bushes, as the place for the nest; and when the eggs are taken from it, she never, in our experience, was ever known to visit the same nest again. To prevent this desertion, and yet to obtain their eggs for use, it is a good plan to have a dozen or two porcelain eggs, and to substitute one of these for each Guinea fowl egg as it is taken from the nest.

When the Guinea hen's nest cannot be discovered, it is a good plan to watch her and her mate, and if he is found alone, it is tolerable evidence that her nest is not far off from him; and it is reduced to a certainty if he becomes anxious and clamorous when any one approaches. In some instances, the hen sits upon her eggs thus deposited, and when this is the case, she usually brings off a large brood. We once knew an instance of twenty-one chicks being thus produced, but Mr, Dixon heard of as many as thirty-two: and in one instance, he knew of twenty-two being reared.

Twenty-eight days is the usual time required for hatching; but one or two days more frequently elapse before the whole brood have merged from the

shell. During the incubating time, the hen should be disturbed as little as possible; but so soon as hatching is completed, both she and her progeny should be immediately transferred to a coop, for the young ones, like those of the partridge, are at once capable of traveling; and, as she has no maternal discretion, she would, if at liberty, speedily kill them by excess of exercise. The best mode of hatching Guinea hen's eggs is to place them under a game or a bantam, for these are the best of mothers. Seven eggs under the latter, or thirteen under the former, will be a sufficient allotment.

It is almost hopeless to endeavor to establish Guinea fowls by purchasing full grown birds. Naturally wild and timid, no sooner are they turned loose in the place they are wished to adopt as their new abode, than they seize the first upportunity to be off, in the vain attempt to regain their old home. In most instances they are thus lost, or if retained, are not productive the first season, and ever afterwards are shy and unsubdued, even by the kindest treatment. Such are the usua. consequences, and the exceptions are very few.

The best course to pursue for obtaining a stock of Guinea fowls is to procure a sitting of eggs, from some friend or neighbor, on whom you can depend for their freshness, and also, if possible, from a place where only a single pair is kept.

Guinea Fowls thus reared, become attached to the place, and if frequently fed, at stated times, and one of those times being just before roosting, they will return punctually like other domestic fowls, though unlike those, they may take wide ranges during the day time. This habitual return, as evening approaches, is essential to their preservation; for although in summer, they would thrive well, roosting at night in trees, yet in winter, they would be killed by the severe cold.

When fed at night, they should be watched and gently urged into the fowl house or shed, and they will there amicably roost with its other tenants, although we prefer giving both to the Guinea fowls and turkeys each a separate sleeping apartment. Their roosts need not be so near the ground as those for the poultry, because they are their superior in flying; but there is no advantage in placing them far from the floor, except, if warmly roofed, that the upper part of the house is warmer. If the house is a warm one, which it should be, especially for Guinea fowls, this reason for elevated roofing does not require consideration; and we can bear testimony unreserved, that low perching is preferable for all fowls.

The principal objection to keeping Guinea fowls is their continuous clamor for "Buckwheat," "Buckwheat," and its incessant cry of "come back," "come back," and even this again has its advantages, invariably predicting a change of weather, as by their continued clamor and watchful nature, they are useful in protecting the other poultry from the hovering hawk, for which reason, if no other, a few should be kept.

Poughkeepsie, Dec., 1865.

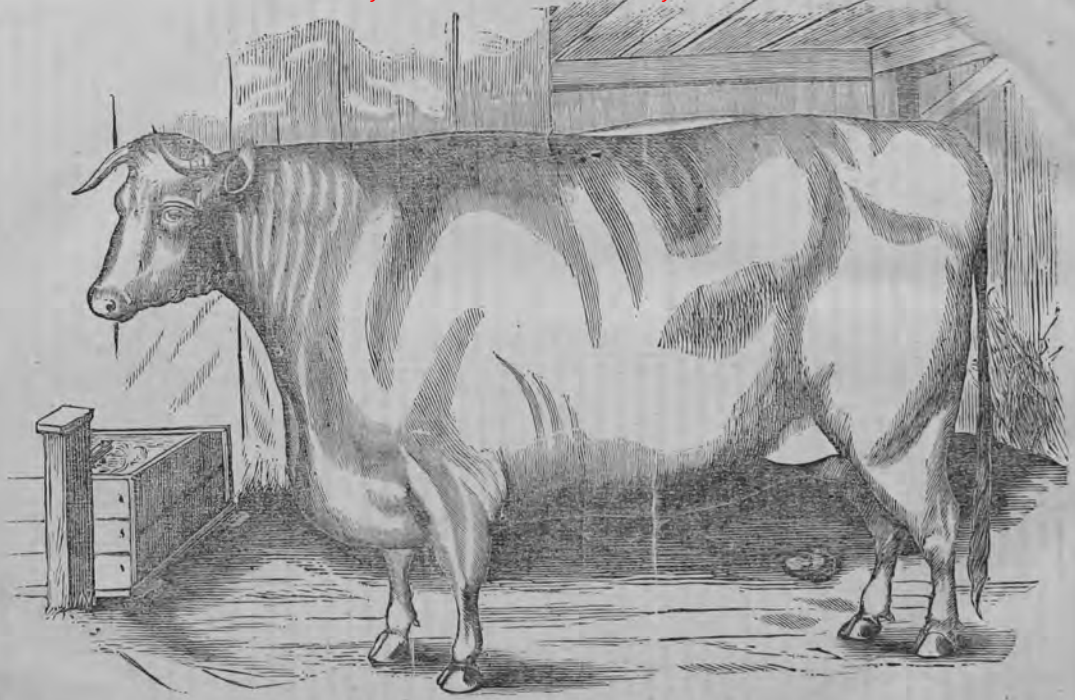
Pear Trees, Blossoming in the Fall.

MESSRS. EDITORS.—I have a dwarf pear tree, of the Bartlett variety, which, on the tenth day of November, of this year, was out in full bloom from top to bottom. It is about seven years old, and a good size. This, to some superstitious persons, would seem to betoken evil, bad luck, a sign of sickness or death. I, however, attribute it to a sap pressed growth during the fore part of the season, caused by transplanting this Spring. I have another of a different sort which had three bunches at the same time, perhaps from the same cause. This is not the only case of the kind, as I see in the Agricultural papers that different trees in different localities have shown the same disposition to put forth buds and flowers in the fall instead of Spring. All I am sorry for is, that I shall have to wait a year longer before I can eat pears of this tree. D. W. SAMPSEL.

Northumberland.

ABOUT FIELD MICE OR MEADOW MOLES.—The field mice or meadow moles appear to be very abundant this season, and it behooves us all to protect our trees from their depredations the best we can. I have lost more valuable fruit trees by the mice girdling them, than by all other causes put together. One of my remedies is to wrap the trees around the coller, as close to the ground as possible, and for about a foot up the stem, with tar paper. I take common rag paper—any paper that is strong enough will do—and paint it well with gas tar. When it is a little dried, I roll a half sheet around the tree, at the ground, and tie it there with a piece of String or bass bark. The mice will never eat the tar paper, or injure the trees unless they get below or above the paper. This is the cheapest, the most easily applied, and the most effectual preventive that I have ever tried. Allow me to caution your readers again at putting the tar on the tree itself, as some have recommended. The remedy would be worse than the disease But the tar applied to the paper and that wrapped round the tree, will never do any injury. The paper will last many years if taken care of. Nothing but the heavy frozen snow seems to hurt it, and that does sometimes by crushing it down. Rain, and sun, and wind, seem to have no effect on it. I have some which I have had throwing round, and laying about seven or eight years, and apparently as good as ever. It will not wear or rot out if it does not get torn.—J. S.

SORGHO SEED.—A portion of the seed purchased in China by the agent of the department of agriculture at Washington, has been received. Two lots shipped from Shanghae in May last have not yet come to hand.



PRIDE OF LIVINGSTON.

CHLORIDE OF LIME FOR VERMIN.

A correspondent of the *London Builder* writes:

Some years ago I read in a French scientific periodical, that chloride of lime would rid a house of all these nuisances. I treasured up the information until opportunity offered for testing its value, and this occurred some four years since. I took an old country house infested with rats, mice and flies; I stuffed every rat and mouse-hole with the chloride. I threw it on the quarry floors of the dairy and cellars. I kept saucers of it under the chests of drawers, or some other convenient piece of furniture, in every nursery, bed, or dressing-room. An ornamental glass vase held a quantity at the foot of each staircase. Stables, cow-sheds, pigsties, all had their dose, and the result was glorious.

I thoroughly routed my enemies, and if the rats, more impudent than all the rest, did make renewed attacks upon the dairy in about twelve months, when probably, from repeated cleansing and flushing, all traces of the chloride had vanished, a handful of fresh again routed them and left me master of my own premises.

Last year was a great one for wasps; they wouldn't face the chloride; though in the dining-room, in which we had none—as its smell, to me most refreshing and wholesome, is not approved by all persons—we had a perpetual warfare. And all this comfort for eight-pence! Only let housewives beware that they place not the chloride in their china pantries, or in close proximity to bright steel wares, or the result will be that their gilded china will be reduced to plain, and their bright steel fenders to rusty iron, in no time.

WINTER MANAGEMENT OF COWS.

As a general rule, the feeding of grain is not customary during winter. Some grain is often fed, however, for a short time before and after calving. Mr. GEORGE WILLIAMS fed Indian corn and oats, ground together in equal proportions, at this time, but thought Indian corn not a healthy feeding material until after the calf is dropped, so that he would feed little if any until then. Some feed grain in summer, but not many; in private dairies, the cows have the whey often to themselves, and it is frequently fed on shorts or bran; where the whey remains at the factories, however, the cows have to do without. As already stated, Mr. WILLIAMS raises considerable corn-fodder, sowing it as early as possible, and then at intervals of a fortnight. The effect of this fodder was immediately traceable, he said, in the milk, both as to quality and quantity, but in the former respect more than in the latter.

Among our visits was also one at the Utica Lunatic Asylum, whose energetic and accomplished Superintendent, Dr. JOHN P. GRAY, devotes great attention to the management of the farm—particularly of the cows, which furnish milk for the six or eight hundred patients he generally has in charge.

Year.	No. of Cows.	Yield in Quarts.	Average per Cow—Quarts.
1858	23	63,578	2,764
1859	23	61,921	2,692
1860	31	70,279	2,267
1861	30	72,140	2,405
1862	33	97,320	2,949

We obtained from the steward's records of this Institution, the foregoing figures as to the quantity of milk made, which shows an average annual yield, per cow, we think, very rarely excelled. To arrive at these averages, however, we take the *whole number of cows kept*, not the average number in milk. Thus, at the time of our visit in June, there were 28 cows on the place, but only 21 of them in milk.

It will be observed that the average yield of milk per cow was raised, in 1862, more than 500 quarts upon the preceding year, and fully 400 quartz upon the average of the four previous years included in the steward's records. This increase was mainly owing to the *cooking by steam* of the winter feed. From early in autumn until green food is plenty, in May, say for full seven months, the following system is adopted:—At about 5 A. M. hay is distributed to them; the stable is then cleaned out. Water warmed by the steam engine of the establishment is brought to the barn, with which the udder is washed previous to milking. They are then milked, and after breakfast receive a little more hay. The steamed food, which forms the next meal, is thus prepared: there are two sheet-iron cans, each containing perhaps 20 bushels; they are filled with roots, scraped to remove the dirt adhering to them, and covered on top with three or four inches deep of meal, the whole depth of the can being 5 feet. Waste steam is admitted at the bottom, and the cooking process continued about 4 hours, or perhaps from 3½ to 4 or 5 hours, the latter if the steam is low. By this time the whole is thoroughly cooked into a pulpy mass. It is then taken out and put into a box on truck wheels, in which it is mixed with about one-third its bulk of middlings and shorts. The shorts are in the proportion of twice the quantity of middlings. After mixing, three-quarters of a bushel of the whole is given per head. The main dependance in roots is the beet, but carrots are also used in considerable quantity; ruta bagas are found to affect the milk. Beets are preferred to carrots, but cows are found to like an occasional change, for the sake of variety. The long blood beet is the variety selected as best. The cows are salted three times a week; but it is common we believe, with many dairy farmers, to keep salt constantly before them. —*L. H. T. in Rural Affairs.*

ADVERSITY has ever been considered, as the state in which a man most easily becomes acquainted with himself particularly, being free from flatterers.

COTTAGE RESIDENCE.

We take pleasure in giving the above cut and accompanying ground plan for a Cottage residence from Downing & Vaux's Villas and Cottages.

The design illustrates a cottage residence built for Mr. Wright, of Goshen. The whole building is under one roof, and the kitchen is so placed that its contiguity to the principal rooms does not interfere with the privacy that properly belongs to the apartments in constant use by the family.

A porch of brick, communicating by arched openings, with verandahs on each side of it, forms the principal entrance, and opens on to a hall 8 by 15 feet six inches. This porch is so arranged that the arched openings at the sides can be closed with glazed frames in winter, and the central opening fitted with a frame and door, thus making a double hall, that is a great advantage in severe weather, as it prevents the ingress of a draught of cold air whenever the front door is opened, and offers a protection from storm to visitors while waiting for the servant to attend to the bell.

The parlor and dining-room open from the hall by doors opposite each other. The parlor has a bay-window and a door opening on to a small private verandah that is not overlooked by any one approaching the house. The dining-room is 15 0 by 18 6.

A pantry between the kitchen and dining-room communicates with both; and by this means convenience of access, without loss of privacy, is secured. A store-room for the kitchen is also supplied in this little outbuilding, and also a sink-room; this latter, having two small windows on opposite sides, is well ventilated, and renders the kitchen a much more pleasant apartment for servants to live in, as it relieves it of the most disagreeable part of the work. The kitchen is 12 0 by 15 6, and has a door close to the back entrance and to the cellar stairs. If preferred, this back entrance might be shut off entirely from the principal staircase by a door across the hall on the same line as the cellar door, thus disconnecting the kitchen still more completely; but it is not shown so on the plan.

The staircase hall is entered from the main hall, and communicates with a bedroom, 12 by 14, on the principal floor. In this design, in the event of an entertainment, the rear entrance should be used by visitors; the bedroom would thus be close at hand, and could be used as a cloak-room, while the parlor and dining-room would make one *suite* with the front hall and porch, the doors of communication being thrown open.

The chamber plan contains four bedrooms and a small study or sewing-room, 8 by 11, opening by glazed doors on to a balcony over the porch. A flat of this sort offers a good opportunity to the ladies of the house to cultivate flowers in pots with little trouble, and when thus used, it is a useful and agreeable accessory.

The plan of the roof of this house will illustrate the general arrangement that experience seems to show is the most desirable for the roofs of country houses exposed to a climate so peculiar as that of these Northern States.

ATTRACTION OF THE SOIL.

THERE is some good information on this subject in the following from *The Rural World*, which comments as follows: "There are some things in this world that have attraction for each other. The number is not small. For instance, clay has an attraction for ammonia. If you expose it to the air fresh from the soil, the ammonia of the atmosphere which comes in contact with it, will be taken up by the clay, and kept there—kept forever till the roots of plants take it up. In order to facilitate this feeding of the clay with this important element ammonia, which contains nitrogen, the one great fertilizing principle—it must be exposed, that is, stirred, thrown to the air by the plow, and changed and newly-exposed by the cultivator and harrow. This is what an old author calls manuring; and he is right, for it is really manuring—adding ammonia to the soil. Lime has a similar effect of attraction. Now, as there is little or no ground that has not clay or lime, the great advantage of enriching soil in this way is evident. Not only that, the ground is made moister in dry weather. Break up a hard, cracked soil, and the air circulating through it will moisten it, so that the lumps are readily powdered after a few workings—or at least to a great extent—and wholly reduced after a shower—in fact fall apart of themselves. The nearer a city or a barn-yard, the more will the soil become enriched. It has often been remarked that people raising vegetables near cities are successful with less manure than other people. Such ground is much worked, from necessity—and as the air contains more effluvia, which escapes from the filth of a city, the soil in its vicinity gets more to feed upon. Soil should not only be stirred, but stirred deeply, especially in the fall, which gives, besides the usual absorption, a chance for the frost to ameliorate. The benefits arising from stirring the soil we see in various ways—in hoed crops, in summer-fallow, in the superiority of seeding the first and the second years, before the ground, by long lying, becomes compact. Could our meadows be worked, as our corn fields are, without injury to the grass, there would be improved crops. But this should always be understood, that soil stirred must have a large share of lime or clay, or a mixture of the two; otherwise, there is little or no effect. Soil even may be hurt in such a case, if worked in hot, dry weather, as the fertility in it is not sufficiently held to be retained, but will escape. This is the case with sand. The more sand, therefore, the more susceptible of escaping. Our soil is a critical thing, and requires an educated eye to direct it—at least an experienced one."

SUBSOIL sound land that is not wet.

THE CROPS OF 1865.

THE Department of Agriculture has furnished for publication the following summary of the crops for 1865, in the loyal States, as compared with other years:

	1865	1864.	1863.
Wheat, bush	148,552,829	160,695,823	179,404,020
Rye, bush	19,543,965	18,572,975	20,782,762
Barley, bush	11,391,285	10,633,178	11,859,155
Oats, bush	225,252,295	176,690,074	173,890,275
Corn, bush	704,427,853	530,481,408	451,967,950
Buckwheat, bush	18,331,019	181,700,540	15,806,455
Potatoes, bush	101,032,095	96,256,888	100,158,670
Total bushels	1,228,501,282	1,013,429,871	953,288,627
Hay, tons	23,588,740	18,116,751	18,736,847
Tobacco, lb	188,316,953	197,408,229	267,257,920

As to quality, the crop is very deficient. The August report estimated the deficiency in quality and quantity at 26,241,698 bushels. The above table places the decrease in quantity alone at 12,172,944 bushels. The quality of the corn crop never was surpassed. That of the other crops is believed to be an average. The number of bushels in 1865 exceed those of 1864 by 215,071,411.

HOW TO MAKE MILKERS.

No matter what breed you have, something is necessary to reach the highest success in raising good milkers. It's a great thing to have good blood, whether it be Ayrshire, Jersey or Short Horn grades, but apart from this important advantage, the course of treatment in raising a milker is somewhat different from that in raising a beef animal, or an animal for labor.

The calf should be well fed and petted while young. Well fed, to induce a rapid growth, so as to enable the heifer to come in early; petted, to make her gentle and fond of the presence of her keepers. Fondling helps to create a quiet disposition, so important in a dairy cow, and this education must begin when young. For a milker we would have the heifer come in at two years old, and if she has been well kept, so as to have attained a good size, she is then old enough to become a cow. She will give more milk for coming in early. It forms the habit of giving milk, and habit, you know, is a sort of second nature. An older bull is better. We use too many young bulls. A three or four year old is far better as a stock getter than a yearling, and many prefer a five or six year old to any other. After the heifer has come in, let her feed be regular. Clover is preferred to all others for the stall feed. A little oatmeal induces a large flow. Indian meal is rather fattening. In bad weather, give her a clean, airy stall.—*Massachusetts Plowman.*

MEADOWS.—Top-dress this month with any kind of fertilizing material. It is better to harrow in bone dust, guano, or home made poudrette.

WINTER CARE OF CATTLE.

How many farmers there are who, towards the close of winter, complain of being short of fodder, and are compelled to purchase hay at high prices to carry their stock through until pasture time. I know from experience what this is, and find it does not pay.

There are two causes and also two remedies for this state of things, namely, too heavy a stock, and too wasteful feeding. For the former, the remedy is obvious; for the latter, a great many farmers have not yet discovered a preventive, but go on in the old way of feeding, in common square racks in the yard, either corn fodder, straw or hay. Here is where the loss occurs; and did every farmer know the great gain there would be in cutting up everything he feeds, instead of feeding it whole, there would be no more complaints of short fodder. I have tried it, and find that I can winter ten head of cattle, on cut fodder, now, where I only wintered five head, last year, and, what is more, keep them in better order. I use a fodder cutter (worked by hand or horse as the case may be) and feed in the yard in troughs six feet long, eighteen inches deep and two feet wide at the top, sloping to one foot at the bottom. My cattle eat it up clean—hard buts, stalks and all; and one ordinary bundle of fodder—such as would be generally given to a steer at one meal—lasts an animal a whole day.

Another advantage is that my manure is all short, easily handled in the spring, when I heap it up under the sheds, and I am not bothered by the long cornstalks all through it. Cattle prefer their fodder cut, and will eat it more quietly.

The same saving may be accomplished in the stable by cutting the hay fed to the horses, cows, &c. They soon learn to like it better than long hay, and then they can waste none.

Let every farmer who has not tried it, and who has been worried to know how to get his cattle rightly through the winter, without buying hay, try this plan, and, if he does it right, he will never regret the outlay for the cutter. My saving of fodder, in one winter, will, I think, pay for my cutter.—*Cor. Germantown Telegraph.*

COLTS AT WEANING TIME.

THE *Rural World* has some excellent remarks on this subject. Farmers should use much care with their colts when they take them away from their dams to wean them. Frequently they receive no extra care at this time; become poor, stunted, and, if they do not die outright, will be pretty sure to do so the following spring. Or, if they live, they never will attain the size or possess the game and bottom they would had they received better treatment after weaning.

The mare has a large flow of milk—much more so than most people suppose, and of the richest quality; and it is a great loss to the colt when taken away from this rich supply, and a loss of flesh, and costiveness, will ensue, followed by a diarrhea frequently, which often terminates the life of the colt.

The colt should not be taken from the dam till at least six months old; and if allowed to run longer, so much the better. A couple quarts of oats a day will be highly relished, or a sheaf of bright oats will come in opportunely. Good pasture should be given, if possible.

A warm bran mash twice a week, to keep the bowels open and healthy, is desirable. Take about four quarts of bran, and pour over it boiling water, adding a little salt, and when cool give it to the colt.

The great secret of success in raising good horses is to keep them growing, in good health and spirits; and this can only be done by proper feeding and general care. They want dry, warm box stalls to stand in during winter, from which they can be turned out-doors in pleasant weather for exercise—for this is needed as much as food,

Good horses can be raised only by good care, providing you have good blood to start with. This is the first step. Without good blood we cannot have valuable horses. The people are beginning to learn this.—*Rural World.*

VALUE OF WEEDING.

EXPERIMENTS were made in England during the past season to test the value of weeding, and resulted as follows: 1. Seven acres of light soil were sown broadcast; one acre was measured and not a weed was pulled out of it; the other six were carefully weeded. The unweeded acre produced 18 bushels; the six weeded acres averaged 22¼ bushels per acre—a clear gain of 25 per cent. 2. A six-acre field was sown with barley. The weeding, owing to the great abundance of charlock, cost 12s. per acre. The produce of an unweeded acre was 13 bushels, of the weeded 28 bushels, thus showing a difference of 15 bushels per acre, besides the enormous advantage of having the land cleared for the succeeding crop. 4. Of six acres sown with oats, one acre, unmanured and unweeded, yielded only 17 bushels; the rest plowed three times, manured and weeded, produced 37 bushels to each acre.

Cows.—Milch cows will very likely need a little extra feed, or their full flow of milk may not be maintained. Let them have the benefit of the best pastures, when there is any choice. If fed four quarts of wheat bran or corn meal daily, or two quarts of the two mixed, the quantity of milk will be increased.

THE VALUE OF A TON OF STRAW.

"PEOPLE don't know the value of straw," said my plowman to me to-day, and so careless are folks about it, that I have considerable difficulty in preserving mine free from damaging rains. Taking the country generally, straw is looked upon as only fit to spread about open barnyards to sop up the rains which have latterly been carrying away the farmer's profit in the shape of strong tea, leaving him only the tea-leaves. As straw can be thatched for 6d a ton, it does appear to me a grievous neglect and waste of valuable property to allow it to stand unroofed, and become rotted by the weather. I produce on my farm of 170 acres, about 200 tons of straw annually, and whether I realize 5s., 10s., 15s. or 20s. a ton for it makes a considerable difference. I wish that our Agricultural Society would offer a prize for a correct and practical as well as scientific estimate of the value of straw of all kinds as food, as manure, or as litter. I am convinced, by my own practice, that straw, (particularly bean, wheat and oat,) has a considerable value for feeding purposes, when rendered available as food. My laborers often say, "Ah, you could not keep half so much stock as you do, if you did not consume your straw." Of course, near large towns, farmers will sell their straw and bring back manure. So important is straw considered as an article of animal food in Spain, that Messrs. Garret are making machines, driven by steam power, for "straw pulping," so that it is rendered soft and silky—in fact duly prepared for animal digestion. I am assured that in all warm Eastern countries straw is always used as food for animals. 'Tis said "wise men come from the East," and in this case I am sure that our English farmers have something to learn. Let us see what straw is composed of, and why it should be valuable as food, and especially as a substitute for hay, so as to set free for the growth of corn and roots a larger area. The late Mr. Horsfall said in that excellent paper of his, (the best, in my opinion, that ever was written,) on Feeding Stock and Dairy Management. (Soc. Journ., vol. 18, p. 173,) "I am satisfied that the most economical use of food, rich in albuminous matter is together with straw or other materials which are deficient in this element." This I had proved to be true. He especially commends bean straw. He says, "In wheat straw for which I pay 35s, per ton, I obtain for 1s 2d., 32 pounds of starch, (reduced as oil, 18¼ pounds from 100 pounds of straw,) available for the production of fat or for respiration." I have long since adopted straw as food, and should consider myself foolishly unprofitable to waste it uselessly in an open and wet farmyard. I believe that cabbage would have been much more extensively grown had farmers known how necessary it is to give with the cabbage a large quantity of straw chaff, without which much of the cabbage is wasted.—*J. J. Mechi*;

WORK FOR JANUARY.

THERE are four-score things that every husbandman may find to do during this cold, blowy, blustering, frigid, unamiable month of January, all of which will turn to good account in his pocket and the comfort of himself, family, and four-footed dependents. Of course we cannot in three paragraphs enumerate more than four things on the long list. But then the doing of these will suggest others, just as thought begets thought, and the whole will come in by a natural drift. Perhaps by making brevity the rule, we may glance at a few more than four "January Duties."

Saw up, split, and pile away under cover, a winter's supply of fire-wood. Improve the condition of that hen house; make it cosy, warm and comfortable—biddy will pay you liberally in eggs. Clean out, cover over, and chink up the pen for store hogs. It will put on pork wonderfully. There's half-a-dozen broken and missing slats in those cattle-racks a woful waste of hay. Attend to that matter. Cut down, and cut up into fire-wood that half-dead old "Lumbardy;" grub out the stump, and make a place for a better tree. The great gate don't swing to and shut well, and the bottom hinge requires repairing. Do that directly. When it storms, take to the tool-house, and take every farm and garden implement in hand. See that they are all in order; knock off dirt, rub off rust, and rub on a little oil. It is a good investment. That job done, you are mechanic enough to shave out a swingle-tree, put a handle to a hoe, mattock, or whitewash brush. Make a garden reel for yourself, and a clothes-line reel for your wife. And every long, January evening, read aloud to your family, so that all may learn, the best agricultural books and papers. You will be a happier man and better farmer for the practice. —*Cosmo in the Philadelphia Evening Post.*

MANURE PITS.—Prof. Voelcker recommends that "the sides and bottoms of manure pits should be rendered impermeable to water, either by clay puddling or hydraulic cement; that the bottom of the manure pit should be in a slightly inclined position, so as to carry the liquid manure and drainings into a manure tank, which should be close by. The tank should be provided with a pump, so as to return the liquid matter to the heap in dry weather. The heap should likewise be well trodden."

DRAINING of wet lands and marshes adds to their value.

SPIRIT OF THE AGRICULTURAL PRESS.

A Great Crop of Roots—John Johnson, the veteran farmer of Geneva, New York, thus writes to the *Country Gentleman* regarding his root crop:

"After a long silence, I write to say that last spring I put a fence around a small piece of land in the field on the west side of the highway as you come from Geneva. 1,880 feet I planted with mangolds. I took them up the other day, cleaned the earth from them thoroughly, weighed, and found them to weigh 2,880 pounds. Now, if 1,880 feet give 2,880 pounds, what will one acre give—say 43,560 feet? I make the amount per acre 33 tons, 730 pounds. I am not so sure in figures as I was when young, but think I am right. I allowed 2,000 pounds to the ton. They were planted in rows eighteen inches apart, and about nine or ten inches apart in the rows. My man John said, 'Sure they would never grow that way at all—in Ireland they put the rows thirty inches apart, and twelve in the rows.' Now, he says he never saw more grown on so small a piece of land in Ireland itself."

Warts on Cattle—A correspondent of the *New Hampshire Farmer* says that his cow has warts upon her bag and teats "long and slender," and asks how he can cure them. The warts can be readily removed with caustic, lunar, or potash. Five cents worth of either lunar caustic, or caustic of potash, will suffice. Keep the caustic in a vial; take a stick of it, wet the end and rub it on the warts. Two or three applications will suffice. Be very careful with the caustic of potash, or it will eat too deep and make a sore.

What Do You Do with Soap Suds?—Of them, the *Scottish Farmer* says: "Although generally deemed only fit for being run off into the common sewer in the easiest and most expeditious manner possible, they are nevertheless highly beneficial vegetable feeders, as well as useful insect preventatives. Hence they should never be wasted, more especially by parties having gardens, as their application to the ground, whether in winter or summer, will show beneficially not only on ordinary vegetable crops, but also on berry-bushes shrubs, border flowers, and even window pot plants; while if poured or syringed over roses, cabbages, &c., they will prevent, or at least mitigate the mischievous doings of the green fly and caterpillars.

Mould—is indispensable in every soil, and a healthy supply can only be preserved through the cultivation of clover and the grasses, the turning in of green crops or by the application of composts rich in the elements of mould.

Drying Cows—Some cows give milk till up to the calving time—some plentifully, so that it is not easy to dry them—and here a great deal of evil occurs. The milk left to accumulate in the bag hurts the bag; the loss of a teat is generally the result. Many owners of cows cannot account for this loss. Trace it back, and you will see it was in consequence of permitting the milk to remain in the bag. This will cake and cause inflammation, resulting in what we have mentioned. It is, hence, that our best cows are unfortunate in their udders. In drying a cow, especially one giving plentifully of milk, the milk every few days should be drawn from the udder. In a few weeks there will be little or no milk secreted; the job is then performed. Be particular about this thing, and save your cows.—*Rural World.*

Bones—An exchange says there is nothing the farmer wastes that is so valuable as bones. The phosphorus contained in them is the richest matter for farming purposes. They should never be thrown away; either break them up as fine as you can and apply to the soil, or burn and pulverize them. Treated in this way, or reduced by acid or alkalies, they are the most direct stimulants the soil can have. They rank among the superphosphates. Save the bones, and give them to your garden in some form or other.

Farmers' Workshops—It is always perplexing, and not unfrequently a cause of much expense, says the Germantown *Telegraph*, to be compelled to run to the carpenter or the blacksmith every time a hinge is to be replaced, a wheelbarrow injured, or a strap broken. To obviate such contingency, the farmer should either be himself, or have in his employ one who can repair such injuries, and he should should also provide accommodations and tools which will enable him to do it. A workshop, with a good bench, vice, and all the various tools required in the performance of the more simple details, should be among the buildings of every homestead. A little skill in the use of tools—and this any person of moderate capacity can readily acquire—will enable one to save many dollars annually, besides furnishing pleasureable and profitable employment for many an otherwise idle and perhaps painful hour. Here should be found white sash, paints, oils and brushes; cements, pruning and grafting tools, syringes for irrigating plants; glass, nails, screws, putty, glazing tools, and indeed, every article that may be required in keeping the premises and apparatus of the farm in a state of complete repair.

Having once become accustomed to these advantages and conveniences, the wonder will be how it were possible that they were not introduced long before.

Cattle for the Dairy—The following was written by the late D. B. Hinman, Esq., of Chester county, Pennsylvania, and originally printed in the Germantown *Telegraph:*

"I do not think that a very large proportion of our cows are well adapted to the butter dairy. What we want from a cow is quantity and quality of butter; we should not be governed by quantity of milk.

"I have some fine looking cows, with the distinguishing mark of good milkers, which were selected by one of the best judges in the country, but which are worth nothing for butter; while for the conscientious milkman they would be very superior. I believe that all distinguished writers and breeders, both in this country and Europe admit that for the butter dairy the Alderneys stand at the head. For early maturity, quantity and quality they certainly excel."

Pork from a Bushel of Corn—The *Country Gentleman* says that an experimenter, J. B. Lewis, obtained 100 pounds of pork from seven bushels of corn, or one pound of pork from 4½ pounds of corn; the grain was ground and moistened with water before feeding. Nathan G. Morgan, of Union Springs, by wetting his meal with five times its weight of hot water, and letting it stand twelve to eighteen hours before feeding, obtained 1 pound of pork from 2½ pounds of corn. Doubtless different results would be obtained from different breeds of swine.

Straw and Beef—The *Scottish Farmer* shrewdly says: "Mr. Mechi may persuade himself that he is in the secret of converting considerable quantities of straw into beef, but we rather suspect it is the straw which renders him capable of extracting nourishment out of the large allowances of concentrated food which he makes use of."

Hogs—See that they have a good warm and dry nest. Many farmers are in the habit of boiling pumpkins and mashing them with meal. This makes very good feed, as it combines the growing and fattening properties necessary. One of the best hogs we ever fattened was fed in this way, but an important precaution was used in taking out the seeds from the pumpkins before cooking. The seeds are powerfully diuretic and prevent the animals from fattening. Let their food be comparatively dry. Mix a little salt with their food, and let them, if convenient, have a little charcoal. Above all things do not teach them how to squeal. So says the *Maine Farmer.*

Best Method of Keeping Beef—The *American Agriculturist* says: Cut up the meat in pieces as large as you desire; pack it in a barrel or cask; then make a brine as follows: 1½ pounds of salt to 1 gallon of water, 1 oz. saltpeter to 100 pounds of beef, 1 tablespoonful of ground pepper to 100 pounds of beef. Put in the salt and the saltpeter, and heat it boiling hot, skim it, then add the pepper. Pour it on the beef boiling hot and cover closely. Your meat will be good at any time. The philosophy is this: the hot brine closes the pores on the surface, preventing decay and the meat from getting too salt. Try it. If necessary, scald the brine over in the spring, or put on a new brine. Farmers can in this way have fresh meat nearly all the time. The meat should be taken as soon as it gets cold, before it has acquired any old taste by exposure to the atmosphere.

Management of Ewes—We condense some hints on this subject from a recent essay by a very practical British writer, Mr. John Coleman:

"As winter comes on the ewes may be kept in thriving condition on a little dry food, hay or straw, in addition to a very moderate quantity of roots. The practice formerly so common of stuffing breeding ewes with roots is most extravagant, most unnatural, and most unhealthy. A good turnip year in Norfolk was invariably followed by a bad lambing season. The great secret of management, and one of the simplest means of increasing our sheep stock, is to do with the minimum of roots and the maximum of dry food, as straw, chaff, &c., making the latter palatable, if necessary, with a small quantity of artificial food. I advocate the use of a small quantity of artificial food, especially for the shearling ewes; it may not be necessary or desirable to begin this too soon in the winter; if the lambing commences towards the middle or end of February, we may do very well until Christmas without extra help; after which it will often prove most beneficial and remunerative, from increase in the wool, finer condition of produce, and manure left on the land. A mixture of beans or peas, barley, wheat, or oats, and palm nut meal would answer the purpose admirably. The Lincolnshire flock-masters frequently give their ewes from half to one pound of linseed cake daily during winter, and, although the cost is considerable, they consider they are repaid in the wool, healthy condition, and increased value of manure."

How to fill an Ice House—The Utica *Herald* says that the ice-house of L. R. Lyon, of Lyon's Falls, N Y., has not been empty for twenty years, nor has a pound of ice ever been put into it. The building is constructed after the ordinary method, and when it is designed to fill it, a rose jet is placed upon the water pipe, and as the water comes through it is chilled and drops into the ice house, where it forms one solid mass.

A WINTER SCENE—THE CHRISTMAS "EVERGREEN CART."

Horticultural.

PLANTING AN ORCHARD.

THE high prices which farmers received for their apples last fall, and the large incomes which many derived from their orchards, has created quite a furor for planting orchards. It is a weakness of American farmers to rush precipitately into the culture of any crop, that for a season proves profitable.

Generally speaking, the result is an over-production of that crop, a great fall in prices, and a disappointment of the sanguine expectations of the farmer.

But I think that there is little doubt that a *well arranged* apple orchard will, sooner or later prove a paying investment.

The first condition of success in orchard culture, is to *start right*. An apple orchard is planted for a lifetime, not for a single year, like a corn or potato crop. If you make a mistake in the latter, it affects but one crop, and you may avoid it in the next, but an error in planting an apple orchard, leaves its traces for half a century.

LOCATION.

It is very important in planting an orchard, that the best location the farm affords should be selected. It should be elevated so as to be as much exempted as possible from frosts, and if possible, sheltered by ridges or woodland from cold winds.

In the absence of natural shelter, the orchard should be protected by planting rows of evergreens to break the force of the winds. In many respects the Norway Spruce is one of the best evergreens for this purpose, it being hardy, healthy, and a rapid grower. The Arbor Vitæ, the White Pine, and the Scotch Pine, are very well adapted for this purpose.

In most sections I would rather prefer a northern aspect to any other. Where the ground slopes toward the sun there is danger of the sap starting and the buds opening unseasonably.

SOIL.

There is some difference of opinion among fruit growers, about the best soil for an orchard; some favoring a light, others a heavy soil. I think that it will be pretty generally conceded, that a pretty heavy loam, if *rightly prepared*, is the best adapted to fruit growing.

To be rightly prepared, it should be so thoroughly underdrained that water will never remain long around the roots of the trees, and if the subsoil is very hard, it should be broken up with the subsoil plow. If the ground needs manure, it had better be applied on the surface, after planting.

SELECTION OF TREES.

The soil being of the proper texture, and underdrained, the next step is the selection of trees for planting.

Never allow any false notions of economy to tempt you to plant a poor, sickly, stunted tree, because you can buy it for little money. It will prove a dear bargain in the end. Select strong, handsome, four-year old trees, whatever the first cost.

Now is the suitable time, when prevented from tilling the ground, to lay your plans for an orchard, determine the number and varieties of the trees you will plant, and by corresponding with different reliable nurserymen, ascertain where you can obtain the best trees at reasonable rates. If possible, visit the nurseries, and select and mark the trees for yourself, and then, when the time for transplanting arrives, attend, personally, to the digging and packing of your own trees.

I will continue the subject in the next number.

P. C. R.

PRUNING GRAPES.

MESSRS EDITORS:—There are few things in this life more difficult for a person to overcome, than his own errors. Every summer for the last twenty years, when looking over my grape vines, I have come to the conclusion that in the winter pruning I did not cut out enough wood, and the result is small clusters, loose bunches, half ripe fruit, and mildew. The rule generally followed, is to cut all of last years wood off except two eyes, unless we want to cover the trellis, then we leave the runners long enough to make the arbor look well.

Now we come to the top of the trellis. Here we find an accumulation of spurs left by the pruner, enough almost, to form a brush heap. There are twenty clusters of grapes where there ought to be but five.

In looking around this city, I think the Germans make the greatest mistake in pruning, for large quantities of grapes. In years such as last they loose all. The great object of grape growers should be, to get large bunches of well ripened fruit.

The best way to produce this, is thorough pruning, plenty of room, good air and elevation:

Rochester, N. Y. J. L.

TREES VS. RABBITS.—Mix a little snuff or pulverized tobacco with common soft soap, and rub your trees with it as high as a rabbit can reach, and they are safe.

The washing of the soap to the roots of the trees, is highly beneficial to them, and will pay for the application alone. The soap will destroy the insects on the bark of the tree, and give the bark a glossy appearance. The liver or flesh of an animal rubbed on the bark of the tree, will also save it from destruction by rabbits. Now is the time to make the application.—*Rural World.*

PROLIFIC CLOVER ROOT.—Mr. M. C. Peck, of Benson, Vt., writes to the RURAL NEW YORKER:—"I have just found a curiosity in a clover root—one root from which grows 42 stalks and 752 blossoms, all matured. When growing in the field the plant measured 4 feet 5 inches in diameter from the extremities of the branches as they spread out on the ground. Who can beat my clover?"

THE truest Christian politeness is cheerfulness. It is graceful, and sits well on old and young. It is the best of all company, and adorns the wearer of it more than rubies and diamonds set in gold. It costs nothing, and yet is invaluable.

THE only true spirit of tolerance consists in our conscientious toleration of other people's intolerance.

FRUITS AND FRUIT CULTURE.

PEARS FOR GENERAL CULTIVATION.—At the last winter meeting of the Fruit Growers' Society of Western New York, a ballot was taken with the following results;

SUMMER SORTS.

	Votes.
Giffard,	11
Tyson,	10
Doyenne d'Ete and Rostiezer, each	9
Osband's Summer,	8
Brandywine and Bloodgood, each	2
Dearborn's Seedling,	1

AUTUMN SORTS.

	Votes.
Bartlett and Sheldon, each,	16
Angouleme,	14
Louise Bonne de Jersey,	13
Anjou,	9
Flemish Beauty, Diel, Belle Lucrative, each,	8
Beurre Bosc,	4
Howell,	3
Washington, Buffum, Des Nonnes, Onondaga, Kingsessing, each,	2
Clairgeau, Church, Superfin, Dix, each,	1

WINTER SORTS.

	Votes.
Lawrence,	15
Winter Nelis,	11
Easter Beurre,	8
Winkfield,	5
Glout Morceau,	3
Josephine de Malines, Columbia, Beurre Gris d'Hiver Nouveau, each,	2
Belle Williams, Aremberg, Duc d'Bordeaux, Beurre Bachelier, Alencon, Jaminet, and Jones' seedling, each,	1

Doyenne d. Ete.—C. L. Hoag had found it to crack for the past two years. H. E. Hooker found it to succeed poorly on the quince—overbearing and not proving good. Dr. Sylvester thought that by thinning, this evil might be avoided; while it bears so early, that we may have the fruit almost as soon, if not quite as soon as planted. The only objection to the *Giffard* was its early decaying—which others stated could be prevented by picking early. The same remark was made by several other members in relation to the *Osband's Summer*. This sort, H. E. Hooker said, was not a good bearer, and G. Ellwanger regarded it as of a very moderate quality. Several members had found it to bear well only on quince, while a few had it bear abundantly on pear stock. The *Brandywine* had not been extensively tried; a few members had found it a poor bearer. The *Tyson* was highly commended by all who spoke of it. C. L. Hoag, of Lockport said it was remarkably exempt from blight. The *Bloodgood* was not rated high by members, and some thought it should be discarded. P. Barry, however, who had a bearing tree for 25 years, had found it uniformly good. The *Rostiezer* was universally commended; the only objection was its tendency to blight. The *Washington* had proved valuable and reliable by the few who had tried—bearing very early on pear stock, and succeeding on no others. The *Buffum* has proved very hardy, a handsome grower, exceedingly productive, and when picked before fully ripe, of fine quality. The tendency of the *Belle Lucrative* to overbear, and as a consequence to become insipid,—and its variable tendency from highest quality to poor,—were the objections mentioned by many, while others always found it good. The *Beurre d'Anjou* appeared to have no defects, except that of insipidity on young trees, which, however disappeared as the trees became older. *Beurre Diel* had proved a fine rich, but slightly coarse pear—valuable for its lateness, but apt to spot young trees and dwarfs moderate bearers, but old standard trees bearing abundantly. W. Sharp, of Lockport, had been able to obtain only $18 a bushel for it in New York, on account of the spots, while the Lawrence brought $24. No objection was made to the *Seckel, Sheldon, Angouleme, and Louise Bonne de Jersey*, except that the flavor of the latter was not of highest character, while its fine growth and great productiveness, placed it high for general value. Several cultivators had found it the most profitable pear for market. The *Flemish Beauty* appeared to be waning somewhat in reputation —cracking badly with several members—although of the highest value at the West. The *Beurre Bosc* was strongly approved, the only drawback being tenderness of the tree.

A PROFITABLE ORCHARD.—Thorough preparation and good management are the most economical, even in the fertile regions of the West. The following description of a young orchard is given in the COUNTRY GENTLEMAN, by E. H. Skinner, of McHenry county, Illinois, a widely known and successful cultivator of fruit. The description would not be less striking, if one could be added representing some other orchards managed on the slip-shod principle, growing among weeds and grass, dying from want of cultivation, and broken down and browsed by cattle.

My young apple orchard of five acres I wrote you about, set three years ago this November, was this fall a sight to look at. We gathered 103 bushels of Wagener and 14 1-2 barrels of New York Pippin (Ben Davis) from it, and sold at five dollars per barrel as soon as gathered.

This should be enough to convince sensible people that *it pays to subsoil and prepare land thoroughly for an orchard!* This orchard of five acres has already paid for itself and I would to-day refuse $1,500, were it offered me for it. Have just sold ten acres of orchard set out six years, for $200 per acre. This we call a good orchard, though it can never equal the one above mentioned, simply for want of first preparing the land. What I once called good preparation I now call "slip-shod."

My dear sir, the facts are simply these—to have an extra orchard, we must go to the bottom and make the whole field as mellow as a garden bed, *not less than twenty inches deep.* We were at this kind of work when it froze up, with four men, four teams and two plows, and could not fit up more than half an acre per day. Some, as they pass by, laugh at me for my extravagant notions as they call them, or my "one idea," but I have shown them this summer that one good idea is better than a dozen poor ones. On one acre and nineteen rods of land I raised 162 1-2 barrels of extra apples getting an extra price for them. This acre and nine teen rods netts over $1,000 —one thousand dollars *Whose Cornfield pays better?* Nearly one third sold at eight dollars per barrel, and most of the balance at

seven dollars per barrel. The variety, Carolina Red June, is one that has been thrown out by some cultivators, simply for want of proper cultivation. With good cultivation it is a good apple; with extra cultivation it is an extra apple. It only wants good feeding.

APPLES FOR MARKET.—Among the varieties in whose favor a large vote has been given by experienced cultivators for Erie, Pa., are the following: Baldwin, Rhode Island Greening, Jonathan, Roxbury Russett, Westfield Seek-no-further—and less tested, Tompkins County King and Northern Spy. Various cultivators have other favorites.

BEST VARIETIES OF HARDY GRAPES.—The Fruit Growers' Society of Western New York, took a vote from its members on the best varieties of the grape for succession in that district. Thirty-one ballots were given with the following result:

	Votes.
Delaware,	20
Diana,	26
Isabella,	25
Hartford Prolific,	23
Iona, Perkins, Allen's Hybrid, To Kalon, and Northern Muscadine, each,	2
Rebecca,	21
Concord,	14
Creveling,	12
Catawba,	9
Lydia, Adirondac and Israella, each,	1

THE BEST STRAWBERRIES FOR FAMILY USE.—At the summer meeting of the Fruit Growers' Society of Western New York, at Rochester in 1865, a ballot was taken for the best six varieties for family use, and resulted in the following vote—those receiving the highest number would, of course, be understood as being the more general favorites in Western New York—33 votes being given in all:

	Votes.
Triomphe de Gand,	30
Early Scarlet,	26
Russell and Wilson, each,	23
Hooker,	22
Burr's New Pine,	12
Hovey's Seedling,	8
Victoria and Brighton Pine, each,	5
Jenny Lind,	4
Crimson Cone, for Canning,	3
Agriculturist,	3
Buffalo, Austin and Longworth, each,	2
Red Alpine, White Alpine, Cutter's Seedling, Jenny's Seedling, Genesee, and Laconstante, each,	1

PLOWING AMONG TREES.—In plowing orchards, in addition to the usual precaution of using oxen, or one horse placed before the other ad tandem, use a plow with a movable beam, set so as to run as far to the left as possible when plowing away *from* the trees, and set so as to run to the right when plowing up *towards* them.

RASPBERRIES.—At the summer meeting of the Fruit Growers' Society, of Western New York, in 1865, H. E. Hooker, a distinguished cultivator, of Rochester, named the following as the best six varieties for general cultivation, viz: Brinckle's Orange, Hudson River Antwerp, Franconia, Knevett's Giant, Hornet, and Black Cap. Charles Dowling named Brinckle's Orange, Franconia, Hudson River, Antwerp, Vice President French, Fastolff and Clarke, a new variety, originated at New Haven. These varieties were generally regarded by the members present, as the best.—*Tucker's Rural Register.*

PLANTS FOR SPECIAL PURPOSES.

We take the following interesting and valuable remarks in the adaptation of plants for special purposes from Vick's New Illustrated Catalogue of seeds, just published:

Much disappointment often results by selecting plants that are not well adapted to the purposes for which they are designed. Most of the trailing Lobelias, for instance, are superb for pots and hanging baskets; but if planted in, the garden, to add to the effect, and where it is desirable to make a good show to be seen at a distance, they are worthless. This is the reason why one customer will write, "Those Lobelias you sent me were beautiful; I never had anything so graceful in a basket—a wilderness of delicate flowers, and in bloom so long:" while another says, "All the seeds produced magnificent flowers except those choice Lobelias—they were tiny things, with flowers no better than many of our weeds." Some inadvertently place tall and free growing plants in the front of flower beds, instead of using them for the background; and, because they dislike them out of place, imagine that they can be of no use anywhere, while in their proper place they are really admirable. There are places where even the coarse Sunflower can be used with advantage and be made to produce a fine effect. Sad mistakes are often made with running or climbing plants. Of course they are comparatively worthless unless provided with the necessary support. Indeed, instead of being an ornament, they are almost a nuisance, if allowed to run about the ground, where they can never make a natural and healthy growth. The same plants, when used to cover an arbor, or buildings, or fence, or when properly trained upon a trellis provided for the purpose, are the most effective means provided for garden decoration. Here we have the true drapery of nature.

To aid in selecting seeds for special purposes, I name a few that can be used with advantage. Others, however, not mentioned here, are nearly or equally good, as I have space only to mention a few.

FLOWERS FOR A CONSTANT BRILLIANT SHOW.—These will be found in the first department of the Catalogue, and are familiar, doubtless, to most of our readers. The Aster, Antrrehinum, Balsam, Stock, Dianthus, Delphinium, Pansy, Petunia, Phlox Drummondi, Portulaca, Salpiglossis, Scabiosa, Double Zinnia, and other varieties that we have not space to name, should have place in every collection.

FOR A SUMMER HEDGE.—There are some situations where a low hedge or screen is very useful and ornamental. I don't know of anything that will make a prettier hedge, supported by neat brush, than the Sweet Pea, if sown early in the spring and deep in the ground—not less than four inches—and the earth is kept well hoed up to the plants. In good soil, the hedge will be three or four feet in hight. The Amaranthus makes a fine ornamental hedge; the foliage is

dark, rich, and some varieties two or three colored. Delphinium cardiopetalum always pleased me for this purpose—about eighteen inches or two feet in hight. Gomphrena globosa, in a good rich soil, makes a pretty hedge two feet in hight.

ORNAMENTAL-LEAVED PLANTS. — Plants with ornamental leaves are becoming popular in all parts of the world. They produce a very fine effect when grown in a group of half a dozen or more together. For usefulness in this respect, I know of nothing better than the Cannas, Ricinus, Amaranthus, and Perilla Nankinensis. The seed of all these but the Cannas may be sown in the open ground, and will produce a splendid effect the first season; or they may be transplanted from the hot bed. The Ricinus has a tap-root, and if grown in a hot-bed, should be in pots or in some manner so that they may be transplanted without injury. The finest I have ever grown, however, were sown in the open ground about the time of corn-planting. The Canna does best started in heat. The Ricinus is the tallest of those named—from four to ten feet high—and should occupy the centre of the group.

FLOWERS DESIRABLE FOR FRAGRANCE. — For fragrance, nothing equals the Mignonette, Sweet Asylum, and Sweet Peas.

FOR BASKETS. — Convolvulus, Fenzlia, Ipomœa, Leptosiphon, (particularly L. hybrida) Loasa, Lobelia, Mignonette Nemophila, Petunia, Phlox Drummondi, Thuubergia, Tropæolum, Verbena, Sweet Alyssum.

Those of a pretty strong running habit, like the Morning Glories and Trapæolum majus, should have the tops pinched off if they run too far, which will make them dwarf and branching. All the varieties mentioned above, except the running sorts, are excellent for pots.

CLIMBING PLANTS.—These are particularly valuable for covering buildings, fences, etc., and making beautiful, what but for them would be very unsightly. Nothing will give more satisfaction than the annual Climbers when properly cared for and used in the right place.

HOW MANY DEGREES OF FROST WILL APPLES BEAR.

Written for the American Farmer.

MESSRS. EDITORS:—How many degrees of Frost (Fah.) will apples bear without being materially injured? I met the Editor of the late *Genesee Farmer* at the Railroad Depot on Friday morning the 15th inst., and in conversation about the weather he remarked that the thermometer indicated 20° this morning, and that he was caught with a good many barrels of apples in his woodshed the evening previous, and had to go to work and hustle them into the cellar, (or words to that effect); and in doing so he had an opportunity of examining some of the apples to see if they were injured by the frost, as some of the hoops of the barrels came off and the heads came out. He thought they were not injured as the barrels afforded them protection. I remarked that I was caught in the same "fix," only with not so many barrels, and that apples would bear a good many degrees of frost without injury. He said about three degrees he thought. I thought about ten degrees, as I had some Rox Russetts out in that degree of cold and they did not appear to be hurt. He said we had not had ten degrees of frost this fall and would refer to Mr. DEWEY. That set me to thinking, as I was fully under the impression that we had had that degree of frost this fall, and that I had Russett apples on the trees and frozen as hard as a stone, had them gathered afterwards and they did not appear to be hurt; I could not reply to him as I had made no notes, and could not remember when, and *may* be mistaken—probably am. Now, on the evening of the 14th, when I carried the good apples down to the cellar, I left a good many of the poor ones on the floor of the woodshed, until the evening of the 15th. They were frozen as hard as a lump of ice, and must have received, I think, at least 20° of frost, as the mercury indicated 22° on the mornings of the 15th and 16th. They were put down cellar frozen as they were, and have since thawed out, and do not appear to have received much injury. The Roxbury Russett appears to be about as good as ever, the Seek-no-furthers' are a little soft and have lost a little of their flavor. A few R. I. greenings appear to be the most tender, and I think will rot; how long the others will remain good I cannot say. Now, Messrs. Editors, I have frequently, in spring, found apples under the trees which have lain out all winter and were not hurt by the frost. I had supposed they had been so covered by weeds and snow as not to have been frozen at all, but now am inclined to believe that some varieties will bear a good many degrees of frost without material injury. The question is, how many degrees of frost will some of our leading kinds of apples bear without material injury? If you think these remarks are worthy a little space in your new journal, you are at liberty to make what use you choose of them.

Yours respectfully,

J. S.

A Dutchman in Albany, some time ago, went out to his milkman in the street with a dish in each hand, instead of one, as usual. The dispenser of attenuated milk asked him if he wished him to fill both vessels. The Dutchman replied, sulting the action to the word, "Dis for the milluk, and dis for the water, and I will mix dem so as to shute myself."

EVERLASTING FLOWERS.—This class of flowers are becoming every season more popular. For winter boquets and floral ornaments, and for decorating during the holidays, and other festive occasions in the winter, nothing can equal them. They are easily grown and dried.

Ladies' Department.

FASHIONS FOR JANUARY.

BONNETS.—There is little change in the style of bonnets. They are made much in the same shape as they were in the fall. They are still quite small in front, with high flat crowns and expanding band—to admit the top of the waterfall, which still keeps popular in spite of opposition from the sterner sex. The most noticeable feature in the new bonnets is the long unhemmed lace veil, either dotted or spangled, and which is part and parcel of the bonnet, being fastened on the side either with or without an ornament and allowed to hang gracefully only from one side of the bonnet. It should be at least three-quarters of a yard in length. An old black silk or velvet hat may be made as good as new by the addition of a crown of colored velvet or silk.

DRESSES—Green is the prevailing color in dress goods this winter, as in fact, it is also for bonnets. Empress cloth is the prettiest, and next to merino the most useful. A black alapaca is one of the most serviceable dresses in a ladies wardrobe—as it may be worn at all seasons in the year. Skirts are scolloped around the bottom, and bordered with a thick silk or worsted cord in place of the old dress braids so long in vogue. Sleeves are made tight to the arm from the waist to the elbow, and then puffed to the top, much in the old leg-of-mutton style; a small coat sleeve will also be worn, and is very pretty.

CLOAKS—Basquines are all the style. Sacques are entirely superseded by these more comfortable and graceful garments. They are much shorter, and fit tighter to the form. A large sacque can easily be altered into a very pretty basquine without much waste of material.

CIRCULARS are made for those to whom the basquine is unbecoming or undesirable.

BELTS are still in favor, and are the neatest and most becoming finish to a ladies toilet that can be worn.

We shall take great pains to give to our lady readers the fashions which combine both usefulness, durability and prevailing style.

CHILDHOOD.—Much is said about the "happy hours of childhood," and it is generally thought that a child's life is one of almost continuous sunshine. But in looking back on our own past lives, we naturally forget the clouds and take but the bright side, and in comparing children's troubles with our own greater ones, we are apt to forget that we are older, stronger, and better able to bear trials. A few marbles are of just as much value to the boy as so many dollars are to the man, and their loss would give him just as much trouble. Generally, children experience more real sorrow than is supposed, and sometimes as much in proportion to their years as men do."

"CAN two work together in a yoke unless both be agreed?"

THE THRIFTY WIDOW.

Next died the widow Goe, an active dame,
Famed ten miles round and worthy all her fame;
She lost her husband when their loves were young,
But kept her farm, her credit, and her tongue;
Full thirty years she ruled with matchless skill,
With guiding judgment and resistless will;
Advice she scorned, rebellions she suppressed,
And sons and servants bowed at her behest.
Like that great man's who to his Savior came,
Were the strong words of this commanding dame;
"Come," if she said, they came; if "go," were gone;
And if "do this," that instant it was done;
Her maidens told she was all eye and ear
In darkness saw and could at distance hear;
No parish business in the place could stir,
Without direction or assent from her;
In turn, she took each office as it fell;
Knew all their duties, and discharged them well;
Who looked on want with judgment clear and cool,
Who felt with reason and bestowed by rule;
She matched both sons and daughters to her mind,
And lent them eyes, for love she heard was blind;
Yet ceaseless still she throve, alert, alive,
The working bee in full or empty hive;
Like that industrious kind, no thoughts of sex,
No cares of love, could her chaste soul perplex;
But when our farmers made their amorous vows,
She talked of market-steeds and patent plows.
Not unemployed her evenings passed away;
Amusement closed as business waked the day;
When to her toilet's brief concern she ran,
And conversation with her friends began;
Who all were welcome at her board to share,
And joyous neighors praised her Christmas fare;
That none around might in their scorn complain
Of Gossip Goe as greedy in her gain.
Thus long she reigned, admired if not approved,
Praised if not honored, feared if not beloved;
When, as the busy days of spring drew near,
That called for all the forecast of the year;
When lively hope the rising crops surveyed,
And April promised what September paid;
When strayed her lambs where gorse and green weed grow;
When rose her grass in richer vales below;
When pleased she looked on all the smiling land
And viewed the hinds who wrought at her command,
As Bridget churned the butter for her hand
(Geese, hens, and turkeys following where she went:)
Then, dread o'ercame here—that her days were spent.
"Bless me! I die, and not a warning given—
With much to do on earth, and all for heaven!
No reparation for my soul's affairs,
No leave petitioned for the barn's repairs;
Accounts perplexed, my interest yet unpaid,
My mind unsettled, and my will unmade;
A lawyer haste, and in your way a priest;
And let me die in one good work, at least."
She spake, and trembling dropped upon her knees,
Heaven in her eye, and in her hand her keys
And as the more she found her life decay,
She grasped with greater force those signs of sway;
Then fell and died!—In haste her sons drew near,
And dropped in haste the tributary tear,
Then from the adhering clasp the keys unbound,
And consolation for their sorrows found.

—*Crabbe.*

RECEIPTS FOR CHRISTMAS.

ENGLISH PLUM PUDDING.—Reduce to fine crumbs a small loaf of old bread; add to this a half pound of very finely chopped beef suet free from skin or stringy substance, a pound of dried English currants well washed, two ounces of chopped candied peel, a little lemon juice, if convenient, one grated nutmeg, and a pound of stoneless raisins; mix well together with from four to six eggs thoroughly beaten, the whites and yolks separately. Having previously greased with butter the dish or mold in which you wish to boil it, pack it firmly in, cover with a pudding cloth, tie tightly down and boil for four or five hours. This pudding will keep a year, and at any time may be boiled afresh and set away again till finally used. Serve with brandy sauce, made by putting a little brandy into drawn butter, or if preferred, drawn butter, with the addition of a little sugar, may be used.

TO ROAST A GOOSE.—Select a young and tender one. If the feet break easily from the leg, or if you can insert your thumb or finger under the wing, you may be sure the goose is young. Free it entirely of pin-feathers, and singe off all the hairs with a little burning paper; remember to cut off the two little oil bags from the back, near that part usually called the "parson's nose." Be careful that every portion of the inside, including the fat, is thoroughly removed. Cut out the neck entirely, leaving a little outside skin; also take off the feet and a half of the wings, which, with the gizzard and liver, should be boiled till tender, and served as an entirely separate dish. After washing clean, tie tightly the skin remaining around the neck. Put into the inside a small quantity of force meat, made of a little sage, onions and bread, finely chopped and seasoned with pepper and salt. Sew up the whole with needle and thread, tie down the feet and remaining part of the wings close to the body, and roast in a good oven from one to two hours, according to size. Serve with apple sauce, also onion sauce, made by adding finely chopped boiled onions to a proportionate quantity of drawn butter. When done the goose should be removed from the pan, the fat entirely poured from the brown gravy, and that with the addition of a little water and some pepper and salt, brought to a boil, and served in a tureen.

TO ROAST A TURKEY.—A turkey will be very much improved by hanging a week or two in a cool, airy cellar or larder. Pick off the feathers, draw and singe it with great care; wash and wipe it dry on the outside; stuff the breast with a force meat made as follows: one quarter of a pound of stale bread, grated into exceedingly fine crumbs, mixed thoroughly with a quarter of an ounce of lemon rind, cut small; the same quantity of parsley, also of thyme; a quarter of a nutmeg grated, and pepper and salt to taste. The whole to be well served and moistened with the yolk of an egg unbeaten. A little butter chopped into bits is a good addition. Truss the bird firmly; place in a large pan; baste often and plentifully with butter. Serve with good brown gravy and bread sauce.

A LADY with whom I am acquainted lately became *helpless;* which calamity was so well published, that her door bell was kept tinkling for a week by the "Honorns," "Bridgets," and "Catharines," anxious to supply the place of the departed help. From so profuse a crop it was difficult to select one flower; each one had an invoice of "kracter," and each one was as demure as if she were about to take the veil. They could all boil and stew; hash and fricasee; wash, mend, and iron; bake, brew and starch; in fact, an army of veterans in culinary pursuits and laundry duties. Not one had a "follower," or stayed out after nine o'clock in the evening.

For some reason—ladies never do anything without a good reason—a very green specimen of the Emerald Isle was selected, who rejoiced in the cognomen of "Mary, sure," a prodigy among pots, kettles, soups, gravies, and "made dishes." She could—by her own account—do everything; could sweep without raising a dust; boil a dumpling so light as almost to disturb the long-cherished principles of gravitation; in fact, if she was to be credited at all, she was a well-appointed kitchen within a kitchen, a *ne plus ultra*, a housewife's veritable "Eureka!" Accordingly she was accepted and sworn in; had pointed out to her the "ways" of the house; was introduced to the kettles and closets, coal-bin and ash-hole, pump and bread tickets, and an infinite variety of matters such as the the "rag for this nail" and "nail for this rag."

Her first dinner was to be extremely plain, and her mistress, willing to lay but a light tax upon her unlimited capacity, ordered for dessert that most simple as well as delicious of wheaten compounds, known among fluent housewives as a "minute pudding."

"Ah, ma'rm," says the all-accomplished Mary, "It would plase ye to see me make that same pudding."

Dinner hour drew nigh, and Mary's mistress was arranging her toilet for the meal, when a gentle tap fell upon her ear.

Mary appeared when it was opened, relating, with beaming eyes, the grand success of the meat and vegetables below, and, with a pleasant smile, inquired, naively, "*Now, marm, where do you keep your minute?*"

ILLUSTRATED PUZZLES.

1. Why is this opera hood like a bad husband?

2. Why is it useless to send this bird a bushel of beans?

For answers see next number.

Miscellaneous.

THE EXCELLENT MAN.

They gave me advice and counsel in store,
Praised me and honored me more and more
Said that I only should wait awhile—
Offered their patronage, too, with a smile.

But with all their honor and approbation
I should long ago have died of starvation,
Had there not come an excellent man,
Who bravely to help me along began.

Good fellow! he gave me the food I ate,
His kindness and care I shall never forget;
Yet I cannot embrace him, though other folks can,
For I myself am this excellent Man!

—*German of Hetne.*

A CURIOUS INCIDENT.

A curious incident lately occurred in a French court of criminal jurisprudence. A young woman, carrying a child less than a year old in her arms, was arraigned for having stolen three gold ten-franc pieces from the house of a lady where she called on business. The prisoner stated in her defence that her baby snatched the coins from a table without her knowledge, and carried them home in its hand; that she had just discovered there, and was preparing to go back with the money when she was arrested The defence was thought most improbable, owing to the child's age; but the president, in order to test its possibility, ordered one of the ushers to lay three gold pieces on the ledge of the dock, within the baby's reach. The moment the little thing saw the money it clutched the pieces firmly and attempted to put them in its mouth. This experiment satisfied the tribunal that the woman had told the truth, and she was in consequence acquitted of the charge.

AN OIL STORY.

Sam. D——, who owned a snug little farm, was somewhat startled one fine day by an offer of more than twice the worth of it in greenbacks.

"Shall you sell it, Samuel?" asked his wife.

"Certainly I shall," said Sam, "if the excited individuals don't back out, or prove to be a couple of escaped lunatics, as I half suppose them to be," and sell it he did.

After the bargain was made and the money paid one of the men took Sam and his wife to the back of his farm where there was a small excavation in the ground filled up by the recent rain.

"See what you've lost and we've gained!" said the excited individual, scooping up some of the water in an old tin cup and holding it up for their inspection.

Sure enough the oil was half an inch thick on the top of the water.

Sam. was indignant. If he hadn't been a fool, as he said to his wife, and just watched for indications, he might have died a millionaire.

Sam's wife was bursting with laughter, but restraining herself, she coaxed her husband into the house and told him the whole story.

"You remember when I had that cough last winter, and the doctor recommended cod liver oil, Sam, and you brought home a whole gallon because you got it cheap, and made me promise to take a dose three times a day? Well, I did'nt, and it stood in the closet till I cleaned the house last week, when I threw it all into the hole at the foot of the garden."

Sam. saw the joke, and pocketed the cream of it in the shape of a pile of greenbacks.

At last accounts Sam. was living in clover while the oil hunters were industriously boring—and may be until this time for all we know.

Patrick's Colt.—"A gentleman," says the Manchester *American*, who favors us with some reminiscences respecting the early settlement of this place, formerly "Old Derryfield," relates the following story:

"When my grandfather resided at Goffetown and Derryfield, then settled by the Irish, he hired a wild sort of an Irishman to work on his farm. One day soon after his arrival, he told him to take a bridle and go out in the field and catch the colt." "Don't come without him," said the old gentleman. Patrick started and was gone some time, but at last returned minus the bridle, with his face and hands badly scratched, as though he had received bad treatment.

"Why, Patrick, what is the matter? What in the name of wonders ails you?"

"'An isn't it myself, your honor, that never 'll catch the old black colt again? Bad luck to him! An didn't he scratch my eyes out o' my head! An faith, as true as I'm speaking to you, I had to climb up a three after the colt."

"Climb after him! Nonsense? Where is the beast?"

"'An it's tied to the three, he is, to be sure, yer honor."

We all followed Patrick to the spot to get a solution of the difficulty, and on reaching the field we found, to our no small amusement, that he had been chasing a young black bear, which he had succeeded in catching, after a great deal of rough usage on both sides, and actually tied it with the bridle to an old tree. Bruin was kept for a long while, and was ever after known as Patrick's colt.

True Honesty.—Some years ago, two aged men, near Marshalton, traded, or according to Virginia parlance, swapped horses, on this condition—that on that day week, the one who thought he had the best of the bargain, should pay to the other two bushels of wheat. The day came, and as luck would have it, they met half way between their respective homes.

"Where art thou going?" said one.

"To thy house with the wheat," answered the other. "And whither art thou riding?"

"Truly," replied the first, "I was taking the wheat to thy house."

Each, pleased with his bargain, had thought the wheat justly due to his neighbor, and was going to pay it.

Young People's Page.

TALK WITH THE YOUNG FOLKS.

My Young Friends: Lend us your ears, and listen to what we have to say. We live in fast times, and they are prolific of fast men, fast women and fast horses. Most young men seem to have a strong proclivity to fastness. They often carry more sail than ballast; more steam than breakage. The fast line is the popular one. The fast horse wins the prize. The fast merchant draws the customers. The fast man secures the gaze of the eager public; and the young farmer imagines he must catch the spirit of the times, and be fast as the fastest. He must have a farm as large as his father had in his old age; must live in a better house than his parents ever thought they needed; he must drive a better and a faster horse; ride in a better carriage; sport a finer watch; live in a more fashionable style; play the gentleman at more expense; cut larger swaths, speak louder, and be known further, than his old fogy ancestors ever dared to dream of. He has no idea of getting rich by the little; he is bound to have a pile at once! He is not going to bring up lambs by hand; sell turnips at ten cents a bushel; carry chickens and eggs to market; wear home-made clothes; wagon wood through the mud; and cart potatoes round like a Yankee pedlar. Not he. Talk to him about a quarter section! He wants a thousand acres. Intimate that he is ever going to fail! Why he can prove by actual experiment and mathematics, that an acre will produce five dollars nett profit—a thousand acres five thousand dollars. He can afford to be fast on that. He don't understand his business? Why he is sure that he knows a thousand things that would astonish his father. Experience? Too be sure he has not had it himself, but he knows who has, and what it is. Of course he is safe—has a through ticket to fortune on the Express, double quick time. This is the feeling of many young men. They want to start, not at the bottom, but at the top of the hill. This slow climbing up step by step; they don't believe in that! This working and waiting; they are going to do none of that! They are willing to work, but they are not going to wait. They want to reverse the order of the seasons, and reap in the Spring. They would like to reap just before they sow, so as to sow money instead of seed. The old way of beginning with a small farm and a few implements, and making up by slow degrees, is not consistent with their notions of the dignity of agriculture. This starting in a cabin, and building one room at a time, as the family, and farm, and purse enlarges, is all gammon to them.

Now this is just the point, we believe, young men have need to be set right on. Instead of beginning with much, they ought to begin with little. Instead of a large farm, they ought to have only a small one. Their experience is small, their judgment is weak, and their wants ought to be few. And beginning with a few acres, they will soon learn how to proceed to insure the best results.

"Large streams from little fountains flow,
Tall oaks from little acorns grow."

Some educators try to make us believe there is some royal road to learning, by which dunces can take a short cut to the old college honors. But this is all false. It is a sham, got up to cheat fools. There is but one road to learning, and that is the hard old up hill way of severe study, and long, close application. True, there are many appliances now that the old students did not have; many helps and short methods to particular things. But the old way, beaten by ten thousand weary feet, is the only way after all. Much the same way is it with the farmer. He must begin in youth, with acres bearing some proper relation to his experience and his actual knowledge. Let him buy a few acres, build a small house, secure a little stock, and such implements as he must have, and begin in a small way. Let him raise his own seeds, plant his own nursery, increase his herds and cattle by natural generation, and not by purchase. Let his own skill and industry supply his own wants, as far as possible. As he adds acres to his farm and rooms to his house, and length and breadth to his barn, and numbers to his cattle, horses and herds, and comforts to his home, and right to his character and purse, he will feel a just pride in the thought that all this is the result of his own skill and industry. He will learn how to keep and improve what he gets, and to add more and still more to his possessions. He will feel that he is, himself, a living power, capable of producing the means of comfort and wealth. He will be accounted, if not a "fast", a growing man; and a growing man is always in the favor of his fellows. When a man is going up, everybody is glad to lend him a helping hand. All who know him, volunteer to do him service. But when he is going down, all step forward to kick him along. Every one accelerates his downward course. It is always best, thetefore, to start at the bottom of the hill, and work steadily up. Better be small, and rising a little, than great, and falling a little. The true course of every young man, in every business, is to begin at the alphabet of his business, and rise as fast as he can safely and honorably.

Pittghkeepsie, 1865. C. N. B.

That Axe.—The other day I was holding a man by a hand as firm in its outer texture as leather, and his sunburnt face was as inflexible as parchment; he was pouring forth a tirade of contempt on those who complain that they can find nothing to do, as an excuse for becoming idle loafers.

Said I: "Jeff. what do you work at?—You look hearty and happy; what are you at?" "Why," said he, "I bought me an axe three years ago, that cost me two dollars, that was all the money I had. I went to chopping wood by the cord, I have done nothing else, and have earned more than 600 dollars, have drank no grog, paid no doctor, and have bought me a little farm in the Hoosier State, and shall be married next week to a girl that has earned 200 dollars since she was eighteen. My old axe I shall keep in the drawer, and buy me a new one to cut my wood with."

After I left him, I thought to myself, "that axe" and "no grog!" They are the two things to make a man in this world. How small a capital. That axe. How sure of success with the motto "no grog!" And then a farm and a wife, the best of all.

Editor's Table.

Prospectus of the American Farmer.

THE GENESEE FARMER, which has been published for the last thirty-four years in the city of Rochester, is now discontinued, and been merged in the "American Agriculturist." The large circulation which it has had during its publication, gives the best evidence that such a paper is needed in the Genesee Valley and Western New York. That so valuable a paper as the GENESEE FARMER should cease to be issued, causes general regret amongst its old friends and patrons.

Many of the friends of the old paper have expressed a desire, and pledged their support and influence, to assist in starting a NEW AGRICULTURAL MONTHLY, in the far famed Genesee country. Influenced by the strong feeling felt and expressed on all sides, we come before the public and offer to the Agricultural family at large, a paper which it will be our aim to make the most useful, the cheapest, and best Agricultural paper in America. We shall spare no expense to make THE AMERICAN FARMER the "farmer's own paper." We have made arrangements with an able corps of correspondents, who will give to our readers, their experience and advice on all subjects relating to Agriculture, and Horticulture. With able editorial talent, and their practical experience, we are confident we can make THE AMERICAN FARMER second to none.

You, kind reader, can, by introducing the paper in your neighborhood, assist us greatly in this undertaking. We rely entirely on your disinterested efforts to create a circulation for THE AMERICAN FARMER, and provided you, and the friends of Agricultural improvement generally, come forward to our aid, we shall be encouraged to persevere in this high and noble calling.

Our terms will be $1,00 *a year; Five copies,* $4,00*; Eight Copies,* $6,00; *and any larger number at the same rates; or* 75 *cents each.*

Postmasters, and all friends of Agricultural progress, are earnestly requested to assist in making THE FARMER known, and to communicate their experience for the interest of the subscribers to the paper.

Commencing the publication of THE AMERICAN FARMER so late in the year, we still hope to have this (January) number in the hands of the public by the 20th of December, and trust all who receive it, will lose no time in introducing it to their neighbors. Send us your name, and get as many as you can of the farmers and horticulturists in your neighborhood to join you.

Address,

JOHN TURNER, PUBLISHER & PROPRIETOR,
AMERICAN FARMER, ROCHESTER, N. Y.

☞ Remember, and address all communications and subscriptions to THE AMERICAN FARMER, Rochester, N. Y.

New York State Cheese Manufacturers' Association.

THE Third Annual Meeting of the New York State Cheese Manufacturers' Association, will be held at the City of Utica, on Wednesday and Thursday, January 10th and 11th, 1866. The Annual Address will be delivered by X. A. WILLARD, A. M., of Herkimer County, Wednesday Evening, January 10th. Mr. WILLARD is widely known as the best practical writer on the Dairy in this country, and his extended tours through the Dairy region eminently qualify him to give an address that will be of great practical value to Dairymen.

The following subjects are suggested for discussion:

1st. The policy of sending an Agent to England to investigate and report upon the style of Cheese demanded by the trade, and the method of manufacture.

2d. The importance, new features, and requirements of the home trade.

3d. The advantages and profits of connecting Butter with Cheese manufacture.

4th. The policy of establishing a Dairymen's Sales Room and Depot in New York.

5th. An arrangement for weekly circulars, containing reports of prices and sales made by the various Factories.

6th. Forming a National Association.

7th. Best grasses and stock for dairy purposes.

NEW TYPE.—We present this, our first number of THE AMERICAN FARMER, to you, kind reader, in an entire new dress, and hope you will take us in your friendly hand and introduce us. Try to send us at least one subscriber. Read over our list of Premiums on the last page and see if you cannot raise a club among your numerous acquaintances, and secure one of those liberal prizes.

FRUIT GROWERS' SOCIETY OF WESTERN NEW YORK.—The Annual Meeting of the Fruit Growers' Society of Western New York will be held at the Court House in the city of Rochester, on Thursday, the 25th of January. There will be an exhibition of Fruits in season, to which all are invited to contribute.

JAMES VICK, Sec'y.

NOW IS THE TIME TO SUBSCRIBE.—We send this number to several thousand persons where we wish to introduce THE AMERICAN FARMER. We shall feel under great obligations to them if they will subscribe, and get their neighbors to join them in forming a club. Send on the names and the paper will be sent by return mail.

CLUBS, CLUBS!—Form Clubs; form them now. We wish every person who receives this copy of THE FARMER would feel himself under a duty to get his neighbors to join him and to send on a club of subscribers, and keep sending names as long as he finds one who does not take the paper.

WE would call the attention of our readers to the List of Premiums on the last page, and our liberal offer to every subscriber at one dollar each. The engravings will be mailed to every subscriber to THE FARMER on receipt of the above price, free of postage.

SUCCESS OF THE AMERICAN FARMER.—We are very much encouraged to persevere in our efforts in starting a new paper by the great number of friends who have called upon us and offered their assistance, and promised to get up Clubs, to all of whom we offer our sincere thanks, and shall be pleased to reciprocate their kindness in any way that lies in our power.

TO OUR EXCHANGES.—We have sent this number of THE AMERICAN FARMER to several hundred newspaper publishers and should be glad to have them notice us. If they will send us a marked copy of any notice they may give, we will enter their names on our books for 1866 and send them one or more copies of THE FARMER without any charge.

CHEAP READING.—This volume of THE AMERICAN FARMER will contain three hundred and eighty-four pages of instructive reading matter and will be filled with the experience of a host of correspondents.

TO OUR FRIENDS EVERYWHERE.—We shall be glad to send a specimen copy of the AMERICAN FARMER to every person who will act as an Agent in procuring subscribers.

Inquiries and Answers.

MESSRS. EDITORS.—Please give me some hints for keeping poultry in winter.—J. B., *Penfield, N. Y.*

Be sure your poultry are well housed, with a good window, with a southern aspect, as fowls love plenty of cheerful light. They will not lay and thrive in a dark, dirty house! Give them meat twice a week. Buy any kind of offal from the butchers, and they will thank you for it, and pay you well in eggs. Attend particularly to their having plenty of water. Snow is bad for them to eat. Clean out the house every fine day and give it a good whitewashing. Sprinkle plenty of sand, ashes or lime all round. Do not let dogs or cats go near the poultry house as they disturb the nests and the poultry. Keep it free from Vermin of all kinds, especially rats and lice. If troubled with the latter, pay particular attention to remove all dirt. Give them a little sulphur and the lice will soon die or leave. Give them broken bones, broken oyster shells, and change of meat every few days, and you will be surprised how much better they will thrive and repay you in eggs. Attend to the foregoing and you will, even this month of January, find your fowls in a better condition to withstand the cold, and be in good heart for producing eggs and furnishing you with early chickens in the spring.—EDS.

J. S.—We shall at all times be pleased to hear from you on any subject suitable to the columns of the Farmer.

LABELS.—See that all labels are in a condition to pass the winter without becoming effaced. Those on newly planted trees need looking to. The wire is often twisted on firmly at the nursery, and, when growth starts, the tree may become girdled. Labels or stakes, intended to be set in the ground, will last for many years if the lower portion be covered with gas tar.

B. B., *Pa.*—We do not know the work you speak of "QUÆRUS"—Bread is a vegetable diet.

H. B., *Ohio*—Send on your sketch and remarks and if suitable, will publish them.

Penfield, N. Y.—The Genesee Farmer is discontinued. You can get the back volumes or any missing numbers by applying to Messrs. ORANGE, JUDD & CO., of the American Agriculturist, New York.

S. H.—We do not employ any traveling agents.

S. R. S.—We have similar enquiries from others and will give you the following subjects upon which we should be glad to hear from you or any of our subscribers:

1. What are the best substitutes for hay in feeding horses, cattle and sheep in winter?
2. On the cause and remedy for mildew on the grape.
3. Best method of raising onions and the best varieties for market.
4. How many times a day should cattle be fed in Winter and the reason?
5. On buildings suitable for a small farm.
6. On Poultry.
7. On Sheep.
8. On the best method of raising calves.
9. On the value of carrots for horses.
10. On the best breed of pigs.

EDITORS FARMER.—Can any of your readers give me a little advice in regard to some cherry trees that I am anxious to improve? I came to this place about three years since and as I and my children, are very fond of all kinds of fruit, and cherries especially, we have been disappointed year after year in finding that two healthy looking cherry trees standing in the side garden do not bear as they should, not yielding over two quarts the first year. The second year just as bad. Last Spring, my neighbor told me to cut off the ends of the branches just above the fruit buds. I did so, to some extent. The trees yielded far more in quantity, but most of the fruit mildewed or rotted before becoming fairly ripe. If any one of your readers will give me some hints or ideas on the subject, he will do me and perhaps others a favor. A. RANNEY.

Rochester, N. Y.

EDITORS OF AMERICAN FARMER.—I have, on the north side of my house, a few peach trees that every Spring give signs of abundance of fruit, being covered with blossoms. But in the time of peach harvest, I look for fruit and find none. Can any of your readers account for this? If so, let them give their ideas or experience in the next issue of your paper.—E. S. T.

SHOW BILLS.—We find it impossible, owing to the great press of business, to get out a show bill at this time, but we hope our Agents will do the best they can for us in extending the circulation of THE FARMER, and by next year we shall endeavor to get one out in good season.

THERE are many young men who can raise a club for THE FARMER by asking their neighbors to join them in forming one. All that is required is to show them the paper and tell them its low price.

Notes on the Weather, from November 1st to December 15th, Inclusive.

The heat of the first half of November was a little below the general average, or as 40.3° to 41.2°
Of the second half, the numbers were, 39.2° to 35.0°
Of the month the means were 39.7° to 38.1°
The hottest morning in the month, 61.0 on the 17th
" coldest " " " 20.0 " 29th
" hottest noon, " " " 66.0 " 17th
" coldest " " " " 30.0 " 11th
" hottest day, " " " " 56.7 " 17th
" coldest " " " " 27.7 " 11th

The water of the two halves was as 0.42 inch. to 1.28 inch. Of the month, 1.70 inch. Yet the water was abundant, as in the two preceding months. The rain exceeded the average. Rain and snow on 21st to 23d at times; snow all melted on the 24th inst. The canal has been free of ice, and on the 30th, the temperature of its water was 37°; Indian Summer from the 14th to the 18th. on the 29th and 30th the foliage had fallen from most of the trees; by the 15th, only the weeping willow and a few others, retaining their leaves; and these had all fallen before the end of the month, except the shrub *privit* or *prim*, Legustrum, which was holding its green leaves on the very last of the month. Snow at Washington, D. C., on the 29th. The month has been quite favorable for farming operations and all ont-door work, though the first half gave some cold and raw, unpleasant weather for a week or ten days. The decline of the price of wheat in England, shows the harvest more abundant than was anticipated.

DECEMBER began very comfortably for heat; but the 4th and 5th were warm and the 5th was 61° at noon, and 53.7° for the day. The 9th to the 12th were warm again and the 11th and 12th very warm and pleasant, so that we had more of Indian Summer. The 12th gave 56° at noon and 50.7° for the day. The mean of the first 12 days was 37.7°, and of 13 days was 36.8°, and of 14 days, 35.5°. The wind changed from S. W. to W. early of the 13th, so that the heat was only 28, while at 9, the evening before, it was 48°, a fall of 20° in a few hours. On the morning of the 15th, the temperature was 12°, a fall of 44° since the noon of the 12th. This change began at the west more than a day earlier than here. At St. Louis. on the 13th, the Mississipi was frozen, the cold being at 9° On the same day, snow at Nashville, Tenn., 2 1-2 degrees of latitnde at the South. On the 14th, the cold was 8° below zero at Cincinnati, as the Telegram read, in the forenoon.

Mean heat of this half is 34.20; general average, 31.07; and water, 0.58 inch. It would have been a warm half month if the last three days had not been so cold; as the mean of the first twelve days is 37.6°; and of 13 days is 36.8°; and of 14 days is 35.5; but as it is, the temperature is 3.1° above the general average. The range of the means of the first half of December, is from 22.9 to 37,7 and its mean, 31.1°; and the heat of 12 days equals the highest just given, 37.7°.

To ADVERTISERS.—All advertisements should be received on or before the 15th of the month to insure insertion in the following month.

Advertisements that are of interest to farmers and only such, will be inserted in THE AMERICAN FARMER.

English Method of Curing Bacon.

As many persons have a prefcrence for unsmoked hams and bacon, we give below the method usually adopted in England. We think this receipt would be very useful to persons residing in the city, and also to those who have not convenience for smoking.

The hogs are killed, scalded and scraped just as they are here, and hung in a cool place to harden but not to freeze. In about 28 hours they will be ready to cut up. The head is first severed from the body close to the ears, the hog is then split down the centre of the back and the two parts laid on a table. If it is desired to take off the shoulder, it should be separated at the first joint below the shoulder. The hams are cut from the sides, at the second joint of the back bone. Take out the leaf lard, then the tender loin, and afterwards the spare rib. The sides are not cut up as in this country, but are left whole and called flitches. The hams should be smoothly rounded, the meat and fat cut away and put into the lard or sausage meat. The flitches should be thoroughly rubbed with salt on both sides and laid upon a stone bench if convenient, and the brine allowed to drain away.

Treat the hams and shoulders in the same manner, place them upon the flitches and cover well with salt. In a few days rub again, adding to the salt a little saltpetre, say one-quarter of a pound to two hundred pounds of pork. Allow the greater portion to the hams, shoulders and cheeks. The object of the saltpetre is to give the lean portion a good color, of course it is not necessary to put much upon the sides unless the spare-rib has been allowed to remain, as is sometimes the case. Be careful to give an extra rubbing to the knuckles and joints and see that they are well covered with salt. If the weather is very cold and the hogs are very large, they will require to remain in the salt for five weeks. Three weeks is quite sufficient for medium sized pork. At the proper time, the hams are taken up, rubbed dry and hung in a high kitchen to dry for several weeks. From thence, they are taken to a high and dry granery or store room and packed in malt. If malt is not convenient, then each ham may be rapped in papers and hnng in an attic or any dry place.

EDITORS FARMER.—I herewith enclose $1 for he coming year. I have in a lot at the back of my house, six apple trees that some years have done pretty well, other times not bearing at all. Last Spring, I wanted to sod my back yard, and took considerable of the sods from under those trees. Thought no more about the matter till it was time to gather the apples. The trees stand in a row, and the four centre ones were loaded, yielding an average of three barrels to the tree. My daughter, who is pretty thoughtful about most matters, observed and called my attention to the fact that the four trees which yielded so well were sodless, and the two outside ones the grass had not been touched. It struck me as rather singular, and I thought I would ask the readers of THE FARMER if there was anything in it.

E. B. BAGLEY.

Important Announcement.

A request having been made to Mr. Barry at the last winter meeting of the Fruit Growers Society of Western New York, that he should deliver an address at the meeting to be held January 24, 1866, he has requested us to state, that he has made arrangements with an eminent fruit grower to supply his place, and deliver an address, which will be of great interest to horticulturists and fruit growers. We would advise all to attend that can possibly do so.

NOTICE.—Since the first side of our paper went to press, the date of the meeting of the Fruit Growers' Society has been changed from the 25tn to the 24th.

The American Farmer in Canada.

AL long as the premium on gold continues, we shall send THE AMERICAN FARMER to our Canadian subscribers at 60 cents each in clubs of five or more, or single subscriptions at seventy-five cents.

If American money is sent, onr terms will be one dollar a year, or seventy-five cents in clubs. We prepay the American postage on all papers sent to Canada or any of the British Provinces.

POSTAGE ON THE AMERICAN FARMER, when paid quarterly in advance, is only three cents a quarter. We prepay the American postage on all papers sent to Canada.

ON page twenty-five, we give a fine illustration of a Winter Season. It is full of subjects for thought, and will call up many pleasant recollections to both old and young.

NEW YORK MARKET.—Dec. 16.

FLOUR—Market opened dull and closed dull, with declining tendency. Sales 7000 bbls. at the following quotations: Superfine State $7.60@7.50. Extra State 8.10@8.20. Choice State 8.25@8.45. Superfine Western 8@7.50. Common to medium extra Western 8@8.40. Common to good shipping brands extra round hoop Ohio 8.50@8.90. Trade brands 9@9.85—the market closing quiet. Canadian Flour is quiet; sales 250 bbls. at $8.10@8.35 for common, and 8.40@11 for good to choice extra. Rye Flour quiet. Corn Meal quiet, Beans $2.75@2.95.

GRAIN—The market for Wheat is quiet and 1@2c better, demand chiefly speculative. Sales are 60,000 bushels. Chicago Spring $1.60@1.80c. Milwaukee club 1.60@1.82. Old No. 1 Milwaukee 1.83@1.85c. Extra choice No. 1 amber Milwaukee 1.90c. New amber State 2.40c. Rye is quiet and steady. Barley dull; sales 6,000 bushels at $1.00 for State. Corn ic lower; sales are 36,000 bushels at 89@95c for unsound, and 95c for sound mixed Western. Oats quiet; sales at 48@53c for unsound, and 60@63c for sound.

PROVISIONS—Dressed hogs 13¼@13¾c ₱ lb. $25.50@ 29.37½ ₱ bbl. Beef at $11@14 for old plain Western Mess; 18@20 for new ditto. Lard 19@20½c for Western. Butter—State in firkins at 44@47c; in tubs 38@44c. Western 25@32. Canada 30@35c. Cheese—there is little doing; Farmer's Dairy 14@17½c, and factory 17@18¾c.

BUFFALO MARKET—Dec. 16.

FLOUR—Market rules dull and unchanged. Sales 80 bbls. Canada bakers' at $9. Held at 11@11.50 for XX white Canada and western; 10@10.50 for amber; 9.50 for red winter; 8.75@9 for Canada bakers'; 7.75@8 for spring and extra State.

GRAIN—The market rules firm but dull; sales yesterday 2000 bushels No. 1 Milwaukee spring at $1.60. Corn rules dull; sales yesterday at 75c. Ohio on track at 67c. Oats dull; held at 44c for No. 1 western, and about 35@40c for those out of order. Barley dull and nominal; held at about 95@1.00 for prime Canada. Rye dull; held at 72@75c for No. 1. Peas dull and inactive; held at 1.00 for Canada. Beans firm; held at 1@ 1.50 for new.

SEEDS—Dull and nominal. Held at $4 for Illinois and 3.75 for Wisconsin Timothy and $8 for Clover.

DRESSED HOGS—Dull and nominal. Held at 11c.

CHICAGO MARKET—Dec. 16.

FLOUR—Market active and advanced 15@20c.

GRAIN—Wheat dull and declined 4c, and subsequently rallied, closing firm at $1.32@1.33¼ for No. 1, and 92½@93c for No. 2. Corn active at 46@47c for No. 1, and 43@46c for No. 2. Oats dull at 26½c.

PROVISIONS—Quiet. Mess Pork, $26.50@27.08. Sweet Pickled Hams, 15c ₱ lb.

HOGS—Quiet, and quotations nominal. Dressed in good demand for shipment at 10@11¼c.

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VOLUME I. ROCHESTER, N. Y., FEBRUARY, 1866. No. 2.

THE AMERICAN FARMER.

A MONTHLY JOURNAL OF

AGRICULTURE AND HORTICULTURE.

ILLUSTRATED WITH NUMEROUS ENGRAVINGS OF

Farm Buildings, Animals, Implements, Fruits, &c.

Volume One, for 1866.

One Dollar a Year, in Advance.

Five Copies for $4.00; Eight Copies for $6.00; and any larger number at the same rate.

☞ All subscriptions to commence with the year, and the entire volume supplied to all subscribers.

☞ Postmasters, Farmers, and all friends of improvement are respectfully solicited to obtain and forward subscriptions.

Specimen numbers sent to all applicants.

Subscription money, if properly enclosed, may be sent at the risk of the publisher. Address,

JOHN TURNER,

Publisher and Proprietor, Rochester, N. Y.

THE AGRICULTURAL PRESS.

It is known, we presume, to all the readers of THE AMERICAN FARMER—a large and very respectable family, daily and rapidly increasing in numbers—that the late *Genesee Farmer* was sold by its publisher, Joseph Harris, to Orange Judd & Co., of New York, publishers of *The American Agriculturist*. It is not known, however, to many, that for the price paid by Judd & Co.—*five thousand dollars*—Joseph Harris agreed, by signing a bond, not to write for any other paper, but also "TO DO ALL IN HIS POWER TO PREVENT AND DISCOURAGE THE PUBLICATION OF ANY OTHER JOURNAL OF A LIKE CHARACTER IN ROCHESTER OR ELSEWHERE." A still less number are aware that Mr. H., not only *designed to sell all the subscribers to the Genesee Farmer*, but all those who have been in any way connected with its publication. These seem to be the facts, as we judge by a "card" published in the January number of *The Agriculturist*. Joseph Harris is very prompt to render up the "pound of flesh" at the bidding of his masters, and takes this course we suppose, to fulfill the bond which compels him to *oppose all other agricultural papers*. The following is the "card" referred to:

"TO THE FRIENDS OF THE GENESEE FARMER.

"ROCHESTER, N. Y., Dec. 16, 1865.

"As previously announced, I transferred the *Genesee Farmer* and *Rural Annual*, to Messrs. ORANGE JUDD & CO., of the AMERICAN AGRICULTURIST, New York, thinking that this arrangement would be advantageous to myself and the patrons of the *Genesee Farmer*.

"But it seems that a young man in my employ, whom I left to mail the December number of the *Farmer*, while I was absent, surreptiously printed and put in copies of the paper, a circular, stating that a new Agricultural Journal would be started in Rochester, published, I presume, (for I have not seen the circular,) by the young man himself.

"Now, while this is exceedingly annoying to me, and clearly a 'breach of trust,' on his part, yet I do not suppose that any one receiving the circular will be misled by it. For fear, however, that possibly some may not at first detect the fraud, I have thought it best to make this statement of the facts in the case. Should it be necessary for the protection of the patrons of the *Genesee Farmer*, legal proceedings will be instituted, restraining this young man from availing himself of the advantages, (however small), of this dishonest conduct. As he has hitherto borne a good character, I presume he was induced by other parties to put in the slip, and lend his name to an enterprise which they must have known would end in failure. I should let the affair quietly drop, only that I fear some of the old friends of the *Genesee Farmer* may be imposed upon. I trust that every one of them will take the AMERICAN AGRICULTURIST, and I am sure that they will not then regret that the change has been made.

"JOSEPH HARRIS."

In reply to these personal charges we simply say that Joseph Harris has, very wisely for him, failed to institute the "legal proceedings" threatened, and which he knew at the time of writing it would be impossible to carry out. On the contrary, we hold him responsible for all damages or loss which we may sustain through his "card," or his personal insinuations, and also Messrs. Orange Judd & Co., for having published the same, and shall at the proper time commence proceedings to have them *prove* or *pay* for these base slanders. Mr. Harris' offer to make a public retraction, will not now satisfy us. This, and only this, we say on matters personal.

But this matter is a question in which the public are interested. We always supposed that any per

son had a *right* to publish an agricultural or any other paper, and to advertise the same in any paper, and that the people had the *right* to patronize such journals as suited their tastes. We never had the least idea that an editor *owned* his subscribers, and could sell them out at a dollar per head! Yet Joseph Harris lays claim to such preposterous absurdities. That the old subscribers to *The Genesee Farmer* object to such a trade our subscription books give abundant evidence.

Joseph Harris affects to think there was something awful in our starting a new paper here, after *The Genesee Farmer* was discontinued or united with the *Agriculturist*. It would be well for the over-virtuous and ridiculously indignant Mr. H. to look at the origin of *The Genesee Farmer*, which he tries to bury so deep as to be beyond resurrection. If he had continued its publication a little longer he certainly would have succeeded in this, as its subscription list had decreased to *less than four thousand!*

The Genesee Farmer was commenced by Luther Tucker, the venerable agricultural editor of *The Country Gentleman*, in 1831. At the death of Judge Buel, of Albany, in 1839, Mr. Tucker removed *The Genesee Farmer* to Albany and united it with *The Cultivator*, (long edited and published by Judge Buel), under the title of *"The Cultivator—a consolidation of Judge Buel's Cultivator and the Genesee Farmer."* No sooner was the removal known than arrangements were immediately made for commencing a *new* paper, under the name of *The New Genesee Farmer*. After a short time the word *"New"* was abandoned, and the paper assumed exactly the name adopted by Mr. Tucker, which was at least hardly honorable. This was the origin of the paper and the name, the "good will" of which Joseph Harris has sold; but Mr. H. came in possession of *The Genesee Farmer* in a manner at least not very *honorable*, "but as he has hitherto borne a [tolerably] good character!" we do not wish to irritate a tender spot, or call up unpleasant reflections. We leave the reader to say whether the origin of THE AMERICAN FARMER, coming out boldly and independently under its own name, is not far more honorable than that of *The Genesee Farmer*—and if the owner of such a concern should not be a little modest in making charges upon those who are far too honorable to follow in their footsteps.

This "card" of Joseph Harris is published in a circular, with several columns of introduction by Orange Judd & Co. This production is remarkable only for the incorrectness of its statements, and as evidence of the puerile vanity of its author. Read the following extract:

"Subsequently, Mr. Judd and Mr. Harris frequently met and discussed the best methods of developing and improving the Agriculture of our country, and Mr. Harris talked of joining Mr. Judd in the *Agriculturist*, but it was finally thought best that AS THEY WERE THE ONLY MEMBERS OF THE AGRICULTURAL PRESS, SPECIALLY EDUCATED FOR THIS PROFESSION, IT WOULD BE BETTER TO DIVIDE THEIR SERVICES."

Only think of this! What important meetings! How the fate of the nation and the world hung in the balance, when these two young men met to *discuss!* And yet all the world was profoundly ignorant of these momentous meetings! Where was the agent of the Associated Press, that notices of these meetings were not telegraphed all over the country? What makes the matter worse is the fact, so *modestly* announced, that these two gentlemen were "THE ONLY MEMBERS OF THE AGRICULTURAL PRESS SPECIALLY EDUCATED FOR THIS PROFESSION"!!! We always thought Luther Tucker, Sanford Howard, John J. Thomas, L. B. Langworthy, and a host of others of our agricultural writers, knew *something* about agriculture and editing agricultural papers, but it seems we were mistaken. What a good thing it was these two luminaries concluded to *"divide their services,"* so as to give us light at two different points! And now that they are to be divided no longer, we fear something bad will happen.

To be serious, we are sick of such silly trash. There are gentlemen now engaged in writing for THE AMERICAN FARMER and other agricultural journals, who were practical agriculturists and skillful writers for the agricultural press when Orange Judd was peddling his salve or "cuticle" for sore fingers—and Joseph Harris was doing errands and other chores for Mr. Lawes, in England.

The truth of the whole matter is this: the publisher of THE AMERICAN FARMER, whom Joseph Harris calls "a young man in my employ," is brother-in-law of Mr. H., and has had almost the entire control of the *business* of the office for many years. If we had been allowed *entire* control, *The Genesee Farmer* would never have run down to *four thousand* subscribers, nor would Joseph Harris have been tempted to sell it. We intend to throw our whole energies into the publication of THE AMERICAN FARMER, and with the aid of a host of intelligent correspondents and the assistance of our friends everywhere, our paper will soon rank among the most valuable and successful of the agricultural papers of the country.

GOOD RULES FOR FARMERS.—1. Perform every operation in the proper season. 2. Perform every operation in the best possible manner. 3. Always keep your implements and tools in first rate order. 4. Finish one job before you begin another. 5. After finishing a job always return your tools to their proper place. 6. Attend personally to all your affairs, and see that the business is effectually done.

"The heart is hard in nature, and unfit
For human fellowship, as being void
Of sympathy, and therefore dead alike
To love and friendship both, that is not pleased
With sight of animals enjoying life,
Nor feels their happiness augment his own."

THE coldest, dreariest, most uncomfortable and unproductive month of all the year is upon us. December and January both have their little oasis in the Christmas holidays, and the New Year's welcome, March and April are happy in being the heralds of the glorious May, but February, has no bright spot to cheer its loneliness, unless, perhaps, we except the day when cupid holds his revels, sending his missives of love from post to post, and causing many a heart to remember in after years, with tears of joy, the 14th day of February.

We in vain try to persuade ourselves that the thoughts that press upon our mind as being appropriate to the month for our readers, are *unnecessary* and *uncalled for*. It is in vain that something whispers in our ear, telling us that intelligent farmers need not to be reminded that this is the month when their domestic animals need more care and attention than perhaps any season in the year. It is in vain, indeed, for while we would fain believe that every one of God's creatures are warm and comfortably provided for, and their every want anticipated, our daily witness bears fearful evidence to the fallacy of the thought.

Standing around the warm fire and talking with a friend, in one of our city stores not long since, we were somewhat startled by the hurried entrance and excited manner of a lady to whose attractive countenance the unwontedness of the occasion had added a double charm.

Singling out the proprietor, she said, "I should think, sir, that you would be ashamed to be taking your comfort in a warm room, and leaving that bundle of chickens floundering in the cold and snow at your door." No one answered her, she said no more, but passed on, closing the door after her. We felt as though an angel had departed, and looked to see what influence her words and appearance had effected. The proprietor, who was at heart really a kind hearted man, had thoughtlessly left the chickens in the condition in which he had purchased them, went to the door and brought in the innocent cause of the scene. There were six of them, fine birds, worthy indeed of better treatment, all tied in one bundle by the legs, and that quite tightly, and we could not wonder at the righteous indignation of the good Samaritan, who had so timely come to their deliverance. How often do we see sheep and calves brought to market and thrown ruthlessly upon the pavement with positively their four legs tied into one. We are ashamed to say that sometimes the pony who does Sabbath duty, stands at the church door, blanketless, on a February day, while the family is cosily hearing the doctor's sermon; but this is a rare case, and the church-going man is usually a merciful man to his beast. Many a stable boy schools himself to believe that forsooth, because the pump is far from hand, and the pond has received its icy coat, that the animals under his care do not need water, or can do without it, now that they do not experience the dryness of the summer's heat.

A friend of ours, otherwise esteemed, when deprived of the services of the man who usually milks his cow, will sooner than leave his comfortable fire-

side, hear the piteous bellowing of the animal from six o'clock till bed time, asking to be relieved of her milky burden, and asking in vain. How often the farmer encumbers the kitchen with his presence, when from every seam and crack in his barn and stable, come the painful pleadings of his domestic animals, asking for only a nail, a hammer, and a lath to make them comfortable. Instances accumulate on our mind. We might go on to tell of uncomfortable beds, the painful itching of the troublesome tick to the poorly fed sheep, the yearnings of cattle for a little salt—the unsatisfied appetite of the merely straw-eating animal, the nausea arising from a lack of an occasional dinner of turnips and rutabagas—the unpleasantness of the effluvia emanating from an undue accumulation of excrements, &c. &c., ad infinitum. But we forbear. All we aim at in this little article, is, to bring before the thinking, intelligent and active farmer, a few hints from which he can derive practice for the future, and food for thought for a February day.

OUR EASTERN LETTER.

WRITTEN FOR THE AMERICAN FARMER, BY G. E. BRACKETT.

THE WEATHER.—As the weather is the fashionable standing topic for conversation, we may as well allow its claims of precedence, by opening our letter with "a fine morning, but rather cold, sir," which is the case with a clear sky, fresh, northerly wind, and the mercury down to zero. And really, the weather during the past month has proved worthy of this priority, as well as its right to a special record. for it has shown such extremes of temperature as are unusual even in this variable climate. During the last days of December, it alternated from cold and squally, with the mercury at ten degrees on one day, to warm and spring-like on the next, with the thermometer indicating fifty degrees. But the coldest "snap" of the season was last week, during which the mercury did not rise above thirteen degrees below zero for nearly three days, and the coldest reached during the term was twenty-four degrees below zero on the morning of the 7th of January. This is the longest continuous cold weather we have experienced for many years, and the lowest temperature since the "cold Friday," February 8, 1861, when we recorded thirty-two degrees below zero. We have had but about four inches of snow, and no sleighing. The ground is now bare, and frozen hard and deep, which is bad for grass, roots, and the next year's hay crop.

MARKETS.—The prices for our agricultural products are quite satisfactory, though far below those of last year. Large quantities of hay and potatoes are shipped from this port to Boston, New York, and cities further South. Potatoes are now sixty cents a bushel; the variety grown, almost wholly, is known as the Foote. Hay is ten dollars per ton for pressed, and ten to twelve dollars for loose; last year it was twenty-five dollars per ton. Apples $1.50 to $2.00 per bushel. Stock of all kinds is high; milch cows $50 to $75; four-year old steers, girth six feet, $140; working oxen, 6 1-2 feet, $150.

BOARD OF AGRICULTURE.—The Maine Board of Agriculture meets at Augusta on the 17th of January. It is composed of one member from each county in the State, which has one or more agricultural societies within its limits, and its duties are advisory to the Legislature upon subjects pertaining to the agricultural interests of the State. The Industrial College question comes up this session for final decision. The prospects are not very flattering. Several sites have been offered for the proposed college and farm, but the trustees have failed to obtain the necessary amount of subscriptions to erect the needed buildings.

THE AGRICULTURAL COLLEGES IN NEW ENGLAND.—But one year of the five allotted by Congress for the establishment of the Agricultural Colleges now remains. Nearly all the New England States have taken action towards complying with the requirements and accepting the national endowment. Massachusetts is about establishing an independent institution, but in close proximity to Amherst College. Connecticut has connected her fund with Yale College. Rhode Island and New Hampshire will connect theirs with their universities, and Vermont, according to a notice now before us, proposes to unite hers with the University at Burlington. In Maine, as above stated, the matter remains to be decided. It is doubtful if we can locate independently, and rather than lose the benefit of the endowment, shall have to unite with some existing institution.

THE CATTLE LAW.—The prohibition of cattle from Canada, in view of preventing the importation of the cattle disease, causes considerable feeling across the border, and will probably have the effect of raising the price of stock in Brighton and Cambridge markets. The whole number of cattle from Canada last year was upwards of 10,000, which was a larger number than from any State except Vermont. The aggregate amount of live stock in these markets last year was, cattle 121,023; sheep 310,456; swine 83,678. Of the whole number, Vermont sent 204,361, or nearly one-half.

THE EIGHT HOUR SYSTEM.—Our readers will have noticed the agitation in favor of an eight instead of the ten hour system. Speaking in regard to what effect such a system would have upon farming operations, we need only say it is wholly impracticable.

HOW WE FARM IT IN THE GENESEE COUNTRY.

WRITTEN FOR THE AMERICAN FARMER, BY "P. C. R."

FARMERS, of different sections of the country, ought to exchange information through THE FARMER as to their manner of farming, and interchange ideas, so that they may profit by one another's experience and observation.

I propose to write for THE AMERICAN FARMER, a series of articles, describing our method of farming in the Genesee country.

Thirty years ago, the expression, "The Genesee Country," suggested a vision of golden wheat fields, and the best brands of flour.

I remember in 1844, listening to a political speech by Frank Granger, in which I was startled by the declaration that "more flour is packed in Rochester than in any other city in the world." I suppose that he uttered the truth then, but it is now, a truth, no longer. The fertile Genesee country is no longer a great wheat growing country, and the once celebrated brand of Genesee flour is unknown to the present generation of flour dealers in the great metropolis, where it was once as current as Orange County butter.

The gradual exhaustion of the soil, the inevitable result of running to a single leading crop, the ravages of the midge, and the competition of the virgin west, rendered wheat culture unprofitable, and compelled the Genesee farmer, as a measure of self-preservation, to resort to a varied agriculture, the only kind that can prove permanently successful. Wheat is not entirely banished from the farms of the Genesee country, but will probably continue to occupy a subordinate place in a judicious rotation of crops, on large farms, but it is no longer king.

The last twenty-five years has brought about great improvements in the condition of the Genesee farmer. He is more intelligent, better educated, lives in better houses, has more attractive surroundings, keeps better horses and other stock, rides in finer carriages, dresses better, reads more, and a higher class of books, papers and magazines, and has, generally, more of the elegancies and refinements of cultivated society. He thinks less of attending the circus and Jim Crow show, and more of listening to the first-class lecture or sermon.

He frequently rides five or six miles with his family, winter evenings, to attend the Athenæum course of lectures, and is an attentive and appreciative listener. He is often better read than the business man of town, as he has more leisure for reading, devoting less time, during the season of long nights, to business and society.

FARM HOUSES.—One who was acquainted with the Genesee country forty or fifty years ago, would, on revisiting it at the present time, probably be struck with the improvement in farm buildings, particularly farm houses.

The pioneer commenced with his rude log house, chimney on the outside, composed either of stone, or sticks and mud, and but one apartment. This was succeeded by an improved log house, with a brick chimney inside, and several apartments, or a small frame house, unpainted, and without ornamentation. Now, you see a frame house, painted, with blinds, projecting roof, more elaborate finish internally and externally, or a brick or stone house. There is still great room for improvement in the architecture of farm dwellings, and the fourth series will probably present a beauty in design, and a convenience in arrangement, that will excel anything the world has yet known.

TOO MUCH LAND.

WRITTEN FOR THE AMERICAN FARMER, BY J. L. HERSEY.

MESSRS. EDS.: WE wish to say a few words on the advantage of small farms. How many of our farmers would be benefited by selling one-half of their land, and applying the proceeds to the improvement of the other remaining half. A farm of sufficient size to deserve the name, can scarcely be too small. An acre of land well tilled, and with plenty of manure, will produce more than *four of poor land, and takes less labor.* A small tract takes less fence—and hence they can be better made, which keeps out breechy cattle, affecting another saving. All the labor on a small farm is accomplished with a saving of time—and he who *saves time, saves money also.* The going and returning from work, the hauling of manure and produce—each and all is quicker done. The owner can see over his place, very quickly, and his hat in the field will sometimes do more than both his hands. No greater mistake can be made, and perhaps no one oftener as we think, than that of *buying too much land.*

Extending our domains while our lands are not half equal to what they are capable of. This buying land is a sort of inherent vice of our nature. It existed among the Romans, as is believed, from the instructive lesson of the father and his two daughters. One was married, and he gave her one-third of his farm; the two remaining thirds were equal to the whole; the other daughter became a wife, and he granted her an equal portion, and the one-third that was left to the father was still equal in its productiveness. Is it not best to live for ourselves as well as for our children? How many of us do and have forgone the comforts of life to obtain more

land, and portion it out to our children! The same money expended in rendering our dwellings convenient, in a good carriage in which to attend public worship, and visit our relatives and neighbors during the leisure that is oftenest found with a small farm, would keep our wives and daughters in better humor.

Many of our farmers are deficient in shelter for their fuel, and it has to be dug out of the snow, and they have so much to see after on a large farm—always driven for time, that it is not laid in beforehand and cut and split, and dry, ready for use. A good wood house is built for the price of one or two acres of land; and in cold, stormy weather, how much ill feeling and family jars might be obviated! To have a good commodious wood house to go and get an armful of dry wood, that will send its cheering rays all round that cosy kitchen; so that the good wife can go about her culinary employment with a smile; then that family group will be more prone to be grateful to the Dispenser of all good; hence by restraining our desire for more, and applying what we might thus spend in bettering our condition, we insure peace and cheerfulness at our firesides, and improve our moral condition also. Charity and the blessings of life begin at home; hardly a house, or the buildings near it are as convenient and comfortable as they might be made. If we are sometimes met with fretfulness, when we should have smiles, let us see if there is no cause. I have made a few observations, and I find that the most thrifty and well-to-do farmer listened to the words of caution given to him by his wife within doors. Many of our farms are sufficient for three or four; and, instead of our sons going South to seek their fortunes, would not that father feel far happier in seeing him settled near him; if not, he is one who is blinded by the gods of this world, and when the scales fall from his eyes, it may be forever too late.

WHEN TO SELL PRODUCE.

WRITTEN FOR THE AMERICAN FARMER, BY G. E. BRACKETT.

THERE is no question we are oftener asked, than "when do you think I had better sell this, that, or the other crop, and do you think such an article will be higher or lower?" To such questions as the former, our invariable answer is, "sell when it will *pay* to sell;" and to the latter, "we cannot tell you," for in these changeable times, no man can tell what a day may bring forth as regards the produce markets. Of course, there are certain general facts which have a bearing upon the matter; but these, every farmer who is posted, as he ought to be, fully understands.

Yes, our advice always is, sell your crops when it will pay to sell them; when the amount received will equal the cost of production, with a fair percentage on the capital employed. This is what we consider sound advice, and the true policy, being a safe course under all circumstances. If the market price will not amount to sufficient to make good the cost of production, you are fully justified in holding on to your produce, as a general rule; but if it will return that and good interest in addition, you are on the safe side to dispose of it. You may hold on to your produce longer and obtain a much higher price, but the chances are just as good that there will be a decline, and you are a loser.

But this is merely introductory to the subject we wish to refer to. We advise you to sell when it will pay to sell, but we fear the advice is counsel thrown away. Not but what you understand our meaning fully, but because you are in no condition to profit by it. How many of you can tell when it will pay to sell your crops, or know how much they cost in the aggregate, or by the pound, bushel, or ton, as the case may be? Can you tell whether you are making or losing, whatever the market price may be? There is the rub. We think we are safe in saying that not one in a hundred of you know the cost of your crops. You think, guess, calculate, it is about so much, but you don't know. Now, how are you going to tell whether you can afford to sell at this, that, or the other price. Wheat may be forty cents or a dollar and a quarter, and potatoes fifty or seventy cents a bushel; you don't know whether it will pay for you to sell yours or not, because you can't tell what it cost you. And so you "go it blind." If you hit a price that pays, you consider it luck; and if you lose, you "grin and bear it."

This is no way to do business. What would you think of the merchant who knew nothing of the cost of his articles, and sold just as it happened. You, even you, would see the impropriety of such a course. Then why not apply it to your own business—your own profession. If anything, it is only more complicated than the merchant's, therefore, requires more attention, and a stricter approach to method and system. Make a new beginning, and next year, know what your crops cost, and then you can tell how to sell. If you will not do it for yourselves, do it for the sake of your boys, that they may not be in the condition you are, when they farm for themselves. Look before you leap. Forewarned is forearmed. Or, as the modern adage has it, "be sure you're right, then go ahead." But you can never be sure you are right until the present slipshod method of farming is done away with, and a system is followed which is more in accordance with the needs of those who gain a living by cultivating the soil.

FARMING IN PENNSYLVANIA.

WRITTEN FOR THE AMERICAN FARMER, BY D. W. SEMPSEL.

MESSRS. EDITORS:—I do not seek a place among your correspondents for the purpose of advising or instructing others on a subject or business in which I am but a novice myself; but to impart such information in regard to passing events or circumstances transpiring in our locality, as may be of interest to the reader in other parts of the country. Some of our croaking farmers complain of the high taxes they have to pay in consequence of the war. Perhaps their party feelings have something to do with magnifying the burdens they have to bear, which are more imaginative, than real; for when did ever our farmers get better prices for their produce. Even here, in the little town of Northumberland, wheat is selling at $2.40 per bushel; corn $1.00, out of the field; last year old corn was as high as $1.75; other grain in proportion, and hay sold for $26.00 per ton. It is not quite so high now; but in all probability will be up again before spring. Beef is now selling here at 13 cents by the side, or 12 and 14 by the quarter. Pork is worth 20 cents wholesale. Beef on foot, 3 cents; and hogs or shoats, 12 cents on foot, or live weight. Butter is worth 50 cents per pound; eggs; 30 cents; lard, 30 cents; tallow, 12 cents; potatoes are worth $1.00, and have been sold as high as $1.50; new potatoes brought $2.00 a bushel this summer; apples sold at $1.00 per bushel, and cider $6.00 per barrel. Peaches, $4.00 per bushel, and very scarce; smaller fruit was abundant. Poultry was also pretty well up. Money is plenty, and as good as ever it has been. Who does not like "greenbacks?" Labor commands good wages. Almost any out-door work commands $2.00 per day; good mechanics $3.00 per day. Help on the farm can be got by the month for about $13.00, and board, or $150.00 a year, and house rent free. Of course, what help is hired during hay and harvest, is much higher for a short time; yet I do not think farmers ought to complain, taking all things into consideration; as a general thing they have never been more prosperous, unless by inadvertency. A case of this kind I will relate.

This fall one of my neighbors, a clever farmer, but rather on the old-fogy order, threshed out his clover seed, of which he had about twenty bushels. He hurried it off to market at Sunbury, about five miles, passing Northumberland, his nearest market, (only two miles,) and crossing the river, paying tolls, and taking more time; and selling out his load or what he had at $6.75. When on his return home, he stopped at the store in Northumberland, when the merchant informed him that if he had brought his clover seed to him, he would have given him $7.50 per bushel for it; but it was too late then to repent; but he may profit by this lesson of experience taught him in this transaction.

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

SOMETHING NEW FROM THE SOUTH.

A FRIEND in Memphis sent me *The Loyalist*, a newspaper now published weekly in Memphis, Tennessee. Unlike many Northern prints, it is more zealous than practical. It is free from all clannish or party feeling, combatting only the unreasonableness and rancor of Southern feeling towards the friends of equal rights at the North; and this the editor does at times with great declamatory power, intermitting occasionally into a grim humor, showing up the editors of the South as being forever haunted by the nightmare that somebody is going to asperse the character of Southern people, and to deny that they are just as brave and generous and chivalric as anybody else.

This very practical editor, made an excursion of several hundred miles down the Mississippi and back by steamer, improving his time among the legion of passengers, to find the business, social and political opinions of such as "could give a reason for the hope that was in them." He sets down the conversation with each in numerical order, from No. 1 to No. 15. Twenty-five young men from Tennessee, who had been in the rebel army, were going to Lamar county, Texas, to form a settlement; four or five had gone ahead to buy lands to form a stock-growing settlement. They expressed no regret for the failure of the Confederacy, speaking frankly of the past, and hopefully of the future. Others were going down the river with a Memphis real estate broker to see, and probably purchase cotton plantations; they had no fear that the negro would not work for wages, or at least for a share of the crop; they also averred that a man could now go into cotton growing with a small capital, as he had no negroes to buy. A *ci-devant* rebel general was going to take charge of a plantation, of which he was a part owner. He was not sanguine that negroes would work for wages, but he intended to offer them a share of the crop. He said some planters gave a fifth, or a sixth, and others half, after deducting all expenses. No. 11 was a shrewd old plantation negro, who had cleared his two bales this season, free of expense, working on shares, which he preferred to $20.00 a month wages. A lively old planter, 70 years of age had resided during the war on his plantation in Mississippi; it was interesting to hear him tell how both sides "worriet" him; he had lost four hundred cattle, his slaves, and much other property by the war, and now he was going to hire his former

slaves and make a big "crop" next year; his son thought "President Johnson the best man in either North or South." No. 13 was a planter from Bayou Bartholomew, who said planters there were generally discouraged, from the fear that the blacks would not work for wages, and they very generally want to sell their plantations. Two bales to the acre was easily made there; the soil is first rate, but fevers prevail.

THE MAKING AND SAVING MANURES—THE VALUE OF ABSORBENTS.

One great cause of the waste of manures, is the fact that a great many farmers are not aware, that the liquid evacuations of the animal, contain nearly all the fertilizing elements of the animal fæces. Liebig tells us that the urine of the animal contains nearly all the nitrogen and phosphoric acid of the excrements; much of what remains has no quickening power. But so fully impressed are some of the New England farmers with the truth of the matter, that the principal subject of discussion at one of their farmers' clubs, was in relation to the best absorbents for liquid manures, muck, compost, &c., and their value and management. It was asserted at the Valley Farmers' Club, in Massachusetts, last winter, that with all the care, with tight floors and the best absorbents, dry swamp muck, turf, sand, loam, &c., no farmer saved more than one-fourth part of his best manure, the urine. It would seem that in that region all the cattle are stalled in winter, and it must be a very sandy region, for it was said that sand was used as an absorbent, because "straw was dear, and clay was too expensive." One farmer said that he used the finest sand he could get for his cattle stalls, as the coarser the sand the less liquids it would absorb. This agrees with Schubler's well-tried experiments. He says that swamp muck dried under cover is the greatest absorbent; that 100 parts of dry humus will absorb from an atmosphere well saturated with moisture, 12 pounds of water in 72 hours; and a rich garden soil, 6 pounds; a stiff clay, 4 pounds; a calcareous sand, a quarter of a pound; and a silicious sand none at all. The same continued experiments found that dried humus would absorb 190 per cent of water, while pure sand only imbibed 25 per cent. Hence the value of humus in the soil in a drouth, and the value of clay over sand as an absorbent, to say nothing of the greater affinity of clay than sand, for the fertilizing elements of manure.

HOW SOME FARMERS MAKE THEIR PORK.

Here is a farmer who had to kill his hogs early in December, just as they were putting on fat to great profit, because his half-manured corn-field did not yield corn enough to feed them any longer. This season he manured better and got a large corn crop; but having no old corn to begin with before harvest, his hogs fattened so slowly on new corn that he had to keep them until January, and then they had only arrived at the most profitable point of their keeping. Had he paid double price for a few bushels of old corn, and fed it to his hogs, ground or boiled whole, one month before harvest, it would have nearly doubled the weight of his hogs. Corn kept over to feed hogs is better than money at twenty per cent. interest. Per contra, here is a market gardener who killed an April pig on the 3d of January, which weighed 368 pounds, double the weight of the farmers old hogs. This pig had all the sour milk and buttermilk of one cow, plenty of ground old corn, with all the weeds and vegetables he would eat through the season. He was kept in a pen, and in the fall he was fed corn, boiled, until it cracked open, all he would eat, with now and then a squash or pumpkin boiled with it. This man said that new corn did not pay for grinding. It is better to feed boiled meal warm, in cool weather, and it should never be suffered to ferment; sour swill occasionally for a change, or to sharpen the appetite, may do—but nutrition is lost in the acidulous fermentation. I once bought of a woman, a hog weighing but 160 pounds. Yet she said it had eaten since corn was ripe, 80 bushel baskets full of ears, besides swill, pumpkins, &c. It was killed about the 1st of January. On questioning, she said it had no other pen or shelter than a pen of rails without a floor. Rails and straw were laid over one corner, but she admitted that the hog had a wet and muddy, rather than a warm berth. No wonder the animal had to eat so much to support animal heat, or that he weighed so little as he had to work off his adipose matter in rooting to find the shelled corn.

UNDERDRAINING, FALL RIDGING AND TRENCHING.

Taking off surplus water is only one advantage of underdraining; it also makes a tenacious soil more friable and absorptive, and a soil is always productive in proportion to its capacity to hold water in absorption; vegetable manure or clover sod plowed in will make a soil absorptive for the time being; but unless it is underdrained, as soon as vegetable matter is exhausted by cropping, the soil is compact and hard again, and it will not only be much later in the spring before it can be planted, but it will also fail to stand either a wet or a very dry summer.

Ridging and trenching in the fall is also a great promoter of early vegetation in the spring, particularly for a tenacious soil. No garden in which clay predominates can be made to vegetate early without fall plowing, or ridging with the spade, which is still better. The frosts of winter are great manipulators; nothing more is to be done in the spring but leveling, and a light application of fine compost manure, particularly if coarse, unfermented manure has been turned under in the fall. Sand and anthracite ashes should never be applied directly to a stiff clay with-

out being first mixed with stall or vegetable manure, because the affinity between clay and sand only makes an adhesive mortar. But clay once ameliorated by compost made of sand and manure, needs nothing but exposure to the frosts of winter to make it ever after loose and friable.

CARE AND MANAGEMENT OF STOCK IN WINTER.

WRITTEN FOR THE AMERICAN FARMER, BY S. P. KEATON.

MESSRS. EDITORS:—There are but few persons, I presume, who have traveled through the rural districts in winter, who have not had their attention drawn to the manner in which some farmers keep their stock through the winter. Some are found exposed to the cold, north-east wind, with an apology for a shelter, consisting merely of an old straw hovel, or, perhaps, the south side of a stack of stalks, or straw. To such farmers as are in the habit of wintering their stock in such exposed and unsheltered places, I would say to them, that the place in which stock is kept during winter in this latitude, is of more importance, and has more effect, upon the condition of the animal, and the amount of food consumed, than many farmers are aware of. Some may say, "How is it? My cattle are seemingly healthy; they eat coarse fodder with great avidity." This may be so; but have you tried the experiment of giving your cattle good, warm shelter during the winter? If so, you must have discovered the difference between the amount of fodder consumed, and the difference in the condition of the animal. Now, the difference is caused by this very fact: that the animal exposed to such treatment as we have alluded to, is required to breathe oftener, and consequently, the action of the lungs will be increased as the temperature of the body decreases. Now, then, in order to keep the animal in condition, the machinery must be kept in motion. This increased action of the lungs being caused by the exposure of the animal to the cold, will, as professors have demonstrated, call for an extra supply of carbon from the food, using up the starch, oil, &c., which would otherwise have gone to cover the frame of the animal with fat. Thus, you will see, that a large proportion of the food given the animal is consumed in the lungs to keep the body warm, consequently, as the animal grows poorer under this condition of treatment, it becomes less able to resist the cold. So, you see that at last, all the nutriment contained in the food eaten by the animal exposed in such situations, is used up in the action necessary to keep the animal from freezing. Thus, you will see at a glance, that the best system to be pursued is warm and unexposed shelter for stock during winter.

Another point of profit is very apt to be overlooked by many farmers. That is, the care of their young and growing animals. The best hay, all the grain and roots, are usually given to the cows, and working oxen. The young animals are left, as it were, to shirk for themselves, with coarse food, and scarcely any accommodations at all, unless, perhaps, the cold side of an old stack of hay or straw. The young animal should constantly be kept growing, from the time it is taken from the cow until it comes to maturity. In order to do this, they should have good care and warm shelter, with plenty of good, and nutritious food. This will cause the young animal to grow rapidly. Its muscles will then be constantly developing, and increasing in size, its bones will enlarge and become solid, its whole frame will enlarge from day to day in so rapid a manner as to be perceptible. The daily waste of the body is much larger in proportion, in the young animal than in the full grown; for they are possessed of a more active circulation, and consequently, the body changes its constituent particles more rapidly. It has been said by some that quite young animals renew their whole body in a single year; hence, the importance of good care and a good supply of wholesome, and nutritious food. The farmer that provides well for his young animals, will find that he will soon have well and full developed animals, coming early to maturity. On the other hand, the man that allows his young cattle no shelter and no better than coarse and unnutritious food, will find that his are one year behind his neighbors in coming to maturity; and though he may fancy he has made a saving of food, it would not be difficult to show him that every hour of his fancied gain was a positive loss.

LICE ON FOWLS.—Do not let your hens grow poor and cease laying, because they are covered with lice, when a remedy is in almost every house—we mean kerosene oil. Take each fowl and rub a small quantity under each wing, and we will venture to say they will thank you, whether the lice do or not.—J. L. H.

We tried the above on our fowls, but found that pure kerosene was too strong. It turned the color of the skin, which soon pealed off. It should in all cases be diluted with a little water, and applied with great care. We found the use of sulphur well dusted into the plumage, an effectual remedy.—EDS.

WORTH TRYING.—It is said that hog's lard is the best thing to give to hens to make them lay. Mix it with their feed—a small piece as big as a walnut will set a hen to laying immediately after she has been broken up from her setting—and thus hens lay through the whole winter. Will some try the experiment, and then report the same in THE AMERICAN FARMER.

PLANS FOR THE FUTURE.

WRITTEN FOR THE AMERICAN FARMER, BY LYMAN NORTON.

WE were reposing, on a sultry August noon, under the Balm of Gilead trees that shaded the carriage way to our paternal home, listening to the conversation of several farm laborers, who were taking their nooning under the same balmy shade. Amid the group was a revolutionarysage by the name of Fosdick, who was also listening. When the conversation flagged, Fosdick sprang to his feet, and with a military air and voice, called, "Attention!" "Well, boys," he exclaimed, "how many of you have formed plans for the future. I learn from your conversation, that some of you are about to enter upon the great campaign for life, or as my good wife, Rosy, would say, are agoing away from home to seek your fortune." Amid the merriment and jokes that followed, the boys, all, save one, answered that they had no settled plans. One young man had formed his plan for the campaign. "Good," cried the old sage, "come forth, Ichabod, and receive my blessing; but first let me know something of your plan; not all of it, but something relating to general affairs."

"Well, Mr. Fosdick," answered the so-called Ichabod, I am resolved to give my leisure time to the acquirement of useful knowledge, that I may adore my Creator acceptably, and be able to serve my country in its halls of legislation, or elsewhere. I am to acquire property to the amount, at least, of twenty thousand dollars, and in my declining years, should God spare my life, I am to be a farmer, with ample means, leaving an inheritance to the children of——but, no matter, you are not to know all," and with laughter, and the old man's blessing upon Ichabod, the siesta broke up.

It is now nearly forty years since the above transpired, and the incident was brought home to our mind by a recent visit to the home of "Ichabod." True to his plan, he has stored his mind with useful knowledge; he adores his God by his munificent charities; he has served his district in the Legislature of his Nation and State, and now, in his declining years, is living on broad lands, with ample means. Our ancient friend received us at his mansion with much warmth, and as we followed him to his library and took the proffered chair, he remarked that we had come in good time, as he was that day employed upon his plan for the coming year, and wished to consult us about planting out some ornamental and fruit trees on some newly acquired lands. "Shadow of Fosdick," we exclaimed, "is it possible your blessing yet rests upon Ichabod, and has the boy's resolution of forty years ago, grown and strengthened with the man.

"Even so," answered our friend. "From that time, every year, I have made my plans for the next, and although I have not always made my plans come out as I desired, yet to them I owe my success in life."

Our friend's remarks reminded us of what we saw and heard during a western tour last season in Mason and Tazewell counties in the State of Illinois. We had occasion to visit many farms, and as our business was partly to learn something of the agricultural wealth of Illinois, we made many inquiries, taking notes, &c. We found the price of farms to vary from ten to fifty dollars per acre, and that too in the same neighborhood, where the soil was of equal fertility, and buildings of nearly the same cost.

We asked of Mr. D. "Why is it, you value your farm at fifty dollars per acre, while Mr. O., on the other side of the ridge, offers his for twenty dollars per acre?"

"Well," said Mr. D., "I reckon I have a right smart chance of fruit. My plan was, when I came to this prairie, to set out shade trees around my building plot; next, a young orchard, and then other ornamental and fruit trees, with grape vines, strawberries, and other small fruits. Following up my plans, I reckon I have a right smart display of shade trees, and fruit for family use and for sale. It is this that makes you eastern men want my farm, and I have been offered fifty dollars per acre for it. My neighbor O. came here a year before I did. He has not any shade trees or fruit trees that bear, as it wa only last year that he found time to set out fruit trees."

We also visited the farm of Mr. P., who had, in like manner, ornamented his grounds with shade and fruit trees. He could take fifty dollars per acre for his farm. On inquiry, Mr. P. informed us that his plan was to be up with the times, with fruit and other trees, and that he intended to be first in such matters, took the agricultural papers, kept a record of our rare plants and fruits, and always made his plans for the coming season.

On the opposite side of the road lived Mr. K. We called upon him; he was truly a noble-souled man, with a big heart. He raised good corn, nice pigs, fine horses, yet he had neglected to ornament his grounds. His buildings were without any architectural taste or beauty. We inquired of him about his method of culture, and plans for the future. He informed us that he seldom troubled his head about plans; took the world as it came. His farm was in the market at fifteen dollars per acre. We could cite many other like comparisons.

In the great and glorious plan of the universe, man, as the master of the earth, has much to do. He must improve and beautify its surface; he must

fell the forest, cultivate its wide plains, drain its marshes, fertilize its deserts, regulate its waters by dikes, canals, rivers, and lake improvement. Perfect the animal kingdom by skillful system of breeding; improve the vegetable kingdom by the selection of choice seeds, plants, vines, and trees, and by experimental and improved culture; by hybridizing and fertilizing; plant out the earth with beautiful trees; arbors, blushing with fruit of the vine; fields, waving with the choicest cereals, and gardens blooming with delicious perfumed flowers, until the whole earth shall bud and blossom like the rose.

The new year has dawned upon us in peace, and the prospect for America is again glorious.

During the stormy days of winter, and the long evenings, let us draw around the table with the family circle and mature our plans for the year.

All of us are not Ichabods, with our plan ready made. Some of us are behind hand in that respect. There is yet time; let us improve it at once. Are we intending to build any out house, or dwelling next summer. If so, let us, with the aid of an architect, or master builder, at once review and perfect our plan for the same. Have bills made out for all the materials, so that the heavy materials may be procured and drawn during the winter months.

Let us examine our plan for working the farm, and note any proposed change for next season. Have we got all the stakes, rails, and fence material we shall need; seed grains, clover and grass seeds. Do we wish any new varieties of grain, or potatoes? What about the garden? Have we plenty of seeds saved, and preparation made for a good supply of early plants? Have we any room for more trees or vines? What about the ice house? Is it in condition, with saw-dust for the receiving and packing of the new crop of ice, soon to be manufactured in nature's great laboratory.

Like skillful generals, let us mature well our plans, leaving no weak points, and when fully settled, with promptness, vigilance, and untiring energy, see that all is as it should be, and our word for it, you will not regret following the example of "Ichabod."

A FACT.—Show me a thrifty, practical and experimental farmer, and I will show you a man who reads works on agriculture, or who borrows hints from a neighbor who takes agricultural papers. Show me a farmer whose fences are going to decay, whose half-starved cattle are strolling over a brush field, and who spends his days and nights lounging at stores and bar rooms—and I will show you a man who is on the down grade, and takes little interest in agriculture, and does not patronize an agricultural paper.

UNDERDRAINING is always advantageous.

THE WEATHER IN NEW HAMPSHIRE.

WRITTEN FOR THE AMERICAN FARMER, BY J. L. HERSEY.

UP to December 16, the ground was as free from snow as in September, and cattle were turned off in the pastures to browse. There has been several small sprinklings of snow, that speedily left as though it came out of season. It seems as though winter must be shortened somewhat; but the fag or butt end may come in the spring. Farmers have an excellent opportunity to cut and pile their fuel for another season, and those who are so slack as to neglect this long period of probation, can blame no one but themselves; and with wood cut and piled neatly up, it is fine business to sled it up to the door. The swamps are now filled up with water, and when winter does set in, we opine serious business, keeping highways well broke out and looking to the stock, seeing they are well supplied with water. Do not let the large ones domineer and drive away the calves, so that they do not get their supply of water daily; and it is well to see that Piggy has a good warm nest. How grateful he will grunt his thanks! See that the good housewife is not destitute of good fuel. It goes far toward keeping a good disposition.

FACTS WORTH REMEMBERING

"COSMO," in the Philadelphia *Saturday Evening Post*, gives the following facts worth remembering:

It is worth while for all farmers, everywhere, to remember that thorough culture is better than three mortgages on their farm.

That an offensive war against weeds, is five times less expensive than a defensive one.

That good fences always pay better than law suits with neighbors.

That hay is a great deal cheaper made in the summer, than purchased in the winter.

That a horse who lays his ears back and looks lightning when any one approaches him, is vicious. Don't buy him.

That scrimping the feed of fatting hogs, is a waste of grain.

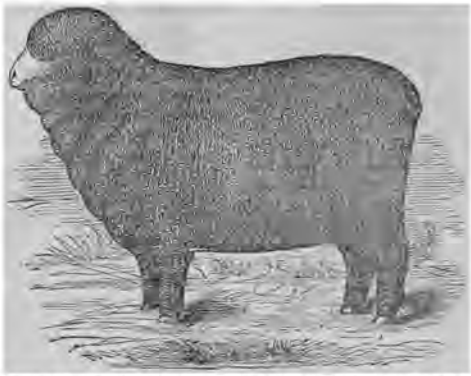
That over-fed fowls won't lay eggs.

That educating children is money lent at a hundred per cent.

That one evening spent at home in study, is more profitable than ten in lounging about country taverns.

That cows should always be milked regularly and clean.

That it is the duty of every man to take some good, reliable, entertaining, paper, and pay for it promptly—of course.



PURE BLOOD MERINO EWE, "SUSY."

THE above cut correctly represents the pure blood ewe, "SUSY"—one year old last spring. Bred by Isaac J. Whitney, of Clarkson, New York. This ewe was sired by a celebrated pure blood American Merino ram, "Cortez," three years old, bred by Mr. Whitney from a sheep purchased of E. G. Farnham, of Vermont, and by him bred from a sheep purchased of Erastus Robinson, by him purchased of Charles Rich, and bought by him of Sir Andrew Cock, of Long Island.

HOW TO RAISE ONIONS.

WRITTEN FOR THE AMERICAN FARMER, BY D. C. SCOFIELD.

To raise onions, the seed must be good, not more than two years old, and produced from large, well shaped onions, which have been preserved from frost, and set out as early in the spring as the ground will admit. The balls containing the seed should be taken off when they show a brown cast, and the seeds have turned black, and spread in a dry, airy place until thoroughly dry.

VARIETY.—The globe shaped, deep red onion, known as the Wethersfield Large Red, or the Westport and Globe Onion, is regarded the best producer, the largest, and most valuable in the New York market.

When sown thin, standing not less than four inches apart in the rows, it yields abundantly. It is of a beautiful color and shape, tender in cooking, keeps well, and will bring from one to two shillings more in eastern markets than other varieties.

SOIL PREPARATION.—The surface should be level, or a little inclined, and as clean from all weeds as possible. Better cultivate the ground on which you propose to raise onions, one year before you put them on it, and not allow a single weed, of any kind, to go to seed, and when you have the ground made as rich as you would have for a crop of cabbage, sow the seed by means of a drill, or otherwise, in rows from ten to twelve inches apart, as early in the spring as the ground will work without clogging. The surface should be left quite smooth, by means of a rake head or hand roller. Some of our Western onion growers use the field roller drawn by two horses. As soon as the onion appears the work of weeding should begin, whether any weeds have appeared or not. The surface should be immediately stirred, by means of a weeder of some kind, and this process should be performed so often that no green thing may appear among the onions. When the second weeding begins, the plants should be left thinned to within three or four inches of each other in the row. It will require at least ten cords of well rotted manure per acre annually, to cause the same plot of land to produce a full crop of onions, from which a yield of from five to eight hundred bushels may be annually expected.

PULLING AND GATHERING.—When the tops have turned a yellowish brown color, they should be pulled and left scattered over the surface of the ground to cure. They should be stirred, or turned over occasionally, till frosts or fall rains are expected, when they should be removed during the dryest part of a dry day to a dry place, from whence to be marketed.

Like all other farm crops, the quality is improved by selecting the finest specimens for seed. I obtained Westport, or Globe Onion seed from Westport, Connecticut, about ten years ago, and have been able to send them back the seed of the Westport Onion improved the last few years.

"RAISE your own clover seed, and sow it with an unsparing hand."

TROUT BREEDING.

It has been said that some things may be done as well as others. Over a year ago Seth Green, of your city, so decided, and concluded that trout breeding and growing could be made to pay as well as the breeding of cattle, sheep or hogs. He cast about for a location for his operations, and concluded that the waters of the Caledonia Spring Creek would be the most favorable for the enterprise. Negotiating with John McKenzie, who owned over half a mile of said stream, by paying him two thousand dollars, he obtained the stream and two rods of land on each side of the same from high water mark. He then commenced arranging reservoirs or ponds for the trout. On the 15th of September, 1864, he had two ready, and began taking trout from the stream with the fly. By the 15th of November he had about fifteen hundred breeding trout in one reservoir, and over two thousand in the other too small for breeding purposes. The trout soon began to occupy the spawning bed, and in about ninety days he obtained from them one hundred and sixty-two thousand eggs which were deposited in gravel beds for hatching, which process commenced after remaining there about ninety days. He was successful in the hatching operation. He was under the necessity of turning about 50,000 into the main stream for want of room in the reservoirs, which were well filled with the little finny tribe. Since arranging for the young stock he has added to his breeding stock about twenty-five hundred more, and over three thousand to the stock that are too young for breeding, and he is adding to the stock almost daily from the stream with his rod and fly. His next crop of eggs, which will be almost countless, he does not expect to be able to arrange ponds for the whole, but will turn the little fishes into the main stream. His object for the present is to increase the breeding stock and not offer any for sale till his stock comes up to the full extent of ground he has provided. Ponds may be overstocked with fish, as well as fields with cattle. Liver appears to be best adapted to trout feeding of anything artificially furnished. After being cut fine some of his fish are supplied from the running stream—others are fed. Those fed increase in size more rapidly than those that look up their own food. By the course which Mr. Green is pursuing, it is believed that in a few years the noted Caledonia Spring Creek will be as well supplied with trout as in any former time. The enterprise of Mr. Green is so favorably viewed that he has sold his one undivided half in the purchase for six thousand dollars. A visit to the grounds, and seeing those trout by thousands while they are being fed, must be interesting to all who ever attempted to throw the fly.—*R. H., (Mumford, N. Y.)*

JOHN JOHNSTON'S FARM.

A CORRESPONDENT of *The Country Gentleman* gives the following account of a visit to the farm of John Johnston, the great farmer of Western New York, situated on the eastern shore of Seneca Lake:

The soil on the east side of the lake is a rather heavy clay loam, or a gravelly clay. Mr. Johnston has been here forty-four years, coming upon the place when there was nothing but a log house to live in, and clearing 63 acres of the 112 of his first purchase. All the buildings on the home farm and the one above it have been erected under his supervision. The farm a few years since contained 306 acres, but recently about 200 acres have been sold, as he found in his increasing age and failing health that so large a farm required more care and attention than he could well give it. His farm now, therefore, consists of about 100 acres, and is very pleasantly located, sloping to the lake. The buildings are substantial—erected for use and not for show. He says he attributes all his success to manures and drainage. He obtained specimen tile from Scotland in 1835, and introduced their manufacture in this country. He commenced tiling in 1838, laying a few tile when it was very wet. Not much was done, however, until 1849, when, as he expressed it, "I went in strong." In one year 42,000 tile were laid.

In those times the ditches were dug for 12 cents per rod, and the excess of crops paid for tiling right along. He was twenty years in finishing, and has laid in all 223,000 tile. The old system of cutting off the springs at the foot of a hill was abandoned and the drains led right up the hill, as the water rises on the highest lands. Drains are dug from 2 1-2 to 3 feet, or until the solid earth is reached and the water flows in from the sides. He says when the water flows in from the sides, and you get a good bottom, it is useless to dig deeper. He has never used any but the horse shoe tile. One drain had been laid that was 150 rods long. He thought it was cheaper and better to lay with tile than with stone, even if the stone was on the ground. Stone drains were not reliable: they were liable to be obstructed, while tile well laid made a permanent thing. If stones were on the ground he would prefer to haul them off and put them to some use; they could be used in various ways upon the farm that would pay better than in drains—since the cost of digging the drains, when stone was to be used, was much more expensive than for tile. He thought one could hardly drain too close. He had put drains 25 feet apart, but would put them from 15 to 18 feet. In covering, he paid no attention to the position the sub-soil thrown out was to take in the drains, but hitched the teams to the plow and covered in that way.

The system of farming which has been practised by Mr. J. for years with eminent success, is to raise corn, barley, oats, wheat and hay, and purchase sheep in the fall to feed up the various products raised and fatten them for the market. In this way manures were secured, and a greater profit realized for the products raised on the farm, than if sold at market prices. He preferred Merinoes, and insisted that they make good mutton, bringing him better prices or more profit than other breeds. He was careful, however, in his selection, and never had anything to do with the *"greasy fellows."* He wanted the grease mixed up with the meat, not with the wool. He used to buy sheep in the fall at two cents per pound; this year they cost five cents. He had sold Merino wethers at 12 cents per pound, making them weigh 117 1-4 pounds each, and increasing their weight in fattening 27 pounds. The labor of feeding sheep was much less than that of cattle, as he could take his measure of corn and feed 100 sheep almost as quick as fussing about one ox. The sheep should be fed regularly at the same hours each day. They are fed twice a day, at first one-half pound of grain each at a feed in the morning at sunrise, and again at 4 o'clock in the afternoon. After a while the feed is gradually increased to a pound of grain per day. Straw or hay is fed to them three times per day—the straw during the first part of the time employed for fattening, ending up with hay. The straw as soon as threshed is stored in the barns. Last fall he had 600 bushels of barley threshed in one day. Oil meal is used extensively for feeding when it can be purchased at reasonable rates. In estimating the relative nutritive value of oil meal and corn, he puts 50 pounds of oil meal as equal to 60 pounds of corn. There is no animal that will take on fat so soon as sheep, if in fair condition when you commence feeding. He could fat a sheep in six weeks.

We went down to the barns and in the yards. He said, This is the way I litter my yards with straw preparatory to feeding. The sheep trample the manure with the straw, and they are littered from time to time, and in the spring the contents of the yards are piled. All along on the outside, road scrapings and earth are laid to keep manures from wasting. He does not believe in keeping his manures under cover, saying that in that condition it would become light and powdery and of but little value comparatively. If his manures were to be placed under cover it would be necessary to keep a pump going with water, which would be labor thrown away, since the same results were obtained by piling in the open yard. He is feeding this year 300 sheep, but has hay sufficient for 100 more, and eight or ten cattle. Timothy cut when ripe he regards as worth no more for feeding than straw. Wheat he would cut when just out of the milk—the early cut wheat has the thinnest skin. The richer the land for wheat the later it is in ripening. He believed that in sowing wheat too much seed was generally used. This fall he had put a bushel and nine pounds of seed to the acre. There was danger of getting the seed covered too deep, which rendered it liable to winter kill. He would sow just as shallow as possible. When land was very rich he had sown a bushel and a half of seed to the acre, but one bushel would have been abundant. This year he had used a light harrow over the ground, after the wheat was drilled, for the purpose of reducing the ridges and throwing the clover seed between. He had tried rolling, but it was not effectual. He thought there was more necessity of pulverizing the soil *now* than formerly. He had been trying an experiment this fall on wheat, with Lawes' manures sowed broadcast with Seymour's sower at the rate of 240 pounds per acre. It was applied on three strips of land in such a way that results might be noted. Had usually raised from 25 to 35 bushels of wheat per acre—in 1859 the crop was 41 1-2 bushels per acre. He would not plow deeper than six or seven inches for corn, and for barley not very deep, but for wheat he did not care how deep the soil was worked—twelve inches or more, if practicable. For all spring crops he would plow light.

He manures liberally for corn, following that crop with barley and then with wheat, when the land is seeded down. He thought he should have to give up raising corn. He can find no profit in raising roots on this soil—the labor costs too much to make it profitable. Some of his grass lands will cut three tons to the acre. From 32 acres this year he has cut 80 tons.

In stock he gives his preference to the Short Horns or Short Horn grades, saying that the animal when done for milk can be turned to good account in beef. He thinks the Short Horns quite as valuable for milk as the Ayrshires. We went out and took a look at the wheat field below the house, and then up the east road so as to get a sweep of the whole farm. It lies spread out in gently undulating fields, and in the distance the sheep were at pasture. Before us lay the lovely lake, and to the right the beautiful village with its spires and cupolas, and here was the great practical farmer, who first broke ground in tile draining in America; and so we walked back to the house thinking what a splendid record Farmer Johnston had made, working out with his own hands results of such vast importance to the agricultural progress of the age. But for him we might now possibly have been back a decade on the road of progress, and immense sums in the aggregate lost to the State and nation. Let him have the honor which his works have so richly merited.

SPIRIT OF THE AGRICULTURAL PRESS.

The Agricultural Press.

A correspondent of Moore's *Rural New Yorker*, says: Those who have conducted the agricultural press, in the United States, during the last decade, have reason to be satisfied with the result of their labors. Farming is now considered one of the most honorable and lucrative branches of industry in which a man can engage, and the farmer now occupies a commanding social, moral, and intellectual position among his fellow men. It is evident to the most casual observer, that the farmer stands higher at the present time, in the estimation of mankind, than ever before; and for all the manifold advantages which he now enjoys, he is in a great measure indebted to the beneficent influence of the agricultural press. And, notwithstanding the high position to which he has attained, he should not be content to remain inactive, but should endeavor to rise higher and higher in the scale of excellence, until he can stand upon the broad platform of republican equality, with the wisest, best, and most influential of his fellow citizens.

Feeding-Boxes vs. Racks.

The *New Brunswick Farmer* gives the following sensible advice: Horses do not naturally gather food from trees; why then should they be compelled in winter to take it from a rack over head? Every mouthful requires the animal to assume an unnatural position, which, with young horses particularly, must interfere with the proper development of the muscles of the neck, and with the graceful carriage of the head. May not the awkward manner in which many horses thrust their heads forward and upward, be attributed to the force of habit acquired in feeding from a rack? Another serious objection to racks is the danger from the seed, dust, etc., falling into the eyes of the animal; further, all the effluvia of the stable, the vapors from liquid and solid excrements, the exhalations from the skin and lungs pass upward, and are to some extent, absorbed by the hay—an addition neither savory nor healthful. The feed box may be made equally convenient with the rack, and is open to none of the above objections. It need not be large, and if the bottom be made of slate all rejected fodder can be easily removed.

Manures out West.

Speaking of the land in Iowa, the *Homestead*, of that State, makes the following remarks: So inexhaustibly rich are most of our Iowa lands, that a man who would take the trouble to draw manure from his barnyard to his fields with a view of enriching them, would be looked upon as a curiosity in some localities. We know of a field that has been cropped annually with wheat and corn for eighteen years, and this year has as promising a stand of Catawba Club upon it as we remember to have seen in the Genesee Valley, of New York. The time will come, doubtless, when manuring will be necessary, but not in this generation; until then, the straw stacks will be burned to get rid of them, and the manure piles continue to accumulate into vast nuisances. Our readers will from this understand why we say so little upon the subject of manures, phosphates, carbonates, guano, etc., etc. It would be labor wasted upon a people who never use them, because they do not yet see the necessity. While admitting that this gradual wasting of the strength of the soil is a short-sighted policy for our farmers, we are thankful that the soil is rich enough to stand the drain for so many years to come.

Food Manufacture.

The *Scottish Farmer* has the following excellent remarks on the mission and importance of manures: It is not merely that the extra manuring induces the extra crop—the manuring furnishes the very building material out of which the increased produce is made. Those very atoms of nitrogen and of phosphorus you are adding in guano—those very particles of potash and soda you are detaching from impracticable positions in the soil, by the influence which drainage has brought to bear upon them—those very atoms of carbon which your plants, vigorous owing to more thorough cultivation are extracting from the air in the sunshine, may travel various roads, but they will come to an ultimate residence side by side in the flesh and the blood of the fattening animal. The various additions to make to your soil, the fertility you extract from it, may indeed he said to "occasion" the increased produce of meat, which succeeds them, but it is in the same way as the stone and the lime occasion, the buildings of which they are the very substance and material.

The Borer.

We are determined, says the *Maine Farmer*, to persecute the borers till they shall seek other quarters than our orchards. We are trying a novel experiment. We box up the tree a foot from the ground and fill it with shavings or saw dust. If they attack the tree, it must be above the box where they can easily be seen. It is easily done, and we see no reason why it will not be a preventive.

Good and Bad Farming.

The *Rural World* says: If our farmers who are opposed to science, should go to Europe, that would cure them. Scientific principles are there applied, and the best cultivation given. Were this not done, the people of Germany could not support themselves. Instead of one man making a living on a hundred acres as here, he makes it on one acre in Saxony. Think of each acre supporting a man in this country. And yet there are some places where it is done, where land is thoroughly cultivated, as they do it in Europe.

The Use of Sawdust as a Litter.

A correspondent writes to *The Farmer*, (Scottish), as follows: The fear of importing the *Rinderpest* through straw carted from farms at a distance, has induced me to litter my cows with sawdust. I should be glad to know through the medium of your columns what admixture would most speedily decompose the sawdust, and thus improve the manure as a fertilizer of land. Whereupon the editor replies: "Sawdust in its natural state is not easily decomposed, but it is an excellent absorbent for liquid manure, and when well soaked with urine, ferments readily. It is, therefore, a val-

uable material for bedding cattle, and no difficulty will be experienced in getting it to decompose, provided it has been thoroughly saturated. At one time we had the command of a large quantity of sawdust, which we used with great advantage as litter, and also for mixing with the night-soil of some extensive public works, for which purpose it answered admirably in every respect. It is stated by chemists that sawdust, during decomposition, forms certain acids, which act as excellent fixers of ammonia, and that when well mixed with dilute sulphuric acid, it is one of the best materials which can be employed for fixing the ammonia given off in stables."

Profitable Poultry Keeping.

In a recent letter, Mr. Sylvester Lehman, of Schoharie county, sends to the *Rural New Yorker* this report of what he has received the past season from a small flock of poultry: "Last spring I had 36 hens. They began to lay in March. Through the month of June, eight of them set; two of them died in the summer, two I killed, and from the lot up to the first of November, I received 3,600 eggs, or 300 dozen. All who can figure can judge whether or not it pays to keep hens at that rate. The receipt of eggs each month was as follows: March, 100; April, 716; May, 720; June, 590; July, 420; August, 556; September 346; October, 152. Breeds—Golden Pheasants and Hamburgs. Feed—buckwheat standing in a box, so that they could eat when they wished.

Curing Hens of Sitting.

A writer in *The New England Farmer* says that he cured his hens of sitting by shutting them in a tub having an inch or two of water on the bottom. He keeps them there during the day and puts them on the roost at night. If not cured the first day, he treats them to the "water cure" another day, when they will be glad to stand on their feet.

Remedy for the Onion Maggot.

In the "*Practical-Entomologist*" for December, the fact that a small stream of boiling water poured along the drills near the roots of the onions, will destroy the maggot, while it does not injure the plants, is well substantiated by different individuals. It is very well known that vegetable organisms will often stand a degree of heat that would destroy animal organisms.

Cashmere Goat.

A late writer in the *Prairie Farmer* says: These goats are hardy, they live and fatten on coarse food. They will winter on good straw alone, and come out in good condition in the spring. The common ewe goat has from two to five lambs at a birth; the Cashmere ewe but one. They can be graded up very fast, but it is necessary to use the thorough-bred male, or as high a grade as possible, to cross with the common goat. A good common ewe goat will raise two or three one-half blood lambs well. The eight months one-half blood ewe will drop and raise one to two lambs. This is much faster than you can grade up sheep. In choosing common goats, get the shortest legged, best formed you can find. There is much difference even in the common goat, and the form of the dam has much to do with the grade offspring. Parties desiring to grade up a flock should procure good common ewe goats in time to have the kids come in April or May. The kids are much stronger and hardier than Merino lambs. We hardly ever lose a kid unless by unavoidable accident.

Poultry Manure.

The *Massachusetts Ploughman* thinks that we might make a great deal more by care in economizing the manure of the poultry house, and that it is worth attending to. Here is what Geyerlin, whose book was alluded to in the "Home for poultry." recently published. says on this point: In France, as well as in our own country, most eminent chemists have proved by analysis that poultry manure is a most valuable fertilizer, and yet, for want of a proper system in housing poultry, it has as yet not been rendered available to rural economy. The celebrated Vanquelin says that when the value of manures is considered in relation to the amount of azote they contain, the poultry manure is one of the most active stimulants; and when, as a means of comparison, the following manures are taken, in parts of 1000, it will be found that—

Horse Manure contains	4.0	parts of azote.
Guano, as imported	49.7	do
Guano when sifted of vegetables and stones,	53.9	do
Poultry manure	83.0	do

It may be seen that it is worth preserving, even though it may be small in amount.

Bedding and Ventilation.

The *Boston Cultivator* gives the following seasonable advice: Every farmer should see to it himself, however trustworthy may be his boys or other assistants, that his cattle, sheep, horses and hogs are well bedded as well as well fed and watered; also, that his barn or barns, where his stock is kept and fed, is or are well ventilated. Domesticated animals, as well as man himself, need fresh air, and when compelled to breathe a tainted and therefore an irrespirable atmosphere, it is at the expense or risk of health and the highest purposes which one has in stock breeding and keeping. Any observing farmer can tell on opening his barn in the morning whether the ventilation thereof is ample.

Butter Made Underground.

In some parts of France, says the *Working Farmer*, butter is made as follows: The cream is placed in a linen bag of moderate thickness, which is carefully secured and placed in a hole in the ground about a foot and a half deep; it is then covered up and left for twenty-four or twenty-five hours. When taken out, the cream is very hard and only requires beating for a short time with a wooden mallet, after which, half a glass of water is thrown upon it, which causes the butter milk to separate from the butter. If the quantity to be converted into butter is large, it is left more than twenty-four hours in the ground. In winter, when the ground is frozen, the operation is performed in a cellar, the bag being well covered up with sand. Some persons place the bag containing the cream within a second bag, in order to prevent the chance of any taint from the earth. This system saves labor, produces a larger amount of butter than churning, and, moreover, it is said never to fail.

Horticultural.

REMOVING SODS FROM APPLE TREES.

WRITTEN FOR THE AMERICAN FARMER, BY D. C. SCOFIELD.

MESSRS. EDITORS:—Mr. E. B. Bagley inquires, in your last number, whether the removal of the sod from four of the six trees back of his house, had anything to do with their abundant crop of apples over the two trees under which the sod was not disturbed.

The removal of the sod no doubt was the immediate cause of the extra crop—yet far better had the sod been turned over and left to rot in its place. The exhausting influence of any vegetable growing within the jurisdiction of the roots of an apple tree, robs it of its need to a greater or less extent in whatever tilth the soil may be; but cover the soil of the orchard with a sod of sufficient strength to sod over a door yard and the grass roots will so completely fill the ground as to nearly exclude the tree from obtaining any nourishment. The feeding or fibrous roots are as sensitive to any obstruction as the roots of corn, and the orchard can no more produce a *good* crop of fine fruit lying chained under a stiff sod, than corn can yield a full crop under similar circumstances.

Though Mr. Bagley got a more immediate result from removing the obstruction at once, and thereby opening the way for the roots to receive more directly the combined influences of light, heat and moisture—yet we hold the doctrine that when a man is so unfortunate as to have his orchard covered with sod, that he immediately cause that sod to rot in its place by covering it with any kind of manure, or half, or quite rotten straw, a distance of at least six to ten feet from the tree each way. Had Mr. B. covered the ground from which he removed the sod, as soon as he had removed it, no doubt his crop of apples would have been more abundant, and of finer quality. Annual top-dressing with manure and the entire subjugation of all vegetable matter, is the only way by which the most complete success in fruit culture can be attained.

THE FLEMISH BEAUTY PEAR.

WRITTEN FOR THE AMERICAN FARMER, BY "J. L."

MESSRS. EDITORS: One morning in the month of October last, while standing at the corner of a street in this city, I heard the following conversation. A gentleman came along with a basket on his arm, and addressed a boy who stood there selling fruit.

"Boy, how much apiece do you ask for your pears?"

"Five cents."

"What kind are they?"

"Flemish Beauties."

"How many have you of them?"

"Only what is in the basket."

"I will give you four cents for all you have got."

"No, sir; no less than five will buy them."

"Well, I will give you five cents; they are cheap enough."

I was just eating one of them at the same time, and I thought the same thing—cheap enough; such large yellow, rich, melting, beautiful pears—cheap enough. I often wonder why it is that men will loose their land, time, care, and attention, in cultivating common pears which are almost a drug in the market, while they might just as well raise Flemish Beauties, Duchess d' Angoulcme, Bartlett, Stevens, Genesee, and a few other first rate sorts that will always bring the highest price in market. The greatest miser that walks the streets when he sees a large, handsome, well ripened pear, will stop and buy it. The city was crowded last fall with common pears offered for a dollar a bushel and they were a dead loss to whoever bought them at that price. I think it is a great deal better to raise apples than common pears. I am acquainted with a gentleman who lives on State street, in this city, who has picked five bushels of the best Bartletts every fall off one tree.

WHEN DOES NEW BARK FORM.

SOME five years ago, the writer attended the annual meeting of the Mississippi Valley Horticultural Association. One of the members had peeled the bark off the limbs for six inches in length of various fruit and forest trees, and at the same time attached a small tin card, with fine wire to the limbs, with the date. These peelings amounted to some three or four each month the year round. The object was to find what time in the year a new bark would be most perfectly formed over the wound. This was found in that latitude to be the fifteenth of June In the months of January, February and March, the limbs showed a very dry, dead surface. April and May, the tree had grown an imperfect bark. June 15th, the peeled surface showed a perfect covering of new bark. From this date, the growth of the bark was less perfect through the summer months and the surface dry and dead in the fall months. I was not a fruit grower myself or a member of the association, yet the facts elicited struck me as being of great practical value to those who were. It was shown that the new bark invariably commenced to grow downwards or from the upper end of the limb; that the sap must go up to the ends of the limbs, and there be brought in connection with the oxygen of the atmosphere, through the injured pores of the leaves, before it could be used in the economy of the tree to form new bark. This being so, and it found an established law that at one period of the year, new bark will form perfectly, and this period probably changing in different latitudes, experiments should at once be made to find out the proper time to prune in different regions, and this can be done as stated.—*Iowa Homestead.*

CLUBS, CLUBS!—Form Clubs; form them now. We wish every person who receives this copy of THE FARMER would feel himself under a duty to get his neighbors to join him and to send on a club of subscribers and keep sending names as long as he finds one who does not take the paper.

PLANTING AN ORCHARD.

WRITTEN FOR THE AMERICAN FARMER, BY P. C. R.

WHAT VARIETIES TO PLANT.—It is not only very important to select strong, healthy trees, but also for a market orchard, the best and most profitable varieties. There is probably, not an orchard in the country, but has some unprofitable varieties in it.

It is impossible to select a list of varieties that will do well in every locality, and on all soils. I shall only endeavor to mention those that generally succeed well in Western New York.

Some advocate making the list of apples for market very small, in fact limiting it to the one most desirable sort. It is generally agreed that the Baldwin combines more merits than any other variety. It is of good size, handsome color, generally fair and productive, and commands the highest price in market. It is said that the Baldwin will produce more money to the acre than any other apple—then why plant any other kind for market?

Were we certain that it would not deteriorate, and would retain its popularity, it might be good policy to plant the Baldwin only. But experience has shown that many apples that were very fine and productive twenty to forty years ago, are now unworthy of cultivation for market. The Fall Pippin, the Newtown Pippin, the Bellflower, the Esopus Spitzenberg—once very popular varieties—have become such poor bearers, or so unfair, as to be rejected among *market* varieties.

A few years may bring about similar changes in the Baldwin, in which case an orchard of that variety, exclusively, would prove a bad failure. Still, I would not have a large; I would select about such a list as the following, for market:

Summer—Red Astrachan, Primate, Sweet Bough.

Autumn—Golden Sweet, Detroit Red, Gravenstein, Twenty-Ounce.

Winter—Baldwin, Northern Spy, Tompkins County, King, Rhode Island Greening, Roxbury Russett, Talman Sweet.

Should I be governed by my own experience, without regard to the testimony of others, I would add to the list for winter, Hay's Wine and Peck's Pleasant. The former is a beautiful striped apple, large, fair and uniformly productive, ripening in early winter—the latter resembles in appearance, when picked from the tree, the Rhode Island Greening, but ripens up in February a golden yellow, with a red cheek, and is of excellent flavor. I know not why they are not more generally commended; I only know that for the last fifteen years, they have not been excelled by any other apple that I have grown.

For family use, I would add to the summer list, Early Harvest, and Early Strawberry, the Fall Pippin to the autumn one, and Westfield Seek-no-further and Esopus Spitzenberg to the winter.

The Early Harvest was for a long period of time a popular market apple, but it is becoming more and more affected by the black fungus, which leads shippers to reject it. As soon as it begins to sweat in the barrel the spots enlarge and soon become rotten. The same is true of the Fall and Newtown Pippins, and some other inferior varieties.

Having determined what varieties you will plant, you are prepared to make contracts with nurserymen for your trees. Some nurserymen refuse to fill an order entirely with the better sorts, but want to work in some of the inferior kinds. Don't plant such; or if you do, graft them over with the better ones. In my next, I will treat of planting the trees.

PRESERVING GRAFTS.—In the *Saturday Evening Post*, of Philadelphia, "Cosmo" relates that a good many years ago, he saw a New York State farmer experiment with scions, and this was his practice: cutting a large, sound potato in two halves, as fast as his scions were cut from the tree he thrust the heels to the depth of about three-quarters of an inch into the cut side of the potato—each half receiving some fifty scions. The bundles were then wrapped in the leg of an old pair of woolen pantaloons, and laid away in the cellar for the winter. In the spring they were grafted, and nearly all grew well. If any one will take the trouble next spring, when apple trees are in bloom, to cut a twig, bearing, say half a dozen blossoms and as many leaves, thrust the cut end into a large sized, sound potato, place the potato in a pot of earth, barely covering it, moisten occasionally, and watch the result, he will very likely argue afterwards that there is something more than moonshine about a potato's preserving grafts.

FUNGUS SPOTS ON PEARS.—These spots have undoubtedly originated in the growth beneath the real cuticle, of a minute brown parasitic fungus, Cladosporium dendricum, which has destroyed the vitality of the subjacent tissue, but has not sufficient vigor of growth or greediness of moisture to make it penetrate deeply into the fruit. Where moist decay has supervened, it is apparently due to other fungi which have accompanied or replaced the Cladosporium. This mould has of late years been a dreadful pest both to pears and apples, in some cases being virulent enough to destroy or greatly impair the young shoots, and its growth beneath the cuticle makes it almost impossible to apply a remedy. After a time, indeed, the cuticle bursts, to allow the fertile threads to break out into the air and bear fruit, but the mischief is then already done, and it is notorious that even were the habit different, dark threaded fungi are far less destructible than those which are colorless.—*M. J. B., in Gardener's Monthly.*

PRESERVING HYACINTH BULBS:—As soon as the flowers wither, take the bulb out of the earth or water in which it has bloomed, wash it and the roots clean, and lay it on the lid of a hamper, or on clean straw, in an airy, shaded, but dry place. Turn the bulb frequently, and when the roots and leaves, &c., have dried up, trim them off, remove loose scales, and ripe offsets, and when the bulb is perfectly dry, lay it by in a drawer, closet, or basket, until the following autumn. By this method, the exhaustion of the bulb, after flowering, is saved.—*Gerald Smyth.*

THE ANTIRRHINUM.

The love of flowers and their culture, is a silent, yet striking evidence of improved taste, refinement, and consequent happiness. Next to the happiness afforded by a blessed consciousness of peace with God, and good will and sympathy with all his creatures, there is nothing gives joy, pure and unalloyed, like the love of the beautiful — especially beautiful flowers—the children of the field, the woods and the garden. We commend their culture to all—to the children, to the ladies; and good friend of the plow, it is no sign of weakness, if you love flowers too. Your hands may be hardened with toil, your face browned with the winter winds—but you may have a soul as pure, as delicate, as alive to the highest, purest joys, as the prattling child by your side, that you love so much. Feed, and keep alive the soul, as well as the body. Nothing preserves the body from disease and the effects of old age, like a vigorous, well-fed soul. This is the reason why some persons never seem to grow old. But, we started to speak of a very useful and beautiful flower, the Antirrhinum, and not to write an essay on flowers and their effects.

The Antirrhinum is one of our most beautiful popular flowering, easy of culture, showy, and flowery, the first year and again the second, is particularly desirable. The appearance of the flower is shown in the engraving, which is sometimes called Snap-Dragon by the children. The roots may be divided, or new plants can be grown from cuttings, but they come so good from seed there is little necessity for this. Seed should be sown pretty early in the spring; transplant when two or three inches in hight, and set the plants where they are to flower, from six to nine inches apart.

There are a great many varieties. *Brilliant*, is fine scarlet and yellow, with white neck; *Fire-fly*, orange and scarlet—white neck; *Galathe*, crimson, white neck, very large and fine; *Dellia*, fine carmine, with white neck; *Papillonaceum*, blood red, throat pure white.

Tom Thumb, was a novelty of last year, very dwarf, and of quite compact habit the plant only growing about four or five inches in hight, and the flower stem about six inches. There is also a dwarf striped or carnation variety, growing about a foot in hight. These are the leading varieties, and three or four of them selected with reference to a variety of colors will make a good collection. There is a white variety, and one called *Ophir*, creamy yellow—both very good for variety. As the flowers are borne in fine spikes they are excellent for the tops of table boquetts, and at the same time make an excellent and showy bed in the garden. For the accompanying engraving we are indebted to ***Vick's New Illustrated Catalogue and Floral Guide.***

THE WINDS AND THE TREES.

PHILOSOPHERS tell us that the winds gain velocity by unobstructed travel; and the fact is verified by the dreadful hurricane on the ocean, the raging tempest on lake and sea, the awful simoon on the African desert, and the furious tornado on the American prairies; all of which strew their paths with desolation, because there are no trees to check the violence of the winds. Even our sudden gusts in summer, when the air becomes too much rarified by heat, are often destructive of life and buildings.

All these besoms of destruction would be greatly modified could trees be planted in their paths. The trees getting the first strokes, and they being flexible, would bend before the blast, breaking its force, and making it pass harmlessly over buildings or other stationary objects.

The electric fluid, so destructive of life and property, also is attracted by trees, and conducted into the ground; and in fact, trees are the best protectors against all the natural destructive agencies with which man has to contend.

Another consideration as to the value of growing trees, is the fact that a *Park* of any size is warmer when belted and grouped with trees, in winter, and cooler in summer, which has been demonstrated by practical experience for centuries. Many fruiting and ornamental plants flourish when so protected, that would not live if exposed to bleak winds. Domestic animals, too, grow faster, thrive better, and give greater returns, if sheltered and protected by trees. Much better is it also to rest under their broad branches on a hot summer's day, or to be enlivened by their cheering green when all else is dull and cheerless.

A feeling of admiration and awe comes over me when I think of the wonderful wisdom shown in the forms and natures of trees to suit our various wants. If we plant trees with naked stems and branchy heads to shut out unsightly views, the work is only half done, as we can see through and under their branches; but when we plant evergreens, whose largest branches are near the ground, they fill up the gap, and the work is complete. With fruit trees, the same beneficent influence is manifest. We have to climb up trees to pick the large fruits, which, when green, are unfit for eating; while it would be tedious to pick currants, and painful to pick the thorny gooseberry and blackberry, did they grow upon trees.

We say, therefore, plant trees for shelter and shade, for embellishments to your grounds, and adornment to the landscape; they are grand and ennobling to look upon, and their fruits and timber in a few year's growth will be as valuable as gold.—*Correspondent of the Gardener's Monthly.*

POSTAGE ON THE AMERICAN FARMER, when paid quarterly in advance, is only three cents a quarter. We prepay the American postage on all papers sent to Canada.

PARSNIPS.

WRITTEN FOR THE AMERICAN FARMER, BY J. H. CORTLAND.

MESSRS. EDS.—I have been very much astonished, while looking over the back volumes of the *Genesee Farmer*, of which I have an unbroken set for the last ten years, at the sparsity of information on the cultivation and utility of raising parsnips. Turnips, carrots, ruta-bagas and beets, all have due attention. Carrots and beets are fairly run into the ground, as it is natural they should, while parsnips are left in the cold, to which however they seem well adapted. My attention was called to the subject by the great success which I have had with that vege table for the last three years.

I planted it only for a house vegetable, in rows about two feet apart. I gave them very little attention, weeding them but once or twice during the summer, and each spring we have had any quantity of parsnips, large, tender, and delicious for table use.

It strikes me in this way. It is easily cultivated, yielding large results for little labor, and is at the same time good for cattle. Thaer, in his principles of Agriculture, says: "The abundant leaves of the parsnip are very grateful to cattle, and if I can trust the limited experiments which I have made upon this subject, increase the secretion of milk." Why should not farmers pay more attention to it? Another thing, I see it stated in the *Farmer* that one great objection which agriculturists have to raising turnips and carrots is, that it is so difficult to keep them during the winter, being liable to frost. If that is so, why not raise parsnips that will stand any amount of freezing and even appear to grow in winter.

I only throw out these hints, not that I set up to know anything about the subject in its practical adaptation to the wants of farmers, but merely to draw out from farmers their ideas and experience in the matter.

FLOWERS IN THE WINDOW.—There is nothing more attractive to the eye of the outsider than the plants and flowers in the windows of houses during the season when garden culture is out of the question. Here every one, without regard to circumstances, may have a miniature green house with all its luxuries and few of its inconveniences. The expense is not worth mentioning, and the labor is a pleasure to all who love these most loveable beauties of nature. In many of the public schools of New England, the female teachers and large scholars cultivate many flowers throughout the year, either in doors or out. So in numerous factories, it has become a usual sight to see at all times the hanging flower or fern vase, the pots on the window-sill all carefully tended and universally prized during the hours of labor.—*Ex.*

HOW TO RAISE PEACHES EVERY YEAR IN IOWA.

When quite young, set the tree in the ground with all the roots running north and south, and thin the tree to a fan shape, with edge in the same direction as the roots. When the tree is past three years old, after the leaves are off in the fall, lean it towards the west till the branches nearly touch the ground. This can be done easily, as the roots which run north and south will be only slightly twisted. This should be the permanent position of the tree; never should it be righted up. The suckers or water sprouts should be kept stripped off during the summer, or the vitality of the tree will run to sprouts.

The ends of *all* the branches should be crippled about the first of August to force the sap into the fruit buds.

Every fall before cold weather sets in, cover the tree with brush to keep the tree close to the ground, and with straw over the brush to protect the fruit buds from the cold—and uncover in the spring about the tenth of May.

Thus, by a little care and labor, every year, an abundance of that delicious fruit can be raised at home, affording a great pleasure, and saving expense of importing from a distance.—*Iowa Homestead.*

SET OUT A GRAPE VINE.

Now is a good time to prepare a spot for a grape vine. Many persons are deterred from anything of the kind by a great parade made by some persons in preparing the ground. Now take your shovel, dig out two or three wheelbarrow loads of earth and mix in with the returned soil, two wheelbarrow loads of manure, and you will have a nice bed for setting out your plant. We ought to have mentioned, as of the greatest importance, the right selection of a spot. Open garden culture will hardly do in Maine for most kinds of grapes. Watch the effect of the frost on your dwellings and see where it keeps off the longest, and there plant your vines. In most parts of Maine, an easterly or south-easterly exposure is the best. We have a Diana which ripened well the 10th of October, and the frost had not struck it the 7th of October, when we took it down for protection in the winter. It was not struck the last year, till the first of November. It is in the corner of the L, and house on the easterly side, where it has about two and a half hours of the sun in the morning. A row of shrubbery is in front of it a distance of ten feet, which may have an influence in protecting it from the frost. We have noticed in our vicinity, the White Sweet Water, growing in the same position and ripening nearly every year. The idea that grapes require the sun all day long in order to ripen them is a mistake. We have seen them run along under the caves of a building where the sun scarcely reached them, and they ripened well. The idea that grapes will ripen better by pulling off the leaves that cover them, we regard as a great mistake. We want to see every dwelling house in the State adorned with a grape vine. Get a Delaware grape and set it out as well in the fall as in spring.—*Maine Farmer.*

PRUNING THE ISABELLA GRAPE.

The importance of allowing more room for the Isabella and other strong growing varieties, than is generally given them, which we have urged on former occasions, we find to be corroborated by the results of experiments. At the autumn meeting of the Fruit Growers' Society, of Western New York, one of the most skillful and successful cultivators, and who had the best Isabellas on exhibition, said that he would not think of allowing less space for each plant than fifteen feet square, which would be equal to 225 square feet of surface. When the vines are young, they do not of course need so much room; and this has led many cultivators to adopt the opinion inadvertently, that they do not require it afterwards.

During a recent visit to the grounds of J. E. Williams, of Aurora, Cayuga Lake, he showed us the mode he had adopted for training his Isabella vines. They had at first grown to the top of a tall trellis, from which point they had been extended more than twenty feet in an upward, inclined direction, and attached to a row of trees—the place where they were fastened to the trees being about twenty feet from the ground. He finds this extension to improve the quality and ripening of the grapes, and stated that the only well matured fruit of this variety in that place, grew on these vines. Vineyards of considerable extent in the neighborhood, which had been freely cut back and allowed only a limited space, ripened their bunches badly. His Catawbas, the vines of which were twenty feet long on a trellis, were also well ripened. The vines of both these varieties were of considerable age, being two inches or more in diameter at the base.—*Country Gent.*

[PRESERVING FLOWERS IN SAND.

Take the finest river or lake sand and wash it perfectly clean. Heat it very hot, and while hot, mix it thoroughly with stearic acid in the proportion of one pound of acid to 100 lbs. of sand. Let it cool. Take a small sieve and fasten boards to the bottom to keep the sand from falling through. Place enough sand in the sieve to hold the flowers in position, not covering them; then with a sheet of paper twisted in the form of a cone or funnel, carefully let the sand pass between, around and over the flowers, covering them all about half an inch. Set in a place where the sand will remain at a temperature of about 70 degrees. The length of time in which they must remain in the sand depends upon the thickness of the leaves and petals, varying from seven to twelve or more hours. This must be determined by experience. When they have remained sufficiently long, remove the boards carefully from the bottom of the sieve and let the sand run out. The flowers should be picked when dry.

By this process the color and shape of the flowers are perfectly preserved, and they will remain so an infinite time.—*G. B. H., in the Rural American.*

We would call the attention of our readers to the List of Premiums on the last page.

Ladies' Department.

FRATERNAL LOVE.

Nearest of blood should still be next in love;
And when I see these happy children playing,
While William gathers flowers for Ellen's ringlets,
And Ellen dresses flies for William's angle,
I scarce can think, that in advancing life,
Coldness, unkindness, interest, or suspicion,
Will e'er divide that unity so sacred,
Which Nature bound at birth.

—*Sir Walter Scott.*

FASHIONS.

A VERY pretty Balmoral skirt and one in fact which is the prevailing style, may be made by taking a white skirt of any kind, binding and trimming it with black braid, usually putting four or five parallel rows around the bottom, leaving a space of about half an inch between each braid. It should be shrunk by washing before using. Common dress braid answers very well where cheapness is desired, costing about fifty cents for the whole. But if alpaca, or any finer quality is preferred by the fastidious, it will cost from eight to ten cents per yard.

SOCIAL LIFE.

THERE is no doubt but that the young ladies of the present day make a great mistake in their manner of entertaining their young gentleman friends. When a young man calls in the evening, Bridget is instructed to hand him into the best parlor, where perhaps there is a fire, and perhaps not. Perhaps the young lady whose fortunate office it is to entertain him, is dressed as she desires, and is all ready to attend—and may be not. But it is all the same. Into the dreary, stiff, formal, uninhabited parlor he is ushered. Every chair is in its place; ornament, picture and ottoman have on company manners. The stove, or furnace register fail to impart even a glow of warmth to the room or anything in it, and by the time his would-be entertainer comes into the room all his conversational powers and ideas have received a chill from which they will not recover during the evening—let the lady talk ever so wisely and so well. Now, we think a far preferable manner of entertaining a young gentleman, where there is between the parties a more than ordinary friendship, would be to allow him to make one of the family group. Take him into the sitting room—the family room—where the mother, father, and the younger children gather together—the matronly dignity of the mother, the kindly authority of the father, and the quaint bruqness of the elderly aunt—all make a pleasing contrast to the youthful beauty and maiden shyness of the daughters.

On a recent visit to Europe, nothing charmed us more than the many pleasant evenings we were permitted to spend as one of the family group both in England and Germany. Memory often takes back to many a pleasant scene in the former country. The huge fire-place, with its blazing coal and singing tea kettle, the large Newfoundland dog on the rug, beneath the mother on one side, darning stockings for the boys, and the father not far off, reading the weekly news; one child lolling on the family dog, and the other just dropping to sleep on his little stool, till both are sent to bed. You may be sure the room is large enough to allow of a wee courting behind the large screen, of which there is one in every family room among the middle classes. The Boston *Review*, in a late number, giving some timely remarks on this subject, says:

"You can not visit an English family in a familiar way without discovering what will possibly surprise you; that a deep dislike of ceremony and state is a very marked characteristic of an English woman. This feature is strongest in those highest in rank, and has been a marked feature in the character of the Queen herself from her girlhood. Now that she is a widow, and her children are growing to the stature of manhood and womanhood, and leaving their home forever, how delightful to recall the sweet pictures of her early married life, when she so much loved to saunter, with her noble and good husband, over the beach near their beautiful home in the Isle of Wight, and to watch those then little children as they amused themselves with trying to find two pebbles of the same shape, or dig wells in the sand with their tiny wooden spades. Was she not a great deal happier amid those sweet domestic scenes than when surrounded with glittering nobility on the grand state occasions?"

TO OUR LADY READERS.—We shall be pleased to receive contributions from the pens of our lady friends to the "Ladies' Department" of THE FARMER. We have a large number of lady readers, capable of enriching its columns with the results of their experience and observations, and we hope to see them contribute freely to this department of our paper, as we wish to make it one of the most interesting portions of THE AMERICAN FARMER.

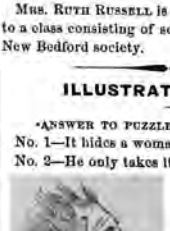
MRS. RUTH RUSSELL is giving lessons in "cooking" to a class consisting of some of the foremost ladies in New Bedford society.

ILLUSTRATED PUZZLES.

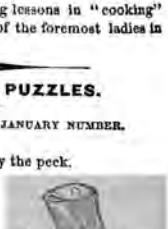
ANSWER TO PUZZLES IN JANUARY NUMBER.

No. 1—It hides a woman.

No. 2—He only takes it in by the peck.



No. 3—Why is this man like Harper's Weekly?

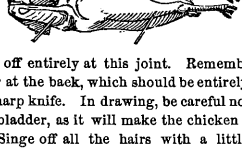


No. 4—Why is this an emblem of man's continual errors?

Answers next month.

DOMESTIC RECEIPTS.

How to Dress Chickens for Table.—Not long since while taking dinner with a friend, we were very much astonished to see the roast chickens brought to table with their legs and wings, stretched in all directions, and lest any of our readers should be open to criticism by a similar circumstance, we give the prevailing method of dressing them. After stripping off the feathers, see that every stump and pinfeather is taken from the skin. Nothing can be more indicative of bad taste and lack of cleanliness, than these unsightly objects when allowed to remain upon any kind of poultry. Take off the neck quite close to the body, leaving sufficient skin to tie over the orifice. For roast chicken the legs should be cut about an inch from the first joint, as seen in cut. For boiling the leg should



be taken off entirely at this joint. Remember the oil reservoir at the back, which should be entirely removed with a sharp knife. In drawing, be careful not to break the gall bladder, as it will make the chicken extremely bitter. Singe off all the hairs with a little burning paper, being careful not to blacken the skin. The gizzard should be opened and the inside removed without breaking the covering, and with the heart and liver washed and inserted into the two wings, which may be done by cutting a small slit in the lower part. After washing, stuff the breast with whatever forcemeat is preferred; tie the neck securely, turn the wings on to the back allowing the gizzard and liver, to remain on the front, and resting neatly and securely upon the side of the breast. Push the legs upward till they remain quietly under the skin of the breast. Then secure the wings and legs together by running a skewer through the center of the bird. Tie the legs down tightly with good clean string.

Renovating and Improving Furniture.—Chairs with cane seats and backs may be made much warmer and far prettier by covering the cane portion with any firm and substantial material, green or black-oil cloth, or new carpeting; rep and empress cloth are any of them appropriate to this purpose. A foundation of under lining and batting should first be made to the desired thickness, and this secured firmly in its place, by tacking to the edge of the wood work. Afterwards cover with material selected and finish with a pretty binding and brass-headed nails, placed about an inch and a half apart. Very fine nails with large heads are the most preferable, as they give a more finished effect.

Scratched and marred furniture may be restored by first scouring with sand paper all the more injured portions, and in fact the varnish will take better if the whole piece is lightly rubbed with the paper. After which apply the varnish, made of the proper thickness by the addition of a little benzine or turpentine. We obtained a pint of varnish and a pint of benzine and a brush, for 90 cents. The brush cost a little over one-third of the money.

How to Clean Ribbons.—A lady sends us the following receipt for cleaning ribbons, which she wishes published for the benefit of those of her sex who wish to try a successful experiment, as she has done. In these hard times all economical hints are acceptable Wet the ribbon in alcohol, and fasten one end of it to something firm; hold the other in your hand, keeping the ribbon out straight and smooth; rub it with a piece of Castile soap until it looks decidedly soapy; then rub hard with a sponge, or, if much soiled, with the back of a knife, keeping the ribbon dripping wet with alcohol. When you have exhausted your patience and think it must be clean, rinse thoroughly in clear water, fold between cloths and rub it with a hot iron. Don't wring the ribbon; if you do, you will get creases in it that you cannot smooth out.

How to Settle Coffee.—A common method of clearing coffee is by the addition of an egg. The white is the only valuable part for the purpose, and only a small portion of one is needed for an ordinary family. It should be mixed with the ground coffee before the water is added. Clean egg shells will do very well. When eggs are fifty cents a dozen they are not always at hand; a bit of codfish or even a pinch of salt is a very good substitute—and if the coffee is put to soaking in a little cold water over night, it will settle clear, without the addition of anything.

To Wash Merinoes.—An old merino dress may be made to look as good as new by first ripping to pieces the skirt, and afterwards washing each breadth separately, in warm suds, being careful to rinse only in clean warm water or suds. Cold water after warm will shrink any kind of woollen goods. Iron while quite damp on the wrong side. Afterwards fold once double on the right side; placing over it a clean newspaper, and iron with a very hot flat, in this way making the seam fold in all new double-fold goods.

Patent Starch Polish.—Take common dry potato or wheat starch—sufficient to make a pint of starch when boiled. While boiling add half a drachm of spermaceti and half a drachm of white wax. Then use as common starch, only using the iron as hot as possible.

Cold Sauce.—Beat up fresh butter and powdered sugar to a cream; flavor with nutmeg and any essence. This is excellent for apple pie and apple pudding. Drawn butter, sweetened and flavored, makes a good common sauce.

Musk.—The Empress Josephine was very fond of perfumes, and, above all, of musk. Her dressing-room at Malmaison was filled with it, in spite of Napoleon's frequent remonstrances. Forty years have elapsed since her death, and the present owner of Malmaison has had the walls of that dressing-room repeatedly washed and painted; but neither scrubbing, aquafortis, nor paint has been sufficient to remove the smell of the good Empress's musk, which continues as strong as if the bottle which contained it had been but yesterday removed.

Miscellaneous.

PEACE AT LAST.

FROM "MATRIMONIAL INFELICITIES," BY BARRY GRAY.

"Do you know, my dear," I said to the fair woman who has the misfortune to be my wife, as we sat together in the library the other evening—it chanced to be the anniversary of our marriage—"that I have been thinking recently, and especially was it in my thoughts during your visit to your mother, that you really might have obtained a better husband than you did?"

"Oh, as for that," she replied, "I made up my mind to that effect years ago; in fact, we hadn't been married a month before I discovered the mistake I had made. But as it was too late then to make any change, I resolved to make the best of the husband I had obtained. Now, there was Charley"—

"Never mind, my dear," I interposed, "about reviving the names of any of your old beaux. I don't wish to hear aught about them; and as they are all either dead and buried, or married, which amounts to about the same thing—the less said in relation to them the better."

"Yes, yes," I cried, "I know them very well; their wives, let me tell you, died of broken hearts, from the effects of their ill-treatment. Butchers, my love, could not be more savage and cruel to innocent lambs, than they were to their wives. It's a fact, and the whole neighborhood as you know, used to talk about their inhuman treatment."

"I must say, on the contrary," said the obstinate little woman, "that I never heard a whisper breathed against their kindness and tenderness. Why, just look at the beautiful monuments they have erected over their wives' graves, and the lovely poetry inscribed upon them!"

"Hum!" I exclaimed, "that is an easy thing to do; but it don't follow that, because one erects a monument a hundred feet high over his buried wife, that he loved her a hundred-fold better than he who simply plants a rose-bush at the head of his darling's grave. It is almost proverbial, too, that epitaphs never tell the truth; and if you should die, my dear, though I would mourn for you very sincerely, I do not believe that I would place more than a simple slab above your grave, inscribed with your name and age."

"Of course you would'nt," my wife exclaimed, the tears rising to her eyes; "it would be as much as I could expect, if you were to give me even a decent burial—leaving the matter of a monument or tombstone entirely out of the question."

"Pshaw! my dear," I replied; "is there any use in your talking that way, I should like to know? In the first place, your health is perfectly good, and"—

"My health good!" she interrupted. "Why, there never was a more feeble woman than I am. You know how weak and ill I have been ever since we were married, and that I am liable to die any moment. But you are used to hearing me say so, and seeing me in this condition. My mother knows how precarious my life is, and she told me, the very hour before I started to come home, that I must be very careful of myself; that I must not entertain too much company—especially your bachelor friends; for that my life hung on a thread, and that I might die any moment."

"Good heavens!" I exclaimed, "if there be one thing more than another which I dislike, it is for your mother to tell you that you are feeble. To my certain knowledge, she has repeated those identical words to you at least fifty times every year since we were married, and I believe she only does it to frighten you and provoke me."

"Well, you are cruel, cruel as the grave," my wife cried, now quite excited; and I'll no longer live under the same roof with one who has no more consideration for my feelings and happiness than you have. My dear mother, who has her only child's welfare at heart, can't give me any advice but you get angry at her for it."

"I don't get angry at her," I replied. "I am only vexed at her for trying to create a disturbance between us. If she'd let you and I manage our own household, without forever suggesting this or that to you, we should know more peaceful days than we do.

"I'll tell you what, my dear," I continued, after a pause, during which my wife had kept her handkerchief to her eyes, in a way that suggested weeping—"I'll tell you what," I repeated, "I had further been thinking about during your absence, and, if I am not greatly mistaken, it will be conducive of peace in our home."

My wife removed the handkerchief from her eyes, and asked me what I meant.

"I mean this, my dear," I answered: "I purpose to remove from the city into the country. I believe that thereby your health will be greatly improved, the fresh air will, I doubt not, bring back the roses to your cheeks, and the quiet incident to a country life, together with the tender communings which our hearts will hold with nature, will bring peace to us at last. Besides," I said, "the temptations which assail us both in the city, will not exist to the same extent in the country. * * * Early rising, too, is conducive to health, and a ramble through the woods is better than a promenade on the fashionable side of Broadway. Again, the cost of living in the country is half of what it is in the city. The rents bear no comparison to city rents, and we can enjoy the fresh vegetables just out of our own garden, which is more than we can say of those from Washington Market. The children, ah, my dear, think of the children! How they will improve by a change from town to country. They will grow fat, and sunburnt, and freckled, and tear their clothes climbing trees, and generally have a good time of it. * * * * * * * * * *

I suppose my wife was too overjoyed to speak; so she only nodded her head, acquiescently smiled, half sadly, and looked forth into the deepening twilight. And so, when winter had glided by, May came, we went into the country, where, undisturbed by city trials, we have found peace at last, and all manner of agreeable matrimonial felicities.

Young People's Page.

TALK WITH THE YOUNG FOLKS.

WRITTEN FOR THE AMERICAN FARMER, BY C. N. BEMENT.

We have something to say to the young girls. We never expect to tire in interest or labor for the girls. We see so much to hope for in relation to the females of our country, and so much that is defective in their education, that their interest—their good, lies upon our heart like a perpetual inspiration. When we see girls educated in the schools of folly and fashion, setting themselves, body and soul, to the blandishments of the shopkeeper and mantuamaker, idling their young lives away in gossip and nonsense, taking early lessons in rouge-daubing and toilet-gilding, talking seriously of matrimony in their early teens, looking forward to making a fortunate match as their only hope and care in life, forgetting all that is greatest and best in their minds and hearts, ignoring all womanly aspirations for life's great duties and joys,—our heart bleeds within us. How many good people are trying to improve their homes in the world! How many are seeking to awaken in human hearts a better ideal of home life—a true estimate of home virtue—a more thorough insight into home duties! How limited will be their success unless the hearts of the girls can be weaned with a burning zeal for improvement. Woman is a mistress, the presiding genius of home; and she must become true to herself, true to her womanly qualities of mind and heart, ere the homes of this world can be what they should be. She must cease to worship at the shrine of folly; she must cease to place her sole good in marriage; she must cease to regard herself simply as the doll or plaything of man; she must cease to lean on father, mother, brother, husband, for support—for instruction. She must feel that she has a mind to be educated—a soul to be taught the way of duty. She must learn to be independent in her opinions, her actions, her duties and aims. Every girl should have some aim in life and educate herself for some place and duty. Her education should be solid and thorough. Why should the boys be sent to college from fourteen to eighteen, and the girls to a seminary or academy only as many months! Why should the boys be three or four years learning a trade or profession, and the girls never learn to do anything? Why should the boys be all their minority learning agriculture with the best books, instructions and experiences they can get, and the girls, who are to be the wives, be ignorant of everything that pertains to their future duties and trials? Why should it be the province of the boys to know so much, and the girls know so little?

We want to see the girls of this age wake up to a new life, and every one of them fix on some great attainment that they will secure. First of all let them aim to be true women, intelligent, self-reliant, virtuous, high-minded, sober, affectionate, thoughtful loving—all that is truly lovely, and nothing that is not; demanding of all their associates that they shall be honorable and respectful. Secondly, let them determine that they will know the most they can know about the practical duties of life; that their hands shall be taught to be useful and their minds active, come what fortune may. Thirdly, let them learn how to preserve their health, to care for and do for the sick, to be judicious managers of households, sick rooms, nurseries, gardens, dairies, and whatever falls to the common lot of men and women. Fourthly, let them learn to do something by which they can earn an honest and profitable living were they thrown upon their own resources. Lastly, let them read and acquire useful knowledge. With such efforts the girls of to-day may be glorious women for the next generation.

SPORTS OF WINTER.—Winter brings joy to the youth, who are not at that season so much confined to labor, and they hail its return with quite as much zest as the aged do the return of spring and summer season. The sleigh ride and the skating frolic are sports in which the frost must always have a share, and it is always made welcome to the young. Winter has its comforts for the adults also. The long evenings favor the social visits of country people, who often without a formal invitation take up their abode for the evening in a neighbor's house, and "talk the night away," at least in part, over a social fire, formerly in an open fire-place, which gave light to the whole room. Here with nuts, apples, crullers, and a tankard of good cider, farmers will talk of their modes of management of their stock, of their grain, of their vegetables, and of their year's store of meat salted up safe in the cellar; and they enjoy a feeling of independence unknown to him who must first seek employment, then his compensation, then the best market to lay out his cash from day to day, to support his anxious family. When the good husbandman has laid up his stores for the season, and feels in himself that he has provided comforts not only for himself and family, but for his cattle and all the brute race on his farm—that he has fields of his own, that always with a common blessing, yield him an abundance of the good things of life—that the failures or the misfortunes of those engaged in more uncertain pursuits, mar not in any great degree the security and independence unknown to most other classes of society.

"SAMBO, is your massa good farmer?" "Oh, yes, massa, a fus rate farmer—he make two crops in one year." "How is that Sambo?" "Why, you see he sells his hay in de fall, and make money once, and in de spring he sell de hides ob all de cattle dat die for want ob de hay, and make money twice—dats two crops, massa."

A LADY named her son, the other day Petroleum. Her reasons for doing so was, that when she had occasion to whip him she might "strike ile."

A SCHOOLMASTER struck "ile" the other day but it was only juven-ile.

Editor's Table.

To Our Readers.

We take great pleasure, this month, in presenting our paper to our friends, filled with original matter, from practical and experienced men, and desire, at the same time to express our regret that necessity compels us to omit our usual agricultural leader, in order to make room for matter of a personal character. We do not think it either profitable or interesting to bring these personal matters before the public, but owing to the insinuations of those opposed to the success of this paper, and the slanderous card which Mr. Harris has published, we are in duty bound to take notice of the fact.

In regard to the advertisement, or circular, as Mr. Harris calls it, we have only a few words to say, and these are the facts in the case.

The circular was put in the December number of *The Genesee Farmer*, as an advertisement, and as such, we intended to pay for it when called upon. Mr. Chase, partner of Orange Judd, when he came to Rochester, after finding that he could not take out proceedings against us, came to us personally, and implied that nothing would be done against us, except that we ought to pay for that circular as an advertisement, and which we consented to, at the old rates for advertising, of *The Genesee Farmer*, and which Mr. Chase said they would think over; and it was with considerable surprise that we heard of, and afterwards received the card, which is published on the first page.

That Mr. Harris should condescend to slander us in the manner he has done, and at the same time express friendship; and also in another column of *The Agriculturist*, call us his friend, is more than we can understand.

But enough. We do not wish to continue this subject, and if any persons have looked upon our efforts with doubts, we trust that they will at once be dispelled by reading this present number. We ask all, whether The American Farmer is not worthy of the confidence and support of the community?

To those who have so nobly come forward with their assistance in contributing to our columns, and those who have voluntarily acted as agents in forming clubs, we return our sincere thanks.

There are thousands of farmers in the country who would willingly subscribe, and many who are not as yet aware that a new paper is started; and we respectfully ask that all who wish success to the cause, will try and extend the circulation of The American Farmer—show the paper to their friends and neighbors—tell them its marvellous low price—show them what is said of The American Farmer by the press of the country, and get them to subscribe. Send on the names as fast as you get them, and we pledge ourselves that nothing shall be wanting on our part to make The American Farmer worthy of support, in its contents and typographical appearance.

The Cattle Plague in England.—From the English papers of latest date, it appears that the range of the cattle plague is gradually extending in some portions of the country, and is stationary in others. In Cambridge, the deaths have in some places, diminished, in consequence of the prior annihilation of large herds. In Cambridge, the disease is still prevalent. In the east of England, fresh outbreaks have taken place. In the center, it continues its ravages. In the south, it is stationary, and in Scotland, more or less severe in different localities. The accounts from other parts of that country are of an equally gloomy character. Veterinary skill seems quite unable to stop its ravages. The disease has already destroyed over 50,000 head of cattle, officially reported—besides some thousands more, of which the Government had not been advised. In consequence of the prevalence of this terrible disease, it is announced that the Royal Agricultural Society will omit their annual show and meeting this year.

Later information, as we go to press, announces that a large increase of the disease has taken place. For the previous week the number was 656, and in the last week of December 7,693 had been destroyed by the plague. In Yorkshire the number was 1,456, and in Scotland, 1,975.

Colonial Fruit.—The Province of Nova Scotia had the honor of taking the gold medal which was offered for the best representative collection of fruit and vegetables from any of the British Colonies, at a show of fruit opened in London, in December, in connection with the Royal Agricultural Society. The London Press says of it, that the Nova Scotian Fruit Growers' Association contribution was an exceedingly interesting collection of fruit, adapted to that Province, and compliments the appearance of the various descriptions of fruit in the collection.

The gold medal of the Society for the best collection of fruit and vegetables, grown by any botanic or horticultural garden in the world, was carried off by the Copenhagen Horticultural Society.

Back Numbers.—Each number of the Farmer is stereotyped, so that we can at all times supply back numbers to any extent. All who subscribe will receive the entire volume. Any numbers that miss in the mails we shall be pleased to replace at any time. The American Farmer for one year will make a beautiful volume of 384 pages, filled with the experience of practical farmers, and profusely embellished with first-class engravings.

Sorghum Sugar.—A subscriber in Indiana sends us a sample of sorghum sugar manufactured by him, and will in the next number of The American Farmer furnish our readers with his process of manufacture, the variety used, &c., which will at this time be particularly seasonable and interesting to our readers.

State Agricultural Society.—The annual meeting of the New York State Agricultural Society will be held at Albany on Wednesday, February 14, 1866.

Inquiries and Answers.

MESSRS. EDITORS:—The farmers in the West are now beginning to build houses and barns, and many are at a loss to know how to build as regards comfort and economy. I would suggest that you illustrate copiously with farm buildings. Such plans as you may select may not suit every one that wants to build; yet with a little modifying, may suit a majority; and who will ever hold you in grateful remembrance for even a suggestion you may offer in the erection of a tasteful and convenient residence for themselves and family. Do not neglect the flower garden. This will enlist the fair sex, and many a dollar may be added to your subscription list. Embellishments of country houses are too much neglected. Farmers need stimulating on this subject—*J. H. A., (West Jersey, Ill.)*

We should feel under obligations to our readers, if they would give us a description of any farm buildings embodying modern improvements, which they may have, with an outline plan of the same, and we will get them engraved for the columns of THE FARMER. Any suggestions on this head we shall be pleased to receive from any of our readers.

E. F. H.—The trouble with you was this: you scalded the fowls in boiling water, whereas you should have used water nearly at the boiling point.

F. W—20 cents per pound, is the retail price here for good turkeys; 15 to 18 cents for chickens.

A. S., (OHIO.)—The postage on THE AMERICAN FARMER to England, is 24 cents a year, which must be prepaid, in addition to the subscription.

A SUBSCRIBER.—See the number for January.

H. F. S.—Will answer your inquiry, if possible, in the next number.

R. H.—No room for you this month.

R. E.—We cannot give you a satisfactory answer; we have looked for one ourselves, but could not find one.

WOOD CHUCKS.—A subscriber wishes to know how to catch these burrowing quadrupeds. Will some of our readers give us their method.

J. O. OMEMEE.—Marblehead Mammoth Cabbage Seed is only sold by the package, at 25 cents each. You can get it by applying to James Vick, of this city.

TRAINING ANIMALS—*Eds. American Farmer*:—As this is a subject of never-failing interest to farmers, and more especially to the young men who are to be farmers in the future, your correspondent would suggest the propriety of a series of inquiries and answers through the columns of THE AMERICAN FARMER, and that we may thus get and give all the best practical ideas and experience of the readers of your most valuable monthly. My boyhood was mostly spent in the roughest portion of Madison county, New York, where we raised with much labor only small crops of corn and potatoes, and still smaller of spring wheat, and scarcely any winter wheat at all. But it was a great grass country, and consequently a stock-raising and dairy country. We had colts and steers in abundance, with which we boys did try our hands at breaking them, as we termed it, during the long winter snows and snow-banks. And sometimes they took the advantage of our letting go the rope or lines a moment, and would nearly break us before we could again bring them to anchor. Thus we took them through the snows of winter, and when spring opened, we began to try but often with very unsatisfactory results to do our spring work with our half-broken teams. Much has been said in these later years about Mr. Rarey's mode, and various other would-be wiseacres have added their experiences, views and theories, and to sift and get before your readers all we could of value on this much neglected subject, is the aim of your humble correspondent. Please let us hear from the readers of THE FARMER.—*Junius.*

Literary Notices.

MERRY'S MUSEUM.

THIS is the title of a neat little monthly, of 32 pages, which is always filled with readable and interesting matter for the young folks. A new volume commences with the January number, which is before us on our table. A fine steel engraving of General Grant, by Buttre, of New York, which is beautifully got up, will be sent to all new subscribers. Address, J. N. Stearns, Publisher, New York.

THE FARMER.

THIS is the title of a new monthly, devoted to Agriculture and Horticulture. By Elliott and Shields, Richmond, Va. It is well got up, and we doubt not, will have a large circulation. We wish it every success.

THE ARTIST'S SON, AND THE EMIGRANT'S SON. From the London Religious Tract Society. Published by Henry Hoyt, Boston. Price, $1,15. For sale by E. Darrow & Brothers, of this city.

These are very interesting stories, in one neat volume, bound in crimson. Typography perfect. Excellent for Sabbath School Libraries, and for presents to children. It is sent by mail, free of postage, for the above price.

HARPER'S WEEKLY.

THIS illustrated paper, of our country, never fails to come to hand, from week to week, always welcome, and filled, at all times, with something pleasing to the eye, and profitable to the mind. Single subscriptions, $4,00 a year. In clubs of six, for $20,00. Harper & Brothers, New York.

OUR SONG BIRDS. A serial, published quarterly. By George F. Root and B. R. Hanby. Prepared expressly for Sabbath and day schools, juvenile singing classes and the social circle. Each number, 64 pages, complete in itself. THE SNOW BIRD, (January,) THE ROBIN, (April,) (THE RED BIRD,) July, (THE DOVE,) (October.) Single numbers, 15 cents. 60 cents a year. $2 a dozen. $15 a hundred. For sale by E. Darrow & Bros., of this city.

Welcome to the "Snow Bird," for January. It appears in beautiful plumage, and we notice that it is in excellent trim. It is the first of "Our Song Birds." A serial, published quarterly.

THE GARDENER'S MONTHLY.

THE January number of this valuable monthly is received, and, as usual, it is filled with excellent reading matter for Horticulturists and others. Any of our readers wanting a good work on Horticulture should read the advertisement of this monthly in our last number, and subscribe for it. It is edited by Thos. Meehan, and published by W. G. P. Brinckloe, of Philadelphia. Price, $2,00 a year. Single copies, 20 cents.

The American Farmer in Canada.

AS long as the premium on gold continues, we shall send THE AMERICAN FARMER to our Canadian subscribers at 60 cents each in clubs of five or more, or single subscriptions at seventy-five cents.

If American money is sent, our terms will be one dollar a year, or seventy-five cents in clubs. We prepay the American postage on all papers sent to Canada or any of the British Provinces.

TO ADVERTISERS.—All advertisements should be received on or before the 20th of the month to insure insertion in the following month.

The American Farmer—Opinions of the Press.

EVERY mail brings us papers saying a good word for THE AMERICAN FARMER. We assure our brethren of the press that their good will and kind words are fully appreciated, and thank them for the liberal manner in which they endorsed our remarks in the columns of the January number, in all but a few cases, giving credit. We are at all times willing to be copied from, but at the same time, desire to have full credit given to THE AMERICAN FARMER.

IT is of the same style and price as the *Genesee Farmer*, and opens with fair promise of success.—*Country Gentleman.*

IT is printed on good paper, clear type, and promises to be a valuable monthly.—*Herald, Utica.*

THE place of *The Genesee Farmer* has been more than equally well supplied by THE AMERICAN FARMER. We trust that the new candidate will not only obtain all the support and good will of its predecessor, but will find its way to a largely increased number of friends and subscribers.—*Telegraph, Germantown, Pa.*

THE first number of THE AMERICAN FARMER bears a creditable appearance, and ought to be sustained.—*Gazette, Leroy.*

THE January number, which we have received, is a very good beginning.—*Star, Cobourg.*

THE AMERICAN FARMER is the title of a neat little monthly sheet, of thirty-two pages. It is equal, in every respect, to its predecessor, the *Genesee Farmer*, and as an agricultural paper, it is perfect.—*Prototype, London.*

THE AMERICAN FARMER presents a good appearance, and under the able management of Mr. Turner, can but succeed.—*Herald, Saginaw.*

IT is an improvement upon *The Genesee Farmer*, which has long been a favorite.—*Republican, Fultonville.*

SO far as it may seek a place among new readers, and stand on its own footing and merits, it is welcome to succeed.—*Messrs. Orange Judd & Co., Special.*

THE January number of THE AMERICAN FARMER is a well got up publication.—*Chronicle, Penn Yan.*

THE January number is very well got up, and we can recommend it to farmers, horticulturists and others.—*Republican, Saratoga Springs.*

THE AMERICAN FARMER well fills the vacuum made by the transfer of *The Genesee Farmer.*—*Atlas, Attica.*

THIS monthly is very neatly got up and filled with acceptable matter—*Express, Rochester.*

THE AMERICAN FARMER is a new competitor for the patronage of farmers and agricultural readers generally, and the first number presents a fair appearance, and is well stocked with valuable and instructive reading. In addition to the paper, each subscriber will receive a copy of the well known and beautiful engraving of the late President Lincoln, and his son "at home:" a handsome present, and making a tempting offer.—*Sentinel, Burlington, Vt.*

IT contains a large amount of miscellaneous and general news as well as many valuable hints to the agriculturist.—*Sentinel, Prattsburgh.*

WE predict that THE AMERICAN FARMER will soon win its way to public favor.—*Commercial, Aurora, Indiana.*

THE AMERICAN FARMER is illustrated with numerous wood cuts, and filled with interesting matter to the farmer and gardener, as well as the general reader.—*Era, Newmarket.*

THE January number presents a vast amount of general and special information for the farmer, embraced in a neat and convenient form for binding.—*Free Press, Kittanning.*

THE AMERICAN FARMER is a new agricultural monthly, got up in good style, illustrated with numerous wood cuts, and filled with interesting matter to the farmer and gardener, as well as the general reader.—*Era, Newmarket, C. W.*

THE AMERICAN FARMER is a new candidate for public favor, and we have no doubt will be a popular one. It is a great improvement upon the *Genesee Farmer.*—*Republican, Fultonville.*

FROM the appearance of the first number, we judge that it would be a very useful paper for farmers.—*Free Press, Honeoye Falls.*

JUDGING from the first number, THE FARMER is to be a very valuable paper, and to more than fill the place vacated by its predecessor. We wish all success to it.—*Telegraph, Norwich, N. Y.*

IT is a most excellent farmers' paper and worthy a liberal support.—*Journal, Clearfield.*

THE AMERICAN FARMER is handsomely printed, on good paper, and is filled with matter interesting to all farmers.—*Courier, Potsdam.*

JUDGING from the first number before us, it is a journal worthy the support of the farming community generally.—*Tribune, Hornellsville.*

THE initial number of THE AMERICAN FARMER promises to meet the wants of farmers. The subscription price is only one dollar per year, and a single number contains a hundred times that worth of practical information.—*Reporter, Titusville.*

FARMERS, who are in want of a good and instructive agricultural paper will find this just the one to meet their wishes.—*Era, Clinton, C. W.*

IT is got up in the same style as *The Genesee Farmer*, but it is an improvement on that defunct monthly It will no doubt be a useful publication to the farming community.—*Warder, Omemee.*

IT is filled with useful matter and is finely illustrated and very cheap.—*Democrat, McConnellsburg.*

IT is well edited; contains a great variety of matter interesting not only to the farmer, but to the general public, and is well worth the price of subscription.—*Journal, Pottsville.*

THE AMERICAN FARMER is the title of a new and a very excellent monthly. We have perused its pages with interest and to much satisfaction. Every farmer and gardener should have a copy of this beautiful little stranger.—*Democrat, Bloomsburg.*

THE AMERICAN FARMER takes the place of the *Genesee Farmer*, and is put up in the same style. We consider it an excellent work, and should receive a hearty support from farmers.—*Republican, Bloomington.*

THE January number which is before us, presents an exceedingly creditable appearance, and its columns are stored with much valuable information.—*Journal, Allegan.*

IT is well filled with valuable matter, and is worthy the farmer's attention.—*Journal, Ann Arbor.*

AS far as we can judge, after examining the first number, THE AMERICAN FARMER deserves to be well patronized.—*Gazette, Picton.*

IT is got up in a handsome and convenient form for binding, and is well filled with valuable matter.—*Transcript, North Adams.*

THE new journal appears to be ably edited, and will no doubt fill the place of its illustrious predecessor.—*Citizen, Jackson.*

WE would recommend THE AMERICAN FARMER to the people of this section as a paper that is exactly suited to their wants. Every one should obtain a copy and examine it, and we feel confident that they will not consent to be without it.—*Enterprise, Keowunee, Wis.*

WE have examined THE FARMER carefully, and would say that it is eminently worthy of the patronage of farmers.—*Republican, Waverly.*

WE are in receipt of this excellent journal for January, the first number of its existence. Each number will be neatly printed, on good paper, and filled with valuable reading matter for farmers. At one dollar, it should not fail to find its way to every farmer's house in the west.—*Borealis, Bowling Green, Ind.*

WE have never seen a better Agricultural paper than the first number of THE AMERICAN FARMER.—*Republican, Sycamore.*

JUDGING from the first number before us, it is a journal worthy the support of the farming community generally.—*News, Nunda.*

THE AMERICAN FARMER is the best agricultural monthly we know of, and is furnished for the small sum of $1.00 a year.—*Family Friend, Brooklyn.*

THE AMERICAN FARMER.—The first number of this new candidate for the favor of the agricultural community is before us. Although gotten up at so short notice, following as it does, the *Genesee Farmer*, it promises to equal that long and justly popular agricultural journal in the quality and quantity of the matter contained, while it far excels it in its typographical appearance and general make up.—*Democrat, Rochester.*

THE AMERICAN FARMER is a successor of the old *Genesee Farmer*, and we judge from the first number, which is on our table, that it will be an improvement on that paper.—*Recorder, Amsterdam.*

WE welcome to our exchange list, THE AMERICAN FARMER, a new monthly agricultural Journal, conducted with marked ability, and admirably fills the place of *The Genesee Farmer.*—*Press, Northampton.*

THE AMERICAN FARMER is the title of a new agricultural paper just started in Rochester. It is the size of 32 pages, is put up in good style, is printed on clear new type, and makes a very creditable appearance. It is something in the style of the old *Genesee Farmer*, but it makes a neater appearance than that ever did and we think is quite likely to be more popular with the farmers. It is finely illustrated, and is furnished at $1,00 per annum.—*American, Albion, N. Y.*

Notes on the Weather, from Dec. 15, 1865, to Jan. 15th, 1866, inclusive.

THE moderate weather continued through the second half of December. The canal was frozen fast on the 15th, and has been fast bound, as usual, through the last half. The mean temperature of this half was 28.10°, and the general average, 25.81°. We had rain, and hail, and snow, on the 20th, and 21st, and sleighing for four or five days; fine wheeling rest of the half month.

The mean heat of the month was 31.10°, and general average, 28.73° The coldest morning, 10°; coldest noon, 20°; and coldest day, 15.38°. The hottest morning, 40°; hottest noon, 47°; and hottest day, 41.33°.

The water fallen in the month was only 1.75 inches; barometer, 29.47 inches, and its mean for 28 years, 29.53 inches.

For the year 1865, mean heat, 48.16; and for 29 years, 47.06°; a year, warmer than the average.

The water, rain and melted snow, for 1865, was 34.08 inches; and the average in 29 years, 32.53 inches; water exceeds the average.

The severity of the cold in the Mississippi Valley for a year or two past, has been striking for winter cold, and summer or early frosts. On December 13, 1865, the ice formed at St. Louis, and temperature down to 9°, colder than our Western New York. On the 14th, at Cincinnati, 8° below; at Quebec, on the 15th, 12° below, and snow fell three or four inches deep at Nashville, Tenn., on 15th.

January, 1866, began fair and pleasant. On the 5th, the temperature was at 3°; on the 6th, in the evening, 5°; and the cold period was distinct and palpable; on the 7th, 2° below in the morning; 3° at noon; 3° below at 9 P. M.; on the 9th, 4° below, at 7 A. M.; at noon, 17°; and the cold period passed off. The cold was greater at the east—Boston, 8° below; New York, 10° below; Albany, 15° below; Auburn, 24° below; Geneva, 12° below; Rochester, 4° below; Montreal, 21° below; Ottawa, C. W., 31° below; Ann Arbor, 6° below; Kalamazoo, 10° below.

The barometer gave the greatest rise known here in 28 years, Jan. 8th—30.52 inches; also, highest known at Geneva College, 30.53 inches; and also was the highest known at Ann Arbor, Michigan.

For the first half of January, 1866, the mean heat was 17.78°; and the lowest mean in 29 years, was 15.9°; and its highest, 36.7°; a cold half of this January. More or less snow, light, and giving very little running of sleighs; smooth for carriages; on the whole, rather cool, but business active, and health as usual.

The Press.

WE feel under obligations to many editors for the liberal manner in which they have noticed THE AMERICAN FARMER, and to many agricultural papers who have sent their valuable exchanges. Would our space allow, we should be pleased to give an extended notice of each.

☞ Editors, correspondents and agents will please be particular to address all exchanges, notices and communications to THE AMERICAN FARMER, Rochester, N. Y.

THE MARKETS.

ROCHESTER, Jan. 23, 1866.

FLOUR AND GRAIN—Very little doing, and little change in prices. Scarcely any grain is offered. A few loads of Red Wheat are brought in. Flour—White Wheat, $12@$13.75. Red winter, $9.50@$10.75. Extra State, $7.25@7.50. Grain—White wheat, $2@$2.50. Red do., $2@2.12½. Corn, 70c. Barley, 80@85c. Oats, 40c. Rye, 75c. Buckwheat, 75@80c.

PROVISIONS—Market dull. Dressed hogs, $11.75@$12, last week, but only $11@$11.50 this. Lard quiet, 18@20c. Butter, 30@35c. Eggs, 33c. Turkeys, 18@20c. Chickens 15@17c.

WOOL—48@55c.

NEW YORK, Jan. 23.

FLOUR—The market for State and Western flour is heavy, and common grades 10@15c lower, with only a moderate demand. Sales, 6,100 barrels at the following quotations: Superfine State, $6.75@$7.20; Extra State, $7.55@$7.85; choice State, $7.90@8.10; Superfine Western, $6.75@$7.20; common to good shipping brands extra round hoop Ohio, $8.85@$8.50; Canadian flour is 10 cents lower. Sales at $7.85@8.20 for common, and $8.25@$11 for good to choice extra. Rye flour dull. Corn meal dull.

GRAIN—The market for wheat is dull and prices of spring 2c. @3c lower. New No. 1 Milwaukee, 170c; choice Amber Milwaukee, 174½c. Unsound new Amber Michigan, 166c. Rye quiet. Barley dull and nominal. Corn quiet and without decided change. Sales 82@3c for unsound and 85@86c for sound Western mixed in store and delivered. Oats dull and lower; sales at 38@42c for unsound, and 54@56c for sound Western.

DRESSED HOGS—Firmer. Sales at 13¾@13¼c for city, and 12¾@13c for Western.

PROVISIONS—The market for pork is dull and prices lower. Sales at $29.62@29.87 for new mess; $28.25@29 for old mess—closing at $28.59 regular; $21.75@22 for prime; and $23@23.50 for prime mess. Cut meats are steady; sales 250 packages at 11@13c for shoulders and 15½@18c for hams. Lard dull and heavy; sales at 15½@18¼c—the latter an extreme price. Butter dull at 30@32c for Ohio and 25@38c for State. Cheese is quiet; sales at 11¼@17¼c for common to prime.

CHICAGO, Jan. 22.

FLOUR—Market moderately active and steady.

GRAIN—Wheat quiet at 122¾@123c for No. 1. Corn inactive and nominal. Oats firm.

PROVISIONS—Dull. Mess pork firm; sales at $26.50@27. Sweet pickled hams quiet at 17¼c. Green meats steady; shoulders 9½c and hams 13½c. Lard steady at 17c.

HOGS—Active. Sales at $9@9.75. Dressed hogs active and advanced 25@35c; sales at $10.75@11.25, closing steady at $11 for good and $11.25 for heavy.

Special Notices.

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feb-tf

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JOHN TURNER,
Publisher and Proprietor,
American Farmer,
Rochester, N. Y.

CONTENTS OF THIS NUMBER.

STEREOTYPED BY JAMES LENNOX, 62 BUFFALO ST., ROCHESTER, N. Y.

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THE AMERICAN FARMER,

A MONTHLY JOURNAL OF

AGRICULTURE AND HORTICULTURE.

ILLUSTRATED WITH NUMEROUS ENGRAVINGS OF

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Publisher and Proprietor, Rochester, N. Y.

THE FARMER AS A MANUFACTURER.

MANY will doubtless remember the remark made in the first number of THE AMERICAN FARMER, that all real improvement in farming must commence with the farmer. He must obtain more knowledge or learn to make better use of what he already knows. Many farmers know a good deal that is of no kind of use to them. Remind them of an important fact and they know it, of course; but they are no better off for the knowledge. Knowledge to be of any use, must be digested, and what is valuable retained. Thus the mind grows, becomes larger and stronger and better prepared for the great struggle of life. Some men read and read, and never get any better for it. They have an intellectual dyspepsia. Their minds don't digest, and therefore the mental food never becomes assimilated and made a part of themselves.

Some minds like some diseased stomachs seem to revolt against the most wholesome and valuable food, and to have a great hankering after that which is comparatively worthless, if not injurious. This is another reason why improvement is slow. Our readers, we presume, will remember plenty of cases where people seemed determined to learn everything except just that which would be of the greatest benefit. Tell a man where he can buy an improved hay fork, or save a dollar in the purchase of a coat, and he is all attention, while important principles that should affect his whole conduct through life, and would if heeded, make him wiser, better, happier and more useful, are scarcely heeded.

Let us always strive to get at the principle of things. To reform any particular practice is well enough, but it is like pruning a tree and washing and scraping the bark, while no attention is paid to the worm at the root. Some of the best farmers we have ever known were those who commenced their business somewhat late in life. Their minds had been trained and their habits formed in mechanical or commercial matters, where the conflict of mind is usually sharp and active, and though comparatively ignorant of agricultural pursuits, their former discipline soon enabled them to become masters of a new and difficult profession. They had learned to look upon the farm in its true light, as a work shop or manufactory, and he who could make beef, pork, wheat, corn, &c., at the least cost as the best farmer. This is the true principle.

We have known farmers, here as well as in other parts of the world, with reputations almost world-wide—known and honored everywhere, as men of unusual skill and science—who if they had to depend upon their profits for support would abandon farming for some more lucrative pursuit, or change their practice very suddenly. It is not all gold that glistens, even in farming, and not always the best farmers that obtain the biggest prizes at our great agricultural shows.

What would be thought of the manufacturer who should make beautiful cloth, substantial and of fine finish, exciting the admiration of every beholder, and yet costing to manufacture twice the amount that could be obtained for it in the market? He might get credit for a kind of useless ingenuity, but as a business man and a manufacturer, would not compare with the one who quietly pocketed his 20 or 25 per cent. profit.

Farmers, as a general rule we think, are rather poor calculators. Perhaps this assertion is too broad. It is true of many, certainly. How few in figuring up the cost of a crop of wheat or corn will

charge all the items of valuable stock used up in its manufacture. The air, the sun, and showers are free enough but they don't make wheat or corn, any more than the water that turns the miller's wheel makes his flour. Those of us who have had experience in bringing up a "run-down" farm know that it is a pretty slow and costly process, and we realize the fact that a crop of grain takes from the soil something as precious as gold. The manufacturer makes no such mistakes. He is sure to count every item of cost, not even forgetting wear of machinery, and then usually adds a little for possible errors—for fear something might have been omitted, or just to be on the safe side. The farmer should be as careful of the character of his soil as he is of his own character, or his surplus greenbacks. It is a fine place for the deposit of extra capital where thieves can not steal. The merchant always considers his business the best place in which to use his capital, and never thinks of placing any in other directions until he has all here that he can use to advantage. The farmer is too often scraping to get every possible dollar out of his business, and thinks every hundred cents thus stolen from his farm, is a dollar saved. Many farmers we know of are getting seven per cent for money that they have foolishly taken from their legitimate business, which had it been used wisely on their farms would have yielded five times this amount of profit.

"OUR" WALKS AND TALKS.

EVERYBODY, I suppose, has a right to walk and talk, except the lame and the dumb. No one can claim a patent as the original inventor of these pleasant and very natural exercises, nor can any one demand their exclusive use—unless it be the ladies. Many will remember that pleasant little book *Walks and Talks*, of an American Farmer in England, published almost a score of years ago. I only mention this to show that there is nothing new in the title.

Your apology in the January number of THE AMERICAN FARMER for the comparatively slow advance of agricultural knowledge, and the accidents that often defeat the ends sought by careful experiment, reminded me very forcibly of some of my walks and talks, that have been anything but agreeable. Once upon a time, I determined to spend a good deal of time and some money in an effort to add to the general stock of agricultural knowledge. I had bought one kind of potatoes under three different names, and found that there was a great want of knowledge respecting this esculent. Scarcely two agreed as to the best variety for an early or general crop, while regarding productiveness and quality there was a still greater difference of opinion, if possible.

I obtained seed from every available source, planted and compared, and classified. I had collected over two hundred varieties, and among them all of Mr. Goodrich's seedlings, some sixty in number, I think. I had promised Mr. G. a report as to productiveness, health and quality, but after growing them for one year, determined to try the next before making a report. My cellar was arranged like a seedsman's shop, with boxes and drawers, all nicely labeled, while my experimental ground was filled with stakes like a nursery. I was also trying a series of experiments with various manures on the potato—plaster, lime, guano, barn-manure, &c., taking the scales to the field and weighing manure, seed and products. I was determined to do a "big thing."

I had conducted these experiments two years, and the third was to be the final test, the results of which could be relied upon with the greatest certainty. In addition to this experimental ground of about an acre I had several acres of potatoes near, all of one kind for a crop. The year before I had engaged two industrious sons of the Emerald Isle to dig my potatoes by the bushel. Meeting one of them early in the morning, I engaged them again, giving all necessary directions, and agreeing to be on the ground myself before night. Being detained, unexpectedly, it was nearly sunset before I could make it convenient to visit my potato diggers, and there to my horror found them at work on my experimental grounds, and the potatoes in three or four huge piles. Having obtained two assistants they had nearly cleaned the ground. There was some pretty tall *walking and talking* for a few minutes, but all to no purpose—my experiments were ended. I retired from the ground a *sadder* instead of a *wiser* man, as I had anticipated.

SORGHUM CULTURE.

WRITTEN FOR THE AMERICAN FARMER, BY "HOOSIER HENRY."

MESSRS. EDS.:—Having had some little experience in the culture of sorghum for the last ten years, I will offer a few suggestions to the readers of THE AMERICAN FARMER, as far as my experience dictates.

1.—*The mode of cultivation.*—The soil should be rich. Plow your ground ten inches deep, about the 8th of May; pulverize it completely. Lay it off with a light, one-horse plow, making the furrows four feet apart, north and south; then cross it off east and west, making the furrows two and a half feet apart. Plant immediately, as the weeds will do their best to see daylight before your sorghum. Drop your seed in the center of the crosses, not more than eight or ten in a hill. Cover lightly with your foot, mashing the fine earth on the seed as you step on each hill. After it is up two inches high, thin it out to four stalks in a hill, and hoe it well, which you will find is quite a tedious operation. As soon

as it has attained sufficient hight, plow it, making three furrows in a row, the wide way, and one the narrow way; or two, if your plow is small. Plow and hoe it once a week, and if you keep it clean until it is waist high, you can say, "Good by," sorghum, until fall.

2.—*Varieties.*—I prefer the old-fashioned sorghum for a fine sirup. It has a sprangly top and black seed. I have made from it, sirup as fair as honey, and of delicious flavor. But for the manufacture of sugar, I would say, as far as my experience goes, the African Cat-tail is far superior, as it is the only variety that has a natural tendency to granulate.

3.—*The best mode of manufacturing the sirup.*—I am speaking now for a single farmer who wishes to make up his own crop, and say eight or ten barrels for his neighbors. I prefer Cook's Evaporator, as I have fully tested its merits, and can say that any man of good common sense, can, after a few days experience, make an excellent article of sirup with it. One grand essential is to have plenty of good, well seasoned wood, in order to keep up a regular high heat, of course you must have good cane, and a good cast mill, in order to press out the juice as fast as you can boil it down. Always let your cane get fully ripe, before making it up. You would not expect as much juice, or as good a flavor in an apple, when two-thirds matured, as you would when fully developed. So in cane the same rule holds good.

4.—*How to manufacture sugar from sorghum.* The sample of sugar you received from me was made from the African Cat-tail variety, the only kind (in my humble opinion), that will pay to raise expressly for the manufacture of sugar.

Boil your sirup until it is quite thick, not forgetting to skim all the green skum off after it becomes thick, between the first four bars of the evaporator, where it first rises. Be very careful not to let your sirup scorch, which can be easily prevented by stirring with a small hand broom when it is nearly finished. We will suppose then, that you are now ready to separate the sugar from the sirup. Provide yourself with a number of cooling boxes, say four feet long by two wide and six deep. In these pour your sirup, and set them away in a room, keeping the temperature from 90° to 100° Farenheit. In one day and a half the sugar will entirely separate from the sirup, settling on the bottom of your boxes. Next draw off your sirup, and cut your muah sugar into boxes with perforated tin bottoms, to drip; after the sirup has all dripped through, take out the sugar and press it. A cheese press may be used, or a screw cider press; after pressing, spread it out out in the air, and that completes the process. We make three pounds of sugar to the gallon of sirup, but expect to make four or five next year More than half of the sirup is left after extracting the sugar.

SEASONABLE SUGGESTIONS FOR THE MONTH.

WRITTEN FOR THE AMERICAN FARMER, BY B. P. KEATOR.

By the time the readers of THE AMERICAN FARMER receive this number, the short month of February will have taken its flight and vanished into the past, which closes the winter of the year, and ushers us into the spring of 1866, which may lead us to exclaim with the poet:

"The stormy March has come at last,
With wind and clouds and changing skies;
I hear the rushing of the blast,
That through the snowy valley flies."

—*Bryant.*

Every farmer should in this month, if he has not already done so, lay his plans for the spring and summer campaign on the farm. It is not too late to cut and haul enough firewood to burn during the summer and the next winter; cut and pile the same in the wood shed, if you have one; if not, rank the wood up nice and cover it with boards—for one cord of dry wood is worth two cords of green and unseasoned wood to burn next winter.

If you have not already done so, cut and haul a few saw logs to your nearest saw mill, if you have good white oak, ash or hickory. Have some of them sawed into wagon and sleigh tongues, wagon axles, &c. Your wheelright will tell you the proper size to have them sawed. You will always find such lumber convenient to have on hand. You will then, when you want a sleigh or wagon repaired, know that good timber is used in repairing the same.

During this month examine your plows, harrows, cultivators, &c., and see if they do not need repairing; if so, have it done immediately. By so doing, you will be ready to commence spring work on the farm one week earlier than your neighbor who leaves his farming implements to be mended until the day he wants to use them. Be particular and examine your harrow teeth and see if they don't want sharpening, for there is no implement on the farm that needs to be in better order than the harrow. A good supply of plowshares should be laid in; take them on the grindstone and grind them smooth. You will find a great advantage in this, as it usually takes one day besides much labor in the shape of rubbing to get a share smooth besides the ground is

not half plowed until the share becomes bright. It will save in the strength of your teams at least fifty per cent. Try it.

This month is a good time to trim old orchards, cut scions for grafting to be set in April, although some set grafts in this month with good success; but I prefer April; the weather then is warmer and the sap commences to flow sooner after the grafts are set, and they are less liable to dry up. Scions should be cut from the last year's growth. Cut large potatoes in halves and stick the scions in them, and lay them in the cellar until you want to use them.

Harness should be oiled this month. For this purpose use neat's foot oil, and add a little lamp black. Don't wash them before oiling, but oil them until they become soft; hang them in a dry room. When dry take a sponge and Castile soap and wash them with the sponge; then take a piece of buckskin and rub them, and they will have a nice gloss, and the black will not color off. Harness oiled in this way will never become gummy, and will have as good a gloss as if it had been varnished.

Many other things besides those that I have alluded to, can be done this month, and I assure you, you will have reason to congratulate yourself when the time comes to commence work, that you are ready and all things are in order.

FARM TALK.

WRITTEN FOR THE AMERICAN FARMER, BY G. E. BRACKETT.

"Good evening, neighbor!

"Good evening! Walk in, and take a chair.

"Rather cold, lately.

"Yes, rather, but this strong north wind has been so cutting and disagreeable that it has seemed to be colder than it really was.

"How cold has it been the last wee

"Only about ten degrees below zero.

"It seems to me as though my stock never suffered so much as they have this cold snap, and it has given them wonderful appetites. I don't have any trouble about their eating straw and fodder, only put it before them. What do you suppose makes them eat more in such weather than they do when it is warm and pleasant?

"They say it's to keep up the animal heat. Fodder is only just so much fuel, which the animal converts into fat or heat-producing elements.

"How often do you feed your stock?

"About four times a day regularly. I feed them as soon as it is light in the morning, then a light fodder after I get my breakfast, or instead, give provender to those I am feeding extra. Turn out and water them and feed again at noon, either in the yard or barn, then stable them and feed at about sunset.

"Then you don't feed in the evening after dark?

"No. It was formerly my practice to do so, but I have followed the system for several years, and find it answer my purpose. It is disagreeable to have to go to the barn and feed the stock every night, just before bed time, as many do. Besides, one cannot always do it himself, and it is dangerous to trust a lantern in some person's hands, in a barn of hay.

"That's so, and some hired men don't know any better than to go into a barn with a pipe in their mouth, and such a fellow who can't be trusted aint worth his salt on a farm.

"How does your hay spend the winter?

"First-rate; never fed out better. Seems to me as if a ton of it lasts the same stock as long as a third more did last winter.

"Hardly so much difference as that, but still I can see considerable difference. You remember in 1864, most of the hay was got when it was rather tender and before the grass had begun to ripen. It made nice fodder and the stock ate it up clean, but there was not much "spend" to it. Now, last year, the grass was a little mature before it was cut, and that is the reason it feeds out better.

"Do you believe in waiting until grass is ripe before cutting it for hay?

"No, I do not; but I would have the blossoms out and the seed formed before cutting, and if possible would cut all grass at that time, but I am fully aware that a farmer cannot always cut *all* his grass, even at the time he would like to, and therefore, I would advise to cut a little too early rather than a little too late, as the loss will be much less in the former case.

"Do you think it good policy to sell hay off a farm?

"As a general thing, no; but still there are cases where I would recommend it. For instance; If a farmer was in debt for his farm, it would be policy for him to sell his hay, if it brought a good price. But in such a case, he should use every effort to add to his manure pile from other sources. Most kinds of special manures and artificial fertilizers only exert a temporary effect for good. There is nothing permanent about them, and we cannot do entirely without barnyard manure for any great length of time. Hay, last year, was twenty-five dollars a ton, and then, in my opinion, it "paid" to sell it and return the needed manure to the soil in some other manner. But this year, it is only ten dollars a ton and it will not pay to sell it. If we intend to "farm it" for a living, we must keep stock to consume our hay, grain and fodder, and thus keep up the fertility of our soil. You know the old saying is, that stock means manure, and manure means grain—therefore, bread to feed the nations, and I think about so myself, don't you neighbor?"

THE BEST SUBSTITUTES FOR HAY FOR FEEDING CATTLE, ETC., IN WINTER.

WRITTEN FOR THE AMERICAN FARMER, BY IDEN.

MESSRS. EDITORS :—The above question is one of great importance; and one that has engaged much of the attention of many of our best farmers. But as might be expected, the result of their trials, experiments, and investigations, have varied considerably, owing, no doubt, mainly to the course pursued in each case, or local circumstances in which they were placed; and it may be to some extent to preconceived opinions or prejudices. But while it may not be profitable to go into any lengthy review of the course pursued, or means used in coming to the conclusions reached by different farmers, it may not be amiss to give what the writer considers the best conclusions that he has been able to come to by some reading, observation, and experience.

It is well understood, that there are a great many substances used as substitutes for hay; and that some of these are preferred in one place, and some in another. But my aim will be to give those that are best in Western New York, and in other places where the systems of farming pursued are similar to those practised here; the soil and climate being very nearly the same that they are here. In doing this, the different kinds of forage and feed that can be used, will be named in their order of excellence, the best, except grain and root crops, first, as follows:

Corn sown for fodder, Hungarian grass or millet cut before it is quite ripe for fodder. Peas, rye, oats and barley, raised and cut green for fodder. Corn stalks, where the grain is allowed to mature, or to become sufficiently ripe to mature after it is cut up. The straw of different crops; as peas, beans, barley, oats, wheat and rye. To these, of course, will be added most kinds of grain, and the different varieties of root crops.

Of course it will not be expected that grain or roots will in any case be used alone in the place of hay. So it should also be understood, that none of the above mentioned kinds of forages, will alone answer in the place of hay, without the addition of more or less grain or roots, or what will be much better grain and roots. The amount of grain and roots fed, being of course in proportion to the value and condition of the different kinds of forage used. Less grain and roots being needed with the different kinds of forage cut before the seed has matured, than when the grain, etc., was allowed to ripen, and then separated from the straw and stalks, or say to feed with the corn stalks and the different kinds of straw.

Of course it cannot be expected, that any very extended directions for growing and feeding all of these crops, can be given in one article, when each one is of sufficient importance for an article by itself. Still a few brief remarks in regard to each may not be out of place.

The great amount of sown corn that can be raised on an acre, and its great value for feeding, necessarily places it first on the list. This crop is easily grown on any good corn land, well prepared in the usual manner for a crop of corn. A shallow furrow should be turned out for the rows, about three feet apart, and the seed sown in this furrow, about forty grains to the foot, and covered with a light harrow. Two or three times cultivating with a good steel tooth cultivator, will be all the cultivation needed on clean land. When cut up it may be allowed to wilt a day or two, and may then be bound in very small bundles, and set in very small stoocks, and allowed to stand several weeks, when it may be put in large stoocks—not stacks—and left to stand until wanted. This course is made necessary by the great difficulty in getting this kind of corn fodder dry enough to keep well, when stored in bulk in the fall.

Hungarian grass, millet and the different kinds of grain to be sown and cut for fodder, are included, because they are, or have been used more or less in many places, and because according to different accounts, they can be made to answer a very good purpose. But whenever sown corn will do well, there can be little doubt, that many times the great amount that can be grown to the acre, must make it much more profitable, than any other kind of grain would be, when sown for fodder. While at the same time in most cases, it will be better to allow the different kinds of grain to mature, then cut, before the crop is dead ripe, save the straw in good order, and cut and feed it with plenty of grain and roots.

The next is corn stalks, where the crop of corn has been ripened and separated from the stalks. When corn is cut off at the ground as soon as the grain is fairly glazed, and set up in the best size stoocks, to stand good, ripen, and dry out well; it is husked out as soon as the grain is sufficiently well cured, and the stalks secured as soon as they are in good order before the heavy driving storms, we usually have late in the fall, have a chance to damage them; such stalks are undoubtedly, all things considered, the cheapest fodder grown in this section. While such stalks are readily eaten by horses and sheep, they seem to be more particularly calculated for the different kinds of cattle, and especially milch cows, being often preferred to hay when giving milk.

In feeding straw, that from peas and beans will be found to give the best profit when fed to sheep

Although horses are fond of pea straw, and cattle will eat more or less of both pea and bean straw, still, there can be but little doubt, that it is much the most profitable to feed both kinds to sheep. While perhaps in most cases, other kinds of straw will pay as well when fed to sheep as to any other stock. Horses and cattle can be kept very well on good bright straw, if it is cut and mixed with a suitable allowance of grain. There is this advantage in feeding straw to sheep, it needs no cutting or other preparation, while some go so far as to both cut and cook straw for cattle. When sheep are kept on straw, they should always have a liberal allowance of grain, or roots, or both.

The most important substitutes for hay are the different kinds of grain, including peas and beans, which, though not cereals, answer the same purpose as the different grains, when used for feeding. For horses and cattle grain should be ground, and the straw or other forage used, cut so that it can be mixed together. This is considered most important when straw is the principal coarse feed. But when corn stalks or sown corn are fed, there is little doubt but it would pay to cut and mix meal with them also. There is but little advantage grinding grain for sheep. But it is very important that a suitable allowance of grain should be fed with each and all of the different kinds of substitutes for hay, giving more with the straw than with good corn stalks, and more with stalks than with grain or millet grown and cut for fodder, or with sown corn. Yet, the best way will be to give a liberal allowance of some kind of roots, for a part of the grain, as unquestionably it would be better for preserving the health of the stock.

This brings up the last substitute for hay that will be considered. Roots are very largely grown in some countries, not only as a substitute for, but to feed with hay and grain. And many believe that the same course should be followed here. While others urge that the high price of labor is a serious drawback, on any profit that may be realized by growing roots on a large scale. But without stopping to consider which is right, I may state that my experience in growing and feeding roots many years, leaves no doubt in my mind, that a certain amount of roots may be grown and fed to the best advantage. That while, with our comparatively cheap land and high labor, it may cost more to feed an animal all the roots it can eat, than it would to furnish the same amount of nutriment in grain and hay or other forage, still the beneficial results, that may be realized by feeding a certain amount of roots, in connection with other kinds of feed, makes it profitable to do so. These beneficial effects, it is claimed, are produced in two ways. First, by the tendency that roots have to promote a more thorough digestion and assimilation of the nutritive properties of other kinds of feed; and second, by preserving and promoting the health of the animal, while kept on dry feed. For these reasons, I have no doubt, that it will pay to grow sufficient roots to feed cattle at least once a day, and horses and sheep at least once or twice a week, while they are kept on dry feed. Sheep should have a good allowance every day, also all cattle feeding for beef, and cows giving milk, a good feed twice a day, would probably do all the better for it. While the roots, if fed with a proportion of grain, would be a great help in producing satisfactory result, in feeding the different substitutes for hay.

STOCK-GROWING AND TILLAGE

EXCEPT in situations where extraneous manure can be procured, it is only by the union of feeding with tillage, that land can be retained in a high degree of fertility. Were the system therefore, more generally adopted—especially on all poor soils—of laying down a considerable part to grass, there can be no doubt that if again broken, its productive powers would be found improved, through the meliorating effects of pasturage and rest; and while the gross produce would thereby be ultimately increased, it would so far diminish the expenses of labor, as in many cases to counterbalance the cost of the stock. The farmer who has the means, as well as the discernment, to make some of the various branches of grazing or the diary, an essential part of his business, and thus nurses a portion of his land, preserves the tillage in constant heart with the additional manure; and though the gross amount of corn may be less than if more ground were under the plow, yet the acreable produce will certainly be greater, and the deficiency will be more than made up, by the supply of cheese, butter and of flesh. He also divides his risk, so that any loss upon his crops from an unfavorable harvest, will be made up by the profit upon his cattle. The bane of necessitous farmers, and the ruin of land, are under stocking and over-cropping.—*British Husbandry.*

TIMBER MEASUREMENT.—The dimensions of round timber are found by girting the log and taking one-quarter of the girt for the side of the square. Hence the rule. Multiply the square of one-quarter of the circumference by the length of the timber, and you have the contents of the log or tree.

WERTS ON CATTLE.—To remove warts from cattle mix equal parts blue vitriol, lard and honey, and onnoint them once in four or five days, they will be removed without making a sore.—*S.*

HOW WE FARM IT IN THE GENESEE COUNTRY.

WRITTEN FOR THE AMERICAN FARMER, BY "P. G. R."

NUMBER TWO.

"THE cattle mourn in corners, where the fence
Screens them, and seem half petrified to sleep
In unrecumbent sadness. There they wait
Their wonted fodder; not like hungering man,
Fretful if unsupplied; but silent, meek,
And patient of the slow-paced swain's delay."
—*Cowper.*

THE farmer's winter is a season of comparative leisure. His principal employment is taking care of his stock. Our fathers have left us no forests to destroy, and so the wood-chopper's occupation is gone. In fact, I think the majority of the farmers of the lower Genesee buy their own fuel. We owe our fathers a debt of gratitude for their severe labors in cutting down the forests and clearing the land, but our obligation would have been greatly increased had they left about twenty-five acres of wood land to every hundred-acre farm. Life in Western New York would have been far more agreeable, and the same labor and capital employed upon seventy-five acres that are now employed upon the hundred would have made better returns.

Many farmers in the vicinity of Rochester, especially on clay soil, raise considerable hay for market, which they sell in winter. Where land will average two tons per acre of good timothy, which will sell at from $15.00 to $25.00 a ton, it will pay a fair interest on land worth $100 per acre.

Many farmers draw in their straw and sell it by the load or ton, at from $5,00 to $8,00 per load, or $10.00 to $14.00 per ton. At the first thought, we should pronounce this bad farming, in thus selling off the basis of manure; and it is, if no substitutes are purchased for the manure thus sold off. But should the farmer, every time he sells a load of hay or straw, draw home a load of stable manure, I think he would fully replace the loss, and make several dollars by the trade. Or, a ton of plaster, applied to a clover crop, to be plowed under, or fed upon the farm, either green or dry, would replace the loss by several loads of straw.

CARE OF STOCK.

As I said before, the chief employment of farmers in winter, now, is the care of their stock. They have made great progress in this respect since Cowper wrote the lines at the head of this article. Many of the readers of THE AMERICAN FARMER can remember when that picture was a reality on many farms. Cattle seldom used to be stabled. An open shed, into which the wind would blow, and the snow drift was the common shelter of the neat stock. Generally, part of them, driven from the shed by the stronger tyrants, were obliged to hover around the straw stack through the cold stormy winter. Now, most of us have warm stables, where the cattle are chained up in separate stalls. We use chains with large rings that can move freely up and down the hitching stake, and fastened around the animal's neck with a snap. For feeding milch cows or neat stock of any kind, I prefer good bright corn stalks, cut before frosted, and clover hay. I am not much in favor of cutting fodder for cattle. I have an endless chain horse power, by which I can cut hay or stalks enough in five hours to last a dozen head a week, but I can see but little gain in it. Cattle will not eat the butts of stalks, whether cut or not, unless starved to it, and I have thought that in trying to separate them from the softer parts, when cut up, more of the better parts are left than when fed whole. The butts of corn stalks are hard to masticate, indigestible and innutritious, and should never be forced upon an animal. Clover hay is much improved for stock, by being wet; and if wet with scalding water a few hours before being fed, and covered with old blankets or straw, it is still better.

A feed of roots of some kind, once a day, is good to preserve the health of cattle and keep their bowels in good order. I feed my stock regularly, three times a day, in their stalls, night and morning—and in the yard at noon, if not too cold or stormy.

We are a little more careful than formerly in saving calves, or in buying cows, to give preference to those having a pedigree. My cows are mostly Durham, or a cross of Durham and native; but I am not satisfied that they are the best milkers. They are rather too much inclined to lay on meat, and where beef is a leading object, they are not easily surpassed.

Sheep-raising is considered profitable on large farms, and the Merino takes the lead in this section. A well selected flock, kept in good condition, will average about six pounds of wool per head, worth from three to four dollars—will average two lambs to three ewes, worth in the fall two to four dollars each; so that we may safely calculate upon five or six dollars, as the annual product of every ewe. They should have shelter, (not too close,) free access to water, and be fed with regularity on good hay, straw, bean vines, roots occasionally, and some kind of grain or beans.

Farmers are beginning to understand that warm shelter is a saving of half the fodder of stock, and consequently provide it.

Farmers' horses have pretty easy times in winter, unless there is good sleighing, and the boys get hold of them, when they receive but little mercy. They should be fed on clean, bright timothy; if on clover, it should be cut and wet; have a little grain—considerable if worked; plenty of dry bedding and be *well groomed.*

Store hogs should have warm pens, plenty of straw, be fed with regularity, and never allowed to squeal.

TOO MUCH LAND.

WRITTEN FOR THE AMERICAN FARMER, BY "W."

MESSRS. EDS.:—It seems that many have the opinion that farming can be done with success only on a small scale, or on a few acres. I believe that it is conceded that all good farmers follow a system of rotation, and to do so, divide their farms into fields of nearly equal size. Now let us take the matter of fences. To illustrate our idea we will take two pieces of land—one of one hundred, the other of one thousand acres, to be divided into ten square fields, each piece to be of the same form. The one hundred acre piece will take over 800 rods, (piece supposed to be 80 by 200 rods), to fence it; whereas one hundred acres of the large piece will take less than 250 rods—a difference of 500 rods, which here (Michigan,) we would rather pay one thousand dollars for, than build; to say nothing of over two acres of land covered by fences, gates, &c.

As to the economy of working large and small farms, I shall not make any estimate here, as it is well known that small fields cannot be worked to any advantage by machines on wheels. Imagine a man with a sulky cultivator in a field forty rods square, or a rotary spader; in the first place, in large fields, doing the work of three, and in the other eight men, and in a superior manner; or a mowing machine. Every practical farmer knows that the hardest work for a team in mowing or reaping, is in backing and turning corners. On commencing haying last summer, we mowed a small field of seven acres, it made a hard day for the team, while twelve acres were cut on an average, when the length of field was one hundred and thirty rods.

There is another heavy drawback on the small farm, namely the great outlay of capital in labor-saving machinery, which a small farm cannot afford, as most of the expensive machines will do the work on from a two to a five hundred acre farm.

There is another strong point in this matter of large versus small farms. Every man wants a good substantial, roomy, well finished and furnished home. His family expenses should be extremely liberal. Then add many luxuries, &c. Now, if he can pay farm and family expenses from the small farm, would not another hundred acres added leave the family expenses clear profit; besides land without buildings, is assessed much lower and of course taxed lower than the other.

How should it be with the farmer? How should he employ himself? Should he labor with his own hands at work which the commonest laborer can do as well, bringing himself down to the level of the motive power of the farm. I answer, no. Any farm that will not pay its incidental expenses, labor and supervision, leaving a good profit, should be sold out and a larger one purchased at once.

The true occupation of a farmer should be—first, the careful overseeing of his farm in all its departments; secondly, comparing his crops and stock with that of others in various parts of the country; thirdly, careful reading of agricultural papers from different parts of the country, thus obtaining a knowledge of the relative course of want and supply. For it is equally as important to know *what to produce*, as *how to produce*. He should so arrange his time that he will be literally a man of leisure, which he can do with ease. I know farmers here who are cultivating farms of nearly a thousand acres in first class style, whose time is not half taken up.

HEDGES.

A SUBSCRIBER to THE FARMER writes from Indiana:

I intend to commence hedging my farm in the spring. My farm is well fenced now, but my rail timber is all gone, and I must have something to take the place of the fences when they are gone. My farm lies on the Wabash River, and I have planted nearly two miles of Honey Locust along the bank. I plowed a furrow and laid the pods thick in it, and threw two furrows on them, and then planted pods the same as before, and then threw two furrows on them, and intend to harrow them well as soon as the ground is in order in the spring. I will let you know how I succeed with them, and also the Osage.

We shall be pleased to hear from our correspondent on this subject.—EDS.

SIZE OF THE WEST.—Illinois would make forty, and Minnesota sixty such States as Rhode Island. Missouri is larger than all New England. Ohio exceeds in extent either Ireland, Scotland or Portugal, and equals Belgium, Switzerland and Scotland together. Missouri is larger than Denmark, Holland, Belgium, and Switzerland, and Missouri and Illinois is larger than England, Ireland, Scotland and Wales.

THE amount of diseased meat destroyed in the city of London during the last quarter of last year, has been no less than 76,203 pounds, or rather more than 80 tons of meat, as unfit for human food.

THE State of Illinois produced in 1865, 177,000,000 of bushels of corn, 25,000,000 of bushels of wheat, 800,000 bushels of rye, 1,000,000 of barley, and 28,000,000 bushels of oats

HOP CULTURE.

WRITTEN FOR THE AMERICAN FARMER, BY F. W. DOLLINS.

As the hop crop is now attracting so much attention in Western New York, a few words about it will not be amiss. Hops were formerly planted on the richest bottom lands, and where they were protected by trees from the wind; but it has been found that in such situations the risk from lice or aphis was far greater than on the poorer uplands, and that exposed windy spots were safest. Hops will grow on quite poor land, if there is a good circulation of air and plenty of sunshine. Good corn land is suitable for a hop garden. The vines should be set, at least, eight feet apart each way; and if the land is rich enough to produce fifty bushels of corn per acre with good cultivation, it is best to set them nine feet apart, as they should never be crowded.

When preparing the land for planting, in order to protect the young plants from drouth, *plow as deep as possible*, with a sub-soil plow, and drag the field until the ground is mellow. Corn, potatoes, or any other hoed crop can be raised on the land at the same time, but should not be planted in the hill with the hop sets.

The sets are cut in pieces three or four inches in length, each containing two sets of eyes. It requires from two to five bushels of roots per acre, according to the number of pieces used in a hill, and the quantity given for a bushel, some bushels being double the size of others. When the eyes are perfect, three or four pieces are sufficient for a hill.

From six to twelve male plants should be put in per acre; if more are used the crop will weigh light.

Plant as early in the spring as the ground can be worked—rather deeper than corn, but not so deep as potatoes. At the same time plant a number of good sets from three to six inches apart in a bed, to make plants to fill up any vacancies there may be the first fall, by which one year can be saved on the missing hills, and the yard be kept alike.

Keep the yard clean the first year. Let nothing go to seed upon it at any time. One weed run up to seed will probably make several hours hoeing for the next year.

It is best to stake the yard the first year, so that the young vines may run up out of the way in cultivating, and not be broken off by the plow. When sets are planted in April, and well cultivated, they often produce from two to four hundred pounds the first year. Stakes can be cut seven and a half or eight feet long, and set one foot in the ground, one stake in each hill. Sawed stakes an inch and a quarter square, are often cheaper and are just as good as round ones. Hops run up a square stick as well as a round one.

The old way of running hops required at least two long poles and sometimes three to each hill, and these poles were from fifteen to thirty feet in length, and set from one and a half to two and a half feet deep in the ground. It requires about fifteen hundred poles on an average per acre, and they must be re-set about once in five years. Many of them break with their load of vines sooner than this, and in falling tear down or break other vines. I have seen half the poles in a large yard blown down by a hard wind where poles are old, destroying most of the crop. A better method has been patented, for which see cut. One stake per hill is used, set one foot in the ground, and just long enough so that a string crossing the yard both ways at the top of the stakes, will be above the head of the horse and man in cultivating, which is about six and a half or seven feet. The twine will last several years if tarred, and should weigh from twenty to twenty-five pounds per acre, though a fine twine, home-made, spun like carpet yarn from flax, and weighing five or six pounds per acre, is just as good for one year, and costs but little. Many hop growers prefer to use the small twine, thinking it cheaper than to save the twine. It takes about ten thousand feet of twine per acre.

The profit of a hop yard, trained in the horizontal method above mentioned, is very great. J. and G. Greenway, of Syracuse, the past year harvested from their yard of four acres, grown on this plan, three thousand six hundred dollars worth of hops, and other instances of as large a yield could be mentioned.

DEATH OF PROF. MAPES.

PROF. MAPES, who in years past was brought so prominently before the readers of the old *Genesee Farmer*, died lately in the city of New York, in the 60th year of his age. The Professor was widely known as an able and experienced agricultural writer, and was a practical farmer of extensive experience in New Jersey. He was an enthusiast in his art, and has left behind him many useful writings. The following reference to his death we find in the columns of the New York *Tribune*:

Prof. Mapes was a born chemist, having manufactured illuminating gas as an experiment, when but eight years of age—gas being then scarcely known. Having qualified himself by years of clerkship, he became a merchant when but twenty-one, and was many years extensively involved in trade, and in sugar-refining, in which he ultimately failed. Meantime as well as since, he gave much attention to the fine arts, and achieved a measurable success in drawing, engraving and painting. Appointed Professor of Chemistry and Natural Philosophy in the National Academy of design, he gave before it a very able course of lectures on the Chemistry of Colors. He was a working member of many kindred societies in this city, and an honorary member of several of the most eminent in Europe. He invented several new processes in sugar-making and refining, some of which are still in use, as well as other useful processes and instruments.

Nearly twenty years ago, when overtaken by commercial reverses, he went out into New Jersey, three miles from Newark, and bought a small farm, which has ever since been his home, save in winter. Here he applied his chemical knowledge to agriculture with signal and beneficent success. We believe that farm has since produced more value and yielded more profit than any equal number of acres devoted to general husbandry in the State. And there is not a farmer in America who might not spend a week of study and observation on it with decided profit.

Prof. Mapes soon established *The Working Farmer*—the most elaborate and scientific of cheap American periodicals devoted to agriculture, and in many respects the best. *The Farmer*, so long as he controlled it, labored to inculcate principles and to ground its readers solidly in agriculture as a science. And few men have delivered more addresses at agricultural fairs, or done more lasting good by them. We honor him that he never shrunk from declaring the truth that our average agriculture is rude to the verge of barbarism, and that treble the labor now devoted to each arable acre would produce quadruple our present crops. Deep plowing, draining and heavy manuring had no abler or more earnest champion than James J. Mapes.

Prof. Mapes was essentially a genius, and, was not without the errors of genius; but now that he is dead, we believe it will be generally felt and acknowledged that American agriculture owes as much to him as to any man who lives or has ever lived.

DESCRIPTION OF THE QUEEN BEE.

THE Queen is no longer than either drone or worker, but not as large as the drone, her body is longer than either of the others, her abdomen is much longer, and tapers to a point, like a sugar loaf; her legs are longer than either drones or workers, but have no baskets or cavities for carrying pollen or bread; her wings are quite short, covering but two-thirds of her length; her color varies according to her age; her back darker than the workers, but her belly is more of an orange color; her movements are quick and shy, and she seems to desire to conceal herself from man; her movements are also majestic, stately, and exciting to her observers. She is perfectly safe to take in the hand, yet she has a sting much longer than the workers. She is hatched with the head downwards; her cell hangs verticle in the comb, and has from thirty to forty times as much material in it as there is in a worker's cell; she is fed on entirely different food from any other bee; and this is probably the reason, or one of the reasons why the egg is changed to royalty. She seems to do but little else than propagate her species, and sometimes leads off in swarming. The government of bees is a monarchy, without any discord prevalent in the kingdom or family. The Queen lives much longer than the workers, her period of life being from three to five years, while the workers live only from six to eighteen months. The Queen seems to hold out well to the last, probably because she is better protected than the others.—*Bee Keeper's Manual.*

OHIO STATE DAIRYMEN'S CONVENTION AT CLEVELAND.

THE Utica *Herald* has a long report of the Ohio Dairymen's Convention, from which we condense the following:

The Second Annual Meeting of the Ohio State Cheese Manufacturers' Association, was held at Chase's Hall, in the city of Cleveland, on Wednesday and Thursday, January 24th and 25th. The number of dairymen and cheese dealers in attendance was between one and two hundred, and embraced some of the most active and intelligent men of this class in the State. There were several delegates from other States, and among those from New York were Hon. George Williams, of Oneida, Mr. Ralph, of Utica, Thomas Judson, of Erie, D. B. Allen, Cattaraugus, Mr. Burnham, of Chatauqua, and one or

two others. The members present, embraced representatives from every cheese producing county in the State.

The Convention assembled at 11 A. M., and was called to order by the President, Mr. B. Armstrong, of Geauga county, who briefly stated the object of the meeting, and after a few introductory remarks, invited Hon. George Williams, of Oneida county, New York, to address the Convention. Among other things, he said:

Three years ago, a portion of the dairymen of New York, in connection with some of your own number, formed an association for mutual improvement and protection, and have been commendably active since the organization. Among the results already springing from it, we fancy we recognize a material improvement in the character of American cheese, which is giving it prominence in the best markets of the world, and returning us better rewards.

Samples of our cheese are reported to have competed successfully, the past season, in English markets with first class English cheese, bringing in some instances the same prices. In this we may each properly feel a degree of pride. As much, however, cannot be said of the bulk of our manufacture, and we should not relax our efforts for improvement until we acquire undisputed ascendency in all markets. We must study the wants of every class of consumers, and seek to give them what they want, all they want, and just in the style and quality they want—and I am not unhappy that to the dairymen of Ohio is awarded the credit of having conformed to many of the demands of English consumers with more promptness than the dairymen of New York. How important, intelligent, friendly and united action is in attaining our purposes, is becoming better understood by dairymen, and I trust we may confidently count upon the requisite unanimity at an early day.

AFTERNOON SESSION.

The Convention assembled a little after 2 o'clock, when the reading of reports was called for, and Mr. L. Bartlett reported the following

ORDER OF BUSINESS.

1. Report of Committee on Finance.
2. On forming an association auxiliary to the American Dairymen's Association.
3. Advantages of associated dairying as compared with the single dairy system.
4. The advantages and profits of connecting butter and cheese manufacture.
5. The policy of sending an agent to Europe to investigate and report upon the style of cheese demanded by the trade, and the methods of manufacture.
6. The importance, new feature, and requirements of the home trade.
7. The policy of establishing a Dairymen's Sales Room and Depot, at some point.
8. Best grasses and stock for dairy purposes.
9. Best heaters.
10. Miscellaneous business.
11. Election of officers.

The first topic for discussion was then read, and Mr. J. C. Horr, of Loraine county, offered the following:

Resolved, That for the purpose of increasing our means of information, we deem it desirable for this Association to connect itself with the American Dairymen's Association, as an auxiliary to the same.

After some discussion the resolution was adopted, and the second topic of discussion taken up. Mr. Williams, of New York, offered the following:

Resolved, That the advantages of the factory system are entitled to general adoption.

Mr. H. Bartlett briefly stated the advantages to be derived from the factory system. By it the product of a hundred farmers could be placed under the control of one person, a uniformity of product was secured, and its value enhanced. The persons superintending the factories had the eyes of patrons constantly upon them, and hence greater effort was made to make a superior article. The manufacturer had conveniences at hand, and was placed in a position to excel.

Mr. S. D. King, of Huron, said it could be proved that the waste of carrying milk, &c., to the vats in family dairies, was more than would pay for sending it to the factory.

Mr. Clark, of Lorain county, spoke of some of the advantages of private dairies and the sales of his own dairy, &c.

Mr. A. Bartlett said the Ohio factories produce from five to ten per cent more cheese from a given quantity of milk than the private dairies, and that the introduction of the factory system had added seventy-five per cent to the price of Ohio cheese.

Colonel Harris, of *The Ohio Farmer*, remarked that he did not rise to say anything against the factory system, but merely to correct the assumption of the last speaker, that the factory system had advanced the price of cheese seventy-five per cent. He thought the advance could be traced to other causes. All agricultural products have advanced. Wool was in demand, and more was obtained for it. In pork the advance had been one hundred and fifty per cent, and in wool seventy-five per cent. In all the great staples the enhanced value, since 1861, could be traced to other causes—the necessities of the times. He was satisfied that the factory system was the best for this part of the country, &c.

Mr. Thompson, of Geauga, had kept a record of weight of milk in a private dairy, and had not been able to obtain more than a pound of cheese from a gallon of milk, (beer measure.)

After a few unimportant remarks from other speakers, the reports from factories were called for, and the following abstract was read, showing the number of cows milked, the gallons of milk obtained, pounds of cheese manufactured, average price received per pound, &c.

NAMES OF PARTIES.	No. of Cows.	No. lbs. or gls. of milk.	No. lbs. cured cheese.	Average price.
		Gallons.		Cts.
R. Hood	906	313,739	387,635	15.59
A. D. Hall	696	219,083	225,628	15.85
E. Stanhope	575	180,135	190,514	15.52
F. Smith	347	109,578	113,270	... ..
		Pounds.		
A. Bartlett	807	2,519,928	255,390	15.60
W. Shaw	420	1,403,892	141,333	15
L. Bartlett	909	3,011,817	301,843	15.75
S. A. Andrews	490	1,192,740	122,389	16.63
J. W. Clark	24	.....	12,972	14.90
B. Armstrong	...	2,023,378	209,255	15.60

EVENING SESSION.

The Convention assembled at the hour designated, and President Armstrong introduced X. A. Willard, Esq., of Herkimer county, New York, who proceeded to deliver the annual address. The address occupied about an hour and three-quarters in its delivery, and at its close a resolution was unanimously passed giving a vote of thanks to the speaker for his able and eloquent address.

PROCEEDINGS OF THE SECOND DAY.

The Convention assembled at 10 A. M., President Armstrong in the chair, and the following committees were appointed:

On incorporating report in that of the American Dairymen's Association: C. W. Horr, Loraine county.

To confer with Executive Board of American Dairymen's Association in regard to an auxiliary: D. L. Hope, Geauga county.

The topic in regard to the importance of new features and requirements of the home trade was brought up for discussion.

Mr. Cannon said he had been in the cheese trade for the last fifteen years. The demand for small cheese was now greater than ever before. Large cheese were difficult to sell. There was no preference for factory cheese over that from private dairies. The improvement in family dairies had been as great as that in factories. Fifteen years ago there was great difficulty in getting good cheese. He thought seventy-five per cent. of the family dairies equal to the factories. He rather preferred family dairies, for the western and southern markets. For southern markets, it was desirable to have a flat cheese, say five inches thick, and weighing about forty pounds. For the southern market they should be half skim milk.

Mr. Pope, of Geauga county, said in St. Louis factory cheese was preferred. Dealers there had told him if they could get factory cheese they would buy no other.

Mr. Horr had taken pains to investigate this matter of markets. He did not believe the West had yet educated a taste for good cheese. They had been using a very poor quality of cheese from private dairies. Let them once get a taste of our factory make, so as to discriminate as to the quality of the two styles of cheese, and this poor rubbish of family dairies would be rejected. At the South, at Louisville and Nashville, factory cheese brought the most money.

Mr. Hall said that factory cheese at New Orleans, brought two cents per pound more than family dairy.

Mr. Jenkins, an extensive cheese dealer and also a manufacturer for twenty years, stated that in his judgment, by adopting the factory make to the southern trade, it would bring two cents per pound more than family dairies. Some extra dairies would sell with factory, but they wanted a brand that could be relied upon and that would be a guarantee of good quality; had dealt with Mr. Chamberlain, of St. Louis, since 1848; he was the oldest and largest dealer in that city, and it was his opinion that factory cheese, if of the right size, would outsell family dairies.

Mr. A. Bartlett, of Geauga, here introduced the following:

Resolved, That in the opinion of this Convention, the best cheese for the southern market is cheese from fifteen to eighteen inches in diameter, and from four to six inches thick; of firm, close texture, soft and mild, sweet flavor, and of a rich butter color.

Adopted.

The next topic for discussion—The policy of sending an agent to Europe, &c., was taken up. The following preamble and resolution were introduced:

Whereas, we must hereafter, as heretofore, seek a market abroad for a large amount of American cheese. Therefore,

Resolved, That it becomes the interest of this Association to unite with similar organizations in sending an agent to England to investigate and report upon the style of cheese demanded by the trade and the method of manufacture.

After considerable discussion the resolution was then laid on the table.

Mr. Bartlett read an elaborate article on the causes of porousness and bad flavor in cheese, soon after which the Convention adjourned *sine die*.

SPIRIT OF THE AGRICULTURAL PRESS.

Ayrshire and Jersey Cows.

Mr. Sanford Howard, Secretary of the Michigan State Board of Agriculture, and well posted on the merits of cattle, writes to the *Massachusetts Plowman*, as follows:

A few years since, Mr. Teller, of Ayrshire, Scotland, kept a dairy of twenty-five or thirty cows for the production of butter. They were kept wholly on the soiling system, and were always sheltered, except when in the yard for exercise and change of air. The herd was mainly Ayrshires, bred in the neighborhood. Trials were, however, made with the Channel Island cows, under which name those from Guernsey, Alderney and Jersey, are known in Britain. The chief object in their introduction was to impart more richness to the milk and higher color and flavor to the butter, and these objects were attained to a certain extent.

While the trials with the full bloods from the Islands were going on, crosses were made between them and the Ayrshire breed, and the females of this cross were reared, and at proper age took their places in the dairy. I saw the herd several times, in different seasons, after the trials with the full-bloods and crosses had been carried on some years. The proprietor told me he should not continue the trials, but should discard the Channel Island cows and their progeny, for the reason that they had not so much constitution as the Ayrshires, would not last as long, and required more food in proportion to their returns in milk and butter.

The conclusion of Professor Low and others, that the modern Ayrshire breed owes its peculiar characteristics in part to an admixture with the "dairy breed of Alderney," may be correct; but experiments seem to have shown that a further infusion of Jersey and similar blood, does not render the Ayrshire more valuable under the circumstances in Scotland. It does not necessarily follow that the same result would ensue in all cases, especially where less hardiness of constitution is required.

Mashes for Horses.

The following recipe was given by a celebrated steeple chaser: Take a feed of oats, a double handful of linseed for each horse, and boil for three hours; then turn into a large tub or earthenware pan, and add as much bran, with just enough warm water to moisten the whole through; put a cloth over it, and let it stand an hour; then mix it well and feed as soon as it is cool enough. This mash is very useful when horses in hard condition "dry up" and grow thin in spite of continual feeds of corn. I give it once a week all the year round, but oftener if required by any particular horse. A few beans may be boiled with the corn if the horse is in a very low condition.—*Ex.*

Ostriches.

The Scottish Farmer states that there has been received at the Garden of Acclimatization of Paris, a hen ostrich bred at Grenoble, and four chickens hatched at Algiers. The ostriches in domestic life are quite farm yard birds; they lay, sit, and bring up their young like ordinary fowls.

Loss of Cattle in England.

The English papers say the losses to the farmers of England and Scotland already foot up $5,000,000. If the devastations of this great curse continue at the same rate of increase for one year, it is estimated that the loss of the agricultural interest will amount to $100,000,000. It is a serious business, fast bringing ruin on many a prosperous farmer. The number of cattle carried off by the plague within the last twenty years amounted to no less than 100,000 in one province of Russia, (Tobolsk,) said to be the original seat of this terrible scourge. There is a difference of opinion as to the origin of the present disease in Great Britain, the greater probability seeming to be that it was locally developed by atmospheric and other causes.

Roots and Stock Raising.

The Canada Farmer says it is impossible to keep stock advantageously without roots. This fact, and the fact also, that roots play such an important part in a judicious rotation, ought to induce more attention to them. Turnip culture has been pronounced the sheet anchor of British agriculture. It has wrought little short of a revolution in farming matters in the old country, and it will do the same here, if it can be made general. Turnips do not require to be sown until the hurry of spring work is over, and thus a season of comparative leisure may be appropriated to this important crop. They are a pretty sure crop, and on good land, highly productive and remunerative. In this country they cannot, as in Britain, be fed on the ground, but require storage. They, however, stand a considerable degree of cold, and keep well either in pits or moderately well protected cellars.

The Fourth Stomach.

The fourth stomach in the calf, is the largest of the four, says *The Massachusetts Plowman*. The rumen or paunch, or the first stomach, does not assume its normal size until after the calf has ceased to suck or live on liquids. The fourth stomach is often called the rennet, as it is this that is taken to produce the curdling of milk in the manufacture of cheese. Food which is finely divided, and does not need further mastication, falls naturally into the third and fourth stomach, even in older animals, while the larger part of liquids falls into these stomachs, also, though a small portion falls into the first and second compartments. Solid food falls partly into the first and partly into the second.

Product of a Jersey Cow.

I have a Jersey cow, which I imported when a calf of four months old, seven years since, says a correspondent of *The Country Gentleman*—and although I am unable to give the weight of milk for any single month, yet I can give the exact result of milk and butter for one year, from March 1, 1864, to March 1, 1865. The cow came in on the 3d of March, and raised the calf until five weeks old. Churned during the year 351 pounds butter, and used for family purposes, 525 quarts of milk. There was no effort made for an extra result. During the pasture season she had grass only, and when in stall plenty of hay and wheat bran, and good care.

Farmers' Accounts.

FROM what we have learned, says the *Germantown Telegraph*, we do not think farmers are, as a rule, careful and exact enough in keeping their accounts. They should have their books as much as a mechanic or storekeeper, in which to enter their receipts and expenditures of every kind and the dates when they are made. The product of every field should be known, whatever crops may be occupied by it, and the field noted, so that a comparison may be made with the product of the same kind from other fields of equal extent, in order to get at the most profitable portions of the farm for particular crops. Indeed every item should be carefully entered, as well as an exact estimate as possible of everything consumed in the family. By this means each one can ascertain the true result of his year's operations—a circumstance which we should suppose every farmer would be especially desirous of knowing—but which, we are sorry to say, too many of them are indifferent about. An exact knowledge of the year's operations, and the success which attends them, have a stimulating effect in urging us to do better where we have not done well enough, and to maintain the gauge where well enough has been achieved. Is it not so?

Soil for the Grape.

It is a curious fact, remarks an exchange, that very rich and highly manured land has rarely produced a grape that would yield a high quality of wine. The grape that contains the most saccharine matter will make the best wine, and the different varieties differ widely in the proportion of sugar. In Italy and in Sicily the very finest and sweetest grapes grow on the rocky rubbish of volcanoes, and those that grow on loose rocky soils, or along hillsides covered with rocks are often the best. These facts ought to teach us not to select the richest soils, and not to stuff them with organic manures, for the grape. The New York *Observer* adds: Grape vines seldom need any manure, except ashes or lime, if the soil is thoroughly cultivated, and all weeds and grass near the vines are kept subdued. One of the most fruitful causes of mildew is the application of too much stimulating manure to the growing vines.

Dry Earth as a Deodorizer for Poultry Houses.

The London Field makes the following remarks that the employment of dry pulverised earth as the means of deodorizing poultry houses, appears to be worthy of more attention than it has hitherto received. The fact that from 400 to 500 fowls can by its aid be kept in one building for months together, with less smell than is to be found in any ordinary fowl-house, capable of accommodating a dozen chickens, is very conclusive as to its efficacy. In the building of the National Poultry Company, where this fact has been ascertained, seven or eight fowls are kept in each compartment, twelve feet by three feet, and yet there is no smell or trace of moisture.

Mr. Greyelin informs us that if a much larger number are put into each run, the ground becomes moist, ceases to deodorize, and the birds at once become unhealthy. It should be stated that the droppings that fall from the perches at night are removed from the runs next morning, and that the dry earth only receives the manure that falls during the day; this has its moisture absorbed so speedily by the earth that it at once becomes pulverized, mixes with the soil, and ceases to smell. So powerful is the deodorizing effect of the earth that it does not require to be renewed in the runs for many weeks together.

It appears a question how far this system may or may not be extended. Is it applicable to private poultry houses? Can it be usefully employed at poultry shows? Would it answer in places where it is requisite to keep birds in close confinement? Can it be advantageously used in our zoological gardens? The employment of earth closets as a means of utilizing and deodorizing that which would otherwise become offensive sewage is well known, and we have no doubt that many of our "feathered friends" might be greatly benefited by an extension of the system that has been so successfully inaugurated at Bromely

Fattening Cattle.

John Johnston wrote *The Country Gentleman* that he feeds his cattle on all the hay they will eat, with four quarts each of corn meal, and oil-meal daily, increasing each to six quarts on the third month; in three months I make them prime, if not extra beef; I litter my yards well, and stable them no longer than it takes to eat their meals, as they do better out than when tied up, and keep clean. Cattle bought that had been mealed, I give more. If stabled, give plenty of air in front: this is important. It is important to have the right kind; Shorthorn and Hereford grades are best. These may be fed at any age. If common cattle, get them deep at the flanks and wide across the loins, with good points generally; such may be fattened at rising four years. There are so few Herefords they are not worth writing about. I am feeding 300 Michigan wethers.

Sheep in Orchards.

A correspondent of *The Maine Farmer* says: I have an old orchard in a piece of mowing land which was entirely run out. I have for several years turned my sheep into this orchard soon after haying; and it now cuts double the hay that it did at the commencement, and my orchard has improved very much. So you see I get more than a double profit from this piece of land.

Apples for Domestic Animals.

Sweet apples are of great value in feeding almost any kind of farm animals. Hogs fatten rapidly on them, as well as on those that are acid. Cows, fed moderately at the start, on well cracked or cut apples, to prevent choking, will increase in milk and improve in condition. Apples form an excellent succulent food for horses in winter. Varieties should be specially sought for feeding animals, combining hardiness, thriftiness, and great bearing qualities. Among the best now known are Corlies' Sweet, Pumpkin Sweet, and Haskell Sweet for autumn—and Green Sweet for long keeping. At the West, the Hightop or Summer Swaar is the best early sort, and the Sweet Pearmain and Sweet Romanite for autumn and winter. So says *The Country Gent.*

Horticultural.

FRUIT GROWERS' ASSOCIATION OF WESTERN NEW YORK.

THIS association held its annual meeting in this city. on the 24th and 25th of January. There was a very large attendance, including several gentlemen distinguished for pomological enterprise, among who we noticed Hon. Marshall P. Wilder, of Massachusetts.

The meetings were held in Corinthian Hall as the accommodations of the Supreme Court Room, at the Court House where the meetings have formerly been held was not large enough.

On calling the meeting to order, Mr. Barry made a short address, in the course of which he referred to the presence of several distinguished gentlemen, among whom was the Hon. Marshall P. Wilder, of Massachusetts, President of the American Pomological Society, and the father of American Pomology. Mr. Barry referred appropriately to the death, since the last meeting, of Joseph Frost, an honored member of the Association.

A committee was appointed to report the order of business for the session.

The following gentlemen were chosen officers for the ensuing year:

PRESIDENT—H. E. Hooker, Rochester.

VICE PRESIDENTS—P. Barry, Rochester; T. G. Yeomans, Walworth, Wayne county; D. W. Beadle, St. Catherines, C. W.

SECRETARY AND TREASURER—James Vick, Rochester.

EXECUTIVE COMMITTEE—William Smith, Geneva; E. A. Frost, Rochester; J. W. Helmer, Lockport; H. T. Brooks, Wyoming; C. W. Secley, Rochester.

STANDING COMMITTEE ON NATIVE FRUITS—J. J. Thomas, Union Springs: H. N. Langworthy, Greece; W. B. Smith, Syracuse; E. Moody, Lockport; H. H. Olmstead, Pavilion, Genesee county.

STANDING COMMITTEE ON FOREIGN FRUITS—P. Barry, Rochester; C. Downing, Newburg; J. Craine, Lockport; John Fisher, Batavia.

In response to a question respecting the value of the barberry, Marshal P. Wilder said that it was not cultivated in his section; farmers objected to it as a noxious plant. The fruit was excellent for preserves. The plant takes root easily and thrives with little or no care.

AFTERNOON SESSION.

The new President, Mr. H. E. Hooker, was introduced. Mr. Hooker thanked the Association for the honor done him. His first knowledge of it was communicated in the street. It had been his hope that Mr. Barry would be retained in the position. That gentleman was eminently qualified to fill it, both by experience and ability. Nevertheless, he (Mr. Hooker) would accept the place to which he had been so unexpectedly elevated, and would endeavor to do his duty in it. In conclusion he came down to business, and called for reports from committees, or the presentation of other matter for discussion.

The committee to prepare the order of business reported the following subjects for discussion:

1. Do the past results or profits in pear growing warrant the planting of large orchards?
2. What varieties of Winter Pears are hardy and best adapted to cultivation?—First, for amateurs; secondly for market.
3. What are the best six varieties of Pears for orchard planting in Western New York?
4. What are the best modes of planting fruit trees in different soils?
5. What is the best treatment for Apple orchards after planting, including cultivation and pruning?
6. What are the best six varieties of Apples for orchard planting in Western New York?
7. Can the Currant Worm be destroyed so that good crops of Currants can be grown?
8. Can healthy and thrifty old Grape Vines, well established in good soil, be grafted successfully and profitably, or should new vines be planted?
9. Is it desirable or safe to embark largely in Grape growing?
10. What is the best Grape for general cultivation in Western New York?
11. Which are the best varieties of Grapes for long keeping, and the best mode of preservation?
12. What early Grapes are long keepers?
13. What are the best methods of keeping, packing and shipping of fruits?

First—Apples. Second—Pears. Third—Peaches. Fourth—Grapes. Fifth—Small Fruits.

The President requested the Hon. Marshall P. Wilder to take a seat on the platform. On complying, Mr. Wilder addressed the Association briefly. He said that after a long illness it gave him great pleasure to meet so many gentlemen with whom he had been so long associated in forwarding the interests of pomological science. This organization, standing first among those of its kind, was one that he had watched with much interest. If ex-President Barry had been in the chair, he (Mr. Wilder) would have called him to account for having designated him as the father of American Pomology. If the remark was correct, Mr. Barry might with equal propriety be called one of its children who had grown wiser than his father. The members of this Society are located in a section famous above all others for its fine fruits. They have intelligence and enterprise to enable them to go forward with the good work in which they are engaged. He bade The Fruit Growers' Association of Western New York God speed. Mr. Wilder concluded by stating that the next meeting of The American Pomological Society would be held in St. Louis on the 4th of September next, and he hoped to see a large delegation from this vicinity. It will be the first meeting of the Society in that region, and he hoped to show the people there that Northern fruit growers were ready to travel half-way across the continent to promote the good cause and cement the bonds of union. [Applause.]

Mr. Barry stated that the societies of the West were exerting themselves to have large delegations at the next meeting of The American Pomological Society, at St. Louis. They meant to astonish their eastern brethren.

The discussion of the first question was then commenced by Mr. Yeomans, of Walworth, who said all of his trees were dwarfs, and he had no experience in the culture of standards. He saw nothing to discourage the raising of this fruit. In many localities he understood

that heavy losses had been sustained from the pear tree blight—with him he had seen nothing of it. He thought that there was as much loss with other kinds of fruit. He had not lost in the culture of pears one per cent. of them from all causes. His dwarfs were at first of the White Doyenne or Virgalieu, but they cracked so badly he budded his trees with the Duchess d' Angouleme. His fruit was all that could be expected from healthy trees, and he thought it was a good investment. With other kinds he had not been so successful. He never budded the Bartlett directly on the quince. Those that he double-worked were vigorous and hardy, and he would not recommend budding the Bartlett directly on the quince without being double-worked.

Mr. Oliver Chapin said he planted about 2,000 trees, standards, about twelve years since. They were in four years afterwards budded with the Bartlett. He had not received a shilling for that ten acres, nor was there a tree upon it he considered worth anything. His trees had not received such care as Mr. Yeomans. His soil is what is termed gravelly loam—good wheat land.

Mr. Burtis, of Rochester, said the Duchess d' Angouleme had done well with him. The trees wanted careful attendance. When the blight first appears, put the knife to the limb. He could not discourage the raising of pears.

Mr. Barry asked Mr. Chapin if there were not pear orchards in his neighborhood that were good?

Mr. Chapin did know one or two, and one of those was on stiffer soil than his—on a side hill, and not much exposed to the wind.

Mr. L. F. Allen, of Buffalo, was invited to occupy the chair during the absence of the President.

Mr. W. P. Townsend, of Lockport, said he had commenced with a large number of varieties; but had gradually reduced the number to about ten or twelve. For the first ten years they paid well; but for the last five years they had been badly injured by blight. The White Doyenne and Louise Bonne de Jerseys were badly injured, while the Duchess d' Angouleme had mostly escaped. He thought there were very few localities in which pear culture could be made profitable. He recommended the Duchess d Angouleme, on the Quince, Bartlett and Seckel. His soil was a sandy loam, running down to clay—"hard pan." His opinion was that only in a few favored localities could the pear be raised with profit, on a large scale.

Mr. Barry said that if it were not for the blight the question as to profit would not be asked. As long as summer pears brought $8.00 to $10.00 a barrel, and later pears $12·00 to $20.00, nothing could be more profitable. Everything that was raised had its enemies. There are losses in every department of industry. The pear had the advantage of bearing every year, while apples bore only every other year, or less frequently. Pear cultivators, whose orchards had been unsuccessful, were those who became discouraged at an early day. Even under present management, pear culture was the most lucrative business which could be followed. Many persons, when the blight attacked their trees, abandoned them altogether, and did not attempt to remove the blighted portions of the tree. A fruit grower should watch his trees, and on the first symptom of blight lop off the affected parts, and if necessary, uproot the tree altogether, supplying its place with another. Those who neglected their orchards had no right to call themselves fruit growers. Pears need not command more than one-fourth their present price in order to be a profitable crop. He had this season sold winter pears for $30.00 per barrel, and got his pay for them.

Mr. Chapin asked whether the pear blight was less frequent under high culture.

Mr. Barry said he thought moderate culture was best, not attempting to stimulate growth by heavy manuring.

Mr. Townsend of Lockport, said that an excessive growth of the tree, was always followed within two or three years by blight.

Mr. Brooks, of Wyoming, said he thought it was largely a question of climate and soil. He would not advise any one to go into the business very extensively without first testing it on a small scale, to see whether the soil was fitted for it.

Mr. J. Fisher, of Batavia, thought if any one went into the business extensively, with the purpose of making profit out of them, he would be very egregiously mistaken. He had planted three hundred trees, and given them the best culture, but he had entirely failed. His experience was most discouraging; nevertheless he advised every man to plant some pears for his own use, but not to expect any profit from them.

Mr. Burtis thought very much depended on the manner of planting the trees. They should be planted with a bed of clay fully six inches deep under each one. If the trees were planted on light or sandy soil, they would almost certainly be destroyed.

Dr. Sylvester spoke in favor of the Seckel. He had planted forty trees, and they had done well, last year cleven barrels. These were standard trees. He had also about two hundred trees on quince stock, all doing well.

Levi A. Ward, of Rochester, said he was not a large cultivator of pears. He cultivated about one hundred pear trees, and had done so for about twenty years. He had not compared one year with another in regard to the blight, but on the average the loss was about five per cent. He had been amply repaid for his culture of the pear. He thought of the Duchess pear there would be an overplus in a few years, if pear culture succeeded as he trusted it would. The winter pears were too much neglected. He raised always large crops of the Louise Bonne de Jersey—from one to one and a half bushels to the tree.

Mr. W. Brown Smith, of Syracuse, thought great mistakes were made in the selection of soil for pear orchards. He knew pears to do well on clay soil. He did not believe in manuring too high. Wheat land was good enough for pears.

Mr. Wilder said everything depended on the selection of the right kind of soil and location. In the vicinity of Boston no difficulty was found in cultivating the pear, notwithstanding the poorness of the soil

compared with yours. The best success he had observed in pear raising was in clay soil.

Mr. Olmsted, of Le Roy, said their trees blighted at the rate of twenty-five per cent. His soil was a sandy and gravelly loam—dry land. He considered pear raising a precarious business.

Mr. Allen inquired whether any one could point out a pear orchard thirty years old, in good bearing condition.

Mr. Wilder said that the first trees planted were imported from Europe, and injured by transportation; but he would say that nine-tenths of the trees he got from the nursery were now living and in good condition.

Mr. Ward said his best crops were borne on trees from twelve to fifteen years old.

Mr. Codding, of this city, referred to some pear trees planted out sixty or seventy years ago, in Ontario county, where he formerly lived. He knew them as old trees when he was a mere boy. They are yet in good condition, and have borne crops worth ten times as much as from the same number of apple trees.

Mr. Brooks asked Mr. Barry how often he would renew a pear tree, if they died.

Mr. Barry said that if a tree had died he would first remove the soil and replace it with new. He did not believe the old soil was good for the trees.

Mr. Wilder confirmed this opinion.

The second question was then taken up—"What varieties of Winter Pears are hardy and best adapted to cultivation?"

Mr. Ward said that what was true in one locality might not be true in another. He would choose—1. Winter Nellis; 2. Josephine d' Maline; 3. Lawrence; 4. Ester Beurre; 5. Doyenne d' Alencon. He did not consider the Vicar of Winkfield a good table pear. It was good for cooking, but for eating was indifferent.

John J. Thomas, of Union Springs, would add the name of Jones' Seedling. He worked the Winter Nellis at standard hight. He did not know another pear, taking everything into consideration, its equal.

Mr. Townsend, of Lockport, also added his testimony in favor of Jones' Seedling.

Mr. Sylvester, of Lyons, said Dana's Hovey was an excellent winter pear. He had eaten one the last week in December, 1865, that was very fine.

Mr. Marshall P. Wilder urged the necessity of thinning out the Winter Nellis early in the season. The remaining specimens would be much better in consequence. The same remark would apply to other pears. The Doyenne d' Alencon, was a very excellent winter pear, hardy, an abundant bearer, and a good ripener. The Beurre d'Anjou was also a valuable pear. He made it a winter pear, and if he could have only one variety, that would be the one. Twenty-five years ago he had been laughed at for saying he preferred the Vicar of Winkfield if he could have but one variety. Now he would amend that by substituting Beurre d' Anjou. The secret of keeping winter pears is to keep them below the temperature which will ferment the juices and bring them to maturity. His winter pears are left on the trees as long as possible. But, after all, Mr. Wilder doubted the expediency of raising winter pears extensively.

Mr. Yeomans said he was keeping several varieties of winter pears in a room, in open boxes.

Mr. Barry mentioned the Beurre Gris d' Hiver as a fine pear.

THE ADDRESS.

The evening sitting of the Society was devoted to an address delivered by L. F. Allen, of Buffalo. The attendance was large, including many of our most respectable citizens, who listened with much apparent interest; after which, on motion of Joseph Harris, a vote of thanks was tendered to Mr. Allen, with a request for a copy of the address for publication.

MR. BARRY'S ENTERTAINMENT.

The members of the Association and other invited guests to the number of about two hundred or more, on leaving the hall took the street cars for the hospitable residence of Patrick Barry, Esq., and quite a number went in private conveyances. The guests were most cordially received, and the entertainment was an elegant one, and worthy the reputation of the host. Mr. Barry omitted nothing that could contribute in any manner to their pleasure. About three hours were spent in social converse, after which the party returned to the city in the street cars, having taken leave of their host with feelings of gratitude for the pleasure he had afforded them.

SECOND DAY—MORNING SESSION.

At the session this morning, Mr. Hooker, the President, was in the chair.

Mr. Lewis F. Allen, of Erie county, spoke of the general lack of information among the fruit growers of the country as to what others are doing. There was a great annual production of apples, but who could tell the amount? Mr. Chapin, of Bloomfield, had three hundred acres under full bearing—others had large orchards. There were millions of Iona and other grape vines planted out each year; and he feared that when they were all in bearing the market might be overstocked. This assembly of fruit growers represented vineyards enough to supply all Europe with grapes when they were in full bearing. He moved that each delegate procure all the information he could from his own county, and report at the meeting next June.

Mr. Yeomans suggested that these facts were taken by the census enumerators, and when that was published it would give the information wanted.

Mr. Allen said he had no confidence in the enumerators. They were a mere set of politicians. He had rather have a guess from Mr. Yeomans than all the statistics the census would furnish.

Mr. Frost moved to amend by appointing a committee of one from each town.

Mr. Barry said that when the society was formed this plan was adopted, and a great amount of valuable information was accumulated, but it was not complete and was never published.

The chairman said he thought that the information furnished by the census would be as reliable as any which could be had by the plan proposed by Mr. Allen.

This plan would involve a great amount of labor, which he did not desire to assume for himself.

Mr. Thomas said that much time was being spent in this discussion, and on his suggestion the subject was referred to a committee, to report at a future meeting.

The President announced as the committee, Mr. Allen, E. W. Sylvester, and H. T. Brooks.

By request of the Society, Mr. Nice read an interesting paper on the preservation of fruit. The great essentials to this were coldness, dryness, evenness of temperature, purity of air, and the absence of free oxygen, which was the great destroyer of fruit. Large buildings were being erected in Ohio, devoted entirely to the preservation of fruit. The profits on one season's fruit paid the entire expense of the buildings. Dryness of atmosphere was secured by using the refuse of salt works, of which the works at Saginaw, Michigan, supplied what was wanted at little expense.

Mr. Allen said that dryness was not essential in preserving some kinds of fruit. A gentleman in Le Roy had kept grapes in a very moist situation. At his suggestion, Mr. Hazelton, of Le Roy, gave the mode there adopted. The grapes were buried in a pit about four feet deep, and kept constantly moist, the lower tiers often submerged in water. They were preserved in perfect order till late in the winter, and brought the highest price in the Buffalo market.

Mr. Thomas asked how much would be the average cost of the houses, and the cost of preserving fruit one season. Also, how long perishable fruit will keep.

Mr. Nice said that the cost of keeping grapes through the season would not exceed five cents per bushel. The houses would cost from eighty cents to one dollar per bushel. Apples could be kept indefinitely. He had in July, 1863, apples of the crop of 1860. The main aim in keeping apples was to have them in the ten hungry weeks from May to July, when new fruit came into market.

Mr. Brooks said he wanted to ask the meanest kind of a question—whether this material from salt works would be beneficial to put into floors of our cellars. He did not care about these large establishments, but wanted something that every householder could apply for himself.

Mr. Nice said this refuse matter would be beneficial if the cellars were made air-tight.

Mr. Allen said that fruit should never be kept in cellars under houses. The decomposition of the fruit was very unhealthy.

Mr. Brooks said that keeping fruit perfectly dry or very moist would preserve it. It was the medium condition that was most unfavorable.

Question number seven was then taken up—"Can the Currant Worm be destroyed so that good crops of currants can be grown?"

Mr. Smith, of Syracuse, said he had succeeded in preserving his currant bushes by applying powdered hellebore. He only used two applications, applying four or five pounds to a half acre, costing four to eight shillings per pound. It needed to be applied after a heavy shower. It did not injure the fruit. The leaves were rough and retained the flour after any ordinary shower, while the fruit was smooth, and it would run off.

Mr. Thomas endorsed Mr. Smith's position. A very fine dredging box was best, and a light application was sufficient. He regarded this as the easiest and most successful operation connected with fruit-growing.

Mr. Bartholomew, of Chatauqua county, said that refuse soft-soap, with saltpetre, had been successful in killing the worms.

The eighth question was then taken up—"Can healthy and thrifty old Grape Vines, well established in good soil, be grafted successfully and profitably, or should new vines be planted?"

Mr. Hazelton narrated the experience of Mr. Isaiah Warren, of York, Livingston county. He had grafted a large vineyard of Catawba at the surface of the ground, the same as an apple tree. They were grafted in March, as the sap began to start, and the wounds covered with wax the same as apple trees. He had been uniformly successful.

A gentleman from Pennsylvania said that there was no difficulty in grafting grape vines. The great secret was in grafting very early. It made no difference whether the bark of the graft and the old stock met. It would grow equally well if it did not.

Mr. Crane, of Niagara county, said he had uniformly failed in grafting grapes. He thought it was cheaper and better to root up the old vines and plant new ones.

The President said new vines would not grow well on the land lately occupied by old vines.

Mr. Wilder asked whether fall grafting had been tried.

Mr. Crane said he had failed equally by this plan with the others.

Mr. Charles Downing had grafted in the fall, below the surface of the ground, in November, covering with a flower-pot to keep the earth from falling on the graft.

Mr. ——, from New Jersey, had grafted in the fall Delaware and Aaron's Hybrid; of the latter one-eighth failed, and of the Delawares seven-eights failed.

Mr. Thomas, of Saratoga, had good success in grafting in the fall. In one case the graft made a growth of fourteen feet the first year.

Mr. Barry said he had grafted a little every year; but had met with very indifferent success—nothing to boast of.

Mr. Wilder said that grafting grapes was a very difficult operation. Some failed with the best of care, while others succeeded without any trouble. He would rather agree to make nine hundred and ninety-nine poor grafts out of a thousand, than to make one good graft out of ten.

Mr. Downing said he cut off a grape vine two inches in thickness, and inserted a graft in the center. It grew twenty feet the first year. (Applause.) Some years, however, he had no success in grafting, while in others scarcely any would succeed.

Mr. Moody said that new vineyards would succeed if planted on the same ground occupied by grape vines. He thought it was far cheaper to pull up the old vines and plant new ones.

Mr. La Rue, of Hammondsport, confirmed this opinion. He thought planters ought to wait a year for the old roots to die out before planting new ones.

The President read a communication from the Fruit Growers' Association of Upper Canada, announcing as delegates from Canada, Messrs: W. F. Clarke, Charles Arnold, William T. Goldsmith and D. W. Beadle.

Mr. Dewey, from committee on the death of Joseph Frost, presented a statement of the facts relating to his death, with appropriate resolutions.

The report was adopted, and ordered entered in the records of the Association, and a copy sent to the family of the deceased.

The ninth and tenth questions were taken up, and a lengthy discussion ensued on grape culture. Previous to adjournment a vote was taken to select the best six varieties of grapes for cultivation in Western New York.

PLANTING AN ORCHARD.

WRITTEN FOR THE AMERICAN FARMER, BY "P. C. R."

LAYING OUT THE ORCHARD.—In planting the trees in an orchard, the first thing of importance is to decide what shall be their distance apart, and the next is to get the rows straight. Apple trees are planted all distances between twenty and forty feet. I think about twenty-four feet apart a good distance. That distance would require about seventy-six trees to the acre.

It is quite an object to have straight rows: first, because it looks so much better; and secondly, because you can plow among them to so much better advantage. It is no easy matter, as I have found by experience, to get all the trees in line both ways. To aid the eye in sighting, take a board, say six feet long, three inches wide. Sharpen one end, and about four inches from the other, bore a half-inch hole through the middle of the board, and saw from the end, through the center of the hole, and two or three inches below it. Stand up this board perpendicular, first look through the hole to determine the position of your stakes, then by looking through the slit made by the saw, you can sight very accurately.

It is well to lay out the outside row all around first, and stick a stake where every tree is to be planted. In measuring, your chain, tape, or line, must be kept level, as in surveying. A line six to eight rods long, and at least a quarter of an inch in diameter, is very convenient. Proceed to mark out your plot both ways. It would be well for one man to sight with the board, prepared as above, from a tree on one side, to its opposite on the other, while another man stretches the line, and sticks a stake at the end of each line. He could walk back on the line thus making a mark, or make a mark with a stick. It is best to have plenty of help, and make haste slowly, when setting an orchard.

DIGGING THE HOLES.—Having marked out the orchard both ways, the next operation is digging the holes for the trees. This should be well done. The holes should be dug large, the soil be all taken out, and the subsoil loosened up with the spade.

PREPARING THE TREES FOR PLANTING.—Supposing that the trees were properly taken up, take a sharp knife and cut off the ends of all bruised or broken roots, otherwise they will rot off. Cut back the top in proportion to the reduction of the roots, leaving the head in good shape, and then you are ready to set them.

PLANTING THE TREES.—It is best to plant trees of the same variety as near together as possible: for instance, if you are to plant one hundred Baldwins, it would be better to have them the first ten trees, in ten different rows, than to have five rows of them, with twenty to a row, or two and a half rows, with forty to a row.

To get your trees straight in the rows, draw your line one way, and sight across it the other way. Fill up your hole with the soil which you removed from it, until the roots of your tree will be just below the level of the ground, and if the dirt is a little higher in the center than about the circumference of the hole, all the better. Spread out the roots with the hands, carefully shake in the dirt from a shovel, pulverizing the lumps, and removing stones. The one who holds the tree should gently work it back and forth, to work the dirt into the cavities under the roots. Fill up the hole, tread down the dirt lightly around the tree, and the work is done.

You will never regret in future years, having taken too much pains in preparing your ground, in selecting your trees, in laying out, and planting your orchard.

OUR KANSAS LETTER.

WRITTEN FOR THE AMERICAN FARMER, BY A. M. BARNES.

MESSRS. EDS.:—The first number of THE AMERICAN FARMER has been received. I congratulate the farmers of New York upon such an acquisition to their library tables. In densely populated regions there are always a class of young men, "bound to rise in the world." Their limited capital will prevent them from purchasing lands in the East, and I find that many of your brother journals are advising young men to seek homes in New Jersey and other places where lands are cheap. There are no markets they say in the West. I do not know how it is in other places, but they should except this region, They forget that the great number of miners in the gold region must be fed. They forget that the Union branch of the great Pacific Railroad is almost graded here, and that iron is in the State to complete the track to Manhattan, and that the cars will be running here early in the summer, and must be continued further every year until this great national thoroughfare is completed to the Pacific coast.

As good land as the world can produce can be obtained along the line of this road, not far from $4.00 to $10.00 per acre, but for remaining on the land five years government will give a fee simple title to the 160 acres, by paying $10.00, of fees to the Land Office Receiver.

It is not now my intention to speak of this region in an agricultural view, but to say to young men intending to commence the cultivation of the grape, to visit this section and examine its natural resources before

paying for land elsewhere. We have millions of acres of bluff land which will prove the home of the vine. These bluffs are very rich, yet stony, and contain all the ingredients necessary as nutriment for the vine. If you will take the trouble to refer to the Report of the Department of Agriculture, for 1863, page 494-96, you will find that out of ninety-seven localities given in the loyal States, that the mean temperature requisite for ripening the grape to perfection at Manhattan is better than at any other place. It will be seen that even the most tender foreign varieties of wine grapes can be ripened perfectly. The reports from California are not given, but by comparing the reports from California, as given by Hon. Isaac Newton, we have a better region for ripening the grape, other things being equal, than even California. Those who have an interest in the sale of eastern grape lands may sneer at this, but in the above report the facts and figures are given, which cannot be gainsayed.

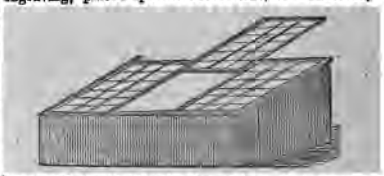
I have not cultivated grapes to any extent, but have been planting different varieties to test in our soil and climate for a number of years. I have fruited grapes since 1859, here, and have never seen a diseased berry or a mildewed vine, although some vines had yellow leaves the first year, which had been propagated from green wood by layering.

The year 1865 was the year known as "the seventh annual wet year," and was a very wet season; yet Concord and Clinton vines which had been layered when they were in blossom, ripened perfectly with the bunches lying on the ground, and some of them partially covered.

The opening of the railroad next summer will give a market for every grape and all farm produce that can be raised within a reasonable distance of the route. Grapes and fruit can be sent to any of the eastern or southern cities. No man need fear a market in the future from this region, either for wine or grapes. Those who have small capital can determine the place that will suit them best.

HOT BEDS AND COLD FRAMES.

These by being protected at the sides and ends with boards, and covered with glass, confine the moisture which arises from the earth, and thus the atmosphere is kept humid and the surface moist, and the plants are not subjected to the changes of temperature, as a uniform state can be maintained, no matter what the weather may be, The bottom heat of the hot bed warms the soil, and enables the grower to put in his seed early and obtain plants of good size before the soil outside is warm enough to receive the seed. Care, however, is required to prevent scorching the young plants. In bright days, the heat is intense inside the frame, and unless air is freely given, or some course taken to obstruct the rays of the sun, most likely a great portion of the plants will be ruined. When the sun gets pretty warm, give the glass a thin coat of whitewash. This gives a little shade, and, with some air during the middle of bright days, will make all safe. The hot-bed is made by forming a pile of horse manure with the straw used for bedding, or leaves, some three feet in hight. Shake all together, so that straw and manure will be equally mixed. It may be sunk in the ground a foot or eighteen inches, or made on the surface. On this place about five inches of good mellow soil. Then set the frame and keep it closed until fermentation takes place and the soil is quite warm. It is better to wait a day or two after this, and then sow the seeds. The principal advantages of a hot-bed can be secured by what is called a cold frame. This is simply a hot bed frame with sash, as shown in the accompanying engraving, placed upon a bed of fine, mellow earth,



in some sheltered place in the garden. By the exclusion of air and the admission of sun, the earth becomes warm, and the moisture is confined, as in the hot bed. After the frame is secured in its place, two inches of fine earth should be placed inside, and the frame closed up for a day or two before the seeds are planted. As the cold frame depends upon the sun for its warmth, it must not be started as soon as the hot bed, and in this latitude the latter part of April is early enough. Plants will then be large enough for transplanting to the open ground as soon as danger from frost is over, and as a general thing, they will be hardier and better able to endure the shock of transplanting, than if grown in a hot bed. A frame of this kind any one can manage. Watering occasionally will be necessary; and air must be given on bright, warm days. Shade also is necessary.

WHEN DOES NEW BARK FORM?

Messrs. Eds.:—I have a cousin who owns a farm in Kent county, Maryland. He bought in 1860-61. In 1864 he had several carpenters at work repairing the out-buildings. Close by was an apple tree that yielded an abundance of apples, which always failed to come to maturity. The carpenters on learning the fact made an onslaught on the tree by removing the bark entirely from the limbs, ten inches from the body, and then down the body to four inches under ground. Completely stripped of all the bark, he supposed, of course, it would die; on the contrary, one of the men told him it would improve the tree, and the fruit would mature. In about ten days or two weeks, on examining the tree, it had formed a new and perfect bark, looked healthy, and yielded a good crop.—The time was the longest day in June.

JAMES PRICE.

Our readers who have to depend on boxes in the house to bring forward their early vegetables should remember to use water at the temperature of about sixty degrees. This will help to bring them forward rapidly.

Ladies' Department.

ATTENTION TO CELLARS.

No good housekeeper will neglect the cellar of the house in which she lives. It should in fact be kept in better order and receive more attention than any part of the house. The effluvia arising from decaying vegetables, putrid meats, and damp and moldy cellar bottoms, is the prime, grand cause of sickness and decease. The cellar of every house, either in town or country, should be swept once a week. Commence in one corner, remove any barrel or obstruction, and sweep the ceiling, walls and floor before replacing, and proceed in this manner through the whole, sorting over any apples or vegetables that show signs of decay. Apples that are perfectly sound, sometimes have adhering to them portions of rotten pulp from decayed fruit; these should be carefully wiped and placed in a clean dry barrel. Wipe over bottles of preserves, pickle jars, butter crocks, etc., at least once or twice during the winter. Any mould or cobwebs, wherever found, should be thoroughly removed. Barrels that are damp and black, through having been in contact with the ground floor, should be turned on the other end, or placed on a dry board. If wood is kept in the cellar, as is sometimes the case in cities, it should be removed occasionally and the floor swept. Persons who take these precautions, and are careful that all obstructions to good drainage are removed, and who are at the same time neat and clean in their persons, and who pay a little attention to diet, seeing that it is at all times wholesome and good, need not dread the coming of the cholera or any other infectious disease.

We wonder if our lady readers ever indulge in a warm bottle? We mean this: On a frosty day, when you dread the long drive into the city, do you prepare for the anticipated cold feet by the addition to your load of a good sized bottle filled with boiling water? If so, you know the comfort derived from such an arrangement, and will need no further hints on the subject. Gentlemen should take notice that a good hot brick to their feet all along their journey, is better than stopping at the tavern and taking a brick in their hat.

DOMESTIC RECEIPTS.

Ice Cream in Winter.—A very good ice cream, or rather substitute for ice cream, may be made in the following way: Set to boil a pint of milk—cream would be better if convenient—when nearly boiling stir gently into it one or two eggs, well beaten, and a very little sugar. Place out doors or in cellar to cool. When quite cold, flavor with lemon or vanilla, and add to it as much newly fallen snow as will make it quite thick. Do not make it too sweet, and be careful to use rather nice sugar, as it will flavor it, if not very pure.

Buckwheat Cakes.—The objectionable feature in the cooking of buckwheat cakes, is the smoke and steam arising from the greased griddle. Now, we assure our readers that buckwheat cakes can be made just as smooth, just as brown, and infinitely nicer—of course, in our opinion—without greasing the griddle, as with. We are confident that this assertion will bring down upon our heads the wrath and condemnation of almost all our lady readers, but we assure you that it can be done, is done every day in our family, and by a little perseverance and practice, may be done in yours.

Keeping Eggs.—We asked a lady friend of ours, and truly, an excellent housekeeper, if she knew of a good receipt for keeping eggs all the year round. "Of course, I do," she said, "I just place them in a basket, and hang them in the cellar where they will neither freeze or dry." We told her we knew of a way, which must be better, as it was founded on scientific principles. Place your eggs in a basket and immerse them in boiling water while you rapidly count twenty. Hang them in the cellar or pack in sawdust, bran, etc., as you wish. The principle of the thing is this. The atmosphere is one prime cause of decay in any substance. The evaporation of the watery portions of the inside of the egg through the pores of the skin and shell, allows the atmosphere free entrance, hence decay sets in. Now it is evident that if evaporation can be stopped, the decaying element is kept out and the egg preserved. This is effectively done by the foregoing process. The heat occasioned by the boiling water, congeals the surface of the albumen immediately under the skin and shell of the egg, thus forming an impervious coating and prevents evaporation and consequently the admission of the atmosphere, and so the absence of decay and the presence of good fresh eggs for breakfast all the year round.

Yeast.—Take two good sized potatoes; pare and boil them until tender; mash them and rub them through a cullender; add a pint of water and two tablespoonsful of sugar; when it is about lukewarm add one gill of yeast.

Hop Yeast.—A handfull of good hops; three pints of water; two potatoes; one tablespoonful of molasses. Mix as thin as pancakes.

ILLUSTRATED PUZZLES.

ANSWER TO PUZZLES IN FEBRUARY NUMBER.

No. 3—Because he is illustrated with cuts taken on the spot.

No. 4—He is always putting his foot in it.

No. 6—Why is this like a bank clerk at one o'clock.

No. 5.—Why ought he to keep this hat, although it does not fit him?

Answers next month.

Miscellaneous.

THE RISING GENERATION.—In the United States there are about 60,000 common schools, which are supported in part by the State treasuries, and partially by funds and school taxes. In England and Wales there are 46,042 public and private schools, attended by 2,144,378 scholars. In addition there are 1,545 evening schools, which provide for 39,683 children. The number of Sunday schools is 23,514 with 2,407,612 scholars. It is estimated that in England there is a scholar for every 8.36 persons; in Scotland about one-seventh of the people are at school, while in the United States there is a scholar to every five persons. In Russia only one child to every two hundred persons receives instruction at school, so that while at nine o'clock on Monday morning there are 4,000,000 American boys and girls at school, there is in Russia only 100,000 enjoying the benefits of education.

INCHES IN A BUSHEL.—The standard bushels of the United States contains 2,150.4 cubic inches. The "Imperial bushel" is about 68 cubic inches larger, being 2,218.192 cubic inches. Any box or measure, the contents of which are equal to 2,150.4 cubic inches, will hold a bushel of grain. In measuring fruit, vegetables, coal, and other similar substances, one-fifth must be added. In other words, a peck measure five times even full makes one bushel.

PLANTING AND DIGGING AT ONCE.—*The New Bedford Mercury* says that as a gentleman, now a distinguished merchant of Boston, but formerly a resident of Nantucket, was one day engaged in planting potatoes on his farm in that town, a dry old fellow stopped to watch the operation. The merchant, more enthusiastic than skillful in his farming, was dropping five seed potatoes in each hill.

"Ah! planting potatoes, Squire," remarked Uncle Jerry.

"Yes," replied the merchant, "and if the rot does not take them, I expect to have a good crop. What time do you think is best to dig potatoes, Uncle Jerry?"

The old man looked into a hill, and replied, "Dig 'em now; you'll never have a bigger crop."

DURING the present high price of coal, a gentleman meeting his coal merchant, inquired whether it was a proper time to lay in a stock? The knight of the black diamond shook his head, observing, "Coals are coals, now, sir;" to which the customer replied, "I am very glad to hear it, for the last you sent me were slates."

Two Irishmen in crossing a field came in contact with a donkey who was making "day hideous" with his unearthly braying. Jemmy stood a moment in astonishment; but turning to Pat, who seemed as much enraptured with the song as himself, remarked: "It's a fine large ear that bird has for music, Pat, but sure he's got an awful cowld."

LOST SHEEP.—A preacher of the Methodist Church was traveling in one of the back settlements, and stopped at a cabin, where an old lady received him very kindly. After setting provisions before him, she began to question him.

"Stranger, where mought you be from?"

"Madam, I reside in Shelby county, Kentucky,"

"Wall, stranger, hope no offence, but what mought you be doin' way up here?"

"Madam, I am searching for the lost sheep of the tribe of Israel."

"John, John!" shouted the old lady, "come rite here this minit; here's a stranger all the way from Shelby county, Kentucky, a hunting stock, and I'll just bet my life that tangle-haired old black ram that's been in our lot all last week, is one of his'n."

IN a criminal court, the counsel dissatisfied with his want of success with an Irish witness, complained to the court. Paddy replied, "Sure, an' I'm no lawyer, yer honor; and the spalpane only wants to puzzle me." "Come, now, do you swear you are no lawyer?" said the counsel. "Faix, an' I do: and yez may swear the same about yourself, too, without fear of perjury."

IN New Haven the other day, two Irishmen demanded $1.25 of a gentleman, for putting in some fuel. A colored man said he would do it for a dollar, and his services were accepted. Presently he re-entered the gentleman's office with his thumbs in the sleeve holes of his vest, and assumed a very well-satisfied air. The gentleman, thinking something was wrong, asked, "What is the matter?" He replied, with a grin, "I have hired the two Irishmen to carry up the wood for fifty cents, and retain fifty cents myself for bossing the job." And such was the fact, for the gentleman went out and saw for himself the two Milesians obeying the orders of their employer with alacrity.

A LITTLE GIRL in Pennsylvania was lately reproved for playing out doors with boys, and informed that, being seven years old, "she was too big for that now." But with all imaginable innocence, she replied: "Why, grandma, the bigger we grow, the better we like 'em." Grandma took time to think of the matter.

"PRAY sir," said a judge, angrily, to a blunt old Quaker, from whom no direct answer could be obtained, "Do you know what we sit here for?" "Yes, verily, I do," said the Quaker, "three of you for four dollars each day, and the fat one in the middle for four thousand a year."

AN Irish emigrant, hearing the sunset gun at Portsmouth, asked a sailor, "What's that?" "Why, that's sunset," was the reply. "Sunset?" exclaimed Pat: "and does the sun go down in this country with such a bang as that?"

THEODORE HOOK once said to a man at whose table a publisher got very drunk. "Why, you appear to have emptied your wine cellar into a bookseller."

Young People's Page.

TALK WITH THE YOUNG FOLKS.

WRITTEN FOR THE AMERICAN FARMER, BY C. N. BEMENT.

We have a little story to tell our young folks, which occurred in our youthful days, in the early part of the present century. When we were just old enough to be mischievous, we were beset by a parcel of our school companions, to go and pilfer the parson's pears. Down by the side of the brook that flowed back of the parson's house was a beautiful meadow, in the midst of which stood a pear tree. It was large, hung full, and they were of a most delicious flavor—real Bergamotts.

Whether we were afraid of a flogging—respect for the parson, (for in those days children were brought up to respect the pious,) prevented me, or whether I was deterred by the recollection of my bad luck in pilfering melons, I can't remember; but I told them decidedly, I would have nothing to do with the matter, and did all we could in our power to dissuade the others from their enterprise.

We don't know how, but it so happened that my honesty got to the parson's ears, and one Saturday afternoon, I received an invitation to go and see him. Away I went, conscious that I had done no wrong. How light beats the heart of innocence! The good man met me at the door: "Caleb," said he, taking my hand, "I have heard that you refused to join in pilfering my pears. Now, I mean to convince you that honesty is the best policy." "Here," added he, placing a large basket of the finest fruit before me: "Eat what you please, and take as many with you as you can carry." I felt that moment happier than ever Napoleon did with empires at his feet. And the circumstance led me to remark in early life the consequence of an adherence to the maxim, "Honesty is the best policy."

"Be honest, and 'tis clear as light,
You'l make by far more money by it,
The profits got by cheating,
Are very few and fleeting,
Experience proves the adage true;
Then never loose it from your view."

We have another story to tell our young readers of a little hero, every word of it is true. A hero is a brave man—a man full of spirit, zeal and courage to do right, to tell the truth, even if it is against himself, to be honest when he could make money by cheating; to be true when he is tempted to be false—is a hero.

Johnny Moor found a pocket book on the street in New York. It was full of money. He soon met a man hastening on in a sort of frantic manner and speed, looking anxiously ahead. Johnny thought to himself that man has lost something, and so he asked him, "Have you lost anything sir, ?" "Yes, my pocket book; have you seen it?" was the quick reply. "I reckon," said Johnny. "What kind of one was it?" The man described it. They went into a store near by. The stranger described accurately the pocket book and the money in it. All was dear to Johnny. He gave up the book with pleasure to its owner, though it contained $1,500. And the generous stranger took the honest little boy to a tailor's shop and dressed him up in a fine new suit, bought and gave him a silver watch and a beautiful portmonie for his poor mother who had taught him to be so honest, into which he put a hundred dollars in gold. A noble little hero is Johnny Moor.

To this good example for boys we would add another, though not of the same order, that came under our notice a few years ago.

A young man in his teens, the son of a moderate farmer, made a practice of reading all his odd moments, snatching scraps of time, morning, evening, noon, rainy days, &c. He always had a book on hand and read a page, a half page, a few lines or words at every moment to be spared from his work. He was equally industrious at his work and his reading. At the age of twenty-one he was well stored with useful information for one of his scant opportunities. But he was not satisfied. When he left his father's farm he made his way to school to the nearest academy with less than ten dollars in his pocket. For seven years he pursued his studies with unabated zeal, working and teaching by turns to meet his expenses, at the end of which time he entered a profession, well booked and well-clad, with three hundred dollars at interest. His success has been just such as industry, economy, calculation, foresight, patience; in a word, all the requisites to make a man of the first order. He not only knows how to make money, and take care of it, and use it, but he is on the pursuit of knowledge. He is at his school every day. He is doubtless as industrious in his studies as in his business. With his studious and industrious habits he can scarcely fail to make his way in life, and act well his part. He has made his mark in the world. Almost every boy may be equally successful, if he will be equally industrious, frugal and faithful in the pursuit of equally honorable aims.

There, my young friends, is an example for you. Go and do likewise.

PICKING UP THOUGHTS.—Boys, you have heard of blacksmiths who have become mayors and magistrates of towns and cities, and men of great wealth and influence. What was the secret of their success? Why, because they picked up nails and pins in the street, and carried them home in the pockets of their waistcoats. Now you must pick up thoughts in the same way, and fill your minds with them, and they will grow into other thoughts; and you will find them strewed everywhere in your path.

THE HOARY HEAD.—"The hoary head," says Solomon, "is a crown of glory, when it is found in the way of righteousness." But "Young America" talks flippantly to his boon companions about "the old man," or "the governor," as a troublesome spy upon his actions, or at best an incumberance, to be tolerated only as long as he will "shell out" liberally. Is this to "honor thy father" ?

CULTIVATE your heart aright.

Editor's Table.

Liberal Offer.

To ANY one who will send us seventy-five subscribers, at one dollar each, or one hundred and twenty-five at 75 cents each, we will send one of the Franklin Sewing Machines, worth $30.00, per Express. This is a liberal offer, who will be the first to take one? Send on the names as fast as you get them. They need not be all sent to one Post Office, as we send to any address; nor need they be sent in all at once. In remitting send a draft on New York or Post Office order.

WE are desirous of extending the circulation of THE FARMER, and we feel confident from the numerous letters we have recently received expressing kind feelings from our numerous friends and readers, that they are disposed to make an earnest effort to increase our subscription list. We want a club raised at every post office to which we now send single copies of the paper. If you cannot attend to this matter yourself, speak to some neighbor who will do so, and furnish them the names of those persons you think would take the paper.

The club price is so small that all can afford to take it. THE AMERICAN FARMER is the cheapest agricultural paper in the country. It is "the farmer's own paper," contributed to by practical experienced farmers, and any one number is worth more than the year's subscription. THE AMERICAN FARMER is young and vigorous as well as prosperous and hopeful, and in our complete new dress, which is no holiday attire, but one specially adapted to earnest work, we feel assured none of our readers will be ashamed to show the paper to their friends and neighbors, and ask them to subscribe. Ask them to help and sustain the cheapest agricultural and horticultural journal in the world.

There is yet abundance of time to extend its usefulness. We can always supply back numbers, which are full of good things, and are just as good now as on the day they were published. We ask all our subscribers to act as agents and forward on one or more names as often as they can. We send the paper to any address. Let all try and forward as many names as they can. Let us have at least *five thousand* more subscribers before the end of the first half volume.

We should feel obliged if our correspondents would forward their communications on or before the 12th of the preceding month, as it is necessary that THE FARMER should go to press by the 20th or 21st, in order that subscribers at a distance may receive their papers by the 1st of the month. We have now, (Feb. 20th), subscribers in almost every State, and in order to reach them we must go to press by that date at latest.

ANY person sending us ten cents for a sample copy, or twenty-five cents for the first three numbers can deduct this amount on subscribing for a year. Please state this fact when writing.

New York State Agricultural Society.

THE annual meeting of this Society took place at Albany, on the 14th of February, the President Hon. T. C. Peters in the Chair. The Treasurer's report showed a favorable state of the finances of the Society.

The Secretary reviewed in the report of the Executive Committee the proceedings of the past year. The reports were accepted, after which the following officers were chosen for 1866:

President—J. Stanton Gould, of Columbia county; Vice Presidents—T. H. Faile, Jr., New York; Samuel Thorne, Washington Hollow; A. Thayer, Jr., Rensselaer; G. A. T. Van Horn, Montgomery; James Geddes, Onondaga; J. McGraw, Tompkins; H. T. E. Foster, Seneca; H. S. Huntley, Chatauqua; Corresponding Secretary—B. P. Johnson, Albany; Recording Secretary—Erastus Corning, Jr.; Treasurer—L. H. Tucker; Executive Committee—G. H. Brown, Dutchess; J. T. Williams, Chatauqua; H. N. Dwight, Cayuga; Solon Robinson, New York; C. J. Hayes, Otsego.

The location for holding the next Annual Fair was left to the Executive Committee, which meets again on the 29th inst. The committee on the Cattle Plague recommended the most careful watchfulness on the part of all cattle owners, and requested that the appearance of any unusual manifestation of disease in their cattle be reported to B. P. Johnson, Corresponding Secretary, Albany, N. Y.

Applications were received from Auburn and Utica in reference to the location of the Fair, which were laid over for consideration on the 29th inst.

THE Cheese Makers' Association, of New York held, their annual meeting at Utica, Jan. 10th and 11th. Six States and the Canadas were represented. The title of the Society was changed to that of American Cheese Makers' Association. Officers: W. W. Comstock, President, Utica; Hon. George Williams, who was elected Treasurer and Secretary, and declined, and Gardner B. Weeks, of Verona, Oneida county, was elected.

NEXT month we hope to introduce a new and very respected friend to the readers of the *Farmer* under the cognomen of "Bueno," who will write for our columns, and we can guarantee our readers a rich treat, and feel assured that they will derive much benefit from anything he may say.

OUR liberal offer to every subscriber, is still open, and we shall be pleased to send the engraving to any address. All subscribers, in clubs at 80 cents each, are entitled to the engraving, and if any miss in the mails, we shall be pleased to replace them.

THE AMERICAN POMOLOGICAL SOCIETY will hold its annual meeting at St. Louis, Missouri, on the 4th of September—M. P. Wilder, President.

THE Vermont State Agricultural Society will hold its next annual meeting, September 11-14.

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

THE GROWING IMPORTANCE OF THE SORGHUM PLANT.

Mons. Martigny little thought, when he was introducing this saccharine plant into France, from North China, that it was in the hotter and more congenial summers of the United States, where this plant was to find a more perfect acclimation. Sorghum, like its cognate cereal, Indian corn, delights in a rich, warm soil, and a hot sun. The seeds being so much smaller than the grain of corn, they vegetate slowly and send up very slender plants, which progress very slowly at first, but after they get a good stand, they will grow as fast as Indian corn under the same culture. The summers in France have been found to be too cool for the successful growth of sorghum. The *Bulletin d' Acclimitation* says that it has only succeeded well in the extreme south, in the neighborhood of Toulon, on the borders of the Mediterranean. The climate of North China is more like that of the United States in summer, than it is like that of France. At Pekin, in latitude 40°, the mean temperature of the warmest month of summer is 84.35, while in no part of France is the mean temperature of any month above 74. Yet the mean of winter at Pekin, is 20° lower than that of Marseilles, four degrees farther north. Hence it may be said emphatically, that wherever the maximum yield of Indian corn can be obtained, of the large Dent variety, there also may be grown the largest and most perfect crops of sorghum saccharatum; in a cooler region and in a shorter season this plant may be successfully grown in a rich warm soil, but its seeds will rarely ripen. Sown in drills as a forage plant, I have found it as profitable as Indian corn grown in the same way, and the large stalks of sorghum when cut up in pieces, are much more eagerly devoured by bovines than the stalks of Indian corn. A great many patches of sorghum have been grown the past season by farmers in Cayuga county, and several crushing mills and evaporators there have been making sirup from the same during the late fall months, and I am told that every farmer is much pleased with the experiment of thus making his own sweetening.

THE VALUE OF STRAW AS WINTER FOOD FOR STOCK.

Strange as it may seem, while early cut, well cured hay with all its gluten intact, is only called a flesh farmer, the dryest of straw which contains sixty per cent of woody fiber, is called a fat farmer; because on analysis this woody fiber is found to be identical with starch. And there is no doubt but that this woody fiber which can be decomposed in dilute acids, may be also made assimilable by fine chaffing and steaming, and then fed with meal or roots—either of which cannot fail to aid the ultimate digestion of the carbonaceous straw. But straw performs yet another important office in supporting animal heat in cold weather. Although no animal should be kept so hungry as to eat straw alone in warm weather, yet when the mercury falls near the freezing point and below, an additional ration of straw will save so much hay, as it answers the same purpose in supporting heat and respiration. But chemistry may well call straw a fat farmer, as when liberally fed with meal, it makes the animal fat and lazy; while it takes nitrogenous hay and oats to give the muscular strength that supports animal life and activity.

CLOVER HAY—ITS TRUE OFFICE.

One great reason why clover hay is in such disrepute, is owing to its being cut too late, after its blossoms have dried up, and the sap of the hay has changed to woody fiber; even if well cured, such hay instead of being fine and flexile, light colored and fragrant; it is only a black and brittle mass of dead blossoms and wasting stalks, not much more nutritious than good straw. No animal can be kept on such hay without daily rations of meal, roots, &c. I keep a cow the year round on clover hay, cut early and cured in small cocks; such hay retains its aroma a long time in the barn. I feed with it during summer and fall, stalks, and other green food, and oats and wheat shorts in winter and spring. Keeping a cow stalled through the summer, not only saves a great deal of composted manure, but also the expense of pasturing with its never-failing drawback of drouth and short feed, to say nothing about the flies, and the trouble of driving her to and from pasture.

Clover hay cut in full blossom and well cured in the cock, is worth more per ton than the average of timothy hay, which is generally cut too late. *The New England Farmer* tells us that John Day, of Boxford, who feeds large quantities of red clover to milch cows, finds that when his clover is used up, and he feeds timothy and red top, his twenty cows immediately shrank two cans of milk per day! Yet it is true that early cut timothy with its seed intact, contains more nutriment than clover hay; but the clover being more immediately assimilable produced more milk. Another great advantage of clover is, that it is a leguminous plant which draws much more of its nutriment from the atmosphere, than any of the cereal grasses. Clover also, by the aid of its long top root draws moisture from the subsoil, which enables the plant to grow in a drouth that would materially shorten a crop of timothy and red top. This large tap root also remains in the soil to enrich it, when plowed under for an alternating crop.

POULTRY MANURE.

In the January Farmer is Vanquelin's estimate of the quantity of azote (nitrogen) in the best sifted

guano, and in poultry dung. He may be right as to the poultry manure, 83 parts in 1,000; but the guano he refers to, must be from the rainy regions where its nitrogen has been exhausted. Repeated analysis of Peruvian guano, from the rainless regions of the Chincha Islands, instead of 53 parts nitrogen to the 1,000, it contains 160 parts, and some of it even more than this.

The reason why well saved poultry dung under cover, is not as nitrogenous as guano that has never been rained upon, is that the guano is made from the flesh of fish and molusca, while poultry dung is made from vegetable food principally. But allowing poultry manure to be only one third as rich in azote as Peruvian guano, it is much richer in alkaline salts, and is worth at least ten times its weight in ordinary stall manure, which also contains much potash in proportion to its bulk.

OUR EASTERN LETTER--No. 2.

WRITTEN FOR THE AMERICAN FARMER, BY G. E. BRACKETT, BELFAST, MAINE.

THE WEATHER during the past month has not shown any phases or variations specially worthy of mention. The coldest was on the morning of February 7th, when the mercury fell to 14° below zero. We have good sleighing with a foot of snow on the ground and somewhat drifted. Our greatest inconvenience this winter has been a lack of water, in fact we are now having a winter drouth. Most of the streams are low or frozen solid, and nearly all mills and manufactories requiring water power have suspended operations. Many wells are also dry and water is scarce for cattle and domestic purposes, so that in some cases melted snow is used. The barometer has ranged the highest the past month it has for years. On the 8th of January it rose to the maximum, 30.25 inches. On the 1st of February it stood at 28.90 inches, and on the 7th at 30.15 inches.

LATER.—Since writing the above we have had a general thaw with a rainstorm on the 11th and 12th of February. The snow is nearly all gone, sleighing spoiled and wells and streams filled with water sufficient for all purposes.

MARKETS.—The market for farm produce is dull and prices lower than for some time. Potatoes are bringing only 45 cents; hay, $8.00 and $10.00. A large amount of hay, pressed in bales, will be "summered over," and thrown into next year's market. Potatoes being perishable must be sold before another season, at whatever loss to the grower. Stock still continues at fair rates. Nearly all that class of cattle quoted in Brighton market as "stores," consisting principally of working oxen, come from Maine. They vary in price from $125.00 to $300.00 and upward a pair, according to their age, size, &c.

THE COMMISSIONER OF AGRICULTURE—Mr. Commissioner Newton, seems to be the cause of a great deal of complaint from agricultural papers and associations throughout the country, and if one-half which is charged against him is true, he is evidently not the right man in the right place. The latest movement in this direction was made by the Maine Board of Agriculture, which instructed their Secretary to call the attention of our members in Congress to the need of his removal from office, if the charges against him are well founded.*

UNITED STATES AGRICULTURAL SOCIETY.—This association met in Washington last month, and elected officers for the current year, and we are glad to learn, as we do from the published reports, that some one is attempting to infuse a little vitality into the concern, as some talk was had of holding an exhibition next year. Why not this? But better late than never.

STATE AGRICULTURAL SOCIETY.—The State Societies in New England are mostly in a dormant condition. They still retain their organizations and elect their officers annually, and that is about all. We believe Vermont was the only one that held an exhibition last year. New Hampshire proposes to hold one next year. It is quite likely that they will all be absorbed by the New England Agricultural Society before many years, and an annual exhibition be held in the different States alternately. It will probably be held in Connecticut next autumn, in compliance with an invitation from the State society. The Maine State Society are taking into consideration the question as to whether they shall hold a fair next fall. The recently elected officers are Seward Dile, President; S. L. Boardman, Secretary; W. S. Badger, Treasurer.

MAINE INDUSTRIAL COLLEGE.—The trustees have decided to locate on a farm in Orono, near Bangor, and it is expected measures will be taken towards putting it into operation by next spring. It will be a separate and independent institution.

MAINE BOARD OF AGRICULTURE.—This association assembled in Augusta on the 17th of January, and continued in session fourteen days. The officers were: President—John F. Anderson; Secretary—S. L. Goodale. Reports and discussions were given on various agricultural subjects. A report and resolve was accepted and passed, recommending the Legislature to appoint a State Entomologist. A resolution was passed calling upon the Governor to take immediate action in regard to measures preventing the introduction of the cattle disease into the State from the adjoining British Provinces.

* We would suggest that as there are "only *two* men specially educated for this profession," in this country—one of *them* should be appointed to this office!!—ED.

Notes on the Weather, from Jan. 15, to Feb. 15th, 1866, inclusive.

THE first half of January was cold; the last half was very near the average of 30 years; or, as 25.4° to 25.0°. The mean of the month would be lower, and was 21.7°, the general average being 25.2°. The coldest morning of the last half was 7°, and the hottest morning, 51°. The coldest noon, 16°; the hottest noon, 41°; the coldest day, 11.6°, and the hottest day, 38.7° The water fallen in the month, was 1.48 inches. The sleighing in the month was little and poor, extending only a few miles south; but the wheeling was good. The weather was rather pleasant, and the surface of the earth was scarcely free from ice.

February began with three cool days, and after three days more, the weather was rather warm, to the 15th. The coldest morning was 3° on the 5th; hottest morning, 37°, on the 11th; coldest noon, 13°, on the 5th; and hottest noon 45°, on the 10th. The coldest day was 9.7°, on the 5th; and the hottest day, 39.3°, on the 10th. The mean heat of this half was 24.2°, and the general average, 24.1°, for 30 years. In 1865, the mean of this half was 19.9°, or 4° colder; in 1864, was 30.3°, or 6° warmer. Snow and rain on the 10th, and on the 11th more rain, which melted more snow, and proved very acceptable in some empty cisterns. The weather was colder on the 12th, and on the ice and little snow, sleighs moved till the warmth of the 13th and 14th, the sleighing was gone. The water fallen in this month has been moderate. On the whole, the fortnight has been much enjoyed as being rather warm and pleasant.

The fall of rain has been great in States at the South, and much damage has been done on some streams. The earth has continued frozen, a fact favorable to wheat and all plants whose roots suffer from thawing and freezing again.

The American Farmer in Canada.

As long as the premium on gold continues, we shall send THE AMERICAN FARMER to our Canadian subscribers at 60 cents each in clubs of five or more, or single subscriptions at seventy-five cents.

If American money is sent, our terms will be one dollar a year, or seventy-five cents in clubs. We prepay the American postage on all papers sent to Canada or any of the British Provinces.

TO ADVERTISERS.—All advertisements should be received on or before the 20th of the month to insure insertion in the following month.

STITCH your paper before cutting, and you will find it a great deal more convenient to handle. We hope all our subscribers will keep their papers on file, so that at the end of the year they will have a nice volume to bind. Any numbers that miss or get damaged in the mails we shall be pleased to replace at any time, as we desire all our readers to have the entire volume complete.

Department of Agriculture.

The following resolutions were adopted unanimously by the Ohio Pomological Society, which has just closed its session in Cleveland.

Resolved, That we feel deeply interested in the great department of Agriculture connected with our Federal government; that we desire its entire success, and believe it destined to contribute immensely to the advancement of agriculture in the country; that we earnestly entreat the President of the United States to appoint a competent man to be the head of the Department of Agriculture, the incompetency of the present incumbent being a source of general remark and complaint from the intelligent agriculturists of all parts of our extended country.

Resolved, That in the opinion of this convention, a change in the head of the agricultural department is imperatively needed for the best interests of the producing classes of the country, and the President of the United States is most respectfully petitioned to listen to the complaints embodied in the foregoing resolution.

The Indiana State Board of Agriculture, at its January meeting, adopted the following:

Whereas, it is a notorious fact that the present Commissioner of Agriculture has totally failed to satisfy the just public expectation in the administration of the Agricultural Bureau; therefore,

Resolved, That in the opinion of this Board, the interests which the Bureau of Agriculture was intended to promote, would be materially benefited by the removal of Isaac Newton, and the appointment of some competent, educated and practical agriculturist in his stead.

The Indiana State Pomological Society, at its January meeting, unanimously adopted the following:

Whereas, The results of the labors of Isaac Newton, the present head of the Agricultural Bureau at Washington, have fallen short of the reasonable expectations of those whose interests he represents.

Resolved, That the views of this Society be presented to the President of the United States through our delegation in Congress, with the respectful request that a man better fitted be appointed for the place.

Inquiries and Answers.

SEVERAL QUESTIONS.—We are starting anew, and I desire to learn the art of making a few acres with few laborers, pay as well as large farms and many workmen. In the first place I want seed corn that is the most prolific you have planted on rich land, and which will ripen in the shortest time. I presume you have varieties that ripen in ninety days. I think by getting such seed, I can raise in our climate on rich land, two crops of corn in a season.

I want to plant some broom corn, say ten acres. How much seed do I require? I have some little acquaintances with its cultivation and manner of saving it. What is the seed worth, and what is brush worth now?—A. L., *Littleton, N. C.*

THE Ohio Dent is the most *prolific* on rich soil, but requires a long season to mature in.

King Philip, Improved, will ripen in ninety days, and is quite prolific.

J. E. R—Columbia county, O. Your letter was not received.

FISH RAISING.—*Messrs. Eds.:* I am anxious to commence fish raising on my farm. There are three small brooks that come in nearly together, and run under the railroad, in which I have caught lots of trout when a boy. Can I get the desired information through THE FARMER, as to how deep the pond must be. Must the top of the ground be removed as far as the pond extends, to make and keep the water pure? Will pickerel live and do well in artificial ponds? Will they

multiply faster than trout? Will it answer to let surface water run into a pickerel pond, or a trout pond? Will it not be a good plan to have the ponds shaded as much as possible? Can pickerel be raised artificially, the same as trout? I can have three ponds, all within forty rods, fed by nice spring water. Will some of your subscribers be good enough to give me some information about fish raising, and answer the above questions?—J. W., *Taylorsville, N. Y.*

MESSRS. EDS.:—Can you, or some of the subscribers of THE FARMER, tell me where I can find some pure Hamburg fowls, or Golden Pheasants, as I should like to get some.—J. C., *York, Pa.*

"R. K. T." wishes to know where he can purchase a trio of good Bronze Turkeys, of large size.

If any of our readers have any of the above to dispose of, they would do well to advertise them in our columns.

W. R. P.—(Lattasville, O.)—Cannot solve your puzzle. If you can give us the answer, we shall be pleased to publish it. We cannot divide 9 into four odd numbers, but it "may be owing to a mathematical obtuseness with which we have to contend!"

Literary Notices.

THE LADIES'S FRIEND.

THE March number of this magazine is on our table. "The Impending Ruin," a fine and expressive steel engraving, illustrative of a story of the same name, leads off the number. The literary contents are excellent. We may specially note "The Impending Ruin;" A Song by Beatrice Colonna; "Victoria Regina," a story in which the heroine, a beautiful and refined young lady, becoming poor, seeks domestic service, and finds her reward in so doing; Poems by Florence Percy and August Bell. Price $2.50 a year; 2 copies, $4.00; 8 copies (and one gratis) $16. Address Deacon & Peterson, 319 Walnut street, Philadelphia.

BLACKWOOD'S EDINBURGH REVIEW. American edition. Volume LXII, No. 1. Leonard Scott & Co., Publishers. New York.

Terms for Blackwood, or any of the four reviews, $4.00 a year. Blackwood and any one review, $7.00. The four Reviews $12.00; Blackwood and the four Reviews, $15.00.

Blackwood is unusually attractive at this time for its serial articles by distinguished writers of fiction, and for the account of our late civil war, now being written by Colonel Von Borke, a German officer, chief-of-staff to General J. E. B. Stuart, of the Confederate army.

CANARY BIRDS. A Manual of Useful and Practical Information for Bird Keepers. New York: William Wood & Co., 61 Walker street, New York.

This is an interesting little book for bird fanciers, containing information in regard to feed, breeding, diseases, &c., &c. Address as above.

FACTS ABOUT PEAT, as an article of Fuel. Compiled by T. H. Leavitt. Published by Leavitt & Hunnerwell, Boston, Mass.

A copy of the second edition of this interesting work is received and contains much new and important information. Price $1.00. Address the publishers.

We notice that no mention is made of an important peat bed at Pekin, Niagara county, New York, belonging to the Niagara Peat Company, of Rochester, N. Y.

GODEY'S LADIES' BOOK FOR MARCH. Louis A. Godey Philadelphia.

THIS is a splendid number, and is liberally supplied with fashion plates, patterns, for fancy work and embroidery. The engravings and fashion plates are beautifully got up. We notice that in this number they commence a new series of Drawing Lessons. "Rizpah's Idols," by Marion Harland, continues to increase in interest. Miss Frost furnishes an excellent story, and other well-known writers contribute to this valuable magazine.

For sale in this city by D. M. Dewey.

HARPER'S MONTHLY MAGAZINE. Published by Harper & Bros., New York. Price $4.00 a year.

We regard this monthly as one of the best periodicals in America. The number for March is before us. It is filled with valuable articles. "In and around Richmond," "Sand Martins," "The Burrowers at Home," "Aunt Esther's Story," &c., &c. The work is beautifully got up, well printed, and its contents unsurpassed. It is well worth the price and every family should have a copy.

CATALOUES, &c., RECEIVED:

Ellwanger & Barry's, No. 1—descriptive catalogue of fruits, well illustrated with different kinds of fruit trees and small fruits. No. 2—descriptive catalogue of ornamental trees and shrubs, roses, flowering plants, &c. Illustrated. No. 4—wholesale catalogue of trade list of fruit and ornamental trees, &c., for the spring of 1866.

"Vick's Illustrated Catalogue and Floral Guide for the Flower Garden," contains an accurate description of the leading floral treasures of the world, with plain and full directions for sowing seed, transplanting, &c. Illustrated with numerous engravings. Also choice seeds for the vegetable garden. It is invaluable to all lovers of flower and vegetable culture, and should be in the hands of every farmer. Sent free of postage for 10 cents. Address James Vick, Rochester, N. Y.

We have received a Pamphlet from C. H. Gardner, New York Agent of the Boston Milling and Manufacturing Company, on "Flour of Unburned Bone." Also a sample of their Flour of Bone, which, from its remarkable and uniform fineness must prove a valuable fertilizer. It is highly spoken of by those who have used it, and the testimonials from our leading men are of the highest character. This pamphlet contains analysis, testimonials and directions for use, and is sent free of charge to all applicants, and we would advise our readers to send for a copy and read for themselves. Since writing the above we have received advertisements and handbill advertisement of Briggs & Bro., who have the exclusive sale of the Bone Flour in Western New York and Canada West. The Company could not have placed this agency in better hands than Briggs & Bro. They have become widely and favorably known to farmers through their extensive business as seedsmen.

From A. M. Purdy—"Descriptive and Retail Catalogue of Small Fruits, &c.," for sale at the South Bend Nursery and Fruit Garden, South Bend, Ind., for the year 1866.

Our Exchanges.

MOORE'S RURAL NEW YORKER.

An agricultural, literary, and family newspaper, published by D. D. T. Moore, Rochester, N. Y., with an able corps of editors and contributors, published weekly. The *Rural* holds its place among the best weekly agricultural papers. Mr. Moore is untiring in his energy, and publishes a good weekly.

THE COUNTRY GENTLEMAN: A weekly journal of Agriculture and Horticulture. Published by Luther Tucker, Albany, N. Y.

Mr. Tucker is a pioneer publisher, having started the original *Genesee Farmer* in 1831, and *The Country Gentleman*, now edited and published by him, is one of our most valuable exchanges.

SATURDAY EVENING POST.

This old favorite of the public presents new attractions continually, maintaining a high position as a family and literary paper. The price of the *Post* is $2.50 a year. Address H. Peterson & Co., 319 Walnut street, Philadelphia.

THE RURAL AMERICAN.

A semi-monthly journal of agriculture and horticulture, published by T. B. Minor, at Clinton, N. Y. On the 1st of January it came out in a new form and style, and is much improved in appearance.

THE BOSTON CULTIVATOR.

A weekly journal of agriculture and horticulture, published by Otis Brewer, assisted by an able corps of assistants. It also contains several columns of original family and literary news.

MASSACHUSETTS PLOWMAN.

Published weekly at Boston, Mass., by Geo. Noyes.

THE MAINE FARMER.

Devoted to agriculture, literature and news, &c. Edited by N. T. True, J. A. Homan and S. L. Boardman. Published weekly by Homan & Badger, Augusta, Maine.

NEW ENGLAND FARMER.

A family newspaper for the farm, field, and fireside. Published every Saturday, by R. P. Eaton & Co., Boston, Mass.

THE MARYLAND FARMER.

A monthly magazine devoted to agriculture, horticulture, &c. Published by S. S. Mills & Co., Baltimore, Md.

SOUTHERN CULTIVATOR.

A practical and scientific newspaper, published monthly, by William N. White, at Athens, Ga.

THE NORTHERN FARMER.

Devoted to agriculture, science, &c. By E. H. Jones & Bro, editors and proprietors, at Fond du Lac, Wis. Published monthly.

THE NORTHWESTERN AGRICULTURIST.

A weekly paper on agriculture and stock raising, by Carpenter & Co., Chicago, Ill.

THE CANADA FARMER.

Is an excellent semi-monthly paper, and is well conducted. Published by George Brown, publisher and proprietor, Toronto, C. W.

THE OHIO CULTIVATOR.

A monthly journal for the farm. By S. D. Harris, Cleveland, O.

THE GERMANTOWN TELEGRAPH.

A miscellaneous, family, and agricultural paper published by P. R. Freas, at Germantown, Penn. The agricultural department is full of valuable information.

THE MIRROR & FARMER.

Published weekly, by John B. Clark, editor and proprietor, Manchester, N. H.

Cattle Disease.

THE London *Lancet* has published a letter which may enable England to arrest this terrible plague without violent legislation. Dr. Murchison believes, and the *Lancet* endorses the belief, that rinderpest is virulent small-pox, shows that all the symptoms are identical, suspects that herds which have had the cow pox are exempt, and suggests the vaccination of all cattle. The cause of the excessive mortality, so greatly exceeding the average among human subjects, is the thickness of the hide, which prevents the pustules appearing, and with the ignorance of veterinary surgeons, delayed the recognition of the disease.

The number of cases has now reached over 12,000 weekly. In Holland it is also increasing.

THE MARKETS.

ROCHESTER, Feb. 22, 1866.

FLOUR—White Wheat, $12@$13. Red, $10@$10.50. Extra State, $7.25@7.50.
GRAIN—White Wheat, $2.15@$2.40. Red do., $2.08@$2.12½.
CORN—55c.
BARLEY—80c.
OATS—40c.
RYE—75c.
PROVISIONS—Dressed hogs, $11.50@12.50. Butter, 30c@35. Eggs, 33c@35c. Chickens, 17c@20c. Turkeys, 20c@22c. Ducks, 15c. Lard, 18c@19c.

NEW YORK, Feb. 23.

FLOUR—Sales at $6.60@$7.30 for Superfine State. $7.15@7.70 for extra State. $7.65@$8 for choice State. $6.55@$7.30 for Superfine. Western, $7.35@8.10 for common to medium. Extra Western, $8.10@$8.50 for Extra Round Hoop Ohio. Canada flour dull at $7.50@8.15 for common; $8.20@$10.50 for good to choice Extra.
GRAIN—White Canada Wheat sold at $2.50; new amber State, $2.40; new No. 1 Milwaukee, $1.67. Rye, 78c@82c. Barley, 90c. Corn, 71c@73c. Oats, 38c@54.
PROVISIONS—Dressed hogs, 12¾c@13c. Pork, $28@$28.37 for new mess. Lard, 17c@18¼c. Butter, 22c@35c for Ohio. 32c @45 for State cheese; 16c@22c for common to prime.

CHICAGO, Feb. 23.

GRAIN—Wheat active, and advanced sales at $1.20¾@$1.51 for No. 1, and 78c@80c for No. 2. Corn dull.
PROVISIONS—Mess pork—sales at $26.50@26.75. Lard, 17¼ @17¾. Dressed hogs, $11@11.25.

BUFFALO, Feb. 23.

FLOUR—White Canada, $10; for common to ordinary spring, $7.75@8.25 for Red winter, 9@9.50.
GRAIN—Canada white, $2. No. 1 Milwaukee spring, $1.28@ $1.25 for No. 2. Chicago spring, $1.62. Corn, 62c@66c. Oats, 35 @46c. Barley, $1.03@$1.06 for Canada, and 95c@98c for State. Rye, 80c. Peas, 85c@90. Beans held at $1.00@$1.50.
PROVISIONS—Dressed hogs, $11.30@$11.50.

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VINEYARDISTS, ORCHARDISTS, FLORISTS,

NURSERYMEN, SMALL FRUIT, AND STOCK GROWERS.

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Feb-12m.

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and either of the above books to every Agent who will send us **Ten Subscribers,** at our lowest club rates of Seventy-Five Cents each.

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Steel Engraving of Lieut. Gen. Grant,

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Engraving of President Lincoln, and also of Gen. Grant

to every Agent who will send us **Twenty-four Subscribers.**

Our object in offering the above liberal Premiums is to create a large circulation for THE AMERICAN FARMER, which we desire to introduce into every town and village in the country. We send the paper to any address. Additions to clubs can be made at any time.

Subscription money may be forwarded by mail, at my risk without being registered. Address,

JOHN TURNER,
Publisher and Proprietor,
American Farmer,
Rochester, N. Y.

CONTENTS OF THIS NUMBER.

STEREOTYPED BY JAMES LENNOX, 62 BUFFALO ST., ROCHESTER, N Y

VOLUME I. ROCHESTER, N. Y., APRIL, 1866. No. 4.

THE AMERICAN FARMER.

A MONTHLY JOURNAL OF

AGRICULTURE AND HORTICULTURE.

ILLUSTRATED WITH NUMEROUS ENGRAVINGS OF

Farm Buildings, Animals, Implements, Fruits, &c.

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JOHN TURNER,

Publisher and Proprietor, Rochester, N. Y.

RAISING CALVES.

WE propose to offer a few remarks upon a familiar subject, not with the expectation of teaching the readers of THE AMERICAN FARMER anything new in regard to the matter, but simply to tell how we are in the habit of doing it, and let us premise by saying that we have particular reference to economy and the "make it pay" principle, in our method of rearing, the object being to raise good animals, but not overgrown ones.

First, then, the calf. These we would have come in March—last of February is better, though the first half of April will do, but not later. Calves which come in June and July are not fit to raise for stock, unless one is willing and able to expend extra labor, cost and petting in raising them. Suppose your calf is dropped the first of April: let it remain with the cow only long enough to thoroughly clean out the udder. This is necessary in order to put natural operations in proper motion. Remove it to a pen, and "bring it up by hand," as the saying is. The first thing needed will be a trough. Make one of wood, four inches deep, and holding four or five quarts. Fasten this in one corner of the pen, or about the hight of the calf's breast, and turn in a quart or so of milk just drawn from the cow. Do not put any artificial teat in the trough, for that will learn them to suck, as the object is to learn them to drink. Turn in the warm milk, and putting the finger in the calf's mouth, place its nose to the trough and in contact with the milk. You will not probably succeed in making it drink the first morning, nor perhaps at night, at the next milking, nor even the next morning—but continue trying, using warm milk at each time, and at the end of two days at most, after much bleating, they will "take hold" and drink nicely. After that, there is no more trouble, except to turn the milk, &c., into the trough. They will sometimes drink at the first trial; if not, always at the second or third.

After they fairly commence drinking, give them a quart of warm "fore-milk" at each milking, and also two or three quarts of skim milk warmed, feeding a portion of the latter at noon. Continue the new milk until they are four weeks old, when they will commence eating hay, and the skimmed milk warmed, with a little flour or oatmeal mixed in, fed three times a day, will be sufficient. At eight weeks old, feed twice a day with the milk, giving plenty of nice hay, and by the first of June they will be ready to turn away to pasture. They should have been taught to drink water, which can be done leisurely, by giving it to them, or driving them to the watering trough a few times. They should be furnished from the time they are a week old with a lot of sweet, nice hay, as often as required, and by the time they are three months old, they will eat it like an ox, and will not forget it, but eat it again readily when they are housed in the fall, which is not always the case with a late calf. It is always well to give them a little milk or sour milk of some kind for a few days after they are turned to pasture; but they will generally refuse it at the end of a week or ten days.

Calves raised in this manner and weaned on hay, are of good size, and in fact at housing time in the fall, are worth about as much as small yearlings. They should be well fed the first winter, with good hay and an occasional feed of roots. If they are steers, they will be tough and hardy, and the boys can yoke and team them some; and if heifers they will be of good size, forward, and more likely to "come in" at two years old.

SPRING.

FARMERS, spring is upon us. Have you got all things ready? We will throw out a few suggestions to you, and the first is to sow some clover seed on that wheat field. This month is a good time to do it. Never mind if the snow is not gone. Spread it on the snow, and the latter will carry it below the surface of the ground when it melts. If you will add a bushel of plaster to the acre, you will receive great benefit therefrom. How about your fences, are they in good order? If not, go to work, at once, while the ground is too wet to plow, and straighten up and put them in order. Examine every board and nail. Are there any that are loose? Repair them, and each succeeding year, first thing in the spring, go over them in the same way. As soon as the ground begins to get dry, go over the meadows and pick off all the large stones so that the mower may not get broken. Rolling the field well now, will be a great help at mowing time, as the mower likes a nice, smooth surface. One stone left in the field, may cost you ten or fifteen dollars, and stop your work for a whole day. So you see you will lose time and money. On rainy days attend to your plows, reapers, and mowers, stables, pig pens, hen coops, and get all your tools in order. You can better spare the time now than a month or six weeks hence. Get all the seed you want ready at the house, or better still, have a room specially for this purpose, near the barn; and be sure and keep a strict account of what each costs, and your expenses for labor, and in the quiet winter evenings of next winter, compare your accounts and see how they stand. Shall it be profit or loss?

To those of our readers who are just commencing, the following essentials to profitable farming, taken from "Rural Affairs," will be found useful:

Buy no more land than there is capital enough to pay for, with one-third more surplus—for a small farm, free from debt, with plenty of means to stock it, enrich it, and carry on its work, will yield more than a larger one, encumbered with debt, conducted feebly in every part, with bad fences, poor implements bony animals, weedy fields, and thin crops.

Lay out the fields in best order—so as to admit a systematic rotation, and to give ready access to every field at all times without passing through other fields.

Provide good fences and necessary gates—and valuable time will not be lost in driving out intruding animals, nor crops lost by their depredations.

Furnish good farm buildings, to secure properly the crops, and to afford shelter to animals.

Select the best animals and the best implements that can be secured for a reasonable price.

Bring the soil into good condition by manuring and draining, and keep it so by a judicious rotation.

Effect a clear and systematic arrangement of all the work, so that there shall be no clashing or confusion.

Employ diligence and energy, and adopt careful management.

HARROWING WHEAT.

WRITTEN FOR THE AMERICAN FARMER, BY "R. H.," MUMFORD, N. Y.

HARROWING of wheat in the spring has not been much practiced by farmers in this country, while in England it is harrowed or hoed. If it is favorably practiced there, why will it not pay here? Some that have tested it here have given favorable reports. Some say it will give one-fourth more when it is well harrowed as early in the spring as the ground is dry, We have frequently done so and concluded that it well paid. Some object and say it is tearing the wheat too much. Where wheat is sown with the drill, very few plants will be destroyed, if it is harrowed lengthwise of the drills. If the wheat is sown broad cast, very few plants will be drawn from the ground.

Another advantage in harrowing is that the clover seed will take much better. The way we have pursued is to take a thirty-tooth square harrow, not a heavy one. Go over the field, on common mellow soil, once and a half lap of the harrow. If it is a clay loam soil, give a whole lap of the harrow. In so doing, the ground must be well broken, and in a few days the wheat will show where the harrow has been. If harrowing will give one bushel more to the acre, it will well pay for the time. If any one doubts the advantage of harrowing wheat, let them harrow in one or more acres, and set off the same amount not harrowed, and when he comes to harvest and thresh the two lots he will find it has well paid for the harrowing; and he will find his clover to more than pay. We, as farmers, go on the guess principle too much, and are willing to do as our neighbors are doing. We want more tests to see which is the best. If one plowing is better than three, then something is saved. To come at the fact of the matter, two plots of ground in the same condition should be selected and fairly tested, and the results given. If so done, we should have facts to govern us, instead of mere guess work.

KEEP a record of your farm operations, of what you do each day; especially note the time you begin to plow, plant, &c., the early and late frosts, and of the ripening and harvesting of grain. Such a record may be pleasant to refer to in future years.

Keep your accounts. Be able to tell at the end of the year how much money you have received, how much you have paid out, and how you stand with the world.

THE INDIAN CETONIA.

Cetonia Indu.

THE accompanying cut is of the Indian Cetonia, a native of North America, and is one of the earliest beetles which the naturalist finds in the spring. They are generally found in the months of April and May, flying like bumble-bees, for short distances at a time, and alighting in the sand. Coming as they do so early in the spring, they are welcome messengers of a warmer temperature. We find the following reference to this insect in "The Life of North American Insects" :—

"Several years ago I made an excursion on the first day of May with a young gentleman from Germany, an enthusiastic amateur in Entomology and Natural History generally, like most of the students of the old country. All at once he stopped, bent down to the ground, and picked up one of these little Cetonias, and, holding it up in his hand, he exclaimed in ecstacy, as if addressing the dearest object of his heart :

> "'Der erste Tag im Monat May
> Ist mir der glucklichste von allen,
> Dich sah ich, und gestand dir frei
> Am ersten Tag im Monat May,
> Dass dir mein Herz gewogen sei.
> Hat mein Gestandniss dir gefallen,
> So ist der erste Tag im Monat May,
> Fur mich der glucklichste von allen.'

Which translated, reads : 'The first day of the month of May is the happiest day of all to me. 'Twas on that day I first beheld thee and my heart confessed me thine. If my confession pleases thee, then ever will the first day of the month of May be the happiest of all the days to me.'

"This little insect is about half an inch long, and feeds upon the pollen of the stamens of flowers—it sucks also the sap of trees, principally that of willows, and deposits its eggs at the side of roads, or in places where garden weeds are heaped up, and in decayed wood. Its larvæ feed on different kinds of roots. Reasoning from analogy with the nature of others or species of Cetonia, I should conclude that the larvæ of this beetle continue in that condition upward of three years before they become perfect beetles."

LARGE PIGS.—A subscriber in Iowa writes us that he killed two pigs, fourteen months old, that weighed nine hundred and ten pounds. And asks can any one beat that?

WEIGHT OF BUTTER.—Crocks or firkins of well worked packed butter contain about *nine pounds* for each gallon capacity.

GOETHE has well said: "Age makes us tolerant. I rarely see a fault which I myself did not commit."

AGRICULTURAL INDEPENDENCE.

WRITTEN FOR THE AMERICAN FARMER, BY "BUENO."

MESSRS. EDS.:—Have you seen in your life—have you heard reliably—of such a phenomenon as a *salt water* farmer? There are such human "What-is-its" extant—very rare animals though! Four in all these United States, that I happen to know: one of them, "Yours respectfully."

Now, sirs, what I want to begin to say first is, that if that new clipper agricultural craft of yours, continues to carry as taut sail, and hold her luff as bravely as she has done these three months past, there will be no lack of first-class agricultural, practical and scientific volunteers to fill every possible position on your quarter deck, where the duty required will be a speciality of any sort, and therefore I beg permission to ship as a sort of *amphibia*—an agricultural vidette, if you please; generalizing always, making a speciality of nothing, pitching in here and there, and any material pitched in that may not suit your craft, why, it is easily pitched overboard, you know; and there is no harm done.

It is masters of ships, usually—not forecastle jacks, that make speeches at getting under weigh. But the Javanese mariners have a practice of declaring their good intentions when they first join a ship. I have been in Java. You will understand, very likely. I have a fancy for putting in a plea just here in favor of

AGRICULTURAL INDEPENDENCE.

Shipmates of the rural regions—male and female! men, boys, women and girls! Has it never occurred to you that individually and collectively, WE, of the country yeomanry, are more dependent upon our fellow men than any other class of human beings in all this world? No. Then you do not look about you very widely or frequently. Why, the whole country is living by and to an unreasonable extent upon us; and while a very large proportion of our fellow men draw their very life-sap from us by a sort of parasitic process, as the misseltoe does from the oak, they at the same time hold us in bondage as absolute as ever was that of the Russian serf. And we—easy, good natured souls—kiss the rod and bless with our toil, the hand that smites us. Innocent lambs :—

> "Pleased to the last, he crops the flowery food,
> And licks the hand just raised to shed his blood."

Only we, being of longer suffering than the lamb victim, line with dollars during our life-time—the pockets of our tyrants; in death, leaving our children still a legacy to theirs.

It is the produce of our fields, the collective might of rural industry, that bisects, re-bisects and nets our country with iron roads, induces the building of canals, manufactories, steam and sailing vessels,

furnishing them all with labor, for the performance of which we pay them rates always unreasonable, and frequently outrageous. It is oftener at the expense of the producer than the consumer, that individual speculators and speculative corporations and combinations grow rich. Both are victimized, for the general tendency of all monopolies are very like those of a reciprocating two-edged blade, cutting both ways, but the farmer suffers most severely, for the reason that he is twice passed under the screws—first in the sale of the raw material, and secondly in buying back every manufactured fabric his necessities may require. Let us take as an example the article of wool. The farmer sells his wool in the fleece, say at sixty cents per pound. The material passes on an average always through three hands before it comes into that of the manufacturer, and after him through two more before it gets back into the country, in the shape of cloth, which the producer purchases, paying a profit to six different individuals, who are all living, and laying up incomes off of the producer.

Ah! that writing of wool and cloth reminds me that the farmer, in the way of cloths, may any day put on independence of wool buyers, brokers, manufacturers, and merchants, so far as that article is concerned, or step into a position so near independence, that five profits on the raw material shall be saved to himself, and the clothing necessities of himself and family be better served than he has ever had them from manufacturers and merchants.

With one of Mendenhall's recently invented, self-acting hand looms, occupying no more space than a grand piano, almost as ornamental, fifty times more useful, the farmer, farmer's wife, or daughter twelve years old, without an hour's education, and no more ingenuity than the turning of a grindstone requires, can sit comfortably down in dining room or parlor, and weave out independence at the rate of from fifteen to thirty-five yards of cloth per day, according to the quality of fabric produced. On the same warp, and with but two minutes required to make the change, a variety of fabrics may be woven, as plain cloths, jeans, ribbed stuffs, twilled, satinets, and kerseys. Thus a lady may commence and weave off a pattern of handsomer and better cloth for her husband—a pair of pantaloons—than can be purchased for more than double the cost at which she has produced it. Then a fine coat pattern—another quick change of treddle—and she achieves a few yards of beautiful jeans for Frank and Fred.; then the material for cloak or coat for herself or Fanny, handsome and good enough for any woman to wear, and wind up with a bright, brilliant Balmoral pattern, more beautiful and substantial than can be purchased at any store in the country, and at less than half the cost.

The achievement does not rest here by a long way, as the loom will afford us cotton goods, diaper, toweling, blankets, linen, sheeting, and shirting, and carpets, all better and infinitely cheaper than we can buy them.

That is the way my wife is weaving out independence, supplying every cloth fabric we require, at from seventy to one hundred per cent less cost than the same material of far inferior quality can be purchased for in this country.

Thus may all farmers, farmers' wives and daughters everywhere, weave out independence of all speculators and monopolizing manufacturers, descending nothing in dignity of social position, occupying all leisure hours, and beyond the home demand for cloth, putting dollars into their pockets equal to all the difference between their raw material and the store prices for manufactured fabrics.

When another step shall have been made towards domestic independence—when some clever inventor shall follow Mendenhall with an equally simple and efficient hand spinning jenny, (and they will do it very soon,) so that every woman and girl, from twelve years old and upward, in every rural home, shall be able to take the raw material in the rough, either wool, cotton, or flax, passing it by a process simple, pleasant and economical, into fabrics suited to their every requirement—then we shall be unconditionally free in this direction.

I have no knowledge of Mr. Mendenhall, other than that he is the inventor of a machine that in its combinations of simplicity, durability, compactness, cheapness and efficiency, is by far the best friend that farmers, and farmers' families, have ever had in this world. I am not an agent of any manufacturer or vendor of the domestic hand loom; but as an agent and advocate of universal rural independence, I shall advise so many farmers, and farmers' wives, as I can make hear me, to address A. B. Gates & Co., Philadelphia, for circulars, samples of cloth, and such other information as I have neither the inclination or ability to give.

That cloth and hand loom breeze has headed me off seven points or so from my original course; but if permitted by the commander of the young "AMERICAN," I shall continue to cruise in these home latitudes until I shall have traced out on our domestic charts several other courses and short cuts to agricultural and industrial independence.

THE majority consider science only when it is a means of subsistence. They worship error itself, so it but feeds them.

TO FIND out an error is easy; to discover truth is difficult. As error is on the surface, but truth lies deep.

PARSNEPS.

WRITTEN FOR THE AMERICAN FARMER, BY IDEN.

MESSRS. EDITORS:—Mr. J. H. Cortland has some very good remarks, in THE FARMER for February, page 60, in regard to growing and using parsneps, and asks, "why should not farmers pay more attention to it?" He also appears anxious to "draw out from farmers their ideas and experience in the matter."

In answer to this, I would say that I have raised more or less parsneps for fifteen or sixteen years. I first commenced growing them for table use, and upon finding that they were easily raised, and often very high in market in the spring, enough seed was sown to have a few bushels to sell. This led to sowing them in drills, like other root crops. By taking this course I soon learned that parsnips could be grown nearly as cheap as mangel-wurzel, or sugar beats; full as cheap, if not cheaper than any kind of turnips that are usually sown in rows like ruta bagas; and cheaper than carrots. This being the case, and having often seen parsneps recommended for feeding stock, particularly cows and hogs, I kept on gradually increasing the amount grown, and experimenting in feeding them, until I became satisfied that they had no very decided advantages over other root crops which made it more profitable to raise them. So now I only grow enough to be sure, and have plenty for my own use for the table; and to give my neighbors who do not grow parsnips. At the same time, if there are a few bushels left, they are always useful to feed. The results of my experience in growing, keeping, and feeding parsneps during this time may be given as follows:

Parsneps should have a good, rich, mellow soil, well prepared in the same manner as for other root crops. The distance apart of the rows should be the same as for turnips, or carrots. I prefer to have them at least two feet, and where farm help is scarce and high, and land comparatively cheap, I think it would pay to put them wider apart, say two and a quarter to two and a half feet. The roots will probably be larger, and by doing most of the work with a horse, costs less per bushel. They should be sown rather early; but not before the ground is dry and warm, and in good condition for the seed to grow, and come up before the weeds have much chance to get the start of the plants, as this saves not a little work at the first hoeing. They should be hoed as soon as they show the rough leaf, and if done before all the better. Parsneps have a larger, broader leaf than carrots; so it is much easier to see, and less work to hoe them the first time. If hoed out early, they will do a great deal better; while if left ten days to two weeks, it will be more work to hoe them the first time, than it will to do all the hoeing they need, if it is done in season. Being troubled very little with insects, they grow and come forward much faster than carrots or turnips, making less work to tend them when small, while they much sooner get the start of the weeds. They make a much more rank and vigorous growth, and much sooner and more completely cover the ground than most other roots; thus requiring very little attention after they have fairly got to growing, and the leaves cover the ground. I have generally grown the Long Dutch to feed, but for table use prefer the Hollow Crown.

As to harvesting, I find it more difficult to dig parsneps, than any other kind of roots. On my soil, which is a rich, sandy loam, they run down so deep, that it takes a strong spade and hard work, to get them out whole; that is, without breaking off and leaving a part in the ground. But, when once out of the ground they are very little trouble; as, unless the ground is very wet they come out clean. Late in the fall, or in the spring, there are not enough tops left to make much trouble. All not wanted to feed in the fall, or by the middle or last of December, should be left in the ground until spring, as they can be kept much cheaper and better in the ground than in any other way. While it is important, in order to feed them to the best advantage, if there is more than can be fed in the fall, or by the time mentioned, that the amount be so divided, that what is not fed in the fall, may be fed in a short time, say in four or five weeks in the spring. This I find necessary, because parsneps, on exposure to the air, wilt and dry up much worse than any other kind of roots, rendering them flat and insipid, and of much less value than when they were first dug. For this reason, but few bushels should be taken up at a time, when feeding in the fall; leaving the digging and storeing for winter, as late as it will answer. It is also best to dig but a few bushels at a time in the spring, until the ground has to be cleared for other crops—though if left too late, say some time in May, they may be injured by growing too much. It is best to have them all dug, and fed out by the first to the tenth of May.

My experience in feeding parsneps, though not conducted with sufficient care and minuteness to be deemed conclusive, has been of a character to show and lead to the following facts and conclusions. I find that horses, cattle and hogs all eat parsneps very readily. But, having generally seen them recommended for cows and hogs, and having usually found it more desirable to feed parsneps to them, they have generally had the most that I have raised. For feeding store hogs, I find them better than any other kind of roots. They eat parsneps without any preparation or cooking, and appear to do better than on any kind of turnips or beets. They also

eat them as well, and appear to grow faster when fed on them, than on carrots or potatoes.

Cows do well on parsneps, and there is no doubt that they increase the quantity of milk, and perhaps make it richer than it would be were the cows kept entirely on dry hay. But for making butter, when cows are kept on dry feed, I find there is a decided preference given to carrots in our small dairy department. For this reason, we usually try to have plenty of carrots to feed, when our cows are kept on dry feed, while making butter; while, as I have good corn land, I find it cheaper and more convenient to keep hogs on corn than on parsneps, or any other roots—consequently I have mostly given up growing parsneps to feed as before stated.

SHORT STORIES.

WRITTEN FOR THE AMERICAN FARMER, BY BELA DUNBAR, NORTH CHILI.

MESSRS. EDS.:—Farmers like short stories. May I tell some? Spring has come. Seize time by the forelock. Fences should now all be seen and reviewed, and put into good repair. Now is the time to graft apple and pear trees. Melt together half a pound of tallow, one pound of bees wax, and two pounds of rosin; work it in water into rolls, and you will have some first rate grafting wax. Now is the time to apply all of the fresh manure on to the land intended for planting, and the compost to the garden. Plowing heavy soils when wet, does more injury than if the team were standing idle. Barley and oats should be sown as early as possible, when the ground is in good condition. The crop will be heavier than late sown. Look very sharp to the seeds to be sown or planted, that no foul seed be used. Put a spoonful of spirits of turpentine in the cavity on the head of all the old cows and oxen, thereby preventing their having the horn distemper, or hollow horn. Now is the time to examine the pork and beef, and if it is not all sweet and right, make it so immediately. Now is the time to make the cellar clean and healthy, and avoid the cholera and other fatal diseases. Attend religious instruction regularly on Sundays, and have the children go to Sunday school. Seize time by the forelock. "The fear of the Lord is the beginning of wisdom."

NATIONAL WEALTH consists chiefly in the products of industry, which furnish food and clothing; and their distribution constitutes the world's commerce.

JOHN J. THOMAS estimates there are 120,000 miles of road fence in New York, 88,500,000 rods, costing as many dollars.

THE potato is a native of South America.

OUR NEW JERSEY LETTER.

WRITTEN FOR THE AMERICAN FARMER, BY W. J. THOMPSON.

By way of introduction, perhaps it might be as well to state in what part of this great country we are located. The township of Clark is in the southern part of Union county, New Jersey. Our land is gradually rolling and well watered with several pure and never-failing streams. The soil does not vary much in its character, which is mostly a sandy loam, well adapted to the raising of grain, fruit, and vegetables, of which I will speak at another time, though I must admit that there are some clay holes, which bear a strong resemblance in wet times to a mixture of glue and molasses; but by proper drainage and a good dose of lime—say one hundred bushels per acre—will produce very heavy crops of grass. Speaking of grass, let me remark, that where our soil possesses any degree of fertility, it takes possession with a foothold not easily eradicated, especially red top and white clover, which comes in natural as the timothy wears out, and makes a close thick sod, affording the best of pasture for dairying purposes, accompanied with the pure water we have been so bountifully supplied with by nature; but I am sorry to say that there is not one farmer out of ten that bestows the care and attention to that remunerative branch of farming that he should, for when butter averages fifty cents per pound, as it has done here for some time back, and two hundred pounds can be made from a good cow in a season, there is no denying that it is a paying business.

Our proportion of wood land is limited—scarcely enough for ordinary purposes, and no fencing material. That, we have to procure from the mountains, some five or six miles west of this place. Our mode of fencing is different from what is practised in some other States. Instead of the zigzag worm, we have a strait and neat post and rail, requiring one post and four rails to the panel, or every twelve feet. The rails are sharpened at each end, and inserted into the posts, which have mortises cut in them about ten inches apart. The posts are set two feet in the ground, which makes a fence four feet high; and if properly set, that is, the posts well fastened and rails drove up tight, is sufficiently strong enough to confine any animal, except it be extra breachy, and the sooner such a beast is disposed of, the more profit it will be to its owner and his neighbors. These fences will last on an average, thirty years, with occasionally straitening up, and one re-setting of new posts, one set of rails generally wearing out two sets of posts. The cost in the woods is twenty dollars per hundred, for posts, and sixteen dollars for rails, estimated to cost one dollar a panel when set. In my next, I will give you our system of rotation, and how we farm.

THE MYSTERY OF THE HONEY BEE SOLVED.

WRITTEN FOR THE AMERICAN FARMER, BY E. KIRBY.

THE Dariezon theory of the honey bee was established by the German apiarons, some twelve or fifteen years ago, after being fully debated by the most eminent German naturalists, and apiarons, in which Prof. Sebolt took a very active part in trying to ascertain the cause of the production of the drone. After making a due research he came to the conclusion that the drone was brought into existence without the influence of the male bee, leaving the production of the drone and queen in mystery. I propose to make the laws of the Author of nature plain respecting the reproduction of the queen and drone.

The theory herein set forth is based upon the laws of nature that govern honey bees, by careful experiments and closely observing the natural instinctive propensities of the honey bee. For many years I have become aware of the facts which are contained in the following theory, without first understanding some of the laws designed by the Author of nature in governing their various instinctive propensities and the singularity in the reproduction of their different forms or sexes of bees. The practical operation must be adapted to the wants of the honey bee at all seasons of the year, which is a proper subject of study for all who keep bees or contemplate keeping them. Without acquiring such knowledge of honey bees, no one should expect successfully and profitably to manage them. Some of the most eminent and scientific naturalists and entomologists, from the best natural evidence that they can obtain, say that a certain class of the lower order of animals and insects, the so-called females of which vivify their own progeny, or in other words, are natural and prolific hermaphrodite, of which the honey bee is of that class. See Dr. Dalton on Human Physiology, for 1864. Page 540-543—on hermaphrodite plants, insects, and animals.

The Creator has made all living things to possess organism. The life and organism are two distinct powers in nature, and it gives to bees just the organism their different forms require for the reproduction of their race, and for sustaining life.

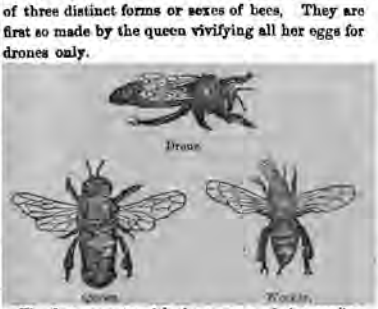
The queen bee possesses the male and female organs; or, in other words, is an hermaphrodite—consequently she can give life and organism for drones only.

The drone bee, from the best natural evidence, is believed to possess the power of transmitting organism only to the queen, by mating with her and transmitting to her spermatic the power of organism and not life, and the queen transmits the semen to the drone eggs, which changes them to workers, and that power is transmitted by the workers to the worker's larvæ, which changes the organism of the workers to queens.

The drone is not a fully organized male bee, and does not necessarily possess the power of giving life. That power is given to the queen only.

The evidence from nature is that the queen bee possesses the male and female organism, and vivifies all of her eggs for drones, and is fully qualified by the drone to give organism to her worker progeny, and the workers can transmit a similar substance to the workers' larvæ, which changes them again to queens. The reader will see the wisdom of the Author of nature in causing the workers to destroy the drones when they have no further use for them, as the drone can not give life to the progeny.

A colony of bees in the swarming season consists of three distinct forms or sexes of bees. They are first so made by the queen vivifying all her eggs for drones only.



The drones mate with the queen, and she receives organism from them in her spermatic. She is then able to change her drone eggs to workers only, and the workers change the workers' larvæ to queens only. The queen is larger, longer and handsomer, and has one more ring or section than the workers or drones, and she is not formed with suitable implements to do the ordinary work of the colony. The drone bee has no implements for work, and is longer and thicker than the worker, and possesses the ability of giving organism to the queen, and gives the same to change her drone eggs to workers, and the prolific worker is possessed with the ability of vivifying their own eggs that produce drones only, ordinarily in the absence of the queen, the natural condition of a colony of bees. The queen is the only fully qualified bee present that is capable of producing all the eggs a colony may require.

The queen vivifies all of her eggs for drones only, and when young flies to mate with the drone on the wing, and she receives from the drone the power of organism in her spermatic sufficient for life, to transmit to her full grown drone eggs, which changes their organism to workers only. The workers transmit that power to workers' larvæ, to give organism to queens only. It is possible that the drones leave

the power of organism in the hive where workers can obtain it, or the workers secrete it in their glands, and give it off through their gullet to workers' larvæ for queens.

The evidence is conclusive that the drone progeny of the queen is vivified by herself, which is shown by the virgin queen and prolific worker both possessing the male organs, for their drone progeny is identical with themselves.

The evidence is also that the queen has to mate with the drone in order to receive in her spermatic the power of organism to transmit to her drone eggs as they pass out, which changes them to workers, by which change they can be hybridized.

The evidence of the workers' larvæ being organized by the workers transmitting the organism left by the drones, is complete; or the workers' secrete it and give it off through their gullet, which changes the workers larvæ to queens, which is shown by the queen's becoming hybridized in their larvæ state.

REMARKS.—Since the above was received and put in type, we have heard with feelings of regret, and have the painful duty to record the death of our esteemed correspondent, E. Kirby, who died at his residence in Henrietta, on the 24th of February, aged 65 years. Mr. K. was a frequent correspondent of the old *Genesee Farmer*, and was one of the first to send in his contributions to THE AMERICAN FARMER. His articles have always been read with pleasure. "Bees" have been his study for many years. The above communication contains an entirely new theory to us, and one we had hoped would have been thoroughly discussed by him and others in our columns. Now that he is no more, we hope those who have anything to say on this subject, will let us hear from them, and follow up this new theory.

Calm has his path been, long his years,
Many his joys and few his tears;
And now the cycles of his years are run,
May heaven be his immortal home.

REPORT YOUR SUCCESS.—How much that is known by our successful farmers is never communicated. We see fields of richest grain, excellent cattle, good fences, &c.; farms that the mind singles out among inferior land, and is delighted at such prosperity, wondering how the improvement was brought about. Who has not such farms in his mind's eye? And yet those farms are unknown; only the neighbors are benefitted by the example. Here is valuable matter. Why not report the success—how it was brought about—so that others may get the benefit?

A SUBSCRIBER in Minnesota writes us that he only cultivates five acres of land, and has supported his family, and paid $1,118 for hired help last season. Who can beat this? We can only account for his success by the fact that he takes twelve or fourteen agricultural papers, and reads them!

RULES FOR THE MANAGEMENT OF COWS.

NEVER buy a cow of a dairyman, for if he is a good manager he will sell only his poor animals.

To determine which cows are best for keeping, try their milk separately, and weigh their butter—for sometimes a cow may give much milk and little butter, and *vice versa*.

Cows should run dry six weeks before calving—if milked closely toward calving, the calves will be poorer.

A cow newly come in should not drink cold water in cold weather, but moderately warm slop. Calves intended for raising should be taken from the cow within a few days, and they will be less liable to suck when old. Feed them first with new milk for a time, then skim milk, then sour milk, taking care that all the changes are gradual, by adding only a portion first; and gradually a little meal.

Calves well fed and taken care of, with a quart or two of meal daily in winter, will be double the size at two years they would have attained by common treatment.

Heifers thus treated may come in at two years old, and will be better than neglected animals at three, and one year of feeding saved.

Hearty eaters are desirable for cows, and they may usually be selected while calves. A dainty calf will be a dainty cow.

Heifers should become accustomed to be freely handled before calving, and drawing the teats.

They will then not be difficult to milk. Begin gradually, and never startle them.

In milking cows, divide the time as nearly as practicable between morning and evening, especially at time of early grass, that the udder may not suffer.

Persons who milk should keep the nails cut short; animals are sometimes hurt with sharp nails, and are unjustly charged with restlessness.

Old cows should be fatted at fifteen years. The dairyman, therefore, who has fifteen cows, should raise a heifer calf every year to supply the vacancy; if the herd is thirty cows he should raise two calves, and so forth.

Heifers dried up too early after calving, will always run dry about the same time in after years; therefore be careful to milk closely the first year, until about six weeks before calving.

Spring cows should come in while they are yet fed on hay, and before they are turned to grass, which will be more likely to prevent caked bag and milk fever.—*Annual Register.*

IT is said "that the learning of a woman is only a desperate substitute for a lost attraction."

RURAL COTTAGE HOMES.

MESSRS. EDS.: We give you in the accompanying sketch, a ground plan of a small story and a half cottage, which we expect to erect during the coming season, as a residence for our foreman. It is sent in response to your call for plans of cheap cottages. We do not expect the cost to exceed fifteen hundred dollars. It will probably be built of concrete.

It fronts south, with the bay-window looking east toward the village and public road. It will be observed that there are no doors on either the west side or north end, thereby saving much fuel during the winter.

The main building is (L,) living room, and (P,) pantry, which is twenty feet square, and nine clear on the first floor, with high eaves so as to get a good room or two up stairs. The roof is pitched at forty-five degrees. In the large space up stairs there are two windows—one in each end. The front one is placed over the space between the two lower front windows and is to be a double window. The other window will be in the back end, over the position marked (T,) but on account of the back roof can only consist of the upper half of a window. The back building containing (K,) kitchen, and (B,) bed-room, will be but seven and a half feet in the clear, with medium low eaves and a pitch of roof of twenty-five degrees. The direction of the comb of the roofs of front and back building is the same north and south.

The back building is twelve by twenty feet, making the entire gable fronting portion twenty by thirty-two feet.

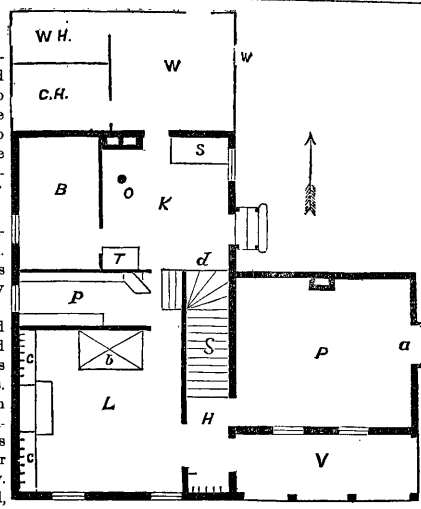
The side building, (P,) parlor, is sixteen by fourteen and a half feet. Gable to the east. The arrangement of the upper story will readily suggest itself to those conversant with such matters.

The cellar is to be under the main building.

FOSTER & CLARK.

West Newton, Westmoreland county, Pa.

We present the above plan of a cottage residence, which we have received in response to our request in the February number, and hope to continue them from time to time. They should not be looked upon as perfect models of rural dwellings, but we think that they will be a great help to those who intend building. There are thousands of working men and farmers in this country who desire to give beauty and interest to their simple cottages, and we repeat that we shall be pleased to receive designs and will get the same engraved, of style and ground plans of neat, simple residences, in order to encourage a love for taste and ornament, and to give an air of some dignity to even the smallest dwelling.—EDS.



Ground Plan.

V—veranda, 5½ by 16 feet. H—hall, 8 by 9 feet. P—parlor, 12½ by 15 feet, two windows in front side, and bay window (*a*) in eastern or gable end. S—stairs, leading to second story. L—living room, 18 by 14 feet; two windows in front or gable end; on west side, two closets, (*c c*), and fire-place; on north side best position for bed. P—pantry, 4½ by 12 feet, with window in west end, and cupboard, (*i*), in north-east corner, and pot closet below. The cupboard should open into both pantry and kitchen, the pot closet only into the kitchen. K—kitchen, 11 by 11 feet. (*d*), door, opening to stairs descending to cellar. X—back porch. O—Position of stove. S—position of sink. T—Position of table. B—bedroom, 7 by 11 feet. W—wash-house. W H—Wood-house. C H—Coal-house.

TRAINING HOPS.—We find the following reference to the plan of training hops invented by F. W. Collins, of this city, in *The South-Eastern Gazette*, Maidstone, Kent county, England:

"The chief purpose for which this plan has been introduced is to save the cost of poles, which every English planter finds to be a most serious item in his yearly expenditure. But it is also claimed for it that, owing to the freedom with which the fruit branches hang from the strings, and their greater exposure to the air and sun, the hops ripen earlier, and are less liable to disease; that the yield is greater and of better quality; that the labor of tending and picking is less than on the long poles; that there is much less danger of the hops being battered by high winds; and that they can be picked without cutting off the bine near the ground. This last is a very important consideration. Many hills literally bleed to death every year, and where this is not the case, the bine is prevented from fulfilling its natural function, in storing up sap to give it life and vigor the following season."

IMPROVED STAMPS FOR MARKING SHEEP.

NUMBERING and registering sheep, at shearing time, is of the first importance to the shepherd who desires to secure the uniform quality, or increase the average quantity of wool in his flocks. At the New York Sheep Fair, held in Canandaigua, we are informed that a large majority of sheep were numbered with side marks. These sheep, being representatives from the best flocks in this and adjoining States, would seem to have received the approbation of that class who give the greatest attention to that branch of husbandry. Since the decline in wool and sheep, it is of greater importance to the farmer to keep only such sheep as sheer the best quality of wool, and of sufficient weight to make them profitable. All the inferior sheep should be selected from the flock and sent to the shambles. This can not be done with any degree of certainty without numbering and registering. The accompanying illus-

tration shows two sheep numbered with the stamp invented by Mr. Todd, Jr., of Pultneyville, N. Y. The cut below shows one of a set of numerals.

They are neatly made of iron, will last a life time, and are sent by express, charges paid, at a price within the reach of all. Of the plan of numbering and registering, Mr. Todd says: "At shearing time I carefully examine every sheep as to form, (before and after shearing), length of staple, quality of wool, weight of fleece, &c., all of which is noted for future reference; and there is no time when so thorough an examination can be made as at shearing. It is almost impossible to select from a flock of sheared sheep, without numbering and registering, such as should be disposed of, or kept for stock. Refer to the register, and you can readily select the ewes having the finest quality of wool, the longest staple, the heaviest fleeces, &c. Using such ewes for stock, as like begets like, it is evident a flock can be very rapidly improved. Sheep numbered as shown in the cut above, save much time at yeaning; as, for instance, No. 58 may refuse to own her lambs. If the sheep are in the field, the lamb may be taken to the house, and at night, when the sheep are yarded, one can readily select No. 58 from the flock. If a sheep is lame, drooping, or from any other cause requires special attention, it can at any time be selected from the flock, though the flock may or shall consist of hundreds. The stamp represented by the above cut is probably the most convenient form in use. By holding the stamp handle precisely like a pen, a perfect impression is made, whether the wool is long or short. The size of the stamp is 3½ inches."

Mr. T. informs us that he will send stamps, by express, (charges paid, to all parts of the country, except the Southern States,) at the following prices: one set of figures, $2.25; two do., $4.00; four do. $7.00; six do. $9.00. Initials 25 cents per set, additional. For further information relative to this improvement address A. Todd, Jr., Pultneyville, Wayne county, N. Y., who will send illustrated circular containing full directions for numbering, registering, and composition to be used. See advertisement in this number.

THE HOP LOUSE AND ITS REMEDY.

WRITTEN FOR THE AMERICAN FARMER, BY P. W. COLLINS.

THE blight caused by the hop louse for the last two or three years in many parts of the country, has been felt by the hop growers in those sections which it has visited, to be a serious evil, and one which called for the serious attention and investigations of scientific men. Evils which are understood can in almost every instance be alleviated, if not entirely remedied, and the evil of the hop louse forms no exception to the rule. The louse makes its appearance in the month of July, and unless its ravages are arrested in a short time, it acquires so firm a hold upon the yard as to make its destruction a difficult task.

It is thought by many that the louse may not return next season, owing to their sudden disappearance from places where they were most numerous last summer, before the time when the eggs to propagate the species for the ensuing year, were laid. Their sudden disappearance was attributed to a highly charged electric condition of the atmosphere. Whether this supposition will prove correct remains to be seen. Meantime it is best to be prepared for the vermin if they should appear. Like other injurious insects, we shall be troubled with them until they are entirely destroyed by some means, when, probably for a number of seasons we shall be free from their depredations. Like the weevil which destroyed the wheat, and the aphis which damaged the barley and oat crops some years ago, which has

again disappeared, we may look for a similar disappearance of the vermin which preys upon hops. In England they have appeared occasionally during the last sixty years, usually remaining two or three years in succession, and then disappearing for several years.

In Kent and other hop-growing districts in England they have a remedy which has been found effectual when used upon the first appearance of the insect, and thoroughly applied. I saw large crops, equal to any obtained for many years, secured from gardens in Kent, which at the beginning of the season were covered with lice, and which had been exterminated by two applications of the wash which I give below. The mixture will be found to be healthful to the vines, and harmless to the person applying it. It is thrown over the vines often twenty feet high, through a hose with a muzzle perforated with small holes, by means of a force pump. When the vines are trained horizontally upon twines between stakes seven feet high, (see cut in last number,) the expense of the apparatus, and labor of using it, as well as the waste of much of the liquid is avoided, as a common large syringe answers the purpose equally well, and a man can go over a yard at an expense of one or two dollars per acre. By taking care that the wash is strong enough to kill the louse, and yet not injure the vine when applied in season, and if necessary a second application made, the following will be found an effectual remedy against the hop louse:

A soap suds is made about as strong as is left from an ordinary washing. Into this is put salt and saltpeter to make it a weak brine, not strong enough, however, for curing meats, as that would injure the plants. Dissolve copperas in warm water and add to the brine in the proportion of one pound of copperas to ten gallons of the liquor.

REMARKS.—Mr. Collins promises us to keep the readers of THE AMERICAN FARMER posted on the cultivation, and all the improvements in hop culture, as they may occur. His facilities are such, having visited the hop growing districts of England last summer, and having now agents in all the hop-growing counties in England, that we shall take great peasure in giving his own and the experience of others, to our readers.—EDS.

IKE MARBLE says the Greek was earnest to make his own brain tell, and the Latin, eager to make as much as he could out of the brains of other people.

MADAME DE STÆL said that the ontological systems of her Germans, had all the darkness which preceded the creation, without any of the light that followed it.

OUR EASTERN LETTER--No. 3.

WRITTEN FOR THE AMERICAN FARMER, BY G. L. BRACKETT, BELFAST, MAINE.

The weather during the past month has been decidedly of the variable and unusual order. On the 16th of February the mercury sank to 9° below zero, with the barometer marking 30.05 inches. On the 19th, it was 42°, with a heavy rain storm. There has been but very little sleighing the past winter, and since February 12. The coldest yet in March, was on the morning of the 8th, 4° Ground nearly bare, and very hard, rough wheeling. If there is any truth in the old saying about March "coming in like a lion, and going out like a lamb," we shall have a fine ending this year, for the first week of the month has been very cold, windy and disagreeable.

The markets remain *in statu quo.* Hay dull, at $10; oats, 60 cents; barley, 75 cents; apples, (Baldwin), $2,00; butter, 35 cents. The potato trade has been lively and large quantities have been exported; they now command 50 cents a bushel in this market. Stock in good demand at paying prices. On Brighton market, beef ranges from $9.50 to $13 per hundred, according to quality.

The New England Agricultural Society. At the annual meeting of this organization, held lately, George B. Loring was elected President, I. K. Gage, Treasurer, and Daniel Needham, Secretary, with one Vice President and five Trustees from each New England State. The treasurer reported the receipts for 1865, as nearly $14,000, and the expenditures about $13,000, one-half of which was paid out in premiums. The convention passed a resolution calling upon the President of the United States to remove the Commissioner of Agriculture from his office, on the ground of incompetency. The Secretary was instructed to prepare a circular to manufacturers of agricultural implements, recommending that they be represented at the International Fair to be held in Vienna, next May. No action was taken in regard to the location of this year's exhibition.

Hay Prospects. The prospect in regard to our next year's grass crop is not very encouraging: Our bare and open winter, with such sudden alternations of heat and cold, freezing and thawing, with a good deal of ice upon the fields, must operate disastrously to the grass roots. A light hay crop would materially reduce the price of stock.

ALL kinds of stock should be kept growing and constantly improving. It is a dead loss for stock to gain none. All they eat is so much loss. Generous feeding and warm shelter will go far to prevent this.

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

THE VALUE OF RED CLOVER AS A FORAGE CROP.

John Johnston, the model farmer of the grain growing region of Western New York, says "that clover will not pay, except to renovate the land, or to raise seed." Mr. Johnston keeps so much stock, drains so thoroughly, and manures so highly, that he can always grow heavy timothy; hence his poor opinion of clover solely for a hay crop, the more especially, perhaps, as his clover grown with timothy is only cut when the timothy is in a proper state, and after the clover has passed its ripening into the decaying state, to the loss of all its best nutriment.

I know a farmer near the eastern shore of Cayuga Lake, whose soil is like Mr. Johnston's, a clay loam with limestone pebbles. He has tried to grow timothy, but he succeeds only in cool, moist seasons, as hot, dry weather is fatal to timothy on that hard, side-hill land, even on meadows nearly level. But he has never yet failed to get a large crop of the very best clover hay, which he cuts in full bloom and cures in small cocks. Such hay he thinks is worth as much for milch cows as ordinary timothy and clover, and gets so much greater yield over timothy grown without clover, that it is much more profitable? One of the best farmers I ever knew, who made a very productive farm out of a sandy waste, near Providence, R. I., said that "clover, swamp muck, and milch cows" had made his farm, with the aid of a little leached ashes to begin with. We made it a point never to grow timothy and clover together, but both separately, and millet and clover together, as they both ripened at the same time, and made, he said, the most nutritious hay for the farm. But of late many farmers have succeeded well in growing timothy and the large variety of clover together. As this clover does not ripen as early as the small kind, and keeps in bloom much longer, it preserves all its nutriment intact until the timothy is ripe enough to cut. The seeds of the large clover are much smaller than those of the small variety, and as this larger plant tillers out more, much less seed is required to the acre. Yet the small clover makes the best hay, only when it is cut in the bloom and well cured and saved from the weather; its tendency to decay is much greater than it is in the large clover.

But Mr. Johnston is so well aware of the great value of clover as a renovating crop, and for seed, that he has perhaps neglected the experiment of making the most of it for a forage crop. He certainly does not give it a fair chance, when he sows, as he says, "a peck of timothy seed to the acre in the fall, and then ten pounds of clover seed on the same acre in the spring." For clover to succeed under such treatment, the spring must be so dry as to retard the growth of the timothy, or it would in a measure choke out the incipient clover plants. Clover, with its long tap root, needs much less rain than the bulbous-rooted timothy plant; and it thus not only draws more nutriment from the subsoil than timothy, but being a leguminous plant, its large foliage also collects much more nutriment from the air, than the narrow-leaved cereal timothy. It exhausts the soil much less, besides leaving its long, large roots to enrich it.

THE GREAT PROPORTION OF INNUTRITIOUS HAY.

A man who keeps several cows for their milk, in this village, said to me the other day, as I was receiving a load of hay: "How come you to be so lucky as to get such a capital load of hay; it is the best I have yet seen except that I cut and cure myself." The farmer from whom I got it, brought in like all the rest of the hay sellers, a load of timothy and clover cut very late, a crumbling mass of dead leaves and stalks. I asked him if he had no early cut clover. He replied, "I have some timothy cut green, and cured thirty-six hours in cock, but I reserved that for my own use." I paid him ten dollars a ton for a load of it, when he sold his present load at eight dollars, and this was the hay above referred to. Our best farmers cure early clover, and get seed from the second growth, but they feed all their hay to their large stock. Once after wheat harvest I saw a farmer on Buffalo Creek, cutting a large field of timothy and clover, with a machine, very late in the season. It was so dry that it needed no curing; but was put in stack immediately. I asked him why he let his hay crop thus lose all its juices before he cut it. He replied, "It will sell just as well in Buffalo." Methinks every western village is thus a "Buffalo."

NOTES ON THE MARCH NUMBER.

WRITTEN FOR THE AMERICAN FARMER, BY J. W. PORTER.

MESSRS. EDITORS:—The March number of your paper is at hand, with an unusual amount of instructive reading matter. Most of the writers for agricultural papers do not consider or study their subjects enough, so that they are of no interest to our Western farmers, so far as putting them into practice. Your article on "the farmer as a manufacturer," is worth more than the subscription price of your paper to any farmer who will read and understand, and take it for a text, as all improvement in farming must commence with the farmer, and that is hard to do, as so many cannot quit the old ways. Many think they know all about farming, who cannot run a straight furrow, sow wheat, build fence, stack

wheat, or hay, or put up a shock of corn that will stand. They could do it, if they would only try; all is done in a hurry, with no eye to improvement.

Now is the time for every one to commence to try and do all work better. Let every man make it his motto, "what is worth doing at all, is worth doing well," and let him never say, "I have no time" to do a thing but take time. No man deserves the name of farmer, (I am proud of the name,) who cannot do all kinds of work on a farm, and he should be able to tell others how to do it, and to tell when it is well done. The only way for him to know it, is by practice. He may read all the agricultural works ever printed, and they will not do him much good, if he does not think it over well, apply it to actual use, and know what was the result, so as to be able to follow it up from year to year, if he finds it profitable. A farmer with no other income can not follow any branch of farming long, if it does not pay. The working farmers are the only ones who can succeed as farmers alone. A man may make a fortune in mercantile pursuits, or in some other way, buy him a farm, have money in the bank to draw on when his farm does not pay, make a considerable show, and make it look to some as though it was not honorable to work on a farm, and that the farmer should be a man of leisure, as says a writer in your March number. I give him credit for eight lines and a half, the balance I beg leave to differ with him very decidedly, as I am a strong advocate of small farms, and one well improved, and for a farmer to be ready to turn his hands to all work, and not to think of such a thing as "bringing himself down to the level of the motive power of the farm," but rather to make labor an honor. Another thing in my experience is, that the closing up of the business of farmers of leisure, without they have some income besides their farm, has been such as no man would desire. The object of all agricultural papers, is or should be to advance the interest of the farmer, and to give his experience to others, and others to him, and it should always be as practical as possible.

What are the prospects of the farmer for this spring? Not very flattering, as wheat never looked worse at this time of the year in Vermillion county, Indiana, and corn can be bought at thirty cents per bushel. Farm hands are asking twenty-five dollars per month, and board. It will thus be seen, without figures, that that will not make any money. Hogs would pay, if they would only live. They die it seems almost without a cause. Farmers must not be discouraged, as corn cannot stay at present prices another year, and if it should, the only way to meet it, is by having "the mare to sell," and the only way is to plow deep, and when the ground is in proper condition, and in good time.

TROUT RAISING.

WRITTEN FOR THE AMERICAN FARMER, BY "R. H.," MUMFORD, N. Y.

MESSRS. EDS.:—Fish breeding is attracting some attention at this time. Trout breeding appears to take the lead, and where water that is favorable for trout breeding can be obtained, it would pay the best of any of the varieties propagated. Many of the streams and ponds of this State are not favorable to the trout. The temperature of the water should range from 40° to 60° for trout; if warmer than that, then pickerel, bass, bull-heads, and eels grow well. Many streams when the bank and hill sides were covered with timber, were shaded, which kept the water cool, and the adjoining lands were not worked into the streams at every heavy rain, rising the water. Now that the land is mostly cleared, the sun has warmed the water, and the rains are carrying the soil into the streams, so that where trout once were plenty, none are now to be found: other fish are taking their place.

The first point in trout breeding is to obtain clear and cool water, and in quantity, so that it may be kept below sixty degrees, and the most favorable will be where water can be taken from the streams into reservoirs, so as not to be washed away at flood time, for at such times the stream is not always controlable. Two or more ponds should be used so that when weeds accumulate in a pond, the fish can be removed, the water drawn off, and cleared out, so as to be over a clear gravel bottom. There should be no mud where trout are kept. If any one has trout water that he can control, and is disposed to go into trout breeding, it would be time well spent to visit the premises of Seth Green, of Caledonia, where more information on the subject of trout breeding could be obtained, than could be got elsewhere.

A CORRESPONDENT gives the following recipe for *scratches on horses*, which he has tried on many horses for several years, and never failed in an immediate cure: "Take a shovel full of hot ashes, (wood ashes,) and throw them *under* the fetlock and *above* the hoof, the part always first affected. If the horse be badly off with them, raise the foot and pour them on, dropping the foot directly. In two hours the horse will move with ease to himself, however stiff he may have been. The disease is immediately cured by the application. The cracks in the skin require a few days to heal."

LAYING MACHINES.—I saw in your paper that feeding hens with lard and meal will make them lay. I have tried this plan, and can say there is nothing like it. Hens are laying machines; grease the machine, and it will work well.—*H.*

SPIRIT OF THE AGRICULTURAL PRESS.

A Point about Building.

The Rural World says the more porous a thing is the better a non-conductor of heat. Hence stone and iron and all the metals, are powerful conductors; and wool, and fur, and cotton are non-conductors. So with the different kinds of wood: according to their compactness is their capacity to repel or attract heat. Soft wood is warmer than hard. A soft-wood house therefore, is warmer in winter than a hard-wood building—because it does not abstract the heat from the room to the same extent. It is also cooler in summer, on the same principle as the heat outside is not drawn in by the wood. These things should be thought of in building, and we see they are taken advantage of.

Experiment in Grass Culture.

An English farmer writes to *The Mark Lane Express* an account of an accidental experiment in grass culture which occurred on his farm a few years ago. He says that his plowman mistook orders, and plowed half an acre in one of his grass fields before the mistake was discovered. This was in the fall, and the land lay with the roots of the grass turned up to the weather during the winter. In spring the sods were turned down carefully and the land rolled. The result was that the grass grew richer and higher in the plowed part than in any other portion of the field, so much so, that the difference could be noticed from a considerable distance. The improvement in the grass of the plowed part has been permanent.

What is the Cattle Plague?

We find the following in the *Journal of the New York State Agricultural Society*, where it is credited to the London *Mark Lane Express*. As the evidence comes from a surgeon of ability, S. Parsons, M. D., it is entitled to high consideration:

"After devoting much time to the study of the cause of the cattle disease, I have come to the conclusion that it is nothing more nor less than small pox in a suppressed form, so far as the symptoms are capable of developing themselves, owing to the closeness of the skin of the animal attacked. The small pox pustules are not visible to the eye, but they can be distinctly seen after death between the soft cellular substance and the internal skin, showing clearly the character of the disease. Medicines have proved of little or no benefit, and the remedy which suggests itself is vaccination—in my opinion the only means of arresting the disease. Upon cattle that are already attacked it would possibly have but little influence, except in the early stage of the disease. Every sound animal should be at once vaccinated to insure its safety. I would suggest that on every farm throughout England, competent persons should be employed to carry out the above treatment. The vaccine lymph might be procured from the different vaccine institutions, and possibly it might be obtained from the cow herself. No time ought to be lost in vaccinating every sound animal, as the only chance of arresting the disease."

On the other hand Professors Gamgee and Simonds, backed by a very large proportion of the veterinary practitioners, hold an entirely opposite view. In a letter to the London *Field*, the former says:

"Dr. Murchison may claim the honor of having stirred the country throughout its length and breadth, and to have encouraged trials as to the preservative influence of vaccination wherever the rinderpest appears. May he be successful in stemming that torrent which has swept away cow after cow, bullocks, bulls, calves, herds, (large and small,) and threatens to involve the whole agricultural community in disastrous ruin! I fear, and have indeed too much reason to believe, that he has only paved the way for another great disappointment. Drug after drug, order after order, system after system, have all left us where I ventured to predict as far back as last August, they would leave us. It may be insane on my part to raise my voice freely and firmly against every suggestion, medical or non-medical; but unfortunately I am again in the unpleasant position of a destroyer of hopes, and staunch in my belief that until we kill out the rinderpest, it must continue to destroy our stock."

The number of cattle attacked per week at the date of last advices, was over 12,000. Unless the disease is arrested, at the present rate of increase, it is probable that before May 1st, 300,000 head of cattle will have fallen victims. 148,023 have already been reported, as attacked, of whom 111,100 have died, besides numbers which have not been officially reported.

Product of Four Cows.

The Massachusetts Plowman states that a farmer in the western part of that State sent to Boston during the past year, as the product of four cows, butter which he received $399.98 for, besides supplying a family of six persons and the company the family had during the year, with all the butter and milk they needed.

Drilling Wheat.

Among the advantages of drilling wheat, *The Prairie Farmer* mentions the fact that with the drill the operations of plowing and of seeding can be kept along together, and that nearly every kernel will be covered properly, and out of the way of pigeons and other birds.

Breeding Fowls.

Talking about breeding fowls, a writer in *Wilkes' Spirit* says:

"I am a great advocate for choosing young birds for this purpose, and recommend that early pullets be selected every year for stock the following season, and put with two-year old cocks for instance. Pullets hatched in May attain their growth and become perfect in shape, size and health, before the chills of winter. They should be put with cocks of two years old, when they will lay on the first appearance of mild weather, and their produce has the same advantage as these have had before them. I do not advocate having young stock fowls so much on account of their laying early, as I do for the superiority of their breeding. Neither is it desirable to breed from fowls of all the same age. Where it can be done, it is better to put a two-year old cock with pullets, and *vice versa*. It is well to introduce fresh cocks of pure breed into the yard every second year; this prevents degeneracy, and for the

same reason no cock should be kept more than three seasons, nor a hen more than four, if it is intended to keep them in the highest possible perfection and efficiency.

Top Dressing Grass Lands.

A correspondent of *The Scottish Farmer* gives his experience on the effects of the application of nitrogenous and phosphatic manures, and sums up as follows:

1. That top-dressing grass land with artificial manure pays.

2. That the general result of Lawes' experiments on top-dressing grass land, are borne out on soils resting on the limestone formation.

3. That for the permanent improvement of pastures, superphosphate of lime is better adapted than guano.

4. That in proportion to the coarseness of the herbage the per centage of phosphatic manures should increase, and *vice versa*.

5. That from the effects which I have observed, it would appear that not only did the superphosphate indirectly check the growth of the finer sorts, but that it directly impeded their growth, and evidently disagreed with them almost from the period of its application.

Bee Moths.

M. Quinby, in *The Country Gentleman*, says he has been fighting the bee miller for thirty years, but not directly. I let the bees do most of it. I give attention to strengthening the swarm, instead. I have hundreds of hives in apiaries away from home, that are not visited throughout the season to destroy worms. The only particular care is to know which are weak, and watch those—there are always some in large apiaries—and when they can not be strengthened by any means, the next best thing is to remove them and save the contents, and more than that, save the swarm of moths which invariably follow in the weak hive. With this care enforced, I have no fear of the moth worm. The Italians, pure as well as hybrid, resist the moth much more effectually than the black bees. In large apiaries hives do not seem to be individually troubled as much as in small ones.

Time of Cutting Timber for Fences.

A correspondent of *The Germantown Telegraph* gives his experience in cutting timber for fencing, in which he states that timber cut in April and May, when the sap is in full flow, he finds will last for posts from seventeen to twenty years. The same kind of timber cut in February and used for fence posts became rotten and worthless at the end of six years. He advocates setting the posts green, or before they are seasoned, because when the sap is displaced by seasoning, all the cavities are filled with air, which when buried in the ground, became partially dislodged by water, producing a mixture very unfavorable to the durability of the wood. When posts are planted in a green state, he says the sap prevents, in part, the admission of the air, and hence their lasting longer. He affirms that if timber is cut for rails when the sap is running, the bark stripped off, and the rails made immediately, they will last one-fourth longer than if cut at any other time and have the bark left on.

To Make Superphosphate.

A correspondent of *The Irish Farmers' Gazette* wants to learn "the best method of making superphosphate, with proportion of bones and acid." The editor gives the following directions: "Saturate the bones with as much warm water as they will absorb, without running off; open the heap as if for making mortar; pour in the sulphuric acid, in the proportion of half a cwt. to 1 cwt. of dry bones, and mix the whole well up; make into a heap, and cover well with fine, dry earth, turf mould, ashes, or saw-dust; leave it to digest for a week or ten days, and then mix some of the above drying stuffs, to absorb the superfluous moisture and render it of easy distribution."

Cultivating Potatoes.

A correspondent of *The Country Gentleman* says: "I would advise new beginners in raising potatoes, not to be so particular about the number of eyes the set of potatoes has, as the size of the piece. A potato smaller than a turkey's egg, should never be used for planting. That size will make fewer sets. Plant the rows three feet apart, and the sets one foot in the row. Ground which has the manure plowed in, in the fall, will produce one-third more, and of an evener size, than that manured in spring and planted immediately; the manure absorbs the natural moisture of the ground, and the crop is tardier in sprouting."

Lice in Chicken Houses.

We hardly know what to advise to rid the houses of this pest, says *The Agricultural Gazette*. We have always found lime-washing effectual when thoroughly done. It must be well worked into all crevices; holes which the brush cannot reach must be stopped, and the operation must be repeated till the desired change takes place. If the fowls are supplied in the house and in their run with a couple of bushels of dust, or better still, of wood ashes, with which should be mixed four or five pounds of black sulphur, they will use it as a bath and rid themselves of their visitors.

Preservation of Eggs.

The best method I know of to preserve eggs, is to fill the pores of the shell with fresh clean lard, so as to exclude all air. It is my opinion that this simple and easy method is preferable to any now in use. Some put them in lime water; some lay them down in salt; some put them in sawdust. But the lime cooks them, so that they have a dried appearance; salt has a similar effect, while eggs saturated with lard, so far as my experience goes, open, fresh and nice. A correspondent of *The Massachusetts Plowman* suggests the above.

We can endorse his method of keeping eggs, "filling the pores of eggs with fresh clean lard," as we have frequently tried it and found it to be in every way satisfactory.—EDS.

Sniffles in Sheep.

Mr. William P. Hayden informs *The Maine Farmer* that equal parts of garget-root, alum, and tobacco, steeped together, will cure the sniffles or nasty nose in sheep. It should be forced up the nostrils with a syringe.

"THE WILD HUNTSMAN"---Out upon the Prairie.

THE scene presented above is one of the most exciting to participate in of all the sports in this country. The buffalo is hunted by the wild Indians, who are famous for their skill in this kind of sport. The buffalo generally go in large herds, and it is frequently the object of the Indian to separate a fine old bull, and to get him to "break" from the rest. They then chase him on their spirited steads, and endeavor to drive an arrow through the animal's heart. The hide makes a famous robe for the "squaws," who generally follow, and the tongue is a dainty bit. The buffalo is rather an ugly customer to close with. The great Gordon Cumming gives him "a character," though the lion hunter did once manage to turn a herd of eight hundred, single-handed, and then rattle on in the midst of them as he selected one to fire at. "They exude a strong bovine smell," and "charge with a low roar, very similar to the voice of a lion." In dying, "they repeatedly utter a very striking low, deep moan." There are few more agreeable or exciting chases than a gallop on a handy horse over the Western prairies, after a herd of these wild bisons of the great West.

ENGLISH FANCY LOP-EARED RABBITS.

THE cut on the opposite page represents a group of those beautiful as well as profitable pets which have been bred to a considerable extent in the United States for the last twenty-five years. Their native place is the Island of Madagascar, an island near the coast of Africa, and they are properly called Madagascar or Lop-Eared Rabbits. All the importations into this country have been made from England, where they receive a good share of attention. In many of the large towns clubs exist which hold exhibitions, at which a good deal of competition is evinced for superiority. This tribe of beautiful creatures are easily reared, and have proved a most interesting addition to the stock of fancies in this country. The peculiarities of this breed consist chiefly in their great size, their fine colors, and their long pendant ears which frequently grow to be from fifteen to twenty inches long. They are very prolific, breeding six or seven times in a year. The young are easily reared, and come to maturity at the age of six months. The animals are confined in hutches two feet wide, and three feet long. The young are taken from the mother at the age of six weeks, and are put together in a separate hutch, and allowed to remain together until six months old. Their food consists of carrots, turnips, &c., with a little oats.

Those of our young readers who keep rabbits, or contemplate doing so, should be careful not to give green food in a wet state, it is apt to produce the rot. If they should get it, our plan was to feed with dry food for a few days and to give them a piece of bread every morning toasted almost black. They are very fond of it. Be careful to keep them clean, and in order to do so, provide them with a box containing two apartments, and never give them more food than is sufficient for their present use. Change their food every few days, and never forget to feed them at the proper time. Take every care of your domestic pets.

VENTILATION.—Is important for all animals, horses, cattle or swine. Foul air, drawn into the lungs, cannot fail to injure its delicate coatings and destroy, more or less, the health of the animal.

ENGLISH FANCY LOP-EARED RABBITS.—*See Preceding Page.*

Horticultural.

THE GARDEN.

THE first employment of man, when he was pure and happy, was to "dress and to keep" a garden; and we think those of the simplest and purest tastes, still find their most congenial employment in the garden.

The garden has peculiar attractions in the first, mild sunny days of early spring. Then, after months of frost and snow, when the earth has been locked in the icy embrace of winter, and the vegetable and part of the animal world in a dormant state—we hasten to witness the new birth, the resurrection of the vegetable creation, and greet the return from milder climes, of the "feathered songster."

With the month of April, usually, commences in this latitude, our labors in the garden.

We take it for granted that the provident gardener made all practicable preparations last fall. That he *dressed* his garden with manure; that he prepared plenty of fine rich soil for his early hot bed, which he protected from hard freezing; that he has overhauled his garden implements, making all necessary repairs and purchases of new ones in the place of those beyond repairing. We suppose that his supply of seeds has already been purchased, and that his hot bed is now in full blast, and that he is fully prepared to commence outdoor operations just as soon as the weather and the condition of the soil will permit. There is nothing gained by plowing or spading the ground when wet and cold. Wait until it is dry, and begins to warm up a little, and in with the peas without delay.

Among the well tested sorts, Daniel O'Rourke cannot be beaten for earliness and good quality combined. It grows about 30 inches high, and should be sown in drills 3 feet apart, and 2 1-2 to 3 inches deep.

Tom Thumb is a few days later; 8 to 10 inches high, and very prolific. It need not be more than 15 to 18 inches apart.

For second early, Blue Imperial, 2 1-2 feet high, is an excellent variety; also Bishop's New Long Pod—18 inches.

For late, Champion of England, 5 feet, and White Marrowfat, are among the best.

Amateurs, who wish to try new varieties of peas, or any other vegetables, can find them described by scores, in the catalogues of James Vick, of this city, or J. M. Thorburn & Co., 15 John street, New York.

Lettuce—Sow early. The Early Curled or Silesian, and the Early Butter, 15 inches apart, and 1-2 an inch deep.

Spinach—Cannot be got in too early after the ground is in condition. Drills should be about 18 inches apart.

Radishes—Early Scarlet Turnip and Long Scarlet Short Top are the best kinds for early. Sow about as lettuce.

Beets—Bassano, or Early Turnip is the earliest good beet. Cultivate same as radish.

Onions—Require a rich soil, and should be sown early, if expected to mature. Wethersfield Red, White Portugal, and Yellow Danvers, are the best varieties.

Potato onions from small ones, can be grown the quickest of any good variety, and are of excellent quality. The small ones cost from $3.00 to $5.00 per bushel, and should be set 8 inches by 15, and barely covered.

Carrots—For early, Early Horn; Parsley—Extra Curled.

Turnips—Red Top, Strap-Leaf, may all be sown early in April.

The latter part of the month, Cabbage and Cauliflower may be sown for late crops. Flat Dutch and Drumhead Savoy are very good varieties of cabbage for winter use; and Thorburn's Nonpareil Cauliflower is one of the best for winter.

Dwarf or Snap Beans—May be planted the last of the month, Early Valentine, Newington, Wonder, Mohawk, Early Rachel, are all good varieties for early string beans.

Potatoes—A few early potatoes may be planted this month, such as Ash-leaved Kidney, Early Dykeman, Early Sovereign, Mountain June, and Early Goodrich, where one is fortunate enough to get them, are the better early varieties.

Let the gardener begin by doing everything well, and in season, and he will find his summer's work much more pleasant and profitable. Remember, "whatever is worth doing at all, is worth doing *well*."

THE FRUIT GARDEN.

What adds more to the charms of the dear old homestead, than to be flanked by a well stocked fruit garden?

Rows of strawberries, raspberries, blackberries, grapes, currants, and gooseberries; also quinces, pears, peaches, cherries, mulberries. These properly belong to the fruit garden, while the apple orchard is an institution by itself. Would farmers' sons, generally, be anxious to leave the paternal homestead, if surrounded by such attractions, for the hot and dusty streets of the city?

All the fruits above enumerated, should be planted in April, and every householder who can command a half acre, or a quarter acre lot, should grow them all.

The following varieties have been pretty well tested, and are among the best of their kind. Early Scarlet, Jenny Lind, Downer's Prolific, Wilson's Albany, Triomph d' Gand, and Bartlett strawberries. The Doolittle, Hudson River Antwerp, Franconia and Catawissa raspberries. The Lawton and Dorchester blackberries. Isabella, Concord, Delaware, Diana, Hartford Prolific, and Rebecca grapes. Red Dutch, White Dutch, Versailles, and White Grape currants. The Houghton Seedling gooseberry. The Orange Quince. Hale's Early, Serrate Early York, Large Early York, Crawford's Early, and Hill's Chili peaches. Doyenne d' Ete, Brandywine, Rostiezer, Bartlett, Seckel, Flemish Beauty, Louise Bonne, Duchess d' Angouleme, Beurre d' Anjou, Sheldon and Lawrence pears. Black Tartarian, Knight's Early Black, Black Eagle, Napoleon Biggareu, Governor Wood and Late Duke cherries; and Downing's mulberry.

There are other varieties recently introduced, and partially tested, that will probably supplant many in the above list, but they are not yet sufficiently tested

in different localities to warrant their recommendation for general culture.

The amateur who has the leisure and means, will take pleasure in procuring and testing all the new candidates for favor.

Among these, the following promise well: Agriculturist, Green Prolific, Brooklyn Scarlet, Jacunda strawberries. Wilson and Kittatinny blackberries. Iona, Israella, and Adirondack grapes. A few years experience will establish the reputation of those really meritorious, and consign to oblivion those that deserve such a fate.

PLANTING GRAPES.

WRITTEN FOR THE AMERICAN FARMER, BY J. SALTER, ROCHESTER.

MESSRS. EDS.:—As April is the best spring month for planting the grape vine, I thought a few plain hints or directions for pruning and planting the same, might not be out of place or unacceptable to many of the readers of your valuable journal, especially to the uninitiated in the cultivation of that most excellent and useful fruit, the grape. Be that as it may, if you think these remarks worthy of a small space in the columns of THE FARMER, you are at liberty to use them as you please.

Every man or woman who owns a single rod or more of ground, ought to plant a grape vine, or as many more as he or she may desire or have room for; for no other plant that we are acquainted with, will be so useful or enhance the value of the ground that it occupies to the extent that the grape vine will. Of course there are some kinds better than others, and better adapted to particular localities; but out of the many excellent varieties in cultivation at this time, a few may be found to succeed and ripen their fruit to perfection in almost any location in these Northern and Eastern States.

Among the most hardy, early, prolific bearers, and of fair quality, so far as well proved, may be mentioned the Concord, Hartford Prolific, Delaware, Crevcling, &c. The two latter are of excellent flavor and quality; the Concord and Hartford are not so fine in flavor and good quality, but are so hardy, early, prolific bearers, and what may be termed very good, that they are usually considered among the most valuable of grapes. Among the new varieties may be mentioned the Iona, the Israella and the Adirondack, all of which bid fair to entirely supercede, in good qualities, many older varieties, except perhaps the Delaware, and that in size. This, of course, will take some years to fully prove, but I can see no reason why they should not be all that is claimed for them, as there is abundance of room for improvement on the older kinds. What we want is to commingle the true Muscat flavor of the foreign grape with the hardy constitution of the American grape; or, in other words, an American grape with the foreign Muscat flavor. This, I believe, we shall very nearly approach, if not entirely imitate. The successful cultivation of the grape is not so difficult a thing as many persons appear to suppose; for I know of no fruit-bearing plant that will so surely and so abundantly repay the little care and attention, and sometimes utter neglect, that it usually receives, as the grape vine. Of course, the better a thing is done, generally, the better will be the result; but it is not always essential to be so very exact in selecting a site for the grape vine.

Choose a southern or southeastern exposure, if you can, and sheltered from northwest winds. If the ground be very low and cold or wet, fill it up with a barrowfull or two of good soil, so as to make it somewhat higher than the surrounding ground, that it may be comparatively dry, and if it is good enough to grow a good hill of corn or potatoes well, it is good enough for a grape vine; and the same good, clean culture that is bestowed upon the corn or potatoes, is all that is necessary for the vine for the first year or two. If the ground lays under water all winter, it is not a fit situation until it is well underdrained. When the ground is well spaded up, and the soil broken fine, dig a hole, say two feet in diameter, and four to six inches deep, a little rounding in the middle of the hole. Set your vine in the middle of the hole as nearly as possible. Spread out the roots in a natural position, or something like the spokes of a wheel. Fill in the soil well among them, so as to get the collar of the plant one or two inches lower than it grew before. Cut the vine down to the lowest good bud, and protect it from accident, and if the vine is healthy, I will guarantee a good growth the first year. As the vine pushes into growth, if more than one bud grow, rub out all but the best shoot, and tie that carefully to a stick, to guard against accident from breaking off. If this main shoot should, during summer, throw out lateral or side shoots, they should be pinched out to one leaf; or, in other words, leave the lateral with only one leaf on it all summer the first year.

POTATOES.

WRITTEN FOR THE AMERICAN FARMER, BY "G."

MESSRS. EDS.:—In giving your readers my experience in planting and growing potatoes, let me first state that I reside in the land of potatoes, at the east of Rochester. The soil for *early* potatoes, such as Early June, Early Goodrich, Mountain June, Ash-leave Kidney and others, should be very rich and well manured with fresh horse manure, and planted as early in the spring as possible. They should be covered deep for fear of late frosts. Next follow with Peachblows, Dykmans, Flukes and Mercer's seedling, for field crops, which should be sown on deep rich soil, and it is well to plant them early in the spring. The best variety grown in this locality for a field crop, are the Mercer seedling, which is extensively grown for the New York market. It is a very good, mealy, early potato, though very liable to rot.

The Garnet Chili is also a very fine potato, but should be grown on a very poor, light soil, as on rich land they grow too large, and are hollow and coarse.

We plow deep, drag thoroughly, and mark the land for planting three feet apart each way.

We always cut our seed potatoes, and prefer large, nice seed, and plant from four to six eyes in a hill. Seed should be selected with as much care as possible.

We always plant two pieces in each hill. It is a good plan to change seed from heavy to light soil, and *vice versa*.

We plant Peachblows on deep, rich, open soil. If you would secure a large crop, plant large seed. Be sure to cut them, planting four to six eyes in a hill. I have raised of this variety, from 200 to 250 bushels to the acre the past season.

I would recommend the following varieties for general cultivation, Early June, Mountain June, Early Manly and Buckeyes. For field crops, Peachblows, Dykemans, Flukes, Seedling Mercers and Garnet Chili. The last named variety should be grown on a poor, light soil.

PLANT A FEW GRAPE VINES.

WRITTEN FOR THE AMERICAN FARMER, BY "W. C."

EVERY yard and garden should have its vine. In some respects, I think there is no fruit that can equal the grape in giving satisfaction to its owner. By a little attention, it takes but three or four years to secure a plentiful supply of this healthful fruit for family use, and each succeeding year, the supply is still more satisfactory.

During the past few years grape culture has extended far and wide, and many disappointments undoubtedly have occurred to the inexperienced; but not perhaps so much through a right selection of varieties as from the manner they were laid out or planted; for instance, it was and is a common practice with amateurs to have trellises built for the purpose of testing new varieties, planting them indiscriminately side by side, but only to be sadly disappointed. The Delaware and Diana may be cited to illustrate the evil. The Delaware is the standard of excellence, &c., but a slow grower, (if poorly treated.) The Diana, in quality, is a fit companion, but not so, however, in habit, as it is naturally a very free grower, and when both are planted side by side, as thousands undoubtedly have been, the Delaware cannot, nor will not prove satisfactory to its owner, from the very fact that it requires a vary generous and well prepared soil to luxuriate in, while Diana needs but an ordinary soil, and does better without a continued application of active manures. I have seen Delawares, Logans, &c., quite ruined while testing them alternately in rows with Dianas, Rogers' Hybrids, &c., and other thrifty growing varieties, and which it is hoped will act as a warning to others who may contemplate setting out vines the coming spring. I may, in another number of THE AMERICAN FARMER, give some facts and figures showing what may be done in a small way in cultivating the grape partly for amusement and experiment.

DISTANCE APART FOR STRAWBERRIES.—I invariably plant in *rows* and *never in beds*. I hold that the objections to planting in *beds* are so great and so palpable, that it will admit of no discussion whatever. My stand and rule is to plant in rows three feet apart, and plants two feet in the row.—*Cor. Hort.*

ORCHARD CULTURE.

1. WE believe in selecting a good site.
2. We believe in a thorough preparation of the soil.
3. We believe in enriching the soil according to its wants.
4. We believe in planting none but good trees.
5. We believe in planting trees not more than two or three years old, if bought at the nursery.
6. We believe in "setting" said trees after the most approved manner.
7. We believe in pruning and training said trees.
8. We believe in setting the branches low down on the trunks.
9. We believe in keeping those branches and trunks free from moss, caterpillars and all other pests.
10. We believe in cultivating orchards.
11. We believe it to be a great fallacy to suppose that cultivating an orchard means to grow crops in it.
12. We believe the perfection of orchard culture consists in giving up the soil exclusively to the trees.
13. We therefore believe in excluding all grass, corn, roots, weeds, cattle, mice, borers, and every "unclean thing."
14. We believe that orchard trees may sometimes be profitably root pruned.
15. We believe that this should not be done "promiscuously" with a plow.
16. We believe that orchards may be cultivated without injuring the roots of the trees.
17. We believe that orchards may be planted in too rich a soil, and make too rank a growth, thereby becoming unfruitful, and also liable to "winter killing," and other ills.
18. We believe in checking this redundancy of growth.
19. We believe this may be done in various ways; such as summer pruning, laying down to grass, growing crops, etc.
20. We believe that summer pruning and root pruning are the most direct, certain and satisfactory modes of accomplishing the end proposed.
21. We believe that grass robs the tree of nourishment very little if any less than some root crops.
22. We believe that an orchard in grass suffers much more in time of drouth than one well cultivated.
23. We believe that an orchard laid down to grass, and kept so, should be top dressed from time to time.
24. We believe that lime, ashes, ground *raw* bones, compost of muck, etc., are capital top dressing.
25. We believe that orchards laid down to grass should be plowed up at the first sign of "giving out."
26. We believe that old and decaying orchards in grass may often be renovated and made good by manure and cultivation.
27. We believe that a cultivated orchard yields fairer and better fruit than one not cultivated.
28. We believe it is a great mistake to except fruit trees from the universally recognized laws of cultivation.—*Horticulturist.*

A Yankee cotton grower asks, what fertilizer to purchase for cotton. We recommend as first of all Flour of Bone, and next Bruce's fertilizer.—*N. Y. Tribune's Report of Am. Institute Farmers' Club, by Solon Robinson.*

THE CURRANT WORM.

HAVING read in the report of the meeting of the Farmers' Club, in New York, something about the *Currant Worm*, which is hardly more than a guess, very far from the truth, permit me to describe for your readers the insect in all its transformations. It is of a kind known as measuring *worms*, about an inch and one quarter in length, when full grown; of a bright orange or yellow color, finely spotted with black, is extremely active, and a voracious feeder. They begin to appear about the middle of May as a very minute, almost black worm, and increase in size and numbers until the middle of June, when they begin to leave the bushes for the earth about their roots. I had them under glass in all stages of growth, and compared them daily with specimens from the gardens. With a garden trowel the earth was turned up, and the chrysalis and the worms, half contracted and incapable of motion, were exposed, precisely like those in the sand under my glasses. The chrysalis, small and almost black, would easily escape notice.

Comparatively few of the worms appear to become butterflies, but still sufficient numbers do pass the chrysalis stage to insure a bountiful supply of worms year after year.

They remain in the chrysalis state two weeks, and emerge as small maize-colored butterflies, with faint gray marks on their wings. They flutter about the gardens, never staying far from the currant bushes, for ten or twelve days, and gradually disappear. All those I kept under glass died sood after their escape from the chrysalis state, and I could not discover where those in the gardens laid their eggs, but I am very sure that they are deposited upon the bark of the currant bushes. I buried a quantity of the live worms in a hole about a foot deep, packing the earth over them as hard as I could. For three days they were crawling out of that hole as fresh looking as ever, and measuring the road to my gooseberry bushes with hungry haste. No amount of *mashing* with trowels or spades seem to kill them after they touch the ground, but they can be drowned very easily. Their name is certainly *legion*, for I have known nine hundred to be shaken from a single bush, at one time. I remember seeing the same worm occasionally some twenty years ago, but it is about seven years since they have appeared in such numbers as to become a pest. I do not see any apparent diminution in their numbers, even in those gardens where they are picked off and destroyed daily in incredible numbers. I believe that a small lantern, set in a pan of water well soaped, would attract the moths at night, and by falling from the sides of the lantern into the water, they would be drowned, which would be a much easier way of destroying them than picking off the worms one by one with the thumb and finger as most of my friends do.—*Correspondent Horticulturist.*

A GENTLEMAN called in our office lately and showed us a Baldwin apple grown near this city, which welghed one pound, and measured 12 1-4 inches round. We felt a strong desire to taste it, but was informed that it was, like some "big things," only for show!

HINTS ABOUT EVERGREENS.

IN reply to several inquiries respecting the proper time to transplant evergreens, we answer that our own experience has induced us to prefer from the 15th of March to the 15th of May, as a choice taking the latter half of this period. Even when the tree has shot half an inch, it seldom fails to grow: provided that it has been carefully lifted in the nursery and carefully set down again. Its growth, it matters little of what variety it may be, is as certain as any other tree. We scarcely have never lost one

In transplanting, however, they should be well secured by a strong stake, which should be at an angle of of 45 degrees, pointing northward. Unless this is done, the high winds of spring, meeting with full resistance, may loosen the roots and kill the tree.

For an ornamental hedge, there is nothing equal to the Hemlock Spruce; it grows equally in sun and shade, though it is most beautiful and luxuriant when shaded about half the day, and the soil is cool and rather moist. A mulching of dead leaves or manure is excellent for the hemlock. When exposed to the sun, the American Arbor Vitæ makes an excellent hedge. It readily grows and is perfectly hardy; but it does not answer where there is much shade, becoming stunted in its growth, and ragged at the bottom.

For sheltering a northern exposure, or protection against any undesirable view, there is nothing equal to the Austrian Pine. It is almost like a wall of iron, bearing more rough usage than any other evergreen. The northern blasts beat harmlessly against it. And although it is a hard-looking, robust, masculine tree, it is, at least to us, extremely pleasant to the eye.

As a choice of Evergreens, we should, as a rule, prefer the true Norway Spruce, the Hemlock Spruce and the Silver Fir. The latter requires considerable room, unless kept in by pruning, as its branches usually take a horizontal growth, like the Silver Pine. All Evergreens will bear pruning to almost any extent. Every grower can suit himself as to shape.

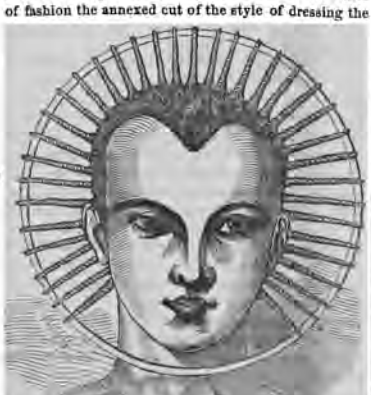
In selecting evergreens of all kinds, be sure to take those with uniform branches down to the ground—a straight, undivided main stock, with numerous thin branches, drooping a little if possible. After transplanting, mulch with barnyard manure, to the extent of the branches, and once a year lightly fork up the soil underneath and keep clear of grass until the tree attains ten or twelve feet in hight. An annual application of manure will produce a rich dark green foliage.—*Germantown Telegraph.*

GRAPE MILDEW PREVENTED.—E. W. Herendeen, of Macedon, N. Y., who has recently visited the Experimental Grounds at Washington, under the charge of W. Saunders, informs us that some experiments for preventing the mildew of the grape, by erecting a cheap roof over them, seemed to answer the purpose perfectly. The roof, he states, may be simply a board sixteen inches wide, nailed to the posts. On a hundred varieties treated this way, not any mildew was seen; while all the rest in the same yard were entirely ruined. Further experiments are necessary. —*Country Gentleman.*

Ladies' Department.

FASHIONS.

It is too early to give a good and reliable statement as to what will be the prevailing style of dress the coming spring and summer. The fashion editors or authors seem to be holding in the balance a mysterious change in dress, the nature of which they condescend to reveal to us poor followers only, as the Egyptian style. What it is, we can only imagine. Godey says: "the new fashion is especially discernible in the flat bands like bracelets, in lieu of sleeves, and in the scarf-like berthe gathered up in the centre and on the shoulders by Egyptian heads in onyx, ornamented with necklaces and head-dresses of precious stones. The *Lady's Book* also tells us that the new jewelry is strongly Egyptian in its character, and the mummies are called upon to contribute to fashion. Gold earrings are of gigantic proportions and of the hoop shape, with pendant ornaments in the centre. In view of these revelations, and of course in no spirit of humor, we submit to the ladies of fashion the annexed cut of the style of dressing the



hair in Africa, taken from Livingstone's Book of Travels. It is an appropriate head dress for those who propose adopting the Egyptian style of dress. We think it would be decidedly *cool* for summer, and somewhat novel, and as the "waterfall" originated with the Caffree ladies, it is quite in taste to follow with the above beautiful design from the same source.

BIBLICAL ANAGRAM.

Ed hout ym grouts atabhinoti, rewha-notu I ymatnuaincy oll sertro: thm shat nivge dnammeometn ot veas em; orf ohut rat ym cokr nda ym sorstelf.

MARY AND MATTIE.

To Preserve Apples.—Put them into a dry cellar, of easy access to a large family of children.

MADELINE'S KITCHEN CABINET.

A NEW KITCHEN ERA.

WRITTEN FOR THE AMERICAN FARMER.

At last we are likely to have a culinary revolution—a kitchen reform; something practical and good, better infinitely than anything ever taught us by the flood of lady cook books with which we have been inundated; teachers that taught us, mechanics, and mechanics' wives, nothing but extravagance, when we most needed to be taught economy, and the art of cooking good, cheap, wholesome dishes.

Ever since the days of the first French Revolution, France has had the best cooks, and the best, cheapest, and most economically cooked dishes in the world. In France, they cook for the king or the commons equally well, and no other people on earth are universally such good cooks, contriving so great a variety of capital dishes so cheaply.

As a rule, the artisan in France dines better than the prince in Austria. It is because the French *cook* their dishes—they do not murder them. Too many of us in America, as well as in Europe, commit murder in cooking.

In his life, M. Soyer was *par excellence*, the best cook in the world. The world has lost M. Soyer, but not his science. His kitchen mantle has fallen double on the shoulders of M. Blot, and to-day, he undoubtedly stands first in the world's *cuisine*. We have M. Blot with or very near us. In New York's fashionable Broadway, the *chef* has opened a kitchen—an academy, if you please—in which cooking is practically taught as a science. And the best, and fairest of New York's ladies, are going to Prof. Blot's academy in classes of a hundred, to learn to be cooks.

Madeline is a graduate of M. Blot's cooking academy, passed, and proud of her kitchen diploma, and if you, Messrs. Editors, will permit, M. Blot's scholar is going to tell all she has learned, of the manner of compounding and preparing perhaps a hundred dishes—most of them simple, cheap and excellent, as the *chef* makes them, and as we can, every woman of us, make them, being once instructed, quite as cleverly as M. Blot himself.

The *chef* teaches no mystery or extravagance. All is clear, practical and economical. I do hope Mons. Blot will have a call to come to Philadelphia and establish a cooking academy in Chestnut street. Thousands of men and women, dying by inches, of ill-cooked viands, would bless the great culinary master for the remainder of their natural lives.

Divesting the new *regime* of so many of its French technicalities and terms as I can safely prune away without interfering with the flavor, I shall endeavor to retain all M. Blot's practical science and economy in every dish. If I make a mis-step here and there, I beg my readers to bear in mind that I am a country girl born and bred—only I have just passed beyond my "teens," and am simply a farmer's wife, though a rather clever cook. Then remember mercy, and I am safe.

With the space permitted me, I can of course be only introductory in my first communication, and then we will go on afterwards in "course," with our lessons as M. Blot himself gives them, making everything as plain as possible.

Professor Blot has spent almost half an ordinary life-time in reducing cooking, or rather elevating it to an art, and the perfection of very high art he has made it. By following M. Blot's instructions and practice, any woman in the country possessed of plain, practical common sense, can not only become a great deal better cook than we can find now—one in every ten thousand among American women—but with the knowledge acquired, she can improvise a hundred new and good dishes she had never before dreamed of.

Every newspaper and magazine in the country ought to present M. Blot's kitchen and philosophy and practice to their readers. They could confer upon them no greater benefit.

According to M. Blot's authority, there are but *seven* regular courses in any dinner, and these may be so varied as to be quite as proper and pleasant for the mechanic's or farmer's, as the monarch's dinner. They are:—

1. Soup.
2. *Hors d' euvre*—some trifle to be eaten while the *releve*, whatever it happen to be, is being carved.
3. *Releve.*
4. *Entree*—whatever side dish is brought in direct from the fire or side table.
5. *Rotis*—roast.
6. *Entremets*—any of the made dishes that properly follow the roast.
7. *Dessert.*

Now we are prepared for the first lesson in cooking, and M. Blot's bill of fare.

(To be continued.)

DOMESTIC RECEIPTS.

Excellent Family Cake.—Mix thoroughly together 2 pounds of butter and 2 of sugar. Mix one-half of it with 4 pounds of flour and 1 tumbler of good, home-yeast and 1 quart of warm, sweet milk. Beat and work with the hands till thoroughly and smoothly mixed. Let it stand four or five hours, or till it is well risen, when add the remainder of the butter and sugar, with 2 pounds of good raisins. Where the stoneless raisins cannot be procured, be sure that the fruit is well stoned before adding to the cake, and a small quantity of pulverized mace. Let it stand over night, and put in pans for baking early in the morning. Let the cakes rise in the pans, when bake at least an hour, in a slow but steady oven. No eggs are required, and if well frosted, may be kept for a long time. Persons to whom eggs are a denied luxury from dyspepsia and other causes, may eat this cake and enjoy it too, as it is *par excellence*.

Vinegar from Apple Parings.—An excellent vinegar can be made by setting aside a large covered crock, and from time to time putting in the apple parings and cores saved from the cook room. Cover with water. In six weeks or two months this will make an excellent table vinegar. Persons living in the city, who experience difficulty in getting good and reliable vinegar, free from acid, will appreciate the value of this method. When quite sour it should be strained from the pulp, put to settle, and afterwards bottled for use. The pulp may be returned to the crock, be covered again with water, and receive the cores and parings as before, ready for the next edition.

Corn Bread or Pudding.—Having tested the following recipe, we can recommend it as being first rate in quality, and exceedingly economical as to cost; Take 1 quart of sweet milk, 1 teaspoonfull of cooking soda, 1 teacupfull of fine sirup or best molasses, 2 teaspoonsfull of salt, 4 teacupsfull of fresh corn meal, and 3 or 4 teacupsfull of flour. Add 1 tablespoonfull of butter, melted. Mix these ingredients well together, and bake slowly an hour or more. The proportion of flour and meal may be varied. The above cooked in a steamer makes a good pudding to be eaten with cream or milk, and sugar or butter. If any one can get up a better corn bread or pudding than this, at as little expense, let them furnish it at once to The American Farmer. *

Jelly Cake.—Four cups of flour, three of sugar, one of butter, one of sour cream, five eggs, one teaspoonful of saleratus. Bake thin and spread a layer of jelly between. This is excellent.

Good Family Soup.—For Two Persons.—Take four medium sized potatoes and one onion, peel and cut the potatoes in squares a little larger than a marble. Slice the onion very thin, wash, and cover with water. Cut up the lean part of two mutton chops, very fine, and sprinkle with pepper and salt, and one teaspoonfull of flour; add to the potatoes and onions, and boil fifteen minutes.

Eggs.—If eggs are good they rest upon the side in water. If one floats end up, you may be sure it is bad.

ILLUSTRATED PUZZLES.

ANSWER TO PUZZLES IN MARCH NUMBER.

No. 5—Because he has already worn it over two (y)ears.

No. 6—Waiting for a chop.

No. 7—Why is this like Ireland?

No. 8—Why is this like your husband in a passion?

POETICAL ANAGRAM.

Incea elifret kame het msu fo nambe nithgs,
Dan fibl roa resymi mofr oul llifnes riepgus;
Nisea file's steb sojy tissoun nl cespe nad sese,
And ewf ane veus ro verse, tnb lal con sleape;
Ho elt het glunente pritis neari romf neceh,
A msell nikounesad si a trengnef ecof.

MARY AND MATTIE.

Answers next month.

Young People's Page.

A CHAT WITH THE GIRLS.

WRITTEN FOR THE AMERICAN FARMER, BY "C. N. B."

We shall, Messrs. Editors, with your permission, dedicate a few remarks in this number, to the girls, whose interest we have been extremely anxious to consult. From our youth upwards we have been an admirer of the tender sex, and never better pleased than in serving them, pursuing the path of rectitude and honor. There is something in the character of a fine woman so truly estimable, and so surprisingly calculated to enchain the feelings and to charm the heart of man, that it would seem next to impossible for her so to undervalue her good name, as ever to depart in the least degree from the sphere in which nature intended her to move. We shall accordingly address a few observations by way of hint, sincerely hoping that the source from which they are derived, will entitle them to some small share of attention.

Our aunt Rhoda, we always considered a fine, sensible old lady. It was enough to do one's heart good to sit and hear her "argufy" any interesting topic. Although not much skilled in the lore of metaphysics, aunt Rhoda was an excellent reasoner, and we dare say that even if that shrewd old fellow, John Locke, was alive she would prove to him satisfactorily, that her blue stockings were not white, without a single argument. Aunt Rhoda had three fine rosy-faced daughters, upon whom she bestowed her constant and undivided attention. She loved them as all parents ought to love their children, and with unwearied diligence was employed in rendering them happy and contented. We once spent an evening with aunt Rhoda, when among other topics of discourse, she dropped a word about "bringing up girls," for they were not allowed *to come* up, as now-a-days; and as we well knew, no one was better acquainted with a subject of this kind, we desired her to give her mind freely upon it. The good old lady immediately put herself into her talking attitude, as was the custom of the day, with an elbow on each knee, and a full pipe of tobacco in one hand, and after some half-a-dozen whiffs, began:

"Girls," said she, "require more care in bringing up than parents generally suppose. Some people think it sufficient if they can get their daughters introduced into what they call good company, make them acquainted with all the newest fashions, and teach them a kind of flippancy of tongue and pertness of manners; but I am of a very different opinion. I never found that girls were generally esteemed for any of these tinsel arts. On the contrary, I have almost always found that the kind of assuming forwardness which belongs to some females, renders them disgusting to their associates; while a meek, modest deportment as often assures to them a general esteem and respect. It has always appeared to me as one of the greatest misfortunes that can befall a young lady, to be called or to be thought the belle of the town, and to be surrounded by a cavalcade of languishing admirers. I scarcely ever knew a lady of this character, who did not meet more than her full share of public reproach. The lips of the malicious and envious are ever prepared with scandal, to endeavor, if possible, to bring such a person down upon a level with themselves in the public estimation. Besides, girls that are constantly surrounded by a multitude of beaux, are not in a situation to place their attachments so judiciously as those who are more recluse, and consequently have more time for sober reflection. I have known many young ladies captivated by what I should consider a trifling accomplishment in a young man; while at the same time they would neglect the overtures of one, who in every respect was vastly his superior. Now, I cannot account for this in any other way than from an error in bringing up. Had they been early taught to prefer the substance to the shadow—to admire solid rather than shadowy acquirements, it is not probable that their judgment would often lead them amiss. I consider it also very improper for a lady to have any particular gallant continually dangling at her side, month after month without his making any advances of love or even friendship. If a young gentleman is really fond of a young lady, and wishes to make her his wife, his intentions ought to be made known, and it is most unquestionably the duty of the young lady to discard him if he do not make proffers of attachment after a suitable acquaintance. I have known the characters of many young ladies suffer very much from an inattention to this particular.

"To prevent girls from forming improper attachments, I know no better rule than to learn them to be domestic. Girls who are fond of home, will seldom, if ever be troubled by the officious gallantry of a conceited fop. They will be likely, moreover, as I observed before, to make proper distinctions between the truly valuable and the artificial; between the man of real sense and of imposing ostentation. It has always been my plan, in bringing up my girls, to endeavor to make them pleased with home, and to furnish resources of amusement for them under my own roof; and I think I have succeeded very well, as every other parent may do. I have been desirous of giving them a solid rather than a specious education; and have taken care to make them well acquainted with household affairs. At the same time I have never wished to debar them of rational amusements abroad, but have always endeavored to make them prefer home to any other place."

Here aunt Rhoda's pipe went out, and her remarks were brought to a close.

The Fox and the Grapes.—A fox, just at the time of the vintage, stole into a vineyard where the ripe, sunny grapes were trellised up on high in most tempting show. He made many a spring and a jump after the luscious prize; but, failing in all his attempts, he muttered as he retreated, "Well, what does it matter? The grapes are sour!"

Acquire a habit of observation.

Editor's Table.

Success of The American Farmer.

We take pleasure this month in returning thanks to our numerous friends and agents who have done so nobly in extending the circulation of The American Farmer. The way they are sending on the names of their friends and neighbors is very encouraging, and we can but thank them for establishing this journal on a solid and enduring basis. Their liberal support and active exertions will stimulate us to still further merit their good will. We shall spare neither expense nor labor to make the "practical farmer's own paper" worthy of a large and extensive circulation. During the last month a very large addition to our subscription list has been received, but there is yet room for doubld and treble the number. We must again urge upon our friends to make another united effort to still further increase our list of subscribers. There is yet time; do not delay the matter, but go to work at once, and ask the first farmer you meet. We can supply all the back numbers from the commencement of the year, which will be mailed at once, to any address, in any State or Territory. The Farmer has already subscribers in almost every State, and having a "foothold," we desire to extend its circulation until its influence will be felt on every farm in the land.

Second Annual Fair of the New York State Sheep Breeders and Wool Growers Convention.—We learn from *The Rural New Yorker* that the next annual fair of this association will be held in this city on the 8th, 9th and 10th of May, and that the following classifications were made at the last meeting of the executive committee:

Prizes are offered on six classes of Sheep, as follows:

First Class—American Merinos.

Second Class—Fine Merinos—yielding a wool adapted to the manufacture of fine broadcloths and other fabrics requiring a staple of equal quality.

Third Class—Delaine Merinos—yielding a wool adapted to the manufacture of delaines and similar fabrics—length of staple being a leading consideration, but in which neither extreme fineness of fibre as required in the second class, nor great weight of fleece, as required in the first, are to be regarded as absolute essentials.

Fourth Class—Lambs—of preceding classes.

Fifth Class—Long Wooled Sheep—including the Leicesters, Cotswolds, and other breeds and varieties usually comprised under that designation.

Sixth Class—Middle Wooled Sheep—including South Downs and other sheep usually so classed.

Officers.—President.—H. S. Randall, Cortland Village; Corresponding Secretary—E. B. Pottle, Naples; Recording Secretary—H. L. D. Sweet, Syracuse; Treasurer—A. F. Wilcox, Fayettville, N. Y.

Erratum.—In the March number the compositor makes "S. W." say, "flesh farmer" and "fat farmer." It should have been flesh former and fat former.

The American Consul at Amsterdam writes to the Department of State, February 20th, that the cattle plague is still spreading, and it is feared will infect the whole country. A mode of treatment recommended as promising to be a successful cure, is to rub the skin of the animal vigorously and then cover them with cloths dipped in cold water, over which dry cloths are to be spread. Out of twenty-two cases treated in this manner only one was lost.

Name Wanted.—If the subscriber at Cleveland, O., who sent us a dollar, and did not give his name, will inform us who he is, we shall take pleasure in mailing the paper to him.

Trachinæ.

The nerves of not a few nervous people have been of late much unsettled by the new bugbear that has been raised regarding the fitness of pork as an article of diet, and some heretofore lovers of ham, spareribs, and tenderloin have made (they think) the alarming discovery that these once-prized viands are the abode of countless worms or trachinæ, that need but to be eaten to work sudden and entire destruction on the whole outer and inner man. Terrible accounts have reached us of the ravages of this new plague in Germany, and it is even rumored that one person has fallen a victim in this country. (It may be well to add that the accounts of this victim are very indefinite and unauthenticated.) If the alarm that seems to have seized hold of some people is to spread, we shall have anti-pork societies all over the land, and Cincinnati and Chicago will cease to offer up hectacombs of swine to appease the hunger of man. But, with all this hue and cry, there is, as usual in alarms, but a very minim of truth. People have been made sick and died of ham-poisoning in this country, occasionally—perhaps once or twice in five years—and people have eaten diseased beef and immature veal; but all this proves nothing against good beef, pork, mutton, etc. The corn crop of the West was, the past season, most abundant, and of a quality far superior to any crop raised for a number of years; consequently good sound corn goes far toward making good sound pork. The breed of hogs in this country has been constantly improving during the past ten years, and it would be next to impossible to gather together any number of hogs of the class commonly seen here ten and twelve years ago.

The cry of trachinæ may suit the purposes of sundry *bears* in the pork ring on 'Change, but if the community is to be gulled to serve the purposes of a clique of speculators the people may as well know to whom they are indebted for higher prices, in consequence, for beef, mutton, &c.—*World.*

The New York State Agricultural Society intend holding a trial of implements next fall. A circular with particulars will be sent on application to the Secretary, B. P. Johnson, Albany, N. Y.

A great pressure is in motion for the removal of the Commissioner of Agriculture—so far without success.

Inquiries and Answers.

MESSRS. EDITORS.:—I do hope that some of your lady readers, or the editress of the "ladies' department, will give us in the April or May number, a good, plain and reliable method of canning strawberries. We have a large bed of this berry, and I shall have plenty to put up. I must confess that I have had poor luck in canning all fruits, and as I know the thing can be done to perfection, I want to know how it is done.—*Mrs. H. A. B.*

MESSRS. EDS.:—How should hen manure be used for corn, and will it increase the yield?—*R. T., Michigan.*

We have seen a statement, somewhere, of a farmer who applied six bushels of hen manure on two acres of corn, putting about a tablespoonful to each hill, and planting the corn upon the manure, and he thought that it increased the yield twelve or fifteen bushels to the acre.

MESSRS. EDS.:—Will some of your readers inform me through your columns, how much stock I should keep on a 100-acre farm, and the proportion. I want to combine stock raising and grain growing together, and want at the same time to keep up the fertility of the soil, and think I can do it in no better way than keeping stock and making manure.—*J. W., Tennessee.*

MESSRS. EDS.:—Will you please give the names of the best six varieties of grapes for cultivation.—*H. J. L., Ohio.*

At the last meeting of the Fruit Growers' Society of Western New York, a vote was taken on this question with the following result, Delaware, 56; Diana, 47; Iona, 36; Isabella, 32; Creveling, 30; Concord, 29. Others were mentioned, but the above six obtained the largest vote.

MESSRS. EDS.:—In view of the great calamity that has fallen upon the farmers of England, and the remedy that is going the round of the papers in regard to vaccination, do you think it advisable for us to vaccinate our cattle in order to prevent its ravages, should this disease break out in this country?—*J. C., Indiana.*

"An ounce of prevention is worth a pound of cure," is an old saying. We notice that many farmers are already vaccinating their cattle in this country, and as it has been found a preventive in Australia, where a disease said to be the cattle plague, has raged for some time, we think it advisable to do so. At any rate, it can do no harm, and may be the means of saying many animals, if the disease is *really* small pox. But upon this point veterinary surgeons and professors in England seem to disagree, and according to the latest news received, vaccination does not appear to have had the desired effect, and a law has passed the Legislature authorizing the government to order all diseased cattle to be at once destroyed and buried.

MESSRS. EDS.:—I noticed in the February number of THE FARMER a short article about Cashmere goats. I would be very much pleased to have some one tell me through the columns of THE FARMER, where they can be had, price, profit, and the manner of breeding them, &c., &c., and all the information that would be interesting to one that knows but little about them. Will some one who has them for sale, advertise them in THE FARMER?"—*J. E. R., Ohio.*

MESSRS. EDS.: Will some of your readers give their experience, through the columns of THE FARMER, of the Galloway breed of cattle, imported some years since from Scotland? From some unexplained cause, these excellent cattle appear to be entirely ignored by our leading stock raisers, and large numbers of the best farmers in the country seem to be unaware of the existence, even, of the Galloways, as a distinct and valuable breed! Canadian breeders, with more wisdom than ourselves, have introduced them extensively, and they form a very prominent department of live stock at the Provincial Fairs. They prove to be better adapted than any others to our long, severe winters, are less liable to disease, and consume less food, and of a coarser kind. On a recent visit to Europe, your correspondent saw large numbers of these cattle. They bring the highest price, per pound, live weight, in the London market, on account of the acknowledged superiority of their beef. The Galloways are distinguished by their color, which is invariably black, having sleek black coats, slightly curly about the head, and are entirely hornless. They are very docile, and compare very favorably in all respects, except size, with Shorthorns. Will some of your readers, who have tried them, give the result of their experience, and state where pure blooded stock can be had?—*A. J. S., Rochester, N. Y.*

C. J.—(Norristown) AND J. H.,—(Ohio.)—You can get Hamburgh fowls by addressing E. A. Wendell, Albany, N. Y. See advertisement in this number.

A. L., (Littleton, N. C.)—Broom corn seed is worth from 8 to 15 cents per pound. Planting seed, $3 per bushel. It requires from two to three quarts to plant an acre. See advertisement in this number.

J. M., (London, C. W.)—Flour of bone is the best manure you can use.

Extracts from Letters.

LET 'EM SHINE.—In regard to appointing a new Commissioner of Agriculture, you say in your last number, quoting from a certain circular, "We would suggest that as there are *only* TWO *men specially educated for this profession* in this country,—one of *them* should be appointed to this office." Would not it be better to have the office divided between them, so that their light may shine in two different places "ter once?" Thus we might have two "head centers," say one in Washington and the other in Salt Lake. Then who, could tell what "galorious" gleams of intelligence, and splendid coruscations of science might emanate from such a wise and "specially educated" couple?

MESSRS. EDS.:—We rejoice in the advent of THE AMERICAN FARMER, and we hope it will be read by the farmers in all these United States. The first numbers come to us freighted with the quintessence of many thinking heads and wise hearts, calculated to interest, amuse, and enrich all its patrons. We were sad to have the old *Genesee Farmer* go down; but we trust THE AMERICAN FARMER may be more useful to the farming community, and be appreciated by the multitude in such a manner that yourselves will derive pleasure and profit in publishing "the practical farmer's own paper."—*B. D., North Chili.*

MESSRS. EDS.:—I am much pleased with THE FARMER. It appears to be an earnest advocate of the farmer's best interest; and well calculated to do as much good as some larger and more pretentious monthly journals, that seem to depend more on management, than the value of their contents, to secure a large circulation. I shall be very glad to see your journal receive a full share of the success that it so well merits.—*P. F., Orleans County, N. Y.*

Notes on the Weather from Feb. 14th to March 15th, 1866.

As the temperature of each half of February was near the general average, so of course was that of the month; of the last half 27.1°, and the general average 27.2°, and of the month respectively, 25.62° and 25.65°. The cold was below zero only once in February, and was 3° below on the 16th. The snow has been very sparing, making but little sleighing. The rain of the 27th carried off the snow chiefly, and filled many cisterns. In the States of Maine and New Hampshire, and over much of New England, the streams had been very low, and the wide rain of the 24th and 25th was a great favor to both man and beast. The ice of the Genesee was removed in the city by the rise on the evening of the 24th.

The water of the month, amounted here to only 1.49 inches, and for January 1.48 inches; so that only a small quantity of water in rain and snow has fallen for the two months; the average is near twice as much. The earth is frozen at the close of the month.

The month of February had no *full moon*, while January had a full moon on the 1st, and another on the 30th. In 1847 the same fact occurred; February then had no full moon, 19 years ago; it will have no full moon in 1885; 19 years of the future, and this occurs once in 19 years, when the same change occurs nearly the same hour of the day.

March began warm, but was cold after three days, so that each noon was less than 29°, till the 10th, with much heavy, raw, chilly wind, making a dismal time. How people did complain! The next three days were warmer but rough; and only the last two were warm. The 14th was 60° at noon, very pleasant and too warm; and the 15th was only 39° at noon. Still, the temperature of the first half was 32.3°, or two degrees above the general average. Little sleighing; ground frozen; water of this half, 1.29 inches, only a little less than in all February, or in all January. The Genesee has been up considerably.

March has had only five days in thirty years when the cold was as low as zero at any part of the day. On March 10th, 1850, the temperature was 5° below zero, and the average of that day was 1° below. In that year the months of January and February, as well as the first half of March, were severely cold. All these five days, but one, were in the first half; so that we may expect no more such cold weather in the half month to come. The earth is being prepared for the operations of spring in its season. Let us trust.

Liberal Offer.

To ANY one who will send us seventy-five subscribers, at one dollar each, or one hundred and twenty-five at 75 cents each, we will send one of the Franklin Sewing Machines, worth $30.00, per Express. This is a liberal offer, who will be the first to take one? Send on the names as fast as you get them. They need not all go to one Post Office, as we send to any address; nor need they be sent in all at once. In remitting enclose a draft on New York or post office order

Literary Notices, &c.

LITERATURE IN LETTERS; or, Manners, Art, Criticism, Biography, History, and Morals, illustrated in the correspondence of eminent persons. Edited by James P. Holcombe, L.L.D. New York: D. Appleton & Co.

An interesting work, containing 190 letters, every one of which is readable, many of them extremely humorous and witty; not a dry, unentertaining page in the whole volume. Franklin, Johnson, Washington, Sidney Smith, Chesterfield, Dickens, Sir Walter Scott, Milton and Pope, and in fact all noted characters, and writers of the last two or three centuries are here represented in their private relations to their friends. Every family should possess a copy as a standard work in the household. For sale in this city, by Steele & Avery.

HOURS AT HOME. A popular monthly devoted to Religious and Useful Literature. Edited by J. M. Sherwood. New York: Charles Scribner & Co. For sale in this city, by D. M. Dewey.

We consider this periodical the best work devoted to religious and useful literature in this country. This year it enters upon its second volume, and the numbers now before us are exceedingly interesting.

THE PRACTICAL ENTOMOLOGIST.

A correspondent wishes us to call the attention of the readers of THE AMERICAN FARMER, to the above-named publication, which is doing much towards distributing a knowledge of injurious insects among those who are most interested in such knowledge—the farmers and fruit growers of the country. It is published monthly, and distributed gratuitously to farmers and others who send twelve cents for postage. Address, E. T. Cresson, 518 South Thirteenth street, Philadelphia.

THE LONDON QUARTERLY REVIEW,

For January, contains articles on Livingstone's Zambesi and its tributaries; Simon de Montfort, Earl of Leicester; Tennyson's Enoch Ardeu; M. Sainte Beuve; Glote's Plato; Miss Berry's Memories; Palgrave's Arabia.

THE WESTMINSTER REVIEW.

The Westminster Review for January contains seven articles as follows: John Stuart Mill on the Philosophy of Sir William Hamilton; Precursors of the French Revolution—St. Pierre and D'Argenson; Lord Palmerston; Coleridge's Writings; Physiological Experiments—Vivisection; the Polish Insurrection of 1863; and Dr. Livingstone's Travels. The editorial contributions on Contemporary Literature—always the ablest article in the Westminster. Published by Leonard Scott & Co., New York. For terms, &c., for the above Reviews, see "Literary Notices," March number, page 100.

PAMPHLETS, &c.

From Ellwanger & Barry, of this city, a circular of a new dwarf variety of the American Arbor Vitæ, originated on their grounds a few years ago, remarkable for its slow growth and compact symetrical habit. At five years old, it only averages 15 inches in hight, and 18 inches broad, and is recommended as an acquisition of much value in the class of small, hardy evergreens, for the decoration of gardens and lawns. Price $5 each, or $18 per dozen.

Third Annual Report of the Proceedings of the West Jersey Fruit Growers' Association, with a list of officers and members, for 1865 and 1866. Clayton Lippincott, Moorestown, President, and William Parry, Corresponding Secretary.

Pomona Garden and Nursery Catalogue for spring of 1866, of Small Fruits and Ornamental Trees. Cultivated and for sale by William Parry, Cinnaminson, N. J. Catalogues sent gratis on application to the above address.

Montelair Small Fruit Nursery Catalogue of Plants and Small Fruits, with a full description of the Kittattinny Blackberry, the best variety yet introduced—grown by E. Williams, Montclair, N. J., with prices for spring of 1866. Sent to all applicants.

Catalogue of Reading Nursery, from J. W. Manning, Reading, Mass.

From D. S. Heffron, Utica, N. Y., a circular, with full description of the Goodrich Seedling potatoes, with price and testimonials.

THE MARKETS.

ROCHESTER, March 23, 1866.

FLOUR—White wheat, $12@$13.75. Red, $9.50@10.75. Extra State, $7.25@$7.50.

GRAIN—White wheat, $2@$2.50. Red do., $2@$2.12. Corn 60@65c. Barley, 85@90c. Oats, 40c. Rye, 70c.

PROVISIONS—Mess pork, $26@$30. Dressed hogs, $11@$12. Lard, 18@19c. Butter scarce at 45c. Eggs, 20c. Chickens, 17@20c. Cheese, 18@22c. Potatoes, 45@50c. Turkeys, 20@22c.

NEW YORK, March 23.

FLOUR—The market for State and Western flour is dull and heavy, and common grades are declining. Superfine State, $6.75@$7.10; Extra State, $7.10@$7.50; Choice State, $7.50@$8.15; Superfine Western, $6.75@7.15; for common to medium extra Western, $7.25@$8.10; for Extra Round Hoop Ohio, $8.15@$8.65. The market closing heavy. Canada flour is heavy, at $7.30@8.10 for common, and $8.15@$11.25 for good to choice Extra. Rye flour quiet.

GRAIN—The market for wheat is dull, and common grades declining. Milwaukee club, $1.55. New No. 1 do., $1.67; choice amber State, $2.43. Barley in moderate request, at 80c for State, and 116c for choice Canada West in store. Corn is less active, at 69@73c for unsound mixed Western, and 73@75c for sound. Oats are in moderate request; sales are at 35@41c for unsound, and 52@55c for sound Western, 53c for Canadian, 49c for Jersey and Pennsylvania, and 58@54c for State.

PROVISIONS—The market for pork opened heavy and lower, but closed more firmly. Sales at $25@$25.12 for new mess, closing at 25.12 cash; $23.75@24 for old mess, and $21.15@$21.75 for prime. Cut meats active, at 11½@12¼c for shoulders, and 16@18¾c for hams. Lard, 17c@19¾c. Butter, 28c@45c for Ohio, and 40@60 for State. Cheese, 16c@22c for common to prime.

CHICAGO, March 22.

GRAIN—Wheat active, sales at $1.28¼@$1.28¾c for No. 1, and 85c@86c for No. 2. Corn dull, and sales at 41c for No. 1, Oats dull at 25@25½c for No. 1.

PROVISIONS—More active. Sales of mess pork at $26.00. Lard, 17¼@18c.

HOGS—Dressed hogs are firmer at $11. Live hogs are active at $9@$9.50.

BUFFALO, March. 22.

FLOUR—Market rules steady with a fair demand. Western at $9.50; White Canada, $11.50; Canada bakers, $8.25; common to ordinary spring, $7.50@7.75 for extra State and choice spring; $8.25 for Western bakers; $8.25@8.75 for Canada bakers, $8@$8.50 for Red winter, $9@$9.75 for amber, and $10.50@12 for common to choice XX white Canada and Western.

GRAIN—Wheat rules quiet. Canada white, $2.25. No. 1 Milwaukee spring, $1.65—held at $1.63@$1.65 for No. 1 Milwaukee spring. Canada Club, $1.62@$1.63, amber Canada, $1.95@$2.10, and $2@$2.35 for inferior to very choice white Canada. Corn rules nominal, and is held at 70c for old mixed; 61c for new mixed on track. Oats quiet, held at 35@40c for Western, and 45@47c for Canadian. Barley rules dull and heavy; held at 95@100c for ordinary to choice Canada, and 85@95c for State. Rye rules dull and nominal held at 80c for No. 1 Western. Peas steady and in fair demand. Canada at 101@102c. Beans firm; held at $1.50@$1.75.

DRESSED HOGS—Dull. Held at $10.50@$10.75 for Canada.

SEEDS—Quiet. Held at $3.25@3.50 for Illinois and $3.25@$3.50 for Wisconsin timothy, $6.37@6.62 for clover, and $2.50 for flax seed.

Special Notices.

THE rapid growth of the Sewing Machine business within the last ten years, is truly astonishing. In the early days of the trade, a thousand machines was a number manufacturers hardly ventured to contemplate. Now, some two or three establishments count their sales between one and two hundred thousand each. The greater part of these are performing their mission of usefulness in the homes and manufactories of this country, but a large number have been sent to foreign countries, and the leading companies are establishing houses abroad to supply the growing demand. The Grover & Baker Company, whose machines are so popular in Europe as they are here, have branch houses in Liverpool and London, and in Melbourne, Australia; and they are establishing agencies throughout the entire continent of Europe. In this country they have branch houses in twenty of the leading cities—all fitted up expressly for their business, and tastefully furnished. These are all supplied with machines and the necessary findings direct from the factory on a uniform plan, so that the public are afforded the same facilities and advantages at Chicago or San Francisco, as at Boston or New York. The Grover & Baker machines are admitted to be superior to all others for family use, and for all purposes that require strength and elasticity of seam.—*Day Book.*

ADVERTISEMENTS.

CONTENTS OF THIS NUMBER.

STEREOTYPED BY JAMES LENNOX, 62 BUFFALO ST., ROCHESTER, N. Y.

VOLUME I. ROCHESTER, N. Y., MAY, 1866. No. 5.

THE AMERICAN FARMER.

A MONTHLY JOURNAL OF

AGRICULTURE AND HORTICULTURE.

ILLUSTRATED WITH NUMEROUS ENGRAVINGS OF

Farm Buildings, Animals, Implements, Fruits, &c.

Volume One, for 1866.

One Dollar a Year, in Advance.

Five Copies for $4.00; Eight Copies for $6.00; and any larger number at the same rate.

☞All subscriptions to commence with the year, and the entire volume supplied to all subscribers.

☞Postmasters, Farmers, and all friends of improvement are respectfully solicited to obtain and forward subscriptions.

Specimen numbers sent to all applicants.

Subscription money, if properly enclosed, may be sent at the risk of the publisher. Address,

JOHN TURNER,

Publisher and Proprietor, Rochester, N. Y.

MAY.

"The spirit of the gentle South wind calls
From her blue throne of air,
And where her whispering voice in music falls,
Beauty is budding there;
The bright ones of the valley break
Their slumbers, and awake."

These "bright ones of the valley," how sweetly they speak to us. So lately slumbering in death, now all awake, alive, arisen. The whispering voice of the gentle South wind has called, and they have come forth, all-glorious in the beauty of a new life. So little worth in the eyes of worldly wisdom, yet so cared for; "they toil not, they spin not," yet they stand arrayed in more than royal glory. Rose and lily, cowslip and primrose, pure, sweet, voiceless messengers are they all, telling us of a new life for him that was dead, and new glory for the lowliest and least worthy.

FARM WORK FOR MAY.

MAY is the month called "beautiful," and she has days that come nearer to the realization of our ideas of the paradise of our first parents, than any others in the year. When the grass wears its liveliest emerald hue, when the apple, peach, pear, cherry, and plum trees are laden with variegated blossoms, and the air is "oppressed with perfume"—then, the dweller in the country walks on earth, and breathes an atmosphere of which the unhappy "cit" has no conception. A few brief suggestions of the ordinary labors to be performed on the farm each month, may serve as a reminder to the practical farmer, and inform those, not of the profession, as to what is going on among those who produce the great staples of life.

As April was the *sowing* month, May is the *planting* month. We used to plant the corn crop first, and then the potato crop. But laterly, since the advent of the potato disease, we have thought that early planted potatoes were more likely to escape the rot, and now most farmers plant their potatoes first. The leading varieties for field culture are Dykemans, Buckeyes, Seedling Mercers, Flukes, Peachblows, Prince Albert, Jackson Whites, and Garnet Chili. The Seedling Mercer is probably our *best* potato, quality considered; but not the most profitable. They require a rich soil—do well on sod; but they are quite liable to rot. The Fluke is an excellent baking potato, but is subject to similar conditions to the Seedling Mercer. The Dykeman is tolerably productive, and a good early variety, but does not do well in some localities.

Of the others named, the Peachblow is the best, being one of the best spring potatoes we have. It yields well on light soils, and will turn off more money to the acre than the Seedling Mercer. The other varieties are coarse potatoes, but yield well, and consequently pay as well as any. The coarser varieties should be planted about three and a half feet apart both ways—the others three feet.

Plant medium sized tubers, cut into two or four pieces, and about six good eyes to a hill. It is a good plan to renew your seed from distant sections frequently. A little fine manure, or bone dust, in each hill, will increase the yield.

Plant corn as early as the season will permit, on rich soil, well prepared. The yellow varieties are generally preferred, although on light soil the eight rowed white does rather better. If, owing to the land being wet, it is necessary to put off planting until the last of the month, the Improved King Philip is a good kind to plant, as it will ripen in ninety days, and is quite prolific. South of 44°, the Ohio dent is a very profitable variety.

Sow plaster. Farmers, usually, have a little leisure after planting, when they should scatter the plaster with a free hand. Sow it on the pasture lot, on the clover meadow, on the corn hills, on anything which your experience teaches you it will benefit. It is the cheapest fertilizer that can be used for clover, and clover plowed under will improve the soil. From 100 to 150 pounds are enough.

Sow corn. Above all, do not forget to sow corn, either broadcast, or in drills, for soiling your stock, in case a drouth cuts short your pasture. In no way can so much good, nutritious fodder be obtained from an acre of ground, as in sown corn. If not needed in the summer or autumn, it can be cured, and makes the best of winter fodder. The ground should be very rich, and about four bushels sown broadcast, or two in drills, 2 1-2 apart. If sown broadcast, it should be plowed under.

Beans. The latter part of the month is a good time to plant field beans. Medium White are about as certain and profitable as any variety. They should be 2 1-2 feet one way, and in drills, or hills pretty close together the other way.

Sow carrots for stock feeding, last of the month, in drills, 2 1-2 feet, if to be worked by horse, or half that distance, if to be worked by hoe. Soil should be rich, and free as possible from weeds.

Repair fences. Turn cattle out to pasture from middle to last of the month. If cows are about to calve, keep them in the yard until it is over—for change of diet and the excitement of greater freedom, sometimes causes abortion. Save all the calves, for at present and prospective prices of cows and beef, it will pay to raise them.

FARM TALKS---No. 2.

WRITTEN FOR THE AMERICAN FARMER, BY G. E. BRACKETT, BELFAST, MAINE.

"WELL, neighbor, Jones, what have you been driving at, lately."

"Oh, a little of everything, getting ready for spring work, you know."

"Going to farm it pretty strong this year?"

"No; I can't see my way clear enough to go into potato raising so deep as I have the last two or three years. Don't think they will bring an extra price next fall, though the new tariff on those that are brought from the Provinces may have a good effect. I shall put in more barley."

"Sell any stock this spring?"

"Only my six-year old oxen. A butcher offered me $225, and I let 'em slide. I don't believe in keeping an animal you have raised for sale, after you have been offered all it is worth. They were a handsome pair of oxen though, and had got to be in good order. The three year olds and the horses will have to do the spring work. How are you getting along?"

"Pretty fair. I've been fixing up the old orchard. Just got through grafting last week."

"What kind of apples did you put in?"

"Mostly Baldwins. They are the standard fruit yet. There's nothing in the apple line that can compare with them for a market variety, that's been found out yet. I've put in some Talman Sweets, Rhode Island Greenings, and a tree or two of early kinds, for variety, you know."

"Cost's something more for grafting wax, than it did a few years ago, don't it?"

"Yes; rosin is high, but some are using the old-fashioned clay grafting cement. On large stocks it answers very well; but on small stock wax is indispensable. The clay cement is made by mixing two parts clay with one part clean cow dung, and putting in a little very fine hay, cut very short, to make it hold together."

"Have you got plenty of seed potatoes? If you have, I want to exchange some of my Footes for some you raised down on your clay loam field."

"Do you think they do better to change the seed from clay soil to your upland?"

"Certainly, I know they do. I make it my practice to change my seed potatoes at least every other year, and they yield much better by so doing. I suppose it is so, to a certain extent, with all kinds of crops, but potatoes show it plainly, and it is the same when changed from upland to lowland or clay loams."

"Got any seed corn to spare?"

"I can let you have a few quarts."

"How did you save yours?"

"I selected it in the field after the husks had got dry, taking only those ears which were filled out over the tips perfectly, and only those which were on a stalk that raised two or more good ears. This is the way I've saved mine for several years, and I think it is gradually improving the quality of the corn."

"What do you think of putting corn in so early?"

"I don't believe in planting corn or any other seed, until the soil is in condition to receive it, and that is not until it is warm and mellow. As a general thing, we are all apt to work our ground too early in the spring, and before it is dry enough. The consequence is we put in the seed while the soil is cold and damp, and by working the soil wet, it is left in a lumpy condition, only half pulverized, and unfit for furnishing food for the young plants. So it's best not to be in a hurry till the right time, and then put things through as fast as you please."

A FEW HINTS ON KEEPING FOWLS.

WRITTEN FOR THE AMERICAN FARMER, BY S. P. KEATOR.

I HAVE often thought that the profits of domestic poultry have been underrated to such an extent, that many persons do not give their fowls the care they are entitled to. That fowls kept by careful and experienced hands, have yielded a handsome income for the capital invested, no one will deny; on the other hand, fowls kept by careless and unobserving persons have failed to meet the expectation of that class who think that there is nothing in good care and good management of poultry, any more than anything else.

There are two classes that keep poultry, the one class keep and raise them for amusement, and generally are fond of that kind commonly called, ornamental poultry; the other class select and keep what are commonly called, barn yard fowls,and it is perhaps from this class, that the greatest profit is to be realized. They produce the finest chickens for the table, and if well kept, will at all seasons of the year supply the larder with good, fresh eggs, which a good cook will rarely if ever object to.

In order to be successful in raising poultry, a few precautions are necessary. First keep your roosting places for fowls clean, and free from lice; let your fowls at all times have free access to fresh and pure water, burnt bones, gravel, &c. Select hens for setting that you know are kind and gentle mothers; select good fresh eggs—those that have been laid the day before are to be preferred. A good sized hen can cover fifteen eggs, and if set in a quiet place will hatch from thirteen to fifteen chickens. After the hen has been sitting about a week it is well to sprinkle a little powdered sulpur in the nest. This will drive away all the lice the hen may have on her, which if allowed to remain, often compels her to leave the nest.

Should you prefer to raise pullets, select small round eggs, as the long sharp ones are sure to produce male chickens. About the time you think the chicks begin to hatch, it is well to examine the nest and remove all the shells and rotten eggs. Perhaps some of the confined chicks may require a little assistance, for sometimes they are unable to break down the prison walls that confine them. In rendering this assistance, be careful not to hold the small end of the egg downward as that may cause a loss of blood and the chick will die. The chicks should be left under the hen, in the nest, at least twenty-four hours after being hatched. By this they gain strength, and will be less liable to perish when removed to the open air. Let the coop stand facing the east, so as to receive the morning sun. Feed with cooked corn meal, until old enough to eat whole grain. A boiled egg occasionally is a good thing to give the chicks strength. Feed little and often and keep your coop clean, and no difficulty will be found in raising ninety per cent of all the chickens hatched.

MANURE FOR HOP YARDS.

WRITTEN FOR THE AMERICAN FARMER, BY P. W. COLLINS.

IT is a mistaken idea that the richest lands are those most appropriate for hop yards. Where the soil is very fertile, as in reclaimed swamp lands, and the rich mucky lands in many sections of Michigan, Illinois and Wisconsin, the growth of vines preponderates greatly over the quantity and value of the fruit raised, when treated in the same manner as is the soil in the older hop districts of New York. These older hop districts are what would be called in Western New York, poor lands; lands unfavorable to the growth of fruit or grain, except in their most hardy varieties; clay, slate lands peculiarly adapted for dairy or stock farms, and used for that purpose. Almost all the hop growers in these hop districts were first, and still are dairymen. The surplus of manure produced on the farms is used advantageously upon the hop yards there, while the same amount upon richer lands would only increase the growth of vines without a corresponding increase in the yield of hops.

There is an infallible rule for the preparation and cultivation of hop yards equally applicable to every section. Whatever prepares the ground well for corn, does for hops. The first thing necessary for either crop is to keep the ground mellow and perfectly free from weeds; first by sub-soil plowing and draining, and afterwards by a frequent use of the cultivator and hoe. Then the proper manure for the hop yard is whatever would fit the same land for a good corn crop; whether it be the contents of barn yards, ashes, marl, lime, plaster, or bone dust. On clay, slate lands it is customary to manure the hop yard in the fall, by placing a shovelfull of good barn yard manure to each hill, which requires four or five loads per acre.

Lime and ashes are also very beneficial in the spring, applied at the rate of about one pint to the hill, which has a tendency to prevent the work of the grubs. Lands destitute of lime and magnesia would be greatly benefitted by the use of lime, ashes and bones. Raw bones, ground into flour, form the most nutritious manure for many lands. This preparation is a great improvement as an immediate fertilizer, upon any other form of bone manure, restoring to the land, in a condition for immediate use, the organic matter which the growth of hops so rapidly absorbs. This can be procured in an unadulterated condition, of the Boston Milling and Manufacturing Company.

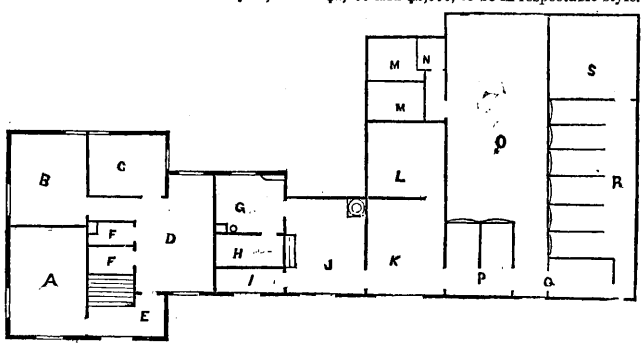
New lands need much less manure than old yards; while if the soil is not properly prepared before the roots are planted, any amount of subsequent cultivation will not atone for the neglect.

BUILDINGS FOR A SMALL FARM.

I SEND the accompanying plan of buildings suitable for a small farm. The idea in view is to obtain the greatest amount of conveniences in the smallest possible space, and hence at the least cost. The buildings are intended to be built in the balloon style, the timber consisting principally of 4 by 2 joists.

House 25 by 20, 11 feet posts, thus giving high chambers. Two large bedrooms, one small one, and a large closet in the chamber. End to the road, and all the buildings face the south. Cellar only under the main house, with roll way. Chimneys in the center of house and L. L 15 by 15, 9 feet posted. Chamber used for granary, &c. Stairs from the wood house. Sink and permanent boiler in cook room; stove to be removed to living room in winter, if desired. Stoves in parlor and nursery. Wood room, with well and pump or bucket in corner. Carriage house, with room on side for harness; thills of wagon pass through the partition into the henery. Carriage and wood room, henery, pig pen, &c., single roofed. Henery with window in roof. Open passage from wood room through carriage room and barn to hog pen. Barn with six cattle stalls, two horse stalls, one bay, and large floor. All outer doors of barn and outhouses to slide inside, except large barn door. Stairs to reach scaffold over horse stalls. Other smaller matters will suggest themselves to any one.

The cost of these buildings depends upon location, style of finish, &c., and will range anywhere between $1,200 and $2,000, to be in respectable style.



FARM BUILDINGS.

GROUND PLAN.—House 25 by 20. Woodhouse, 12 by 10. Carriage house, 12 by 10. Barn, 35 by 25. Henery, 10 by 10. Hog Pen, and Water Closet, 10 by 10. Measurement in the clear. No allowance made for walls and partitions.

DESCRIPTION.—A, parlor—13 by 10; B, nursery—12 by 10; C, library—10 by 8; D, living room—15 by 11: E, hall—10 by 5; F, closet; F, cellar; G, cook room, &c.—9 by 8; H, pantry—9 by 4; I, hall—9 by 3; J, wood and well room—12 by 10; K, carriage room—12 by 10; L, poultry house—10 by 10; M, pig pen—7 by 5; M, pig pen—7 by 5; N, water closet—4 by 4; O, barn floor—25 by 13; P, horse stalls—6 by 4, each; Q, passage; R, cattle stalls—12 by 8½; S, bay, 12 by 10.

CABBAGE.

MESSRS. EDS.:—I have just been reading in the April number of THE FARMER, a pretty minute description from one of your correspondents, on the subject of raising parsnips, which is all very good. I wish to say in this connection, for the benefit of your readers, that I have been in the practice of planting cabbage seed, with such seed as come up small and are at first of slow growth, especially with carrots. The cabbages come up quick, and shows where the rows are, which enables me to weed the bed before the carrots get large enough to be easily seen; and another advantage is, they make the best cabbage plants for late or winter use. Standing thin in the rows, they grow more stocky than when sown thick in a bed, and are fit for transplanting before the carrots get large enough to be injured by them.—*A. Devoe.*

A MAN'S influence is imparted to his beasts, particularly the horses, the working cattle, and the milch cows. A man of an irritable temper gets up nervousness in a horse or cow.

THE next Ohio State Fair will be held at Dayton, September 25.

HOW WE FARM IT IN THE GENESEE COUNTRY.

WRITTEN FOR THE AMERICAN FARMER, BY F. C. REYNOLDS.

NUMBER THREE.

THE lower Genesee country within four to six miles of Lake Ontario, has a soil differing materially from the middle and upper sections. It is generally a light, sandy loam, originally covered with a scant growth of oak, chestnut and pine. Some portions have a mixture of clay in the subsoil, which adds to its fertility.

This lower section is peculiarly adapted to growing potatoes of a dry, mealy quality, very popular in the New York markets, and owing to the protection afforded by the lake, is a good fruit region. Here the grape flourishes, and seldom fails of a good crop. Peaches often survive the winter here, when killed by the severe cold a few miles further south. The lowest point reached at my place, (between three and four miles from the lake,) during the last winter, was 2° below zero, on the 8th of January. A few miles further south it fell to 10° below. In some parts of the State, the thermometer fell as low as 20°. In Philadelphia, it sank to 15° below. Peach buds are uninjured here as yet.

The leading staples in this lake region, are fruit and vegetables, and notwithstanding the land is much weaker and lighter than that further up the river, yet farmers, in years past, have made money faster than they have on the heavier soils. In grass and grain they excel us, on the heavy soils; but we surpass them in hoed crops. Oats on a light, sandy soil, are not a paying crop. They average from 15 to 30 bushels per acre. Up the river, they get from 30 to 60 bushels per acre.

We aim to get oats in the ground just as early in the spring, as it will admit of working; late sown oats rarely succeeding well. We generally sow after corn or potatoes—rarely on sod ground. We sometimes go through with the plow and split the hills, harrow them down, cross-plow, and sow upon the furrows, if they are fine and even; otherwise harrow them first. Where the land is in suitable condition, I like to drill in oats, as it puts them in of a more uniform depth. We use from 2 1-2 to 3 bushels of seed per acre. The lesser quantity will answer, if the light oats are all blown out. On very strong land the Poland variety brings the best returns, but on lighter land I prefer the Black Maine oats.

Some practice seeding down with oats; and, if the oats are got in early, with tolerable success. In such case, the grass seed is sown before the last harrowing, or the ground is harrowed both ways, then grass seed sown, and then the ground rolled with a heavy roller.

The profit of the oat crop on an average soil, in ordinary times, may be stated thus:

Cost of plowing, sowing, and harrowing an acre	$6.00
Three bushels of seed, at 50 cents	1.50
Harvesting and drawing	8.00
Threshing and drawing to market	3.00
Total cost of crop	$18.50
By 40 bushels of oats, at 40 cents per bushel	$16.00
By 1 ton of straw	10.00
	$26.00
Net profit per acre	$12.50

This would pay the taxes and ten per cent on land worth $100 per acre. Higher priced land should never be sown to oats. There is a tradition among farmers, that oats are an exhausting crop. Is such the fact? Who knows? This prejudice has probably arisen from observing that crops immediately succeeding oats are generally rather light. Cannot this be accounted for in any other way than by supposing that the oat crop has inordinately exhausted the soil? In the first place, we are not so careful in selecting our best land for oats, as for wheat, corn, or barley. Any cold, wet piece, we think, will answer for oats. The soil is often exhausted before the oats are sown, as well as after they are grown. Secondly, we do not take the pains in fitting the ground for oats that we do for other crops. They are generally hurried in early in spring, often before the ground is sufficiently dry, and in consequence the following crop suffers.

Analysis does not show that oats draw from the soil more largely of important ingredients, than other grains. If then, it be a fact that they exhaust the soil more than other crops, it must be because they have less capacity for extracting their aliment from the atmosphere. Who knows whether such is the fact, or not? I once knew a farmer who generally sowed oats before wheat, instead of summer fallowing, with good results. Of course he sowed them on a wheat soil, in good condition, and immediately after harvesting plowed the ground to enable the scattering grain to germinate. He generally had a crop of green oats several inches in hight, to plow under before sowing his wheat.

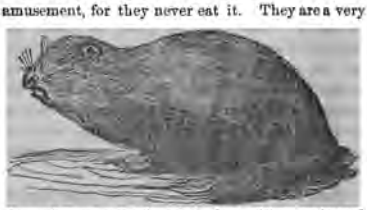
Barley is another spring crop that we endeavor to get into the ground as early as practicable. It does best on pretty heavy loam, and is believed to leave the ground in good condition for succeeding crops. Indeed, many farmers prefer a crop of barley to a summer fallow, as a preparation for wheat. The two-rowed variety is generally preferred at present. Two bushels of clean, plump seed per acre will answer. The cost of raising barley, is about the same as that of oats—say $13.50 per acre. It yields on good ground, from 20 to 40 bushels per acre—say an average of 25 at 75c. per bushel, $18.75. Straw for feeding is worth rather more than oats—say $12, making gross income, $30.75, and net profit, $17.25, rather a better paying crop than oats.

The reader will perceive that the farmer of the Genesee country must devote his land to more profitable crops than oats or barley, to make money very fast.

WOODCHUCKS.

WRITTEN FOR THE AMERICAN FARMER, BY JOSIAH SALTER.

MESSRS. EDS.:—A correspondent on page 67, February number, inquires how to kill woodchucks, &c. To me, that is a very simple operation, but why does he want to kill them? I have never been able to discover that they do any particular damage, and I preserve them for sport, in the absence of other game during summer. True, they will burrow a few holes on the high ridges, along the fences, and if there happens to be a young apple tree directly opposite their hole, and not many feet off, they will occasionally *champ* the bark a little, apparently for amusement, for they never eat it. They are a very



shy and wary animal, and the least thing, a piece of rag or paper tied around the tree will keep them off for ever. They, of course, eat a little clover, and grass, and fruit when they can get it. They steal a little from me, and a little from my neighbors; but I have never been able to miss enough at a time to make me vexed, or begrudge it. I have some fifteen to twenty burrows, or more, around my farm, and how many woodchucks I cannot tell; but almost any summer's evening I can find out one or two woodchucks, sitting up on their haunches, looking about as knowingly and cunningly as a squirrel.

As I said before, they are a very wary and cunning animal, and it takes a clever and courteous sportsman to approach them; therefore I call it good sport to get a crack at one, and never shoot at them with a shot gun, for they are very hard to kill with shot, and I consider it too cruel to wound them and let them get away; I, therefore, shoulder my rifle, march round the fields, screened as much as possible, until I see one out, then approach as near as it is safe without being perceived, wait until he sits up, or I give a slight whistle, and he will be up in an instant, draw as fine a sight as possible on his head, crack goes the rifle; if I miss, all fair and square, up go his heels, and down goes his head into his hole, quicker than lightning. If I hit, he is a dead "un," and not merely wounded, as is likely to be the case with a shot gun, to get away and suffer. When thrown into the manure heap, and thoroughly decomposed they make excellent manure, which is about the best use I can put them to.

If your correspondent has no time nor inclination to sport, and merely wants to get rid of them, it is a very easy matter, as far as my experience goes. During summer, ram a bush into the mouth of their holes, or with a spade dig down the mouth of each hole, or set a dog to work at each hole, and the first opportunity, the woodchucks will all leave for parts unknown to *him*. If this is too much trouble, the next best thing is, to take, during winter, a small ear of corn, a sweet apple cut in two, or a piece of Johnny cake, sprinkled with or steeped in a solution of strychnine, and put a piece down each hole. This will be sure to kill. To suffocate them with smoke or the fumes of brimstone is cruel, and I never do it or allow the boys to do it, if I can help it.

BLACK SPANISH FOWLS.

MESSRS. EDS.:—Allow me the privilege of answering your readers a question that is asked me time after time, namely—what variety of fowl I think the best. And while doing so, I will add, as proof of the correctness of my views, that the opinion of the majority of my customers, particularly of fanciers, coincides with my own. I have had over eighteen years' experience in breeding and rearing fancy fowls of all kinds, and my first choice is for the White Face Black Spanish. They will lay more weight of eggs than any other variety, while as a market fowl they are large, flesh tender, sweet, juicy, (not stringy as with some of the larger breeds,) and in this market (Albany) and New York, they are always readily sold, while those with feathers on their legs are sometimes rejected as tough. I suppose that more Spanish are sold to fanciers and amateurs in a year than of all other kinds of pure bred combined. I find it so in my case (and my prices being the same for all varieties it is immaterial to me which I sell). I see that some fanciers (who have a particular kind for sale) claim the Brahmas as the best. They are a good fowl to lay in winter after others are done, and they are a splendid "hatching machine" in summer. I had a hen of this breed that sat five times in a single year. Some of your readers might have seen her with her brood of chickens at the National Poultry Show, in this city, Feb., 1856. She hatched her first brood Jan. 5th, 1856, and sat four times more during the year. The Brahmas are an excellent variety, but I must inquire of some of your correspondents the difference between them and gray Shanghais.

E. A. WENDELL.

ALL things, as they rise, by the smooth handle take."

HEDGE SEED.

WRITTEN FOR THE AMERICAN FARMER, BY "COSMO."

MESSRS. EDS.:—Being but a skirmisher—an irregular, if you please—I hope it will not be expected that I shall make live shots—pink the center at every crack. But, having been several times round the world, and somewhat across it, picking up, in out-of-the-way corners, odds and ends, not very common far up country, possibly I shall now and then put in a shot that will count.

By the by, if there should happen to be among THE FARMER'S friends those who have a bit of salt marsh, or swamp, or mill pond, I shall be delighted to meet them socially. There are swamp, and salt marsh, and pond productions that I have studied the economy of abroad, some of which I have an idea may easily enough be utilized at home, and therefore propose a chat upon the subject, one of these days, when we shall have become something better acquainted.

Just now, I have in mind a live fence material, which appeared to me most efficient in countries quite as cold as any portion of ours; and as we have discovered as yet, nothing that is quite the thing needed for hedging in the United States, I believe attention ought to be called to the material, and notwithstanding it is a long way off, if there shall be found ten or half a dozen reliable enterprising farmers in all our northern regions, who will undertake to make a fair and faithful experiment, I will undertake to procure for them within a reasonable time, the seeds, free of cost.

The material is the thorn-bearing shrub, popularly known in Spanish American countries of the Southern hemisphere, as the *Napandai*. I have not learned that any of our botanists have Latinized the bush as yet. The *Napandai* is found common enough in all the interior of southern Brazil, in Uraguay, Paraguay, and throughout the whole of the provinces of the Rio de la Plata; though I do not remember to have ever seen it on the coast, or very near to any of the larger rivers. I do not know if the shrub is timid of wide waters. I saw it growing in its best perfection to the southward of El Paye del Diaro—those vast low, level plains, stretching away along the coast to the southward of the Rio de la Plata; and along the Port Desire River in Patagonia, in about the parallel of 46° south. The shrub grows abundantly, and seems perfectly hardy, though the winters are long and severely cold. On the Pacific side, all through the interior of Chili, to the southward of Valparaiso, as far as the 42d parallel of latitude, the *Napandai* is a common bush, and we often saw it used as hedging enclosures for corals.

The shrub grows rapidly from seed, making, if properly planted, an impassable fence in the third year of its growth, at which age, its average hight is about four and a half feet. Its structure is more compact and symmetrical than the North American or European thorns; the foliage dense and vividly green; its flowers ornamental and sweet scented—the elysium of the honey bee, and the sharp, black, carved and wicked thorns are so numerous, that it must be a brave beast or bird that ever makes the second attempt to force the passage of a *Napandai* hedge.

The growth of the shrub is so compact and uniform, that very little cutting is required, even for an ornamental hedge; and the only possible objection to the *Napandai* as a hedge plant, that I can conceive of, is its prolific bearing of seeds and slovenly habit of sowing them broadcast to an unreasonable distance, where they spring up and flourish like weeds. In our country, perhaps, the birds would look after that difficulty, as I observed upon many occasions that chickens and pigeons greatly preferred the seeds to corn or any other grain.

FOOLISH FERTILIZING PHILOSOPHY.

We saw not long since, in a somewhat circuitous cruise through Missouri, Illinois, Indiana, and some of the western counties of Ohio, in all, at a rough guess, one hundred and fifty farmers, burning straw and corn stalks in the field; first to get the "trash" out of the way, though there were but five or six of the fifty, that my shipmate and I called to an account, who were green enough to own up that getting the trash out of the way was the prime object. They said:

"O, we are fertilizing our fields bravely; don't you see?"

"No, we don't see," said Ned. doggedly, to one old veteran who had been a member of Congress, and was president of an agricultural society; and who was burning up about thirty tons of good wheat straw all in one pile.

"No, sir; *we* don't see any such thing!" Ned repeated. "How much fertility do you expect to get out of all that pile of straw, Colonel?"

"How much, sir? Why all of everything it contains of the material, I reckon—about twelve per cent of its bulk—$200 worth out of the pile, certainly. You see we cannot burn up anything; it's all there in the ash."

Ned laughed a regular horse ha! ha! ha! at which the Colonel stared; but not half so much as he did by the time Ned. had talked chemistry and fertilizing philosophy to him in his amusing salt water fashion for about ten minutes.

"No shipmate, you cannot absolutely burn a thing out of existence, certainly. But provided it were possible, it would only be equivalent to what you are doing."

"Why, how is that my dear sir?" The Colonel was becoming interested and slightly alarmed.

"Smoking like a first class ocean steamer, burning soft coal," Ned went on, pointing to the immense column of black smoke going high up into the air, and then widening out and sailing away before the strong upper current, blackening far to leeward, all the eastern horizon.

"Colonel," Ned. broke out suddenly, "if you expect to derive any especial benefit from the consumption by fire, of that big straw pile, you will need to sow and plant all the White Pigeon Prairie, away over yonder in Michigan."

"Why, sir, what do you mean?"

"That *there*, is where you are spreading about ninety-two per cent of your straw fertility, fertilizing and belonging to people you never heard of—perhaps never will. There is the trifling per cent of one condition of potash that you will have left for your share, and the larger portion of the silica. That, however, you will have so roasted that it will serve you no fertilizing purpose for these four years to come. All the other elements of fertility are going up in that column of smoke and sailing off out of your reach."

"But what better could I have done? The straw was here in my way, and"—

"You should have distributed it here, there, and everywhere about your farm, and get it out of your way, my dear sir. A great deal of it would have been profitably employed in stable bedding and barn yard litter, in place of the good bright hay sacrificed to such purposes. The straw having five times the absorbing capacity of the hay used, would have secured to you five times more good manurial wealth than you have secured about your stables and barn yard, that has now flown or run away and lost.

"Then there is your orchard, which would have been greatly benefitted by a liberal straw mulching; and so would all your pastures and meadows, and everywhere you would have had your straw in the best possible condition and position for nature's active agents to lay hold of, decompose and return to the soil in the proper form, losing in the process scarcely seven per cent of the sum total of fertility in the straw; whereas, by burning up the big pile as the manner you are doing, you are left less than eight per cent, and that in a condition that I would not give a fifty cent 'fractional' for the whole lot."

"What an agricultural ass I am, to be sure!" the Colonel said, looking excessively foolish. "But I thank you, sir, for the lesson. I shall never burn another straw or corn stalk for manure, so long as I live. That is sworn to."

Your own business ne'er ask any other to do.

VARIETIES OF WHEAT.—I have grown the "Hoosac" or China Tea Wheat for the last five years. Until last year, it gave good yield, say eighteen bushels per acre. This wheat should be cut as soon as ripe, or a little before; otherwise it shells badly. I think the Yellow Fife as good for flour, better to yield, and it will not suffer as badly by standing after it is ripe. I raised it last year; the best of it gave from 20 to 25 bushels per acre; a neighbor got 25 bushels. It was a poor season for wheat with us. The Yellow Fife is a soft wheat like the Club, and unlike what is called the Scotch Fife.—*J. W. S., Grinnell, Iowa, in Prairie Farmer.*

CARROTS FOR HORSES.—Experiments have shown that the best way to feed carrots to horses, is in conjunction with oats. Alone, carrots are not as good as oats alone, but in conjunction, they are better than each fed separately. If you are in the habit of feeding four quarts of oats to a mess, give two of oats and two of sliced carrots, and the result will be more satisfactory than if each were fed separately.

AMOUNT OF BUTTER.—Butter obtained from a given quantity of milk varies immensely. Mr. Morton, in his "Hand Book of Dairy Husbandry," asserted that the quantity required to make a pound of butter varied from sixteen to twenty-nine pints, depending upon the breed of cows and the feed given.

ONE acre contains 160 square rods, 4,840 square yards, 43,560, square feet. One rod contains 90.25 square yards, 272.25 square feet. One square yard contains nine square feet. The side of a square to contain one acre—208.71 feet; one-half acre—147.58; one-third acre—120.50; one-fourth acre—104.36; one-eighth acre—73.79.

THE total number of hogs packed in Chicago during the season just closed is 501,462, against 750,147 last season—showing a falling off of 248,695. The average yield of lard is 41 per cent more than last year. The total number of cattle packed is 23,728 head, against 92,459 head last season. The diminution is 68,431 head.

FOREST trees are raised in nurseries in England, as fruit trees are here. The following prices are from a late catalogue: ash, birch, beech, alder, $5 per thousand; chestnut and elm, $6; spruce, $1.96; pine, $2.45, &c.

IN a letter written from Germany, Mr. Klippart, of Ohio, said: "Here very little damage is done by insects, since the birds are protected by law, and every grove is full of them."

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

AGRICULTURAL INDEPENDENCE.

Your correspondent "Esta Bueno," with his off-shore phrases, has pleasantly brought to mind my nautical days, so that for the time being, I lived my boyhood over again. He was undoubtedly one of those skippers who did not come in at the cabin window, with a fresh water commission, but first had a training *before the mast;* and, if he was ever so unfortunate as to be pressed on board an English man of war, his Yankee tact soon gained him promotion from the waist where they only pull and haul, using swabs and holy stone the decks, to take his station on the forecastle, in the afterguard, or in one of the tops. But if he had lived as long among farmers as I have, he would find that he is a little out of his *reckoning* when he says, "We of the country yeomanry, are more dependent on our fellow men than any other class of beings in the world!" Although feeding the whole country, "yet held in a bondage by the other classes as absolute as was ever that of the Russian serf." 'Tis true, that at present the farmers at the far west have to pay monopoly prices for the railroad transportation of their products, extortionate express charges, and the rate of passenger fare there is yet twice as much as it is on our New York Central; but time and ever blessed competition will soon regulate all that, and the western farmers, like those of Western New York, will then be masters of the situation. It was only yesterday a miller excused himself for asking the New York city prices for flour, by saying that the farmers, one and all, refuse to sell their wheat at any thing less than the New York quotations; and they were masters of the great home market, at least until Lake Erie is open.

I have never yet seen "a righteous man forsaken," or a farmer fail, who stuck manfully to his legitimate calling; but I have seen scores of produce buyers and millers fail from speculating in wheat, pork, &c.; the tendency has always been to pay higher prices to the farmer than the New York market would warrant, and the country banks have done much to favor such unfortunate speculations. Thus in my day, the farmers have grown rich, while as a general rule, speculators in their products have grown poor.

But apropos of Mendenhall's self-acting hand loom. It does nothing but weave after all. It neither cleanses, spins, nor dyes the wool, nor dresses the cloth. Here is a woolen mill employing about four hundred individuals, which can weave cloth at an expense of four cents a yard; yet to complete the fabric from the dirty fleece, will cost us from ninety-four cents to the four, for weaving. Seventy dollars a pound has been paid for one article of analyne chemicals for coloring, without which, not even a lady's Balmoral skirt can be made to conform in beauty to the present style and fashion.

Our "*Bueno*" shipmate must reflect that the day of small things has passed away; the log house, with a lumbering loom between the two beds, the cobbler's bench in one corner, and the spinning wheel, and dye tub of butternut bark in the other—now live only in tradition; and the farmer's daughter, now substitutes the piano for the wheel, while her expensive costume, from bonnet and waterfall, to her neat and dainty *chaussure*, contrasts strangely with the linsey woolsy dress and cobbler made shoes of her grandmother's day; so that "Bueno" himself may probably exclaim in the true sailor aphorism: "the sails and rigging are worth more than the hull."

But suppose our farmers made their own clothing, boots and shoes, and denied themselves every manufactured or imported luxury, where would they market their surplus, and at what price? Where would be the manufacturing towns and villages to pay them fifty cents a pound for butter, twenty-five cents for cheese, and a corresponding rate for flour, corn, pork, &c? What would be our foreign commerce—for if we do not import, how can we hope to export? Much has been said about the approaching ruin of the country when our imports have exceeded our exports—yet it is this very excess and balance of trade that has enriched the country year after year, and aided it to carry on a triumphant war at an expense of three thousand millions.

THE FEBRUARY REPORT OF THE COMMISSIONER OF AGRICULTURE.

The New York *Weekly World* publishes a whole column of very interesting tables from this department, from which we learn that the quantity of grain harvested in 1865, exceeded the crops of 1864, by 215,541,988 bushels; also that there is a decrease in the value of the hay crop of nearly ninety-two millions of dollars, and in the tobacco crop of nearly six millions of dollars. More hay was probably made than in 1864, but the absence of the war demand has reduced the price, as the fall in the value of gold has reduced the price of the grain crops. The Commissioner seems to have been very indefatigable in collecting the statistics of the number of acres and the crops grown, in every State that had not seceded from the Union; thus living down by his own practical tact and usefulness, the machinations of the few who are eager for his place, the clamor of their friends, and of the many who do not seem yet to know that the reports of the present chief are a great improvement on those of any one of his predecessors.

THE GROWING WEALTH OF THE DAIRY REGIONS OF NEW YORK.

A letter from Chatauqua county, to-day, says that $200,000 or more was paid out last year by two New York agents for the butter made in a region of six miles square. It is true that the superior quality of the butter in that cool, high, moist, well watered region, has made it in great demand by the eastern epicures, which materially increases the price. Although as much hay is often cut to the acre in this warm, dry, grain region, the late summer pasture suffers so much from drouth, that the cows fail in their milk unless slopped daily, or fed green corn fodder, &c.; and then, the butter is so inferior to the butter of the highland dairy regions, that it only passes for second and third-rate in the New York market, and the poor qualities are often sold as grease butter? But the Seneca county farmers have much to encourage them at this time to make butter and cheese. Our great manufacturing villages always pay the highest price for all the butter and cheese our farmers have yet offered them without any squeamish regard to its quality. Then the profit to the grain growing farmer in the manure made from a stock of milch cows, is a consideration, which in these last days of exhausting and exhausted grain growing pabulum, no wise farmer can disregard with impunity;

JOSEPH WRIGHT'S LARGE CORN CROP.

Joseph Wright, of Waterloo, is receiving many letters, asking for seed dent corn, or directions where they can send for it in its true indigenous location. He makes this general reply, get your seed where it is largest, and the dent does not run out, either South Ohio and Illinois, or South Michigan; 14 to 22 rowed yield about alike. Plant early in May, 3 by 3 1-2 feet in hills. Keep the weeds down by hoe and cultivator. The soil must be well underdrained, and manured so highly by working in fine stall manure as to be friable and absorptive, so as to hold moisture enough to keep the leaves from curling, except at mid-day through a summer drouth. He then has one-fourth more crop of large dent corn without soft ears, than he gets of dutton or long eight-rowed yellow, with like soil and culture. Early planting gives a feeble plant, but a strong root, which soon makes the plant distance the late planted in hot weather.

But the secret of Mr. Wright's success is no marvel, when it is known how much manure he makes. He keeps 160 bovines, 66 horses and colts, a flock of sheep, hogs, &c. He feeds all the corn, oats and hay he grows, besides buying 100 tons of straw and much hay when it is cheap, from other farmers; feeding it all with his large corn stalks, cut fine by horse power, and then treated with meal. He feeds some uncut straw in the coldest weather to support the heat of the animal. If the dent corn grown in the climate of Western New York, is planted, its tendency is to degenerate into a round flint corn with a larger cob and collar. It is said that a change also takes place in the tropical regions, so that the true indigenous corn region is in about latitude 40°, in the lowland plains and river bottoms. In the same latitude on the sea coast, the climate is too cool and moist for the dent variety of Indian corn.

MULTUM IN PARVO.

WRITTEN FOR THE AMERICAN FARMER, BY "B. D.," NORTH CHILI.

THE clover seed has been sown, twelve pounds to the acre, and now is the time to sow one bushel of plaster per acre on it, and on the old pastures.

The ground for corn must be very nicely prepared, made mellow on the surface, and the corn planted on sandy or gravelly soil, and a handful of ashes put in, or on each hill. It will pay the value of one dollar per bushel.

If it is now time to prune fruit trees, while doing it, look carefully, and take off, and destroy all worms' nests.

The man who expects to succeed, should unite energy and activity, to reflection and experience.

Weed out all the bad weeds from the wheat and rye fields.

Sow peas early, to feed pigs in autumn, but sow late if you wish to avoid the pea bug.

Never mind the new or old moon in farming, but till the earth—the promise is sure.

Plant the garden with a good variety of seeds, and keep it well taken care of; stir the surface often, and if possible, while the dew is on, except among beans.

The produce of a good garden, will half support a family.

Now is the time to take off all tag locks from sheep, and remember never let a lamb grow to maturity, with a long tail.

Cattle and horses should never be turned out to pasture in spring, until the ground is firmly settled.

Look well to the teams, that they are properly fed, and not worked too hard at first, lest they become galled and sore.

Summer fallow should be broken up early, and worked thoroughly—like baker's dough, the more it is worked, the better it will be.

Value as you ought the experience of others, and your own will cost less than without such aid.

LOVE, like the epicure, oftener dies of excess than of hunger; it lives on love, but it resembles those alpine flowers which feed themselves by suction from the wet clouds, and die if you besprinkle them,

CUTTING BUSHES.

WRITTEN FOR THE AMERICAN FARMER, BY J. L. BERSEY.

MESSRS. EDS.:—I see with regret, that in many parts of New Hampshire, pastures and fields are growing up to grey birches, iron bushes, brakes, which destroy half of the feed. This shows bad husbandry, clearly, or a spirit of slackness; and yet, the owner of such pasture will excuse himself, and say that he has no time to cut them; yet I think, if the fact could be outspoken, he thinks they cannot be eradicated from the soil. I have heard farmers boldly say that grey birches and iron bushes could not be destroyed. I believe it to be a mistaken idea; for there is no vegetable but what may be killed by a few cuttings at the proper season. I repeat, *at the proper season*—for I believe you might cut grey birch thirty years in succession, at the same season, and still it would spring, phœnix-like, from the stump. To illustrate: the repeated cutting of an asparagus bed in the spring is far less injurious than a single cropping when the plants have attained its full maturity.

That all plants may be subdued by repeated cutting is a position that does not rest on mere theory, but is supported by innumerable facts. The sprouts from oak, chestnut, maple and other forest trees, are easily subdued in pastures newly cleared; for cattle, and more especially sheep, keep them so closely cropped. They will die in one or two years. It is my conviction for one, if grey birch could be as closely cropped for a sufficient length of time, it would die; but, alas, sheep and cattle utterly refuse them, unless placed on the starvation point; hence the whole success of this plan of killing grey birch, depends upon applying the cutting at the proper season; and in order to determine the right time, the farmer should understand something of the vegetable.

The growth of vegetables in summer exhausts the resources of the root, and the greatest exhaustion is when the top has arrived at its full perfection, and before it begins to decay. When the stalk begins to decay, it pays tribute to the root, and returns a portion of what it has received, so as to replenish the source from which the future vegetation is to spring. If this be the economy of vegetables, we have a hint as to the proper time of cutting. Hence, if we wish to preserve the root for future growth, we must cut in the winter or spring when the resources of the plant are collected in the root. If we would destroy the plant and prevent future growth, we must cut when the root is most exhausted. This is generally just before the fruit ripens. Trees that are cut in the winter or spring throw up a very vigorous growth of young shoots; but those cut in August or September, put forth no shoots. And it is our opinion that grey birch can be cut at a time of the year when no sprouts will follow. Some tell us that when the sign is in the heart, cut your bushes, and they are dead. This may be so. Another says, cut them in the spring, and they will bleed to death. Yet I doubt it.

Grey birch makes excellent stove wood; but it is the curse of a great deal of land in New Hampshire, and if pastures could be kept clear of them, they might be made to pasture twice the amount of stock they now do. Plowing and cultivating will destroy them; but many farmers have not the manure to apply to pasture lands; hence they should strive to hit on the right time to cut, so as to kill.

HOW WE FARM IT IN THE GENESEE COUNTRY.

(Continued from page 142.)

MANURE.—The farmer finds his barnyard in the spring full of crude manure, the droppings of his horses, cows, sheep, &c., mixed with the straw used for their bedding, and the rejected portions of their fodder. Some practice drawing this out as early as the frost will permit, spreading it on the ground designed for corn, and plowing it under. Others throw it into piles, let it remain and decompose through the summer, and draw it out in the fall upon their wheat land. Both classes find very good arguments in favor of their practice. Those who plow it under in the spring, say that if allowed to ferment through the summer, it loses much, by evaporation, of its fertilizing gases; whereas, if plowed under in the spring, decomposition goes on slowly, and the gases are absorbed by the soil, so that but little is lost. The application of coarse manure to heavy land, renders it lighter and more porous.

The other class contend that in *a dry season* the coarse manure is a positive injury to the crop, drying up instead of rotting, and rendering the soil much drier than it otherwise would be. We have known crops of corn, in an early drouth, very greatly injured by the presence of coarse manure in the soil, but this rarely happens when the manure is drawn out early in the spring, and applied to the corn or potato crop.

We, in the interior of the Genesee country, have not yet learned the art of making and saving manure as they have on the exhausted soils of Long Island and New Jersey. There, nearly everything animal, vegetable or mineral, capable of adding to the fertility of the soil, is carefully gathered, composted and applied. Sods are gathered from old headlands, corners of fences, the road side, and when fences are built, the soil is first removed to the compost heap, and the fence set upon the sterile subsoil. Leached ashes are frequently drawn ten or twelve

miles, and twelve to fifteen cents paid for them at the ashery, and scattered over an exhausted soil, which it is desirable to lay down in clover or timothy, to enable the grass to take. Coal ashes are considered worth five to eight cents per bushel. Citizens of towns are paid for allowing their outhouses to be cleaned out, and fæcal contents, after being divided, and deodorized by composting with several times its bulk of loam or muck, are applied to corn or potatoes in the hill or drill. We have not come to this in the Genesee country, and may avoid it, if we adopt an intelligent and economical system of farming.

INDIAN CORN.—The corn crop may be considered the leading crop at the present time in this section. Although the farmer's *direct* cash receipts for his corn crop are not quite as large as those were for his wheat crop in the heyday of wheat growing, yet he finds it a very convenient crop to feed to all domestic animals. Horses, cattle, sheep, hogs, poultry—all are grateful for a few nubbins of corn, and the farmer must have a pretty generous harvest to have any left in his crib, to sell in the spring. He disposes of most of his corn in the form of beef, mutton, wool, butter, pork, and poultry, and has a considerable portion left to return to his land in manure. The average yield of corn in the Genesee country is altogether too small.

We do not make our land rich enough—do not till it well enough—do not cultivate the corn enough, to produce maximum crops. We now and then hear of a farmer raising 80 to 100 bushels of shelled corn to an acre, just to show us what can be done, but most of us are content to raise from 30 to 50 bushels. We, somehow, act as if we think it wiser to go over twenty acres of land to get 800 bushels of corn than to raise the same quantity on eight or ten acres.

They have one practice at the east that we might profitably adopt here—that is, manuring in the hill with some quick acting fertilizer. They use poudrette there. In the absence of that, we might use hen manure, composted with gypsum, muck, or mould. A tablespoonfull of such a compost dropped on the corn before covering, would give it a wonderful start, and greatly augment the yield.

The varieties mostly cultivated here, are the eight-rowed, white, the eight-rowed yellow, and the red-blazed, also eight-rowed. The latter, on good land, is generally the most productive. The King Philip improved, and the Ohio dent are occasionally grown. We generally plant all but the latter, about three feet apart each way. The dent should be at least four feet. We generally plant from five to eight grains in a hill. Three stalks are enough to grow, but we have to allow about half for casualties.

Our time of planting is from the tenth to the fifteenth of May, according to the season. We favor early planting.

Extracts from Correspondence.

A CORRESPONDENT in Indiana, writes:—"We are having a continuation of wet and mud. The Wabash has been over its banks for nearly a month. It is high now, and falling very slowly. Farmers have not plowed, but all are getting ready, and will make it go, early and late, as soon as the soil is in a condition to work. Wheat begins to look green; late sown is very much injured by freezing, and some early by the fly, or from sowing bad seeds. Not many oats, and no spring wheat in this county."

J. W. PORTER writes us from Vermilion Co., Indiana, the following interesting items:—"We are having a wet, muddy time. It has rained for two days. The Wabash is over low bottom, and rising very fast. I have done a little towards planting evergreens. Last spring I was passing a cedar bluff, with a salt sack on my saddle, and I pulled about one hundred and fifty little cedars of one year's growth, planted them in rich ground the next morning, and nearly every one lived. Some are one foot high now. I keep them clear of grass and weeds. I think that in three years I shall have as large trees as those who took them up two feet high, and much less trouble to handle. I went last fall in my spring waggon to a hemlock bluff and got two hundred and fifty small trees. The winter has been very hard on them; some will die; but all the very small ones are as green as ever. I am going to try another lot this spring, and am going twenty miles to a white pine bluff for them. I have a large lot of Norway Spruce, Balsam Fir, and Arbor Vitæ seed, with which I will try my luck, as soon as the ground is in condition. I intend to have every permanent meadow surrounded on the exposed side with evergreens, if they will grow, and wherever I want a permanent fence, an Osage Orange hedge, when it will not be an obstruction to the country. I would not have one that cut off a fine view. I have known farms sold, not far from me, for fifty-five dollars per acre, which have had the above improvements in evergreen hedges; while others near by, equally as productive, would not sell for over twenty-five dollars. It will pay. I would say to all that would plant evergreens from forest,—be satisfied with small ones."

LAWNS.—One bushel of gypsum, two bushels of ashes and one bushel of fine bone dust, sown at the rate of forty bushels per acre, or one peck per square rod, is recommended as a fertilizer for lawns.

MEMBERS of the New York Farmers' Club have used kerosene to kill the scale insect and other parasites upon plants and trees without injury to them, while they have found gas tar injurious.

BEES.

A CHAPTER of well settled facts. Metcalf's key to bee keeping, presents the following:

1. All stocks of bees should be kept strong in numbers.

A well garrisoned city may defy assault.

2. A moderate increase of swarms will keep them strong, and secure the largest yield of honey.

3. Bees filled with honey are not inclined to sting.

As the robber's knife is staid by your purse, so bees are bribed with proffered sweets.

4. In natural swarming, bees fill themselves with honey.

Emigrants to a new country carry their treasures along as capital to begin with.

5. Bees alarmed at smoke or otherwise, instinctively seize their stores.

The householder, at the cry of fire, secures what he can.

6. There should be no communication between occupied hives, allowing the bees, of one to pass directly into the other.

"No house is large enough for two families."

7. A swarm of bees destitute of a queen, fast dwindles away; and unless supplied with one, soon perishes, either by robbers or moths.

A country without a government, a farm without an owner.

8. Swarms having comb insufficiently protected by bees, furnish a retreat to millers, and food for worms.

Unguarded treasures invite thieves.

9. An access of drones should be avoided by discouraging the construction of the cells that hold them.

Drones are the "dead heads" of the hive; the *useless mates* in the farmer's herds.

10. The building of drone combs may, to a great extent, be prevented—first by securing the construction of new combs in hives containing queens; and second by placing frames to be filled, in other hives near the centre.

11. Queens are most economical reared in small swarms.

An ounce of prevention is better than a pound of cure.

Who would employ ten men to do what one man could do better?

12. Small swarms, if united in the fall, winter more safely and consume less honey.

"In union there is strength."

13. Bees of colonies containing fertile and unfertile queens, should not be put together without first breaking them up, i. e. inducing them to fill with honey, and destroying the unfertile queen.

SHEEP.

WE copy the following excellent suggestions about sheep, from a circular issued by F. C. D. McKay, Esq., the general agent of the American Emigrant Company. The company have already over 10,000 sheep scattered among the farmers who have purchased land of them, in flocks ranging in size from fifty to two hundred head.

1. Keep sheep dry under foot with litter. This is even more necessary than roofing them. Never let them stand or lie in mud or snow.

2. Take up lamb bucks early in the summer, and keep them until Dec. 1st, following, when they may be turned out.

3. Drop or take out the lowest bars as the sheep enter or leave the yard, thus saving broken limbs.

4. Count, every day.

5. Begin graining with the greatest care, and use the smallest quantity at first.

6. If a ewe loses her lamb, milk daily for a few days and mix a little alum with her salt.

7. Let no hogs eat with the sheep—especially in the spring.

8. Give the lambs a little "milk-feed" in the time of weaning.

9. Never frighten sheep, if possible to avoid it.

10. Sow rye for weak ones in cold weather, if you can.

11. Separate all weak, or thin, or sick, from those strong, in the fall, and give them special care.

12. If any sheep is hurt, catch it at once and wash the wound, and if it is in fly time, apply spirits of turpentine daily, and always wash with something healing. If a limb is broken, bind it with splinters, tightly, loosening as the limb swells.

13. Keep a number of good bells on the sheep.

14. Don't let sheep spoil wool with chaff or burs.

15. Cut tag locks in early spring.

16. For scours, give pulverized alum in wheat bran—prevent by taking great care in changing dry for green feed.

17. If one is lame, examine the foot, clean out between the hoofs, pare the hoof if unsound, and apply tobacco, with blue vitriol boiled in a little water.

18. Shear at once any sheep commencing to shed its wool, unless the weather is too severe, and save carefully the pelt of any sheep which dies.

19. Have some good work by to refer to at least; this will be money in your pocket.

THE Niles (Mich.) *Republican* says a large amount of maple sugar has made its appearance, and is selling at 20c to 22c per lb. The season has not been favorable for its manufacture. The editor has also been shown "a sample of fine sorghum sugar, produced by C. Tatman, of Pipestone. It has the appearance of New Orleans sugar."

SPIRIT OF THE AGRICULTURAL PRESS.

Peach Culture.

We have good authority, says *The Gardener's Monthly* for saying that peaches which are injured by the Yellows, can be restored to health by a severe cutting back to the main stump, so as to secure a thoroughly new growth of branches, and that trees so restored, will not be again attacked, but live to a good and honorable old age.

There is a strong opinion existing, that Yellows is caused by injury to the sap vessels, by which the fluid is prevented from flowing properly. By opening up new channels from the sound wood, this is remedied. Again, it is well known that after a peach gets over three or four years healthily, its age is indefinite. This severe trimming seems to help it over this critical time.

Perhaps, whether a three year old tree had the Yellows or not, this severe treatment might benefit it, but this is a mere surmise.

Cost of Raising Corn.

The Warren county correspondent of *The Prairie Farmer* says: "The great staple crop of this section is corn, for which the soil is particularly well adapted. Corn, properly taken care of, does not generally cost over twelve cents per bushel, cribbed. Last year I raised over four thousand bushels, at a cost of nine or ten cents per bushel when cribbed, with the husks on. Any person doubting, can have the figures of every item charged in my farm account."

Bees and Honey.

James Bruce in *The Scottish Farmer* thinks the agricultural population cannot be too strongly impressed with the expediency of keeping bees. In many parts of Russia the peasants have each 400 or 500 bee hives, and make more profit of their bees than of corn; and in Spain, the number of hives is incredible; a single parish priest, I was informed, possessed 5,000. Honey possesses astonishing restorative power; at the point of death, when all stimulants and tonics fail, a tablespoonfull, or two, will, if given every half hour, rally and save the patient's life. "My son, eat honey, because it is good, and the honey comb which is sweet to thy taste."—Prov. xxiv. 13. In a recent communication to "Times' The Bee Master," I have advised a trial of it in hydrophobia, in its concrete state, every hour, for relieving the constriction of the throat and abdomen, present in this most formidable disease.

Cultivating Potatoes.

A correspondent of *The Country Gentleman* says: "I would advise new beginners in raising potatoes, not to be so particular about the number of eyes the set of potatoes has, as to the size of the piece. A potato smaller than a turkey's egg, should never be used for planting. That size will make fewer sets. Plant the rows three feet apart, and the sets one foot in the row. Ground that has the manure plowed in, in the fall, will produce one-third more, and of an evener size, than that manured in spring and planted immediately; the manure absorbs the natural moisture of the ground, and the crop is tardier in sprouting."

Charcoal for Hog Cholera.

The Prairie Farmer contains this statement from a correspondent in Missouri:

"In *The Prairie Farmer* of the 17th inst., bituminous coal is recommended as a preventive of hog cholera. I can endorse this from six years trial, having lost but one hog in that time. In 1860, I had nineteen hogs intended for fall porkers, but the cholera got among them and killed eighteen. I made use of all the remedies I could hear of, until I saw it stated by some writer, that 'stone' coal was an antidote for cholera. Since then, I have kept coal in their range, and have lost but one since, (whether from cholera or not I cannot tell,) although hogs have been dying with cholera all around me; as many as a hundred on one farm. I have found coal ashes taken from grates, better than unburnt coal. The small pieces of coal and coke the hogs eat much more freely than the entire coal; it is softer and more easily masticated. If any one should be induced to try the ashes, they will be surprised to see the quantity hogs will eat, particularly, when generously fed on grain."

Salt as a Manure.

The Scottish Farmer says: "Salt acts in two ways—First, as food for the plant; and secondly, by rendering other substances, particularly phosphates, available for the purposes of nutrition. We have had long experience in the use of salt as an auxiliary manure, and in most cases have found it of much service. There are parts of the country where an application of salt will not produce any marked results, such as districts exposed to heavy rains coming direct from the sea during a considerable part of the year. This we have noticed especially on certain parts of the western coast of the British Islands. Where much town manure is used salt is also less efficacious, generally speaking, as such manure usually contains a certain amount of it. The quantities we used are as follows:—for green crops, 5 cwt. to 6 cwt. per imperial acre; for cereals and young grass, 2 to 3 cwt. For roots it may be sown broadcast over the land before the drills are made, and in the case of cereals the quantity to be applied may be divided into equal parts, one-half being first applied, and the remainder after the interval of a fortnight, moist weather being selected for the purpose. When grain crops are apt to lodge, salt imparts strength to the straw, and we have noticed that the grain is also improved in color."

Medicinal Properties of the Blackberry.

"Fire-fly" writes to the London *Field*, as follows:—"Physicians in former days used to recommend an infusion of blackberry leaves as a remedy for hæmorrhage of the lungs; and I know it is an excellent gargle in cases of relaxed or ulcerated sore throat, and can therefore the better understand its being of service in some kinds of heartburn, for it possesses healing virtues. Many astringents are productive of heartburn; port wine, for instance, will cause it with some people. The juice of the blackberry leaf is used in village practice for the removal of tetters: the leaves are bruised, and steeped in white wine, and applied in the form of a poultice."

Planting Trees.

"Pioneer," in *The Prairie Farmer*, says on this subject: "I have transplanted many hundred forest trees in the last ten years, and I have rarely lost a tree, and most of them set in the fall. One of the most important rules to be observed is, before taking up a tree, mark it in some manner, so that you will know which is the north side, so as to be able to reset it in exactly the position it grew in the woods. This may seem to many of no importance, but to those who know that there is in the bark and wood of all trees a radical difference between the north and south sides, the north side being close grained and tough, while the south side is invariably more open grained and brash, or soft, the importance will be seen. If this is done, your tree does not have to undergo a complete change in all the parts, and is ready to start off and grow at the proper time as readily as though it had not been moved."

How to Know Good from Bad Meat.

The North British Agriculturist has the following:—"Good meat, says Dr. Letherby, is neither of a pale, pinkish color, nor of a deep purple tint. The former is indicative of disease, and the latter shows that the animal has died from unnatural causes. Good meat has also a marbled appearance, from the ramifications of the little veins which surround the fat-cells; its fat, especially that of the internal organs, is hard and suety, and is never wet, whilst that of diseased meat is soft and watery, often like jelly or sodden parchment. Again, the touch or feel of healthy meat is firm and elastic, and it hardly moistens the fingers; while that of diseased meat is soft and wet; in fact, it is often so wet that the liquid matter of the blood runs from it; in which case it is technically styled 'wet.' Good meat has but little odor, and this is not disagreeable; whereas diseased meat smells faint and cadaverous, and often has the odor of medicine. This is best observed by cutting it and smelling the knife, or by pouring a little warm water on it. Good meat will bear cooking without shrinking, and without losing very much in weight; but bad meat shrivels up, and it often boils to pieces."

Estimating Weight of Cattle by Measurement.

The Canada Farmer, in reply to a correspondent, says: Many experiments have been made by graziers and salesmen to ascertain the net weight of cattle by measurement, and a number of rules and tables have been formed of the results obtained. None, however, can be regarded as absolutely correct. With the most accurate measuring is required a practical acquaintance with the points and forms of the animals, and allowance must be made according to the age, size, breed, mode and length of the time of fattening, etc., conditions which require a practical eye and long experience to appreciate. We have found the following method to lead generally to trustworthy results—measure carefully with a tape line from the top of the shoulder to where the tail is attached to the back; this will give the length. For the girth, measure immediately behind the shoulder and fore legs. Multiply half the girth by itself in feet, and the sum by the length in feet, and the product will give the net weight in stones of eight pounds each. For example, with an ox or cow five feet in length and seven feet in girth the calculation will be as follows:

Multiply half the girth by itself in feet	3.5
	3.5
	12.25
Multiply by length in feet	5
Weight in stones	61.25
Multiply by 8, (No. of pounds in one stone)	8
Weight in pounds	490.00

A Henological Operation.

We witnessed says *The Maine Farmer* an operation in our henery a few years since, that would stagger our belief should we have heard it from others. A hen was seen moping in the yard for several days, with her crop enormously enlarged from a stoppage of the lower passage. A servant girl in the family, like some bold surgeons, determined upon an experiment. She caught the hen one morning before the rest of the family were up, cut open the crop with a pair of scissors, emptied it of its contents, washed out the crop, sewed it up and let her go. She got well, and for aught we know, is still running about the premises. On relating our story to a neighbor, we were brought down by his relating an anecdote of his hen which lost her crop entirely, and a new one grew out in its place. We could'nt believe that.

Disease among Bees.

The Scottish Farmer contains the following: "A contagion has broken out in the beehives of certain districts in France. A distinct sort of infusioria fastens on the honey-worker, and multiplies on his body with such rapidity that death ensues in a few hours. It has been ascertained that the germs of the animalculæ are found on certain shrubs, particularly on the *helianthus amarus*, which it is of vital consequence to extirpate from the vicinity of bee-hives."

Cattle Plague.

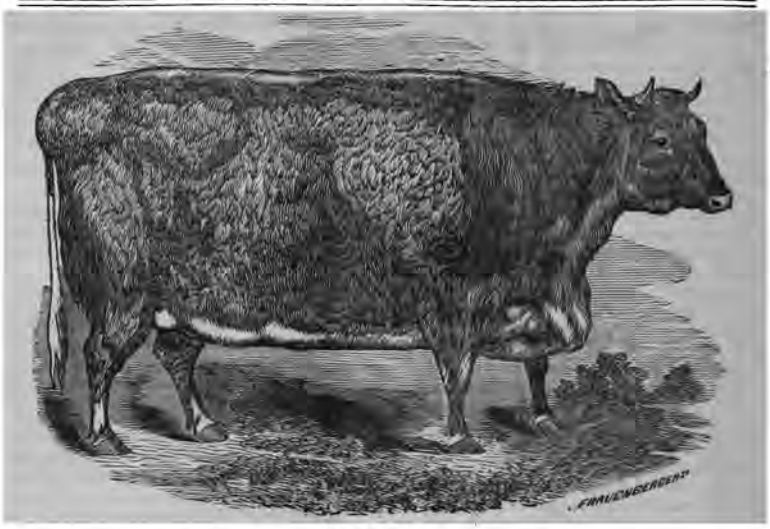
The London *Agricultural Gazette* is severe upon Parliament for its neglect to adopt stringent measures to prevent the spread of the cattle plague. Speaking of a late act, it says: "While Parliament was having its fortnight's talk, more than 30,000 cattle were attacked and the disease was known to exist in 18,734 distinct and separate centres of infection."

Sound Horses.

The Maine Farmer says on this subject: First and foremost, if you wish to have sound horses, get clean limbed and sound breeds, be sure to breed from no other than perfectly sound animals on both sides. The animals you breed from should not only be sound, themselves, but be from sound ancestors. Ringbones, spavins, pinched feet, and many other troubles about horses, are quite as transmissible to the offspring as the color of the hair, or any other trait, either good or bad. When farmers fully comprehend and realize the importance of selecting the best animals for breeders of all kinds of farm stock, farming interest will then have advanced a long stride ahead of what we have seen.

Salt for Sheep.

Sheep, says *The Maryland Farmer*, should have access to salt, placed under cover, all the time, or they should be regularly fed as much as they will eat once a week.



ROSA,

A SHORT HORN HEIFER, THE PROPERTY OF CAPTAIN TENNANT, OF LEEDS, ENGLAND, AND THE WINNER OF THE SILVER CUP, AS "THE BEST COW OR HEIFER" IN ANY OF THE CLASSES, AT THE SMITHFIELD CLUB CATTLE SHOW.

MYSTERY OF THE HONEY BEE.

WRITTEN FOR THE AMERICAN FARMER BY J. H. GRAVES.

MESSRS EDS.:—I noticed in your last number an article by the late E. Kirby, of Henrietta, on the mystery, or organism, of the different classes or sexes of the honey bee. Being much interested in

Drone. Queen. Worker.

all subjects connected with this so called mysterious insect, please allow me to ask, through your columns, a few questions on his theory, for wiser heads than my own to answer:—

1. What evidence is there, that the drone or male bee, is not by nature a fully organized male bee? He, I believe, fulfills the mission which nature requires.

2. Does the queen possess both male and female organism? Is she an hermaphrodite? Why can she not give life and organism to the worker without the aid of the male, as well as to the male?

3. How does the queen discriminate between the workers' and male eggs?

4. What is the substance or power the workers employ to change the worker's larvæ to queens?

5. Which is the odd bee in the three sexes, if there be three?

I conceive there is in nature but two natural sexes, male and female,—positive and negative,—either in the insect, animal, or vegetable kingdom; therefore males and females constitute a family of bees. The queen being grown in a large cell is a full grown female bee, and is therefore capable of propagating her race. On the contrary, the worker being reared in a small cell is a dwarf, consequently her propagating organs are undeveloped. She therefore is not susceptible of being fecundated by the male, her mission being labor only. The evidence: an egg may be transferred from a worker's cell to a queen's cell and it will produce a queen. Will some one answer?

GIVE your stock a little dry food each day for the first ten days after you turn them out to grass. This will prevent scouring.

GET up a *Club* for THE FARMER. See our half yearly premiums to agents, on last page.

Horticultural.

The Maying.

AN INVITATION.

FAIR May unveils her ruddy cheek,
And decks her brow with daises,
And scatters blossoms as she goes,
Through fields and forest mazes.
The fragrant hawthorn, white with bloom,
Fills all the uplands airy;
The grass is dry, the sky is clear—
Let's go a Maying, Mary.

THE GARDEN.

DURING the month of April, we are deterred from sowing and planting many of our tender vegetables, by fear of king frost. Should we, in this latitude, venture to plant in the open air, beans, corn, cucumbers, melons, peppers, tomatoes, and many other varieties, thus early in the season, one blast of his chilling breath upon them would undo the labor of days. We sometimes, have to replant some of those varieties when sown in the early part of May; but we must venture a little, if we would get early vegetables, and so are not inclined to hold back long after May day.

In May, we are also obliged to encounter that *spontaneous vegetation*, always unwelcome, which springs up all over the garden, right in the middle of the beds which we have sown with seeds of useful plants, which they will choke out and supplant, if not met with energy and determination.

We enjoy the asparagus this month, and if we allow it to grow four to six inches above ground before cutting, and then cut it off above the surface, we shall find it to be much more tender, than if we used the blanched portion beneath the surface.

If the early dwarf beans were not planted last month, they should be as early as possible this, and the pole beans can follow: London Horticultural, White Cranberry, Scarlet Runner, and Dutch Caseknife, first, and Lima last. The latter is worthy of a little extra preparation, in the way of bone dust, or other fine manure in the hill. Three good, sound beans to a hill, are enough and they should be carefully planted with thumb and finger, eye down.

Sow cabbage and cauliflower for main crop, and Long Blood Beet for winter use. Long Orange, Long White, and Altringham Carrots can be sown any time for main crop. If the celery has got a good start in the hot bed, prick it out into a rich bed, prepared for it.

Sweet corn can go in by the middle of the month. There are a great many varieties now offered by seedsmen; Extra Early Dwarf Sugar, is the earliest good variety; Darling's Early Sugar is a good kind, and Stowell's Evergreen cannot be surpassed when once grown.

Hills should be prepared for cucumbers, and melons, and squashes, (both summer and winter,) by digging in, and thoroughly intermixing with the soil a good shovelfull of hog, or cow manure. Horse manure is too dry. Cucumbers, musk melons, and summer squashes, may be four feet each way—the other six. Early White Spined, Early Russian, and Long Green are good cucumbers. White Japan, Nutmeg, and Green Citron are good musk melons. Ice Cream, and Goodwin's Imperial, are good water melons. Early Bush Scollop, Early Bush Crookneck, Summer Squash, and Hubbard, Boston Marrow, and Turban are the best winter squash.

Egg plants and tomatoes should not be transplanted from the hot bed into the open ground until the latter part of the month. If they have been managed right in the hot bed, they should be strong, healthy plants, just ready to blossom. To have tomatoes early, the ground should only be moderately rich. Four feet each way is the proper distance apart.

SMALL FRUITS.—As all small fruits should have been planted in April, they only require to be kept mellow and clean. It will increase the strawberry crop to mulch them just before ripening. If we would have currants, in some sections, it will be necessary to destroy the currant worm. We think that it is a well attested fact, that we have a remedy for this great pest. Powdered white hellebore, dusted lightly over the bushes when it makes its appearance in May, has proved efficacious in a multitude of instances; and all that we require to enable us to enjoy that wholesome and palable fruit again, is a little attention at the proper time. The hellebore can be obtained at any drug store, at trifling expense, and dusted on through a fine sieve, a dredging box, or a large pepper box. It is a good plan to mulch all newly planted trees about the last of May, as it retains the moisture about their roots, preserves a more even temperature, and gradually affords a little nutriment.

DIANTHUS LACINIATUS, (Double.)---The Japan Pink.

THE Japan Pinks are a most beautiful and showy class of flowers, of somewhat recent introduction. The Chinese Pinks are old favorites, but since the introduction of the larger and more brilliantly colored Japans, their glory has been somewhat eclipsed. The single variety was first introduced into Europe about six years since, we believe, by Heddewigg, and was named from the introducer, *Dianthus Heddewiggi*. It was very large, and single, and by its size and brilliant coloring created quite a sensation among florists.

Double varieties, nearly or quite equal in size, were soon produced, of various shades of coloring, from the deepest blood red to the most delicate pink.

Dianthus Laciniatus followed a few years after Heddewiggi. It is of a still larger size, not so rich in coloring, nor quite so stiff in the petals, which are very deeply serrated or fringed. The double variety is a monstrous flower, but with a loose and ragged appearance, as shown in the engraving.

A NEW HORTICULTURAL IDEA.

DR. J. STAGMAN, Leavenworth, Kansas, has been creating quite an excitement in the horticultural world, by articles in *The Horticulturist* and *Gardener's Monthly*, upon the hardiness of plants as affected by color. His theory seems to be that dark colored plants absorb more heat, electricity, and carbonic acid than lighter colored ones, and are consequently hardier.

This theory certainly looks plausible, and may it not be owing to its truth that we find it almost or quite impossible to find a *white* grape which is hardy. Thomas Meehan, editor of *The Gardener's Monthly*, authority in horticulture, endorses the theory. It is well worthy the investigation of progressive horticulturists.

INSECT AND FUNGUS REMEDIES.

WRITTEN FOR THE AMERICAN FARMER, BY "W. C."

In the April number of THE AMERICAN FARMER, I find an article on the hop louse and its remedy, the writer apparently having faith in a recipe given for its destruction; but on critically analyzing its constituent parts, I think I should feel a little timidity in using it, had I any hops to practice upon, and though the article wisely contains a caution as to the strength of the mixture, yet it is not sufficiently definite in my opinion, to guide the novice without risk, or by "bitter" experience learning wisdom in the operation.

I have experimented upon foliage with all the articles mentioned, and am therefore induced to put the uninitiated upon their guard in respect to its use, even as a weak "brine." It is true that some insects are more readily destroyed than others, but can any one guide us in this matter to a point where the insect must surely die by its application, and the foliage remain uninjured?

Last season, I think it was Dr. Kirtland who recommended a solution of copperas as a remedy for pear blight, by its being syringed upon the leaf and branch, both as a preventive and cure; and undoubtedly it was universally tried, but I would ask how did this solution operate in some hands, through a lack of knowledge as to how weak it should be applied? In some gardens, I noticed, after the application, the foliage was completely "spotted up" and discolored, and the trees not only must have experienced a severe check through the season, but positively injured by it, and the same result may be anticipated of salt and saltpetre, if applied by guess work, as the action of the sun upon foliage saturated with such a mixture, being such as to tend to its total destruction.

Can any of your numerous readers give us the requisite number in pounds and gallons for the liquid mentioned, so that all who may give it a trial may feel to be on safe ground.

BOTANY FOR BOYS.

WRITTEN FOR THE AMERICAN FARMER, BY "COSMO."

NOTWITHSTANDING the arbitrary title, I shall have no objection whatever, to *girls*, men and women, as well as boys, reading such bits of botany as I shall offer, and if they shall find in them that instruction or entertainment that pays the perusal, the object of the writer will have been obtained.

I have often wondered why it were not better to clothe our trees, shrubs, fruits, flowers, bugs, reptiles, mites, and monsters, in plain, familiar English names, which a child can comprehend and remember, than to hedge them in with chaotic Latin, and so mystify them with an interminable array of *branches*, *classes*, *orders*, *families*, *genera* and *species*, that the reader, not being a Latin scholar, comes out of the description of a rare tree or ridiculous toad, with not an atom more understanding of the subject than he went in with.

Believing that such bits of the natural history of birds, bugs, beasts, trees, shrubs and plants as I design to offer to the readers of THE AMERICAN FARMER will be more acceptable to the majority, divested as far as possible of all foreign prefixes, Latin adjuncts, and learned addenda, I shall endeavor to confine description to simple terms in our own vernacular, leaving technicalities and scientific classifications to those who write and read more elaborate works upon such subjects.

Having thus established a platform which shall serve as explanation and preface to any and all future communications, let us begin practically, with one of the most strikingly lovely of all our American Flora—the beautiful California queen.

NEMOPHILA.—We have no less than fourteen distinct varieties of this modest little Pacific pet—all low growing, charming, hardy annuals of easy culture. The habits of the whole, Nemophila family are neat, compact, and pretty. Only two of the varieties ever attain an altitude of twelve inches—about six is the standard. But as we have in humanity some very pretty dwarfs, so we have in the floral world this very lovely dwarf from the Pacific coast.

Nothing of nature's floral workmanship can be more gracefully beautiful, than an association in groups, of all the Nemophila varieties,—arranged either in double, treble, or quadruple rows, crosses, stars, circles, squares; or so sown as to form initial letters, monograms, anchors, beasts, birds, &c. We shall have in one variety, flowers of pure white velvet, beautifully dotted with jet black; in another, a blue—blue and bright as the blue heavens above us; sprinkled with flecks of black. The third gives us flowers of black, shining velvet, edged all round with creamy white; in another we have chocolate, white, and gold; again—Lapizlazuli and cornelion, marbled and veined with white. There is one—lilac, crimson, and gold; and so we go on, changing from beautiful to fascination, through the whole series.

In its plant structure, the Nemophila is as attractive almost as in its floral development. The stock is strong and stout at the base, diminishing by regular gradations at each outshoot of leaf and flower stem, which are thrown out at intervals, opposite each other; the foliage springing first from the stock, in a single leaf—long denticulate, five-lobed and shaped very like the foliage of the black oak. Within the base of the leaf stem, springs up the flower stalk—long, strong, and slightly waving, crowned with a single flower, having five petals, almost circular, within which is a centre of delicately furred stamins, forming a well defined, variegated, and very beautiful American Star.

The general color of the plant-stock, flower stems and foliage, is a delicate, chaste green, and the whole structure of the Nemophila is one of dwarfed magnificence and modest beauty.]

GRAPE GROWING.—Including the islands, it is estimated by *The Ohio Farmer* that there are 3,000 acres of land planted to grapes along the southern shore of Lake Erie.

SEE Premium List on another page.

FARMERS ENLARGE YOUR GARDENS.

We copy the following valuable article from the pen of D. Griffen, a correspondent of *The Country Gentleman*, who says on this subject:—

"The subject of this heading has engaged the attention of the writer, and inspired him with confidence to urge it upon others. The influence would be valuable with the rising generation. It would be much more likely to attract their attention and interest, than to become interested in common farm labor, or rather just raising the common necessaries of life. Farmers, you owe it to yourselves and to your familes; its a lesson that boys ought to learn when young—the germination of seeds, the cultivating of plants, transplanting and pruning of vines and fruit trees. Where is there a field open for so much instruction to the young, as to observe and assist in cultivating an extensive, varied, and fruitful garden—each one to have a little plot to till, and rival his brother in competing for praise and commendation? The impression would be useful and permanent—the germ of a successful farmer would be hastened into life; there would be an interest anchored that will grow with their growth and strengthen with age, and be among the earliest and strongest impressions of the successful farmer. Some excuse themselves on account of not having time; but to such I would say, it is a duty you owe to your families, especially the rising generation—it is a miniature lesson that might well be compared to primary education. Suppose you should be enabled to get a few more dollars by devoting your whole time and attention to common farm labor, would it not be better for those who you will be in a measure dependent upon in old age, to have a small balance expended in practical knowledge and experience, that would be both useful and lasting, and build a foundation for observation and research, that go far towards making home pleasant, prosperous and happy. The excuse often urged in not setting vines and fruit trees, is no place to set them. Just look around and see with how little labor and expense you can enlarge your garden to give ample room for a few vines and trees, and a plot always handy for raising early potatoes and carrots, that are almost invaluable for horses in winter, and while engaged in excessive labor.

"In preparing the ground for spring crops, my judgment warrants me in the conclusion that it is the most profitable investment on the farm, that a good garden, well tilled and enriched, and stocked with a good variety of small fruits and vegetables, which, if bought, would cost far more than many would suppose, but when once enjoyed would seem both necesary and useful. I have been successful in raising grapes and currants by setting rows through the middle of the garden, thus giving a chance to enrich and till both sides of them, and been rewarded with bountiful crops of delicious fruits, interspersed occasionally with a pear tree, which, if healthy and productive, will produce very pleasant recollections to superannuated age.

"The population of the country is increasing so rapidly it ought to have an influence to stimulate experiment, reflection, and comparison. By observing what bountiful crops can be raised on a small piece of land or garden, the lesson would urge us to apply the same principle in the general management of the farm, and if heeded would soon double the production of many of the farms of this wide and extensive domain. The most obtuse cannot fail to observe the advancement and improvement since our ancestors were in the active walks of life, but our expenditures are much more than theirs, and to keep up an equilibrium we must have an advance in production.

"It is useless to imagine that we can augment production by more excessive labor than our ancestors, because very many of them had constitutions much more inflexible than many of the present day; consequently we must resort to more enlightened and well directed calculations. It is the best directed labor that pays the largest returns. Then why excuse yourselves longer? Some talk and act as if the world was not as large for them as other people, but it is a delusion. The rains and dews enliven all alike. Study, observe, experiment, and reflect, and if you do not realize your expectations this year, the lesson you will learn will serve as a beacon light to guide you aright another year. Experiment on a small scale, on things of a doubtful nature, and you will become interested and observant, and light will begin to shine down as knowledge opens her bountiful stores. It is said that knowledge is power, and who of us would not be willing to harvest double the crops we do now if we only knew how. It is the self-made man that is the most reliable and successful. Many farmers excuse themselves on account of age, but much might be done to open the avenues to knowledge and prosperity to those that will soon occupy their places, not merely to learn them to work, but to learn them how to work. Boys are observant, and if taught and enlightened, will not think a farmer's life a mere drudgery, but will enter with zeal and knowledge, and will be useful, reliable and prosperous citizens, and help build a foundation for this republic to make it worthy of its motto 'Excelsior.'"

RASPBERRY NOTES.

We have noticed a tendency during the past few years to run upon the blackberry, to the neglect of the raspberry, so far as raising fruit for market was concerned. The result is, raspberries are yearly growing scarcer and selling higher, while "plenty as blackberries" is literally true with that fruit, and growers complain of light returns in money, not berries. It is now time to change the current and revive the neglected raspberry.

For family use *Brinckle's Orange* ranks No. 1, and when better known will sell where it does not have to be carried far. Flavor excellent, size large, abundant bearer, and ripens its fruit over a long period, thus extending the raspberry season. It is only half-hardy, and should be laid down and covered with earth, or otherwise protected during the winter. The canes are strong and branching, and have the merit of not suckering freely.

"*Doolittle's Black Cap* is a valuable variety, to say nothing about its improvement over the ordinary Black Cap. Our own opinion is, that high culture of transplanted Wild Black Caps would make the "improved" in a few years, but as the Doolittle is abundantly propagated by nurserymen—it can be increased very rapidly with no skill on the part of the grower—and is now sold at a reasonable price. It is better to buy enough to start with, which need not be over two dozen for a large family. When well established, each root or stool should yield four to six quarts of fruit in a season, so prolific are they. They are perfectly hardy, even as far north as Maine. The objections raised against them are, color, ripening nearly together, and thorny canes. By training upon a high trellis, keeping sheared or tied in, they can be conveniently managed. They incline to a lengthy growth, and after reaching the top of a six-foot trellis, may be allowed to bend over and return to the ground, affording a bearing cane both up and down. Even with this length, on rich soil, the extremity will often reach the soil and take root, thus furnishing a new plant, this being the way it propagates itself. The old root will live many years, and throw up new shoots close to the bearing canes. They may be trained upon buildings or high fences. Growing in clusters, the berries can be picked rapidly, and to our taste are not bad either in pies, puddings, dumplings, as a sauce, or served up raw with sugar. It bears carriage to market well, and is growing in favor both with dealers and consumers.—*N. Y. Tribune.*

PROFITABLE CRANBERRY CULTURE.

A CORRESPONDENT of the Boston *Advertiser* has the following account of large profits, made at small cost in cultivating cranberries: "Having a piece of swamp land of muck bottom, with a depth of from one to ten feet, I procured a few roots of cranberries from a neighboring meadow, and stuck them out rather carelessly some few years since, and that is all the care they have had. This season they bore abundantly. When picked we found by actual measurement that the product was just five pecks to the square rod. These sold by the bushel for four dollars, amounting to five dollars per rod, which multiplied by one hundred and sixty, amounts to the snug little sum of eight hundred dollars per acre. This land has had no other care, except that it is flowed in winter for cutting ice."

WASH FOR APPLE TREES.—Soft soap and lye, equal parts, well mixed. With a brush, or old broom, rub the tree in all parts, from the ground up into the branches. It will keep off the apple tree borer, which is now proving fatal to many apple trees, and it will give the tree a smooth bark and add to its thriftiness, that will well pay for the time and expense. Now is the time to apply the wash to keep off the borer—May. Soap from the bottom of the barrel, which is not favorable for common use, answers as well as that which is better.—*R. H., Mumford.*

NEVER buy till you find you have money to pay.

THE APPLE MAGGOT.

The Entomologist, wholly devoted to insects, in answer to a correspondent, says:

The "small white maggot" which, as you say, "perforates your apples and sometimes renders them of no value to use or to sell," is most probably the larva of the well known Codling moth (*Carpocapsa pomonella,*) which was originally, like many other noxious insects, imported from Europe, and within the last year or two has been very abundant and destructive, not only on the Atlantic seaboard, but also in the valley of the Mississippi. Its history may be thus briefly told: The moth deposits its egg in the eye (or bloom end) of the apple, and the larva hatching out therefrom burrows into the heart or core of the apple, and feeds on its substance. When full grown, that is about half an inch long, it bores a passage way out for itself, sometimes along the same road that it came in by, sometimes through the cheek of the apple, thereby making a brown, discolored hole about the size of a crow-quill. Before it is finally ready to come out, the apple infested by it usually, but not always, falls to the ground. Soon after this it changes into the pupa state, having first spun for itself a thin, gauzy cocoon in the chinks of the bark or other such appropriate hiding-place. The moth comes out from the pupa in June and July, when it lays its eggs for a second brood in the half-grown apples, the pupæ of which do not come out into the moth state till the following spring, at which time the next year's crop of apples is just beginning to grow. You will find a figure and description of the moth in Harris' *Injurious Insects*, pp. 484—5. It is a beautiful little insect, with a large patch of burnished copper on its wings, and it is a pity that, being so beautiful, it should be so mischievous.

The most effectual remedy is to pick up and destroy all the wormy apples as soon as they fall from the trees as most of these, though not all, still contain the living larva, no matter whether they are bored or not. It is also stated that, by wrapping any old rag round the tree, the larvæ will gather into it to spin their cocoons, when, of course, they must be treated as the Western folks treat horse-thieves, that is, made to promise not to do so any more.

EVERGREENS.—Place broad-leaved evergreens where they will get no sun in winter, yet away from where the roots of trees will make the ground dry in summer. Deep soil, but shallow planting, is all important for them. In transplanting, take care of the roots.

MIGNONETTE.—This hardy little annual, should be in every garden, it is one of the most fragrant of the small flowers. In selecting your flower seeds, do not forget this beautifully scented annual.

HEDGES.—A correspondent of the London *Farmer's Magazine* says one of the great errors in planting hedges is the neglect of the subsoil. No matter how well the surface is prepared and the weeds kept out, if the subsoil is not right, the hedge cannot be durable.

Ladies' Department.

DOMESTIC RECEIPTS.

CANNING FRUITS. — *Messrs. Eds.*:—A lady wishes through the columns of your excellent paper, a few good, practical and reliable hints on preserving or canning fruit. Now, I can not write an essay upon the subject, but can give my experience in this branch of the culinary department, which has been an extremely successful one for the past four years. Strawberries are the first berries that claim attention. I endeavor to bottle some 30 or 40 quarts every year. This is quite an allowance for a small family, and I do so many, not because I prefer them to any other bottled fruit, but because I am sure of them when uncertainty exists in procuring the later fruits. "A bird in the hand is worth two in the bush." I proceed in the following way: Procure the berries as fresh as possible; wash thoroughly, to free as much as practicable from the little stick-like particles which adhere to the seeds. Put the fruit in a porcelain or brass kettle, with white sugar enough to make sweet, and place upon the back of the stove, that the juice may run from the berries somewhat; or, if you wish, you may add a little water and proceed to boil immediately. After there is juice enough to prevent any possibility of burning, place farther on the fire, stir gently and occasionally till they boil. Put some rather warm water in your glass bottles, afterwards some much warmer. When quite hot, lade in your *boiling* fruit, and when the bottle is quite full, put on the lid. I say nothing about wax, as I have discarded the wax bottles entirely. Your unsuccessful correspondent may be assured there is no secret about the matter at all. If your fruit is unfermented and the jam is boiling hot while bottling, and the lid applied securely and properly in that condition, provided of course, that the bottle is full, none can fail of having fruit preserved in exactly the condition in which it was placed in the bottle.

Another thing, if you understand the principle, and are careful to fulfill its conditions, you may bottle your currants, pie plant, raspberries, blackberries, peas, beans, tomatoes and corn, or in fact, any vegetable or even milk, cream, or boiled chicken, &c.

To bottle currants and gooseberries, cover with water, bring to a perfect boil, and bottle boiling hot, sealing or putting on the lid immediately. Peas and corn, or beans, in the same way. Red raspberries, if not too large and watery, make a delicious canned fruit. Currants mixed with raspberries are excellent for pies. Blackberries bottle nicely, and cherries too; both unsurpassed for pies. I pride myself particularly on my peaches, and when the proper season comes, shall surely not fail to send you my way, which is certainly reliable, providing of course you wish any more of my productions, which I shall take for granted, if you publish this. ADALINE K. ANTHONY.

MESSRS. EDS.:—I saw in the April number of THE AMERICAN FARMER, a lady's request for some good method of canning strawberries. I give my method, which is plain and simple, and the fruit keeps very nicely. Take half a pound of good sugar to one pound of berries. Put the sugar and berries in a brass kettle, set them over a slow fire, and let them scald thoroughly through. Put the cans in warm water, then add hot water until the cans become hot. Then put in the fruit scalding hot, and seal with the cans remaining in the water. The sooner strawberries are canned after picking, the better the flavor. S. B.

REMARKS.—We thank our esteemed correspondents for their excellent suggestions. We see that they have the right ideas on the subject. The fruit should always be heated through, and never fail to boil before bottling and be sealed or closed with the lid immediately. We shall be glad of the peach recipe or any others that our correspondents may furnish. Let us also hear from others, of their experience in domestic economy.

A DELICIOUS PORK CAKE.—Take a pound of good raisins and stone them carefully. Cut up into wafer slices, a quarter of a pound of candied peel or citron. Pour over these one pint of boiling water. Take one pound of good fat salt pork, and with a sharp knife cut it into extremely thin slices. Place each slice over another, and cut again into fine lengths, and the lengths again into small squares, and afterwards chop to a pulp. Drain the water from the raisins, and add sufficient to make it one pint. Boil, and pour over the pork pulp, stirring it well. Add to this the raisins and one pound of well washed English currants; two small teacups of sugar, two of molasses, two nutmegs grated and the rind and juice of a lemon, if convenient, and four teaspoonsfull of cream of tartar. Mix into the cake nearly enough flour, before adding two teaspoonsfull of soda dissolved in a little warm water. Afterwards add flour to make of a tolerable stiffness. It will be nicer if baked in one large cake, instead of dividing it. It will also improve with age. Should not be taken from the pan till cold, or cut till day after baking. Be careful to grease the pan well, and to place upon the bottom a sheet or two of white paper so arranged as to allow of one or two corners to protrude over the sides in order the better to remove the cake when done. No eggs are required.

TO WASH LACE CURTAINS.—Take them down from the windows, shake well from dust, mend if needed, and wash and starch as usual. Instead of drying and ironing, as is often done with indifferent success, spread evenly upon a clean floor, or well swept carpet, and leave undisturbed till quite dry, when they will be ready to hang again. It is unnecessary to pin them to the carpet as some do. Embossed muslin curtains should be sprinkled and ironed.

MEAT.—If you wish your roast meat to be tender and delicious, on no account put water into the pan, but baste often with the liquid which comes from the roasting fat.

TO BOIL PEAS GREEN.—Asparagus, green peas, &c., should be put into boiling water and kept boiling without the lid, when they will keep their color, and be far nicer to eat.

MADELINE'S KITCHEN CABINET.

A NEW KITCHEN ERA.

WRITTEN FOR THE AMERICAN FARMER.

M. BLOT'S BILL OF FARE.—LESSON I.—1.—*Potage Julienne.*—Carrots of the best, sweetest turnips pared, cut in thin slices and fried in butter until about half done. A few slices of onion, some simple meat, broth, and a very little burnt sugar is then poured over the vegetables, which are then to be stewed gently until quite soft, when the potage is to be poured over slices of bread fried to a light brown, and the dish is ready to serve.

2.—FISH, *Broiled Maitre d' Hotel.*—In order to broil any sort of fish so as to have them at the best, there should always be a strong draft, so as to carry clear from the fish all blaze and smoke made by the dripping fat. The fish, either fresh or salt, being broiled both sides, quite done, is dished, and a sauce made of butter and flour, in equal quantities, with the juice of half a lemon turned over it. The fish to be served as soon as prepared.

Small, fresh fish, are first dipped in eggs well beaten, and then rolled in very fine bread, or cracker crumbs, and fried.

3.—BEEF, *baked, piquante sauce.*—Fresh beef is prepared in the pan with pepper, salt, a few cloves, and a warm meat broth poured over it. Then cover with paper, to prevent burning, and place in a pretty hot oven, and bake thoroughly through.

M. Blot contends that no "roast meat" is ever *baked* in an oven. The *Chef* is right. The sauce for the baked beef is made by chipping an onion very fine, cooking it in good, sound, sharp vinegar, and then adding butter and flour till the proper consistency is obtained, after which the cooking must be continued until the raw taste is taken from the flour.

4.—LIVER, *en brochette.*—Cut fat salt pork sufficiently freshened, and beef's liver, in very thin slices, then sandwich them—a slice of pork, then one of liver, and so on alternately, until the sandwich is quite an inch thick. Secure them with small skewers, boil till about half done, then dip in well beaten eggs, and fry in fat till quite brown, and done through thoroughly.

5.—QUAIL, *larded au jus.*—Truss the bird in the ordinary manner, having it stuffed or not, as you choose. Place it in the pan containing some nice, rich gravy, and bake as rapidly as possible without scorching. Very nice for delicate persons. Pigeons, snipe, woodcock, and robins may be cooked in the same manner.

6.—TURNIPS, *en poulette.*—The best sorts of turnips are pared, sliced thin, and simmered moderately till quite soft. The water is drained off, and sweet milk, thickened with flour, and a lump of butter added, all boiled together, are poured over the turnips in a vegetable dish.

7.—POTATOES, *Parisienne.*—Good, sound potatoes are sliced very thin, and fried to a bright brown. Sliced in the same manner, and baked in the oven, they are called, *Potatoes a la Francoise.*

8.—*Choux a la Creme.*—Take cold milk, allowing four eggs to the quart, the eggs broken into the milk, the whole placed over the fire in a saucepan, and beaten vigorously with an egg beater while boiling. Cook five minutes.

9.—*Petits poires*—with almonds.—Melt two ounces of butter in a pint of water. As soon as the water boils, stir in sifted flour till a thin paste is obtained, stirring moderately at first—rapidly after the flour is all in. Then three eggs, beaten up with sugar, and flavored with almonds are added. When the batter becomes quite stiff, it is taken out and baked in small cakes, and these when done are opened with a knife, and a dessert spoonfull of the *choux a la creme* put into each one.

There ends the first course of instruction.

We are told by M. Blot, and practically taught, that when once we have learned to make *Potage Julienne* correctly, we have the principles that enable us to make a half dozen different soups. *Potage Jardiniere* is made in a similar manner, except that no bread is used in it. In *Potage Culbert*, a poached egg for each person is added. *Potage* with rice, is simply adding nicely boiled rice a few minutes before serving. *Potage Printanier*, is made by putting asparagus, radishes and green peas in the *Julienne.*

Just as the *beef piquante sauce* is cooked, turkey, mutton, venison, and any kind of cold meat may be sliced and warmed with the sauce.

Turnips, carrots and oyster plant, may all be cooked as the turnips in *Poulette.* Liver—either of beef, calf, or pig, and kidneys may be prepared the same as liver in *Brochette.*

The *Chef* tells us that properly cooked, beef is the most nourishing of all the meats—miserably murdered, as it is far too frequently, it affords the least nutriment. Mutton comes next to beef in the list of nourishing meats.

(To be continued.)

BREAKFAST ROLLS.—Two pounds of flour, one quarter of a pound of butter, three potatoes, one gill of yeast, and a little salt. Let them rise all night.

ILLUSTRATED PUZZLES.

ANSWER TO PUZZLES IN APRIL NUMBER.

No 7—It's been in a row, and you can not collect the rents.

No. 8—Because it is decidedly put out.

Answer to Poetical Anagram in April No.

Since trifles make the sum of human things,
And half our misery from our foibles spring;
Since life's best joys consist in peace and ease,
And few can save or serve, but all can please;
Oh, let the ungentle spirit learn from hence,
A small unkindness is a great offense.

MARY AND MATTIE.

Clarkson. N. Y.

Answer to Biblical Anagram in April No.

"Be thou my strong habitation, whereunto I may continually resort. Thou hast given commandment to save me; for thou art my rock and my fortress."

Young People's Page.

TALK WITH THE YOUNG FOLKS.

WRITTEN FOR THE AMERICAN FARMER, BY "G. N. B."

HOME POLITENESS.—There is nothing more agreeable in one's manners than true politeness. It secures favor and wins esteem everywhere. It strews one's path with pleasant flowers of human speech and action, and secures for its possessor testimonials of respect from all he meets. Some people seem to be naturally polite, but most people will be awkward and ungraceful, and many even clownish, without some attention to the culture of politeness. To be cultivated successfully, it must be done at home, and while young. Home politeness is the only lasting politeness. It must be cultivated, to become natural. And this cannot be without a daily endeavor to be polite at home. There are a thousand little courtesies that are truly polite and agreeable, which many entirely neglect at home. Calling nicknames, using positive commands, abrupt and coarse forms of speech, repeating cant phrases, low and local vulgarisms, forgetting always to thank persons for little favors done, and indulging in rude ways and words at home, is only so habituating one to those things that he will be sure to do when he goes away from home. What one is at home, he is likely to be abroad. Home characteristics and habits stick fast. Learn to be habitually polite at home, and you will be so among strangers.

EASY TO DO RIGHT.—Any person can tell the truth easier than a lie—can be honest easier than dishonest. The natural inclination is to do right, and it is easier to do it than wrong. It is not an irksome task, as some maintain, a sacrifice of all pleasures, a hard, doleful crucifixion of the natural man, to do right; far from it. Right lies in the straightforward path of life; wrong is in the bye-ways and behind the hedges. To do right is both easy and pleasant. Rectitude smiles upon her followers, and pays them well for their service. There is glory in the right, and everybody knows it, or should know it. To live honorably is to get the world's esteem. Men know this. Then why do they not so live? Ah, that old theory that it is hard to do right has frightened them from an attempt to live by the principles of honor and virtue.

RULE YOUR SPIRIT.—Over all that is censorious should your spirit bear sway. Sublime is the beauty of a human spirit enthroned in sense! How all the appetites, passions, and lusts, bow down in abeyance, and become beautiful in their humility, labor and usefulness! Every sense is a servant of mind, and when held in subjection is beautifully useful. "He that ruleth his own spirit is greater than he that taketh a city." There is nothing like a contented spirit. No person can be happy who does not possess it. The man in moderate circumstances who is satisfied, is far happier than the man of wealth possessing a discontented spirit.

TO THE BOYS IN PARTICULAR.—"Don't shoot the birds." Incredible is it not, that the birds should need an advocate?—that these bright and beautiful denizens of our gardens and groves should fear harm from the hand of man?—that his eye and ear should be so dull as to find no charm in their untaught melodies, in their forms of perfect grace? Yet not more strange than sadly true is it, that boys and "children of larger growth," can find delight in the destruction of these harmless creatures. One could not believe it, did not every day witness these noble bipeds sallying forth armed with deadly weapons and on murderous thoughts intent, and at night returning with a dozen robins, jays and bluebirds—proud trophies of a well spent day! "Well, and why not? *It is such sport!*"—I hear them say. I will tell you, my young friends. There is not much use in talking to a man who would shoot a little bird; but when you become a man, remember what I tell you now—these little birds were not made in vain, nor merely to furnish "sport" for the idle. Their wise Creator formed them for an important use; if you destroy them, you frustrate his plan, and nature always suffers when the laws and plan of God are disregarded. You have probably heard your elders speak of the great increase of the various tribes of caterpillars, and that the fruits are not so fair as of old; but knotty and worm-eaten. Yet, I suppose that you nor perhaps they either, ever dreamed that the destruction of the birds had anything to do with the case. You would realize it, could I tell you how many bugs, and worms, and flies were frequently found in the crop of a single bird. I cannot tell the numbers, but have been astonished at the amount as certified by credible witnesses. Farmers and gardeners are beginning to find out that birds are their most useful allies. Nothing in the insect line comes amiss to their dainty looking bills, from the aphides upon the rose bush, to the hideous and disgusting caterpillers. And if they sometimes treat themselves to a ripe cherry or tempting strawberry, who can blame them, if after such a dinner they fancy a little fruit, by way of dessert. And how do you know but their quick eye perceived a worm in the very cherry you grudge them? "The laborer is worthy of his hire," and man can well afford this compensation for their tireless industry.

BOYS SPARE THAT BIRD.—I know of few things more calculated to disturb one's equanimity of mind or ruffle the feelings of a humane man, one who lives among animals and birds, and feels as if they were all personal friends, than to see a straggling thing called man, with rusty musket or rifle, creeping about our highways, orchards, or woodlands, and popping away at harmless little creatures, who give to the landscape half its charms, and to the eye and the ear half their pleasures.

I know these men cannot look upon birds as I do, or they would not have to be guilty of homicide, to know what the sensations of a murder are when they wantonly destroy these denizens of the air. I plead not for the parrot or the crow; but the beautiful songsters that greet us in the morn with a hymn flutter over our heads, and exhibit an instinctive happiness that would reconcile the most morbid misanthropist to life and its cares. I never hear the song sparrow, that with us is

nally the first harbinger of spring, without a feeling gladness "that the winter is over and gone, and the me of the singing of birds is come," and this fretting increased, as day after day the blue bird, robin, yellow rd, bobolink, thrush, oriole and swallow successively rive and enliven the groves and fields with their presce, and fill the air with their music.

As soon as the birds appear among us, and begin to ild their nests, a set of idle and miscreant boys comence annoying them, and take their eggs, and often stroy their nests; and at all seasons of the year a set ruthless vagabonds prowl around through every ighborhood, with their guns ever ready, to shoot wn every robin, sparrow, and even the diminutive d harmless wren, either of which are rendering more rvice to the community, in proportion to their ability, an their numerous persecutors. Did they love birds well as I do—did every one delight in hearing their adsome notes, few, very few, would be the birds deayed. But cruel as it is, to take the life of the innot birds that build their nests and rear their young, in e shrubbery around the meadows and groves, we have days past, we are sorry to say, been guilty of such is of cruelty. Gladly would I, if I could, restore to e every innocent bird I have been guilty of destroying; t it is too late. For mere sport, multitudes of the thered tribe are destroyed by wanton boys and the m of the fowler. For having been guilty of such acts, almost think I can excuse myself. Like other boys I as fond of "sport," notwithstanding such sport reulted in the death of those creatures that had an unubted right to live. I can call to mind many times ere I have been well nigh affected to tears in witssing the death struggles of the little warblers that ve fallen at my feet, pierced with leaden missiles. len too have I called to mind what L'Estrange in his ples says, in regard to the observation made by some ngs to some frolicksome boys—"children you do not nsider that though this may be sport to you, it is ath to us." Sporting for pleasure and destroying the nocent creatures God has made, is indeed cruel pleare. To me, it seems right to spare the creatures he s made, especially the birds, inasmuch as everything as made for some good and wise purpose; therefore, y young friends, I beg you to spare the birds.

A WORD TO YOUNG LADIES.

WRITTEN FOR THE AMERICAN FARMER, BY J. L. HERSEY.

Young ladies, as well as young gentlemen, sometimes ind in their own light, and do themselves much jury in their endeavors to win and woo each other. o young lady of sense, cares a fig for a dapper dandy au, who prides himself more on the cut of his coat d cultivating the extremes of fashion—rather than e mind; who bestows more care on the parting of his ir, and the insipidity of his conversation, than on the ore enduring qualities of the head and heart, which ne should make his acquaintance pleasant and profitle. What young man, of common sense, would t prefer a wife who can cook, and wash, and sew, and scrub, and do things necessary to perfect the arrangement of every well regulated household—to one who can sing fashionable music, drum on a piano, talk sentimental nonsense, and repeat whole pages of album poetry? Not that accomplishments of this nature are to be discarded or neglected, altogether; but, that the essentials ought to be acquired first, and practiced the most. Young men of sense like to see their sweethearts sometimes in the kitchen with their sleeves rolled up, and a pan of hot water before them, a dishcloth and a piece of soap in their hands, hard at work scrubbing at the breakfast or supper dishes. Oh, it is a beautiful sight, and makes a young man feel at home; feel that here is a gift worth taking—a young lady that will keep his home neat and tidy. But many of the young ladies of these days, follow the example of Solomon's lilies "which toil not, neither spin," and consider it beneath their calling to have a knowledge of the most ordinary parts of housekeeping. In this, young lady, you are altogether mistaken; you never appear more beautiful than when employed in some useful occupation, in learning the art and mysteries of making apple pies, preserves, and learning how to become a frugal housewife—as that is the desideratum to be arrived at and what every farmer needs, who wishes to thrive in earthly matters. If we go back to the days of chivalry, there we find the lady-love of the knights, burnishing their armor. Let the same labor be now applied to burnishing the milk pans, and boiler covers, and strainers and tin cans. Hang them up around the pantry as trophies of your art and industry; rise early in the morning; feed the chickens, and get the breakfast ready; sweep the floors, and dust the chairs, and when the bell rings have the breakfast smoking on the table. Then fly round, do all the work required, and if you go systematically to work, you will have the whole afternoon and evening to devote to reading, writing, sewing, music, or shopping.

What a delightful wife a young lady makes who is brought up in this way. She is much better than gold—yea, than much fine gold; and the young man who can abandon such a household idol, and seek the dram shop, or the gaming table, is not worthy of heaven's reward; and unless a great change comes over his dreams, his chances of seeing the inside of the Golden City are slim. Now, young ladies, heed the advice of one who wishes to make you fit companions for domestic happiness, and fit you to bring up a family of children in the paths of usefulness, and be a blessing to your age and generation.

THE ALPHABET.—The following verse contains all the letters of the alphabet, and may be used as an exercise for young children in tracing the letters:

"God gives the grazing ox his meat,
And quickly hears the sheep's low cry,
But man, who tastes his finest wheat,
Should joy to lift his praises high."

NEVER chase a lie. Let it alone, and it will run itself to death. I can work out a good character much faster than any one can lie me out of it.

Editor's Table.

SPECIAL ANNOUNCEMENT!

Now is the Time to Get up a Club!

One more number will complete the first half volume of The American Farmer. To those who commenced with us, and have read the back numbers, we need not say that we have spared neither labor nor expense to make the paper interesting and profitable to our patrons; and it will be our constant effort in the future to make it still more worthy the large and extensive circulation it already enjoys.

On entering upon the last half of the present volume we are desirous of further increasing our list of subscribers, and to this end would call the attention of our agents and friends to our offer to send The Farmer for the remainder of the year to any address, in any State or Territory, for only **Fifty Cents.** What farmer can refuse this small sum? And what we ask, is, that all our readers will let this be known. We want every subscriber to feel personally interested in The American Farmer, and to do all he can to increase its circulation. Now, is a good time to interest your friends and neighbors, and get them to subscribe, take their names and subscriptions, and forward on to us at our risk. *The back numbers can be sent to those who desire them,* and each yearly subscriber will count double in taking any of our premiums. Read them over, and try what you can do for The American Farmer. We want ten thousand more for the last half volume, and we shall have them, if each will do his share, and send on the names of two, three, or more, as opportunity occurs.

Our space is so crowded that we have been compelled to issue a supplement, containing Premium List, with full instructions to agents, as we wish to give all the room we possibly can for valuable reading. Make it known that the farmers have adopted The American Farmer as their own paper, in which they can communicate their thoughts and experience from one to the other. Let all our readers send in a few names to swell the list of subscribers.

Recollect that all names received before the 1st of June will receive the June number.

Prize Essays.

We have, with great care, made the following selections for prize essays, to be published in The American Farmer, and we make the offer, to send a dollar book to the person who will send us the best communication or communications on any of these subjects. The writer to select the book he or she wishes. The essays should be short, as our space is limited. They should occupy not to exceed a page of The Farmer, or less. They must be sent in by the first of August, as we desire to publish them in the October number. They will be submitted to a competent committee, and those accepted will be published, and the books at once sent to those who send in the best. We want plain, practical statements of facts, and we hope our readers will let us hear from them on all of these subjects.

1. On buildings suitable for a large or small farm, with plans.
2. On the importance of shelter for stock in winter.
3. On winter work on the farm.
4. On fattening cattle and sheep in winter.
5. On preparing fire wood for winter use.
6. On preserving roots for winter use.
7. On the best feed for stock in winter.
8. On the management of stock in winter.
9. On making and putting down butter for winter use.
10. On curing pork and hams.
11. On the different breeds of cattle.
12. On the different breeds of horses.
13. On the different breeds of sheep.
14. On the different breeds of swine.
15. On the breeding, rearing and fattening of pigs.
16. On the management of fowls in winter, so as to secure a full supply of eggs.
17. The best method of improving exhausted land.
18. How to keep up the fertility of the soil.
19. On underdraining.
20. On the best rotation of crops on a farm.
21. On the management and application of barnyard manure.
22. On the recreation and amusement of farmers and their families in winter.
23. On the modes, system, and local characteristics of farming in each of the different States—an essay from each State.
14. On the same in Canada.
15. On Bee culture.

New York State Agricultural Society.

At the meeting of the Executive Committee of the State Agricultural Society, held at Albany, on the 29th of March, it was decided to hold the next annual fair at Saratoga. At the same time a committee was appointed to locate the place for holding the great trial of implements in July. The preference of the board was in favor of Auburn. It is expected that this trial of implements will be of great interest, and one of the most important ever held in the United States.

Census of the Cattle Plague.—Up to March 3, the cattle plague had appeared on 16,415 farms in England; 3,396, in Scotland; and 688 in Wales. Total, 20,499 farms. There was on these farms a grand total of 349,712 head of cattle: of these, 187,059 had been attacked; 26,135 killed for security; 39,081 slaughtered healthy; 117,664 died of the disease; recovered, 26,106.

We shall be glad to hear from any of our readers, the result of their sheep shearing. Give us the weight of fleece, age of animal, and any particulars you think of interest to the American farmer.

We have received from Otis Tinkham, Lakeville, Mass., a package of Early Japan Melon seed, for which he will accept our thanks.

Wool Growers Convention.

We hope our readers will remember that this society holds its next meeting in this city on the 8th, 9th, and 10th of May. It should be well attended by all wool growers and sheep raisers. A large attendance and a good show is expected. For classification of prizes, &c, see last number of THE FARMER, p. 129. The New York Central Railroad has agreed to carry stock free, and the arrangements on the Monroe County Fair Grounds are all that could be desired, as the pens are well covered, which will be a protection to the sheep in case of rain; and are otherwise well arranged for the comfort of the animals.

Farmers, Write for Your Own Paper!

We copy the following from an exchange, which we think very appropriate, and will apply with equal force to our own readers, and trust they will not fail to heed the exhortation:—

"Give us field news, stock news, horse talk, cattle talk, hog talk, bear talk, turkey talk, fox talk, duck and goose talk, always giving preference to the more useful and substantial items in the above list. Write early, write often, and continue to write.

"Take up your pens, O, ye cattle kings, ye horsemen, ye Shepherd of hill and plain, ye Dairy men and women, ye Wheat growers, Corn growers, Grass growers, ye Apple Kings and Garden diggers, ye men and women of the rose tree and the pansy bed, ye lovers of the grape and the juices thereof, ye Nimrods of the bush and the saddle, ye Women of the gridiron and the frying pan, who know the mysteries of broiled quail and lordly steaks, and such generous dishes as make us stout and good natured."

Inquiries and Answers.

MESSRS. EDS.:—Will some of your correspondents give, through your columns, a plan of a hall and buildings for a county agricultural fair grounds. I want a plan only of those which have been found to be exactly fitted for the purpose.—*G. E. B.*

"J. S." wishes to know if any of our readers have had any experience with the Prickly Ash as an hedge plant. If any one has tried it, we should be glad to have them communicate the facts through THE FARMER.

MESSRS. EDS.:—I wish some of your readers would communicate through THE FARMER, some hints about raising turnips, the time to sow the seed, distance apart, and how to prevent the ravages of the fly, &c., as I wish to raise some to feed stock next winter, and desire information.—*F. M., Ohio.*

W. S., (Mich.)—We shall be glad to hear from you and others, the result of your sheep shearing. Give us the weight of fleece, age of sheep, and any items you may think of interest to farmers generally.

J. M.—Chedder cheese was first made in the rich valleys near the Chedder rocks, (from whence it derived its name) in Somersetshire, England. The Stilton obtained its name from a small town in Huntingdonshire where it was first publicly sold. The process of making was for a long time kept a secret, but is now generally known.

MESSRS. EDS.:—I wish your correspondent on hops would give me the distinguishing marks between the male and female hops.—*H. K., Schoharie Co.*

E. S.—We should advise you to use the land for cranberries. It will be good for nothing else, and in four years, with proper management will yield you a handsome profit. Cranberries require a wet, swampy soil, and your waste land can be made of good account by using it for this purpose.

H. W.—Put a little manure under each hill, and you will succeed better. Melons and cucumbers require a good deal of warmth, especially for a start. We always treat ours in this way, and have excellent success. Cover the manure with soil about three inches.

E. B. CORNWALL.—The nasturtium is an annual, producing half red and half yellow flowers. The seed just before ripening, is gathered for pickling. Sow early in the spring, and when the plants are up about three inches, place sticks or secure cords for them to rest upon.

H. B.—Soak in chamber lye, and mix with plaster, before sowing.

E. H.—Should like to hear from you on that or any subject of interest to farmers.

AN "ENGLISHMAN" who has been accustomed to the use of rock salt in the old country, wants to know how it is that it is not used more generally here. He thinks it far better for cattle, as they cannot take too large a quantity at once, as is the case with common salt, and much more convenient, as a lump can always remain under some shed or tree, where the cattle can procure it as desired.

E. P. H.—Soak the seed about twelve hours in lukewarm water. Parsley is a long time in appearing; sometimes the seed will be three weeks in the ground before sprouting.

A LADY READER.—You may plant radishes at any time during the spring and summer. A sandy soil is best for them. To secure a constant supply, sow a little only at a time, scattering a few seeds every week or so. We prefer the red turnip.

S. A. BARNES.—We think as you do—the cow should be killed for so grave a misdemeanor; but we would fatten her first and then use the beef.

THE FERRET.—(J. C.)—They are little known in this country, but almost every English farmer keeps them. They are a native of Africa, and were imported from that country to Spain, and from thence to England. There are but few in this country at the present time. They are very sensitive to cold and require to be kept very warm during winter. Where rabbits and rats abound they are very useful for their destruction.

MESSRS. EDS.:—I am quite an amateur in grape culture, and fear sometimes that I fall into grave errors, and some of my neighbors rather like to run on me a little. The other day one of them asked me if I had pruned my grape vines this spring. I told him no. He laughed, supposing that I should do so. I pruned considerably. Going into the garden the next morning, I found icicles hanging on the cut portion, some two or three inches long. It immediately struck me that I had been fooled somewhat; as it seems folly to lose so

much sap. How is it? Is it usual to prune at this season, (April,) or not. I have read several articles on grape culture, but never remember to have seen the practice of spring pruning forbidden. Will some of your numerous readers give us a few ideas on the subject from practical experience.—*J. D., Morristown, N. J.*

If you left your vines until the sap had commenced to flow, it would have been best not to cut them. You should have waited until the young shoots had started, and then rubbed off what buds you did not want to grow.

Notes on the Weather from March 15th, to April 15th, 1866.

THE first half of March gave us moderate temperature, or 2.1° above the general average. The last half of March gave us 27.6° as the mean, or below the general average 6.8°. As the winds were strong, raw, and quite constant, and snow squalls were very frequent, the weather was held to be uncommonly dismal for even March. The coldest morning was 12°, on the 18th; the coldest noon, 17°, on the 17th and 25th; the coldest day was 15°, on the 25th; the warmest morning, 35°, on the 16th, 21st and 31st; warmest noon was 44°, on the 23d, and hottest evening, 40°, on the 31st. In 1841, March 17th, the temperature was 5° below zero, the only time here that the temperature was so low in thirty years in the last half of March. The mean of March was 29.9°, or 2.8° below the general average. The fall of water in the month was 2.71 inches—near the average. Rarely have been so many complaints of bad weather, as in the last half. The earth was frozen at the close of the month. Maples were showing some blossoms.

APRIL.—The first half was pleasant, warm, dry and good. The mean heat was 4.50° above the general average. The hottest noon was 75°, on the 5th; and the same showed the hottest day—65°. The coldest morning was 30° on the 9th; 35° the coldest noon, on the 7th, and coldest day, 33.3°, on the 7th. Very little water has fallen this half month, only 0.18 of an inch. The ground dried early, plowing was begun early, and earlier than usual some oats have been sown. Still, the progress of vegetation has not been equal to some years. The lilac is just leafing, and the weeping willow; the early flowers have appeared; the soft maple blossomed early in the month, showing only stamens, but the pistils have since appeared in later buds with stamens; the common elm is also fully in flower; the spring beauty and trailing arbutus nearly as early as is usual. The surface of the earth is rather dry, and a fine rain would advance the grasses very greatly.

The return of birds this spring was early and singular. Some robins appeared in February, just before the cold of the 15th, and remained through and after it; but soon disappeared, though occasionally seen. As the last of February and beginning of March were warm, robins and some others came for a few days. As March 14th was 60° at midday, robins, blue birds, &c., were quite numerous. This is about the usual time of commencing a permanent stay for the season.

THE MARKETS.

ROCHESTER, April 23, 1866.

FLOUR—White wheat, $14.00@$14.50. Red wheat, $11.00@$11.50. Extra State, $7.25@$7.50.

GRAIN—White wheat, $2.50@$2.60. Red do., $2.12@$2.25. Corn, 65@70c. Barley, 85@90c. Oats, 50c. Rye, 70c.

PROVISIONS—Mess pork, $27@$28.50. Lard, 18@19c. Butter is very scarce at 38@45c. Eggs, 18c. Chickens, 20@20c. Turkeys, 20@22c. Cheese, 18@22c. Potatoes, 50@65c.

NEW YORK, April 21.

FLOUR—The market for State and Western flour less active, and common grades are 10c lower. Superfine State, $6.90@$7.50. Extra State, $7.50@$8.00. Choice State, $8.05@$8.65. Superfine Western, $6.90@7.50. Common to medium extra Western, $7.55@$8.70. Trade brands, $9.15@$12.00, the market closing dull. Canada flour $7.75@8.50 for common, and $8.55@$12.25 for good to choice Extra.

GRAIN—The market for wheat is dull. Choice No. 1 Milwaukee at $1.88. Corn dull, at 82@85c for unsound mixed Western, in store and delivered, 90c for white Southern, and 94c for Jersey white. Oats, 42@50c for new, and 57@60c for old Western, 59@60c for Canada, 55@56c for Jersey, and 62c for State.

HOPS—Steady at 20@65c for 1865 crop.

PROVISIONS—The market for pork opened firmer, but closed heavy and irregular. Sales at $26.50@$26.62 for new mess, closing at 26.60 cash; $25.00@25.25 for old mess, and $22@20.00 for prime. Cut meats at 10¼@11¼c for shoulders, and 15¼@17¼ for hams. Lard, 17¼c@19¼c. Butter, 25c@45c for Ohio, and 40@60 for State. Cheese, 16c@22c for common to prime.

CHICAGO, April 21.

FLOUR—Market dull.

GRAIN—Wheat active, and advanced 1@2c. Sales at $1.41¾@$1.42¾ for No. 1, and 96c@96¾c for No. 2. Corn quiet at 45¾c@46¼c for No. 1, and 42c for No. 2. Oats quiet; sales at 27½@28c for No. 1.

PROVISIONS—Sales of mess pork at $25.50@$25.75. Lard, 18¼@18¾c.

BUFFALO, April 21.

FLOUR—Market dull. Canada spring, $8.55. Canada and Western spring, $8.50. Mixed brands at $8.50@$10.50.

GRAIN—Wheat very scarce at $2.45. Amber winter $2.35. Canada and Milwaukee Club, $1.83@$1.84. Corn, 66c. Barley, 78@87c for Canadian. Rye inactive and nominal at 80c. Peas, quoted at 100c for Canada. Beans quiet and nominal at 125c@150c.

SEEDS—Timothy firm at $5@5.25. Clover $6.75.

ADVERTISEMENTS.

GRAVES' DOUBLE-WALLED BEE HIVE.

WE earnestly call the attention of the public to this valuable Bee Hive. It contains a number of indispensable advantages to profitable Bee Culture that no other Hive can possess. A full description of the Hive and its management, will be found in a pamphlet of about 40 pages which we have just published, giving full instructions on

Nucleus and Artificial Swarming,

Transferring---when to be done,

Destroying the Drones and Miller Worms,

Wintering, Feeding,

and in fact on all subjects connected with the profitable culture of the Honey Bee.

Also a cut and description of my newly invented

Movable Frame,

which entirely prevents the building of the comb across the frames, and attaching it together, which has been the only objection to movable comb Hives. Every Bee master will adopt this frame when he sees it. The inventor of this Hive has spent many years in searching into the mysterious nature, habits, and requirements of the Honey Bee. Also in constructing a Hive especially adapted to the Bee's peculiar nature, and at the same time protecting them against their numerous enemies, particularly the Bee worm, which are effectually secured.

This work should be in the hands of every family who take any interest in Bee culture. Price 20 cents. If sent by mail, a 2 cent stamp should be enclosed. Wholesale $10 per hundred. All orders for book, individual, town, and county rights, and hives, should be addressed to

GRAVES & VANDERBECK,
my-tf **No. 6 Chestnut St., Rochester, N. Y.**

BAUGH'S RAW-BONE SUPERPHOSPHATE OF LIME.

—Baugh & Sons, Inventors and Sole Manufacturers, Philadelphia. This

MANURE

has been before the Agricultural public for

TWELVE YEARS PAST,

under one name and one proprietorship.

It has been used upon all crops with remarkable success, and by thousands of farmers in the Atlantic States. A trial will convince any farmer who has never used it, of its value as a manure, which we would ask all those to make upon their Spring Crops.

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181 Pearl Street, N. Y.
General Wholesale Agents.

☞ This old established manure can be had of dealers in all important towns, to whom we recommend farmers to apply. my-3t

FOR EVERY FARMER AND HORSE OWNER.—Just published,

The Complete Farrier and Horse Doctor,

giving the best and most useful remedies for every disease to which the Horse is subject. 64 pages, price 15 cents. Also,

Horse Taming, with Rules for Selecting Good Horses, Breaking Colts, Feeding, &c.

64 pages, illustrated, price 15 cents. Either of the above mailed free for 15 cents each, or both for 25 cents, by

HUNTER & CO., Publishers,
my-3t Hinsdale, N. H.

TODD'S IMPROVED STAMPS.

FOR MARKING SHEEP.
(See notice in April number.)

Agents Wanted Everywhere.

Send for Circulars to Agents. A. TODD, JR.,
my-1t Pultneyville, Wayne Co., N. Y.

BEANS AND CORN.

NOW IN STORE—
75 Bushels pure White Mountain or Marrow Beans,
50 Bushels pure Early King Philip Seed Corn,
50 Bushels pure Early Dutton Seed Corn,
25 Bushels pure White Flint Seed Corn—at
RAPALJE'S Seed Store, Rochester, N. Y.

PEAS! PEAS!!

NOW IN STORE, AND READY FOR OUR CUSTOMers, at Rapalje's Genesee Seed Store, Rochester, N. Y—
150 bushels Canada Creeper (field) Peas,
200 bushels Black Eye Marrowfat Peas,
200 bushels Early Washington Peas,
100 bushels Daniel O'Rourke Peas,
100 Early Emperor Peas,
50 bushels Dwarf Blue Imperial Peas,
50 bushels Prize Taker Peas.

ALSO

150 bushels Timothy Seed, best quality—
25 bushels Red Top and Blue Grass,
25 bushels Orchard Grass.

SPRING WHEAT,

And a FULL ASSORTMENT of ALL the leading kinds of Garden and Flower Seed, Agricultural Implements and Machines, the best that can be found in this section. my

FLOWER AND VEGETABLE SEEDS.

VICK'S ILLUSTRATED CATALOGUE OF SEEDS.—Floral Guide for 1866—is now published, and contains a full description of the choicest floral treasures of the world, and the best vegetables, with plain directions for culture. Illustrated with a colored bouquette and fifty wood engravings, of the newest and best flowers, and containing about seventy pages. Sent to all who apply, enclosing Ten Cents, which is not half the cost. Flowers from seeds sold by me, obtained the first prizes at the principal State Fairs, and hundreds of County Fairs, the past summer. Address, JAMES VICK, Rochester, N. Y. my

GOODRICH SEEDLING POTATOES.

THE GARNET CHILI—FIVE DOLLARS PER BARrel, at the Genesee Seed Store, Rochester, N. Y. my-tf

CIDER WANTED.

THE SUBSCRIBER will furnish Casks and pay Cash for any quantity of

PURE CIDER,

delivered at the Railroad or Canal. For further particulars, address,
HORACE WILLIAMS, Agent.
Buffalo, N. Y. my-6t

JAPAN MELON.

I WILL SEND TO ANY ADDRESS on receipt of 20 cents, a package of Japan melon seeds, of my own raising. Two packages, 40 cents. Order early, as my stock is limited.

Address, OTIS TINKHAM,
ap-1t Lakeville, Mass.

EXTRAORDINARY OFFER!!

SUBSCRIPTION FOR HALF VOLUME!

LIBERAL PREMIUMS TO AGENTS!

Desirous of reaching the large number of farmers who do not now take an agricultural paper, we have concluded to receive subscriptions for the coming half volume, (July to December, inclusive,) of THE AMERICAN FARMER, at the following low rates:

SINGLE SUBSCRIPTIONS ONLY 50 CENTS FOR SIX MONTHS!

5 Copies for $2. 8 Copies for $3, and any larger number at the same rate, or **37 1-2 cents each.**

For List of Premiums and inducements to Agents, read over carefully the following list—choose your prize, and get up a Club for "the farmers' own paper:"

ALL PRIZES AND NO BLANKS!!!

We will send any of the following prizes, (postage paid), to any Agent who will get up a list of subscribers at the Club rates of **37 1-2 cents, for the half volume:**

TABLE OF PREMIUMS,

For the Half Volume---July to December, 1866, Inclusive.

	Value.	No. of Subscr's
1. Scribner's Ready Reckoner and Log Book	$ 30	6
2. Miner's Domestic Poultry Book	50	8
3. The American Farmer for one year, 1866	1 00	10
4. Manual of Agriculture	1 00	10
5. Rogers' Scientific Agriculture	1 00	10
6. The Horse and his Diseases, by Jennings	1 60	16
7. Everybody's Lawyer	1 60	16
8. A beautiful, fine large Steel Engraving of Lieut. Gen. Grant, 18 by 24 inches	3 00	20
9. A beautiful, fine large Steel Engraving of the late President Lincoln, 18 by 24 inches	3 00	20
10. Both of the above engravings, each 18 by 24 inches	6 00	32
11. Franklin Sewing Machine	30 00	150

OUR SEED PREMIUMS,

Being desirous of creating a love for beautiful flowers, we have made arrangements to obtain a choice collection of flower seeds from Mr. James Vick, the well known seedsman of this city, all of which are reliable, and which give such great satisfaction to all who try them. We will send a package, valued as below, of our own selection, or to those who prefer we will send Mr. Vick's Catalogue to any of our readers or Agents, to make their own choice. They will be put up in packages and sent to any address, postage paid:—

	Value.	No. of Subscr's
1. A choice variety of Flower Seeds, Annuals	$2 00	20
2. " " " " " "	3 50	30
3. " " " " " "	6 00	40
4. " " " " Annuals, Biennials and Perennials	10 00	60

All names sent in before the first of June, will receive the June number.

Our summer campaign is now before you—try and do all you can to get subscribers, and by so doing you will do good and encourage us at the same time to make THE AMERICAN FARMER still more worthy the liberal patronage it already enjoys.

CONTENTS OF THIS NUMBER.

STEREOTYPED BY JAMES LENNOX, 62 BUFFALO ST., ROCHESTER, N. Y.

VOLUME I. ROCHESTER, N, Y., JUNE, 1866. No. 6.

THE AMERICAN FARMER.

A MONTHLY JOURNAL OF

AGRICULTURE AND HORTICULTURE.

ILLUSTRATED WITH NUMEROUS ENGRAVINGS OF

Farm Buildings, Animals, Implements, Fruits, &c,

Volume One, for 1866.

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Specimen numbers sent to all applicants.

Subscription money, if properly enclosed, may be sent at the risk of the publisher. Address,

JOHN TURNER,

Publisher and Proprietor, Rochester, N. Y.

WORK FOR THE MONTH.

CORN.—Harrow well as soon as the corn comes up. Do not let the weeds get a start. Keep the cultivators at work among the rows, and follow after with the hand hoes. If the rows were planted evenly and straight, you will have no trouble, as the cultivators can then easily pass between them. As fast as the weeds get a fresh start, follow them up with another harrowing and hoeing, and you will be surprised how fast the obnoxious weed will disappear, leaving your soil nice and mellow for future crops.

WEEDS—of all kinds should be kept under this month. To take them early, while they are just commencing to grow, is the time to destroy them. Do not let them get a chance to go to seed.

CORN FODDER.—It is not yet too late to sow, but it should be done as early this month as possible. Cultivate well two or three times, so as to have your land in good order, and to destroy the weeds.

STOCK.—Keep no stock in-doors that you can help. Let them have their freedom as much as possible. See your animals every day. Inspect each one's condition regularly morning or evening yourself. Let them have some places of shelter, if turned out to grass, where they can get out of the scorching rays of our summer sun. It is cruelty to animals to put them in a field entirely destitute of trees, and leave them with the midday sun pouring down on their backs. Give them some kind of shelter, if only a tree, to bask under.

POULTRY.—Attend to your early chickens. The early broods, if well attended to and well fed this month, will be ready to kill by the first of July, and will command a higher price and pay you better than at any other time.

BEES.—Now commences the honey harvest. Your success depends much upon the spring treatment. Let every bee master or mistress at once see that every hive is thoroughly renovated. See that there is no lodgment for the miller worms. Puff a little tobacco into the fly hole; invert the hive; remove all bad and moldy comb. Scrape off the bottom, and wash thoroughly with salt and water. It will sweeten the hive, and keep out ants and other insects. Get your hives ready for the young swarms.

RUTA BAGAS—May be sown any time after the 15th. They like a clean, rich, mellow soil, and will come in useful next fall and winter, to feed to your neat stock. When up, they should be thinned to about a foot apart, and all weeds kept down; do not give these robbers of the soil a chance to get more than a start, and then cut them off with the hoe or cultivator.

HAYING.—Cut hay just at the transition state from flower to seed. This is the best time. Watch the barometer closely, and you will find no difficulty in securing your hay without getting it wet, and have it all in good order.

FENCES.—Keep a sharp look out on your fences; keep them in good repair, and it will save you from the trouble of running after your stock, should they break into your wheat or corn fields. We knew a farmer who had to leave his men in the middle of hay making, and also to take one with him to go and drive out some horses that broke into his wheat-field, and after considerable shouting and running, succeeded in getting them into the road, and it was not until several hours were spent, that they were again returned to the meadow. In this way the work of two was lost for nearly the afternoon. Look well to your fences.

CUTTING TIMBER.—This month is a good one to cut rail and other timber. Timber cut during the summer months will last longer than at any other time, as it will season rapidly. When cut in the fall or winter, it becomes sap rotten; but in summer it hardens, and dries, and lasts longer.

WATER.—Do not overlook the importance of having a bountiful supply of pure water for your stock. If there is no spring, or water in the meadow where you turn your stock into, let them be driven to water night and morning. Sheep and cattle often suffer from this cause during the summer months. See that they do not in your case.

WHEAT HARVEST.—Will soon be here, and preparation should be made beforehand. Have all your rakes and implements in first rate order. See that you have enough help engaged to do the work; if not, make arrangements at once to get more.

PERSONAL SUPERVISION.—Attend every day to your stock and crops. Blessed is that farmer who attends to his stock, and sees that their every want is regularly supplied. No one can do this like the farmer. Watch them closely, and you will be surprised how much more interest you will take in them yourself, and your men will derive new exertions from your presence in the barns and in your meadows.

WORK FOR WET DAYS.—Look after your implements and tools. Do not let them lie around, in out of the way places, to get rusty; but have "a place for everything, and everything in its place." These are the days to attend to them, and when you are through, and have looked over your cattle and sheep, take your paper in hand, and see if you cannot get some new ideas to work upon when the rain is over.

J. W. BROWN, Kensington, N. H., makes a calculation of the loss in plowing an acre of land fourteen rods in length by turning the team at the ends. If the furrows are nine inches wide, it will require about four and two-third hours to turn the team at the ends. If the acre was 50 rods long, it would require only one and one-third hours to make the turns. He estimates the distance traveled in plowing an acre at eleven and five-eight miles.

BRUSH DRAINS.—Where stones are scarce, and tiles not easily obtained, brush drains are an excellent substitute. They are, in fact, the cheapest of all kinds of underdrains, on account of the rapidity with which they may be filled. The brush, being excluded from the air, will last a long time.

THE strawberry is a great rover; in fact it is the "Red Rover" of the vegetable kingdom.

NEW YORK STATE SHEEP BREEDERS AND WOOL GROWERS FAIR.

THIS association held its annual fair in this city, on the 8th, 9th, and 10th of May, and was very largely attended. The weather during its continuance was all that could be desired. The show was both numerous and fine. The Merinos were very well represented, and the display of long wools though not numerous, was remarkably good. As an exhibition of fine sheep, the fair was eminently successful, and was considered far superior to the show of last year.

At the Canandaigua fair last year there were about 800 sheep shown; on the present occasion there could not have been less than 1,000 on the grounds.

It was extremely difficult to get any correct list of the entries, as none was kept upon the grounds. There were about 150 entries of Merinos, (among which were several animals valued at $10,000 each,) and only the following entries of

COARSE WOOL SHEEP.

Samuel H. Barrons, Irondequoit, one three year old Leicester ram, and one three year old ram. Also, five yearling Leicester ewes.

E. Gazley, Clinton, N. Y., five 2 year old Cotswold ewes and lambs, also five 2 year old ewes; also five yearling ewes; three yearling Cotswold rams; also, two 2 year old Cotswold rams.

John Pratt, Cobourg, C. W., one Leicester ram, 3 years old.

P. R. Wright, Cobourg, C. W., one 3 year old and one 2 year old Leicester ram.

Heman J. Redfield, Batavia, five Southdown ewes; also one 4 year old Southdown ram.

John Lynch, West Brighton, one 2 year old Southdown buck; also five 2 year old Southdown ewes.

W. G. Wayne, one Cotswold ram, three years old, and one yearling Leicester ram.

Our space forbids an extended notice of all the entries and particulars of the sheep. The following is the list of premiums awarded by the committees:

LIST OF PRIZES.

1st CLASS—AMERICAN MERINOS.

RAMS TWO YEARS OLD AND OVER.—1st. Percy & Burgess, North Hoosick. 2nd. David Cutting, Richville, Vt. 3rd. Edgar Sanford, Cornwall, Vermont.

RAMS, YEARLINGS.—1st. M. Clark, Shaftsbury, Vt. 2nd. Parish, Wiley and Pitts, Ontario county, N. Y. 3rd. J. C. & S. T. Short, Livonia, Livingston county, N. Y.

EWES, TWO YEARS OLD AND OVER.—1st. N. E. Wheeler, Middlebury, Vt. 2nd. Burgess and Percy, Hoosick, N. Y. 3rd. W. R. Pitts, Honeoye, N. Y.

EWES, YEARLINGS.—1st. Pitts, Wiley and Parrish, Ontario County, N. Y. 2nd. L. J. Burgess, North Hoosick, N. Y. 3d, E. D. Searls, Cornwall, Vt.

2D CLASS—FINE MERINOS.

RAMS, 2 YEARS OLD AND OVER—1st, to William Chamberlain, Red Hook, N. Y.; 2d to William Chamberlain, Red Hook, N. Y.; 3d, Isaac J. Whitney, East Clarkson, N. Y.

RAMS, YEARLINGS—1st, Carl Hein, Red Hook, N. Y.; 2d, Wm. Chamberlain, Red Hook, N. Y.; 3d, Isaac Bowers, Riga, N. Y.

EWES, 2 YEARS OLD AND OVER—1st Wm. Chamberlain, Red Hook, N. Y.; 2d, William Chamberlain, Red Hook, N. Y.; 3d, Mariner and Brunson, East Bloomfield, N. Y.

EWES, YEARLINGS—1st, Wm. Chamberlain, Red Hook, N. Y.; 2d, L. J. Brace, Le Roy, N. Y.

3D CLASS—DELAINE MERINOS.

RAMS, 2 YEARS OLD AND OVER—1st, Silas G. Smith, Half Moon, N. Y.; 2d, Jacob Voorhees, Potter, N. Y.; 3d, L. E. Heston, Alabama, Genesee county, N. Y.

RAMS. YEARLINGS—1st, John P. Ray, Honeoye, N. Y. 2d, C. H. Warner, Lima, N. Y.; 3d, George Brown, Birdsall, N. Y.

EWES, TWO YEARS OLD AND OVER—1st W. M. Holmes, Greenwich, N. Y.; 2d, George Brown, Birdsall, N. Y.; 3d, George W. Root, Lima, N. Y.

EWES, YEARLINGS—1st, A. Hemenway, Canandaigua, N. Y.; 2d, Geo. Brown, Birdsall, N. Y.; 3d, J. F. & S. C. Short, Livonia, N. Y.

FOURTH CLASS.

LAMBS OF THE PRECEDING CLASSES—1st, Harlow Brothers, Darien, N. Y., 15; 2. Marriner & Bronson, 10; 3d, A. Thayer, Hoosick Falls, 5.

A special commendation to a pen of lambs about six months old, owned by Wm. Chamberlain, of Red Hook, N. Y.

Viewing Committee—E. Ennis, J. P. Ray, H. Allen.

FIFTH CLASS—LONG WOOLED SHEEP.

RAMS TWO YEARS OLD AND OVER.—1st. E. Gazley, Clinton, Dutchess county, N. Y. 2d, P. R. Wright, Cobourg, C. W. 3d. P. R. Wright, Cobourg, C. W.

RAMS, YEARLINGS.—1st E. Gazley, Clinton, N. Y. 2d. E. Gazley, Clinton, N. Y. 3d. Samuel H Barrons, Irondequoit, N. Y.

EWES TWO YEARS OLD AND OVER.—1st. E. Gazley, Clinton, N. Y.; 2d. E. Gazley, Clinton, N. Y.

EWES, YEARLINGS.—1st. E. Gazley, Clinton, N. Y. 2d. Samuel H. Barrons, Irondequoit, N. Y.

SIXTH CLASS—MIDDLE WOOLED SHEEP.

RAMS TWO YEARS OLD AND OVER.—3d. John Lynch, West Brighton, N. Y. 3d. Heman J. Redfield, Batavia, N. Y.

EWES TWO YEARS OLD AND OVER.—2d. John Lynch, West Brighton, N. Y.

EWES, YEARLINGS.—Heman J. Redfield, Batavia, N. Y.

THE SHEARING.

One of the most interesting features of the fair was the sheep shearing, which took place on the last day of the exhibition. Our Monroe county farmers may feel proud of their fair, which we think compares favorably in weight of the sheep and fleece, with that of the State, (see page 193.) Below we give the weight of the animals and fleece.

Name of Owner.		Weig't of Sheep.	Weight of Fleece.
L. J. Rowe	E	92	11- 9
Elon Percy	E	89	6-12
John Lynch	R	161*	8
E. Gazely	E	100¾	10-12¾
J. C. & S. T. Short	E	90	12-14
Potter Baker,	E	96	10-15
Pitts & Wright,	E	103	16-10
Thos. Johnson	R	119	22-15
N. Burgess,	E	69	14- 2
I. J. Whitney	R	106	16- 7
A. H. Clapp	E	57	10- 3
L. J. Rowe	R	129	17-12
E. Gazely	R	125*	11-10
J. & P. Martin	R	115	15
—— Steele	R	89	17- 8
Slusser & Mosher	R	152	22- 9
G. J. Hollenbeck	E	51	8-12
M. C. Roundy	R	106	11- 3
H. M. Boardman	E	65	11- 7
Clapp & Sweet	R	94	15- 1
L. Babcock	E	44	9- 6
W. H. Pugsley	R	122	16- 6
U. C. Rogers	R	135	15- 6
J. E. Short	R	116	21-11
S. H. Barrons	R	209‡	18- 9
G. H. Warren	R	93	15-12
H. M. Boardman	E	75	18-10
U. C. Rogers	R	128	18-11
J. Bailey & Son	R	88	18- 2
J. Moulton	E	50	9-15
H. M. Boardman	E	66	11- 8
Isaac Bower	R	93	11- 1
L. J. Bowee	R	88	13-15
T. Terrill	R	110	16-11
T. Steele	R	78	14- 8
Baker & Champlin	R	92	12- 1
L. E. Heston	R	116¾	12-14
J. C. & S. T. Short	R	128½	15-10½
J. C. & S. T. Short	R	110	21-11
J. C. & S. T. Short	R	97	19-08
I. J. Whitney	R	128	22- 3
Percy & Holland	R	——	19- 1
T. Johnson	R	117	22-15
M. G. Kapalen	R	——	23- 5¾
C. Bush	R	111¾	26- 9¾

The above were all Merinos with the exception of those marked * (Cotswold,) and † (Leicester.) Most of the above fleeces will be cleansed, the report of which as soon as complete, we shall give to our readers, as it will contain valuable information.

We noticed several patents on the grounds, among which J. H. Graves of this city, exhibited his Patent Bee Hive; Elder & Baker, of Huntington, O., a chair for holding sheep while being sheared or doctored. It is a very simple arrangement, and light enough to be carried around a farm by the shepherd when the necessity occurs. Also another for the same purpose, by L. B. Budd, Johnsonburg, N. Y. Sturdevant & Co., of Seneca Falls, exhibited an Improved Milk Stand which takes up but little room. There are six revolving shelves for milk pans, arranged one above the other, so that a person can stand and skim all the milk without moving a step. D. N Rogers & Sons, of Pittsburgh, Pa., had on exhibition their "Harpoon Hay Fork," (illustrations of which appeared in the December number of *The Genesee Farmer*) for unloading hay. It was operated on the grounds with general satisfaction.

A TABLESPOONFULL of saltpetre given to a cow once a day, for three or four days, is an effectual remedy for the garget. It can be given in a mash if the cow is hearty, or in a dough pill. So says a New York farmer.

BEE CULTURE.

WRITTEN FOR THE AMERICAN FARMER BY JASPER HAZEN.

MESSRS. EDS.:—But for the honey and wax secured by means of the honey bee, we should probably no more cultivate or keep bees, than we would wasps or hornets. Their skill in detecting and gathering honey from the flowers, renders them an object of interest, and their cultivation a subject of legitimate inquiry. Were they still left to their own instincts to find the hollow tree, or some other place of deposit, their home would as formerly, be eagerly sought, and at the proper time robbed of its stores. For a length of time, no matter how great, they have been furnished with a home by man, as the better way to secure the greatest advantage from their labors. Much of that advantage depends upon the character of their home.

Mr. Quinby says, "The advantages of bee-keeping depend as much upon the construction of hives, as any one thing." There are two classes of hives, clearly marked, and distinguished from each other in their construction, from the amount of room they furnish for stores, the influence they have upon the habits of the colony, and the amount of stores gathered by them.

A colony in a hive of 5,000 cubic inches or more, of acceptable room, will be likely not to swarm often. A colony with 2,000 cubic inches, a little more or less, will be likely to swarm, and if considerable less, to swarm several times in one season.

Speaking of large hives Mr. Quinby says. "The swarms will not be proportionably large when they do issue, which is seldom." To be understood in a few words, we call the hives, with so much room non-swarmers, because they will not swarm often; and the small hives swarmers, because with them, the rule is to swarm. The colony in the small hive will loose some days, sometimes weeks in idleness, clustering out preparatory to swarming. In the large hive with no necessity of clustering out, and no disposition to swarm, no time is lost.

All the workers in the small hive, all the workers in it swarm for one month after the first swarm issues, and all the workers in the first swarm through the seasons, are the product of the old queen, and had the colony been in the large hive, would have stored the same amount of honey in the one hive, if large enough, that it now stores in the two, three, or four. They have without loss of time in idleness, the amount of two or three colonies, all engaged in one great body of workers during the whole white clover season. The result sometimes is a whole barrel filled with honey, or three hundred pounds is stored in a bee tree by one colony of bees.

In a non-swarmer hive, a colony will give from five to ten times as much surplus as a colony would give in a swarmer hive. Mr. Quinby in his first edition of "Mysteries of Bee Keeping," estimates the difference, five to the non-swarmer to one for the swarmer. The difference from experiment in my hives of both classes, has been from seven to more than twenty in the large, to one in the small hive. In one season, I had six colonies in my possession and son's, that gave no swarm, and gave an average of sixty-nine pounds and fourteen ounces of surplus. The six colonies gave 419 1-4lbs.; four colonies in the Quinby hive, recommended in his book, gave three swarms, from three hives, and no surplus honey. One gave twelve pounds of surplus and no swarm. Thus from four colonies, I got three new swarms, and twelve pounds of surplus, an average of three pounds, from my swarmers, to an average of seventy pounds lacking two ounces from each non-swarmer. It will be seen that this is nearly twenty-two to one in favor of the non-swarmer. One of the colonies on the second day of July had collected nearly eighty pounds of white clover honey in glass boxes.

Who would willingly be at the expense and trouble of five hives and colonies of bees, if he could obtain the same returns of honey from one? In one case, the laborers consume six dollars worth of their product for winter stores and give one dollar in value to their keeper. In the other case, they consume but six dollars worth, and give five dollars to their keeper. In one case, he lets his honey pasture for one seventh of the returns, and in the other he gets five-elevenths, nearly half. This is as Mr. Quinby estimates and as my experiment shows: with the swarmer he gets, one-tenth: with the non-swarmer he gets seven-tenths. I here estimate thirty pounds for winter store to each colony.

In a revised edition, Mr. Quinby has materially altered his estimate. He there gives two dollars to the swarmer, to five dollars to the non-swarmer. But even this difference would be fatal to the policy of using the swarmer. We have the expense of five hives and colonies to secure the same returns from swarmers, that we obtain from two colonies in non-swarmer hives. We must then have fifty colonies instead of twenty to obtain equal returns. Then we get but two-sevenths of the honey stored by the swarmers against five-elevenths, nearly half by the non-swarmers. If a colony of bees in a swarming hive is worth five dollars, the same colony, in a non-swarmer hive would be worth two dollars and a half, and the non-swarmer, after most of the white clover honey harvest is past, by removing the boxes and confining them to the central apartment, will be likely to send out a swarm. With these facts, I think no reasonable man can doubt that the non-swarmer is necessary to the most successful bee keeping.

IRON AS AN INVIGORATOR.

WRITTEN FOR THE AMERICAN FARMER, BY "COSMO."

CHEMICAL science has some time since made the discovery that Iron, in some form—the most popular one now with doctors, being Iodine, in some of its modifications—is, for the human system, the best invigorating tonic known in medical jurisprudence. One of these days the fact will become just as widely known that Iron is also one of—if not the very best vegetable tonic, stimulator, and invigorator, in the world. Mankind and the vegetable family are not so radically different in their anatomical structure, but that the material which feeds and clothes, gives life, and maintains in health and vigor, humanity, will under modified conditions, and in another form, just so certainly perform the same offices for plants.

More than a dozen years since, a neighbor and myself, terminated a series of iron experiments on vegetation, the result of which was proof positive, so far as we were concerned, that for peach, pear, cherry, and plum trees—the peach especially—for all the small fruit shrubs, and for pushing forward, inciting quick, healthy and vigorous growth, and imparting an improved flavor to a variety of fruits and vegetables, there was nothing like Iron. The results of our practice were published in a popular agricultural journal, a copy of which I have now under my eye, and that was the last we ever saw or heard of our *iron culture*, in public; only that one "scientific" paper treated us with considerable *iron-y*, and our experiments with what it called deserved contempt. Some of our neighbors, however, so fortunate as to be deprived of such "scientific" education, took up our practice, and have continued it ever since with a success that has clearly proven that we were right, and "scientific" journalism twelve years ago, wrong—upon the iron question, at least.

But, science, both at home and abroad, is just beginning to discover that iron is valuable, even old iron, for other purposes than bayonets, horse shoes, and stub-and-twist gun barrels. Somebody, far wider known to fame than the two obscure farmers, has made the recent discovery that iron, properly applied, is a powerful vegetable tonic, a corrector of bad habits in several kinds of fruit trees and garden shrubs, and will make peas, asparagus, tomatoes, turnips, cabbages, beans, and in short, almost every garden vegetable to which it is applied, thrive, and produce wonderfully. The same scientific journal which ridiculed our iron practice of twelve years ago, has changed its tone of irony to one of exultation, astonishing my farmer friend and I quite as much as we did *it* once, by now declaring *iron* to be one of the best of all known *fertilizers*. That is a great deal more than we ever claimed for the metal, or believe now. Iron is no more a fertilizer than the ammoniate principle of Peruvian guano is. Its action is that of a vegetable stimulator, pushing forward the young plant, imparting early vigor, enabling to thrust outward and downwards its roots, until they lay hold of and appropriate the food suitable to build up the plant stucture, which material has been lying inert in the soil during the existence of generations of preceding plants less vigorous in growth.

But the action of iron on the plant structure is a great deal more lasting than that of guano. Its latent action is that of a tonic, maintaining the best condition of health through the entire period of the plant's growth, and imparting to the fruit a better flavor than its ordinary pabulum affords. Then iron in its sulphates and oxides, never paralyzes the functions of any one of the constituents of plant life, as Peruvian guano inevitably does in all soils to a greater or less extent. On the contrary, iron in these forms is a universal harmonizer of all accidental difficulties, which may, and frequently do occur between organic, underground principles, and in its milder iron rule, assumes the office of Pacific ator-General of the elementary forces.

A late number of *The British Medical Journal*, having just made the discovery that old iron is really worth something in agriculture, thus announces the important fact: "It is a new discovery that wonderful effects may be obtained by watering fruit trees and vegetables with a solution of sulphate of iron. Under this system beans will grow to nearly double the size, and will acquire a much more savory taste. The pear seems to be particularly well adapted for this treatment. Old nails thrown into water and left to rust there, will impart to it all the necessary qualities for forcing vegetation as described." My farmer friend says he don't know what *The British Medical Journal* calls *new* discoveries, but is pretty confident that between us, we discovered a good deal of the "wonderful effects" of iron as applied to vegetation, some fourteen years ago, in a quiet, secluded corner, in the United States.

Our first satisfactory experiments with iron, agriculturally, were upon peach trees. We each had a few favorite trees which took on early consumptive habits, blooming full and freshly, but casting their fruit at half growth, and their foliage at a period four or five weeks to early. The trees undoubtedly were in a decline. Arguing in common sense manner, we decided that our trees had exhausted some element essential to their health and longevity. A chemical analysis of the soil discovered to us a want of *iron*; and knowing the peach tree to be a great lover of, and rather a greedy feeder upon that mineral, we supplied the deficiency by digging all in

among the roots of the ailing trees, all the old rusty nails, hoops, and every scrap of old iron we could lay hands on. The iron dose was applied in October, and the following season our consumptives had recovered, and afforded us a full crop of better peaches than they had ever borne before.

In some future number of THE FARMER I propose to have something more to say in regard to our *iron rule*, as applied to other fruit trees and garden vegetables.

REMARKS.—A gentleman near this city who grows several varieties of pear trees, some years since got a lot of horse shoe filings and placed them round the roots of one of his dwarf trees, and he states that it is the most thrifty tree he has in his lot, and assigns the only reason to the fact of placing this refuse iron at the foot of the tree.

PICKEREL.

WRITTEN FOR THE AMERICAN FARMER, BY "R. H.," MUMFORD, N. Y.

ABOUT fifty years ago, the Messrs. Wadsworth, of Geneseo, procured some pickerel from Lake Ontario, and put into Conesus Lake. The water was favorable for them, and in a few years they began to show an increase, and from the lake they made their appearance in the Genesee River and its tributaries. For many years past all the waters of the Genesee which are favorable for pickerel, have been well supplied with them, so that thousands are taken every season by trolling, and with live bait, that is, small minnies, and of a size that proves very satisfactory to the fishermen. About twenty years after they were put into Conesus Lake, one was taken that weighed twenty-nine pounds, and several weighing from fifteen to twenty-five pounds have been taken in the Genesee and its tributaries. Pickerel do not succeed in water where trout will. At the Blue Pond in Wheatland, the water is too cold for pickerel. About seventy-five were put into the pond, mostly small ones, some twenty years ago, and for the past ten years none have been seen there; they have gone down the outlet to find water more favorable. In two streams emptying into the Genesee, but a few miles apart, one is well supplied with pickerel, while the other has none, for it is a trout stream. In propagating fish, it is important to know what kind can be bred in the waters that would be desirable to improve; if that is not well considered it is hardly possible to succeed.

TO CURE SCRATCHES ON HORSES.—*Messrs. Eds.*:—Tell your subscribers who have horses which are troubled with *scratches*, to try a simple remedy, viz.: keep the fetlock clean with castile soapsuds, and then wash them twice a day with buttermilk. Give them a good rubbing at each time. LOUIS.

DOMESTIC MANUFACTURES.

WRITTEN FOR THE AMERICAN FARMER, BY "MADELINE."

"MAY I be permitted to say, through our brave FARMER, something as plainly practical as I can, to as many of my fellow-countrywomen, and girls, farmers' wives, mechanics' wives, and everybody's wives and daughters, as shall court the acquaintance of my favorite FARMER beau?"

"Yes, certainly, madam."

"Ah, thank you! You are a kind, commander, and unless I err greatly in judgment, there will be several of our lady friends who will one of these days be thanking us—you for printing, and I, for what I am going to write as plainly as I can."

"Do you, and our lady friends, know that a very large proportion of our high priced, fashionable furs—mink, Hudson's Bay sables, &c., are only common domestic skins?—very cheap imitations, which sell at extravagant prices? I do, and have done so, these five years. And all that time I have been planning and plotting rebellion until this latest winter, when I succeeded in putting on perfect independence, and a suit of furs of my own dressing and making up, which I am not ashamed to parade by the side of any fine lady's Russia's. That, is what you and I ought to tell our friends *now*, in order that they may be *semper paratus*, and next winter put on independence and fashionable furs as well.

"I purchased last fall, two dozen down Delaware musk rat skins at 15 cents each, which amounted to $3.60. First in order was the dressing process, achieved in this way: the skins were slit open underneath, lengthwise, stretched, on the fur side down, on a board, wide and long enough to hold them all at once, and secured with tacks. Then a composition of equal parts powdered alum and common table salt was laid over the flesh side of the skins, about half an inch deep, and suffered to remain three days. The skins were then removed from the board, washed clean in warm soap suds, and scraped thoroughly with a dull case knife. After they were about half dry, I took them one by one, sprinkled them with powdered chalk, and rubbed away vigorously with both hands until they were quite dry, after which they were sprinkled over again with finely powdered alum, folded once together in a pile for five days, when they were perfectly oured, and as beautifully soft as the finest kid glove. Now, to metamorphose my Delaware musk rats into Hudson's Bay sables, and this is the way I did that:—

"For the two dozen skins I had half a pound of logwood and a quarter of a pound each of annatto and common potash, which I soaked altogether in two gallons of soft water twelve hours. Then after boiling the dye about half an hour, it was strained

through a cloth. Two ounces of blue vitriol was dissolved in a gallon of soft tepid water, and the skins dipped in it two or three at a time, until all were thoroughly saturated. Then the dye being kept hot—not quite boiling—the skins were immersed in it about half an hour, and then, without squeezing or wringing, they were hung up to drain. When nearly dry, they were plunged for five minutes in a warm water bath, having about a spoonfull of gall to a gallon of water. That fixes the color as indelibly as if nature herself had fixed it. Then all that remained to be done was to hang up the skins until perfectly dry, whip them into life with a switch, and they were ready to make up.

"My silk lining, wadding, cord, tassels, and sewing silk, costome $4.20. Then cutting a pattern by a friend's suit of fashionable mink, I cut my suit of sables by the pattern, made them up in three days, and soon after wearing them the second time, I was offered $140 for the suit. They cost me, everything counted, beside my time, a trifle over $9. Pretty well, for Delaware musk rats, don't you think so?

"Ah! I had forgotten the *tails*. Very fair, respectable tails, as you observe. Well, sir, they are *au naturale*—the *bona fide* tails of six tom cats that living were a nuisance. Dead, their tails dressed, and colored in the same manner as the skins, form fashionable appendages to my fashionable $9 musk rat sables, and the skins of those same tommies, dressed and dyed, make the center of a carriage robe as beautiful as any other in this country.

"Now, I might, perhaps, have told my fur story in somewhat fewer words, but you see I wanted it all so perfectly plain, that there could be no possible mistake made in any attempt to follow my example and put on fashionable furs of domestic manufacture. Considering that all kinds of skins—those of cats, dogs, rats, foxes, coons, woodchucks, minks, musk rats, and young lambs, may be so readily dressed by the same process, and turned to comfortable account, I think that you and I ought not to begrudge the writing and printing."

SCAB IN SHEEP.—Take one pound of mercurial ointment, and three pounds fresh lard, well mixed together. Turn the sheep upon its back and anoint the bare spot under each leg, and also around each place where the "scab" has appeared. Keep the subject from the weather a few days.

THE State Agricultural Society of Illinois offers $100, $75, $50, $25, for the first, second, third and fourth best and largest artificial groves of deciduous trees.

THEY are all as sick that surfeit with too much, as they that starve with nothing.—*Shakspeare.*

AGRICULTURE IN NEW JERSEY.

WRITTEN FOR THE AMERICAN FARMER, BY W. J. THOMPSON.

MESSRS. EDS.:—Our farms in this place range from 30 to 75 or 80 acres; but few larger. Perhaps some of the readers of THE FARMER may think that such small "patches" are not worthy of the name of a farm, but it is not always your great "Spanish grants," which cover all out-doors, but the small farm well tilled, that brings in the "dollars." I could point out many illustrations of the fact.

The system of farming practiced here is varied among the wide awake and enterprising farmers. The object is to raise a variety, or what might be termed a mixed system—that is, hay, corn, oats, wheat or rye, with roots and fruit enough for home use, and some to spare. Also, in addition, a dairy suitable in number to the size of their farm. So in case one thing fails, they have another thing to lean upon.

Another class believe that nothing but the hay crop will pay, having only the labor of cutting, curing and housing, leaving them lots of time to *trade* horses, which some of them consider a very remunerative business; consequently they have their farms principally in grass, keeping little or no stock, and selling most of their hay in the Newark or New York markets—both within twenty miles of this place. In the end, the latter class will find that they have been pursuing a ruinous policy both to themselves and their land, as we cannot rob the soil for a number of years, without being robbed in return in the shape of small crops.

There is still another class, who believe that farming does not nor will not pay, the great trouble being they do not try to make it pay, having no system at all, but cropping away as though the land possessed some extraordinary degree of fertility which could never be worn out. I know some men who pretend to call themselves farmers, who will take some four or five crops of oats and buckwheat off in succession, without any manure, sprinkling a little grass seed with the last crop, and at the next haying season remarking that it is "plaguy queer, that grass don't take as it used to some twenty-five or thirty years ago! Guess it must have been sown at the 'wrong time of the moon'!"—when the truth is they have pursued such a barbarous system, that they have reduced their land almost to the perfection of sterility.

The course of cropping adopted by those farmers who care anything for the future condition of their land, is—first, corn: we take the oldest meadow we have; plow during the month of April, with a lap furrow, eight inches deep; then about the first of May, provided the soil and weather are favorable; if not, as soon as it is; harrow thoroughly—you

cannot harrow the ground too much—and mark or furrow the ground, four feet apart each way, and plant from four to six grains of corn in a hill, having but four stalks remain, when we hoe it. We manure in the hill, with a shovelfull of pretty well rotted manure; some use a composition of hen manure, wood ashes and plaster, a small handfull to the hill, which answers a very good purpose. The after culture consists of running a plow or cultivator, (sometimes both,) once a week from the time you can trace the rows across the field, until it gets too large, which is about the first of July, and hoeing by hand once in the early stage of its growth. We commence cutting up by the roots, and shocking as soon as the husks get brown, putting thirty hills in a shock, and tying tightly with one or two good rye straw bands. We consider corn stalks cut before they are frosted worth fully fifty per cent more than those which have been killed by frost. The corn is then left to stand in the shock four or five weeks, or sometimes longer, when it is husked in the field. Corn drawn and cribbed, and stalks drawn and stacked or housed convenient to feed in winter. The average yield of our corn crop for some years back is about eighty bushels of ears per acre, though I have raised 116 bushels per acre, and last year, one piece I had, yielded 120 bushels to the acre.

The cost and profit of one acre stands thus:

To amount interest on land at $100 per acre	$7.00
To 10 loads of manure, one-half charged to corn	8.75
To amount of plowing, harrowing and furrowing	3.00
To amount putting out manure, planting and seed	4.00
To amount plowing, cultivating and hoeing corn	7.00
To amount cutting and shocking	2.00
To amount husking, cribbing and drawing stalks	4.00
	$35.75
By 40 bushels of shelled corn at 90 cts per bush.	$36.00
By 250 bundles of corn fodder, at 5 cts. per bush.	12.50
	$48.50
	35.75
Net profit per acre	$12.75

Cost per bushel 89 3-8 cents, or, at present prices of corn there is 31 7-8 cents profit per bushel. So the farmer of Union county, can sell his corn at 90 cents, and make a fair profit; but if he converts his corn into pork, poultry, or eggs, he will realize at the least, $1.50 per bushel, or 29 cents extra profit for his trouble of feeding. In my next, I will continue our rotation.

BUTTER obtained from a given quantity of milk varies immensely. Mr. Morton, in his "Handbook of Dairy Husbandry," asserted that the quantity required to make a pound of butter varied from sixteen to twenty-nine pints, depending on bread and feed given.

IT is a good divine who follows his own instruction; I can easier teach twenty what were good to be done, than be one of the twenty to follow mine own teaching.—*Shakepeare.*

ANSWER TO "S. W."

MESSRS. EDS.:—Will you please permit me to be politely personal? Should like to stand on the inshore tack, heading due "S. W.," about a couple of cables' length.

Now, shipmate, it is possible enough that "Bueno" would find himself out of his "reckoning" among the farmers of *your* latitude, before he had lived among them a quarter the length of your cruise; and my present opinion is that if "S. W.'s" cruising ground had been limited to *my* latitude and longitude, he would have growled like a mad top man at a lee reef earing long enough before "Bueno" began to bark. Hav'nt you heard, shipmate, of their burning corn to cook and keep warm by, out west? It is true, I have seen the burning—several—good many. Reason—railroaders charged $4, freight on a ton of coal, fifty miles. $5 on a ton of corn, same distance. Coal was *nav pas*, of course. Corn ever so much the cheapest fuel.

Good many other places besides Western New York, shipmate. I know how well Western York State farmers always keep their port tacks aboard, and *command* the situation with their weather batteries. Fortunately, they are able to do it. And unfortunately the farmers of big Western States are not. Let us offset the miller's argument by two or three western facts.

"Bueno" has a lady friend living seventy miles from Chicago, who last fall sent to that market twenty-two barrels as prime sweet potatoes as ever went to market anywhere. Net returns for the lot, $2.85. Freight, commissions and storage exhausted the balance.

Four tons of fine grapes rotted in one narrow neighborhood, because they would not pay railroad freight sixty miles, and the growers were not prepared to make wine. A friend sent 120 baskets of as fine tomatoes as ever grew, 83 miles by rail to market, and got—his baskets back, and a bill of $4.30 from the railroad folks for freight due over proceeds of sale.

The guess of "Bueno" is that shipmate "S. W." lives among farmers—*a manufacturer*. "Bueno" lives among farmers, a salt water *farmer*, and sees things in that light. As to the *loom*, never thought of superceding the three-deckers with the little clipper craft. Only advised farmers' wives and daughters to ship it as a—I say, "S. W."—shipmate!—don't you remember how convenient our spun-yard winch used to be on the forecastle of the "Old Beaver," at sea, when our lee back stays needed new worming and "sarvis"? No ship chandlers to run to. How independent, to be able to "lap up" our own home-made spun yarn, so nicely, eh? If Madam Fashion demands that *les dames* of the *demi monde*,

shall kneel to analyne chemical shrines at $70 per pound, or forego *haut ton* Balmorals, does that argue that our wives, sisters and daughters, less pretentious, should not put on pretty petticoats of fabrics wrought by their own hands? Did'nt we used to be prouder of our forecastle made "ducks" and "jumpers," shipmate, than any of the shore togs we could buy "round the corner"?—and was'nt they cheaper, and better too?

"Bueno" has not had his land tacks aboard sufficiently long to be quite able to see through the jog, how any country is to be enriched and enabled to carry on "a triumphat war" by virtue of an excess of imports over her exports. Will my "S. W." shipmate be pleased to work out the position by "lunars," double altitudes, or traverse sailing, so that I can see it? As we have laid hold of, and unlaid the same strand, the first time trying, rather guess we shall be shipmates in THE FARMER, next year.

Yours, BUENO.

MATTERS IN MAINE.

COLD, backward spring. Farm work ten days later than last year. There is but very little seed put into the ground, up to date (5th May.) Ground frozen and full of snow on night of 29th of April. Markets lively. Potatoes quiet, 65cts; butter, 50cts; hay dull, $10: stock, well up, good demand, and fine prices. No leaves yet. Early birds all arrived. Cattle cannot be turned from the barn for three weeks. Prospects are that the usual amount of planting will be done.—*B.*

HOW TO MAKE GOOD BUTTER.—A lady experienced in making butter, communicated to the Winchester *Virginian*, the following recipe:—"Before I go to milk, I put a kettle, say one-third full of water, and large enough to let the milk pail into it, on the stove, where it will get boiling hot by the time I come in with the milk. I then strain the milk into another vessel, and wash the pail, (which should always be of tin,) then pour the milk back into the pail, and set it into the kettle of boiling water till the milk becomes scalding hot, taking care not to let it boil; then pour it into crocks or pans, and set it away in the cellar for the cream to rise in the usual way. Cream produced in this way will seldom require more than twenty minutes to churn, while by common practice the dairy maid may often churn for hours, and then, perhaps, have to throw away, as I did before I became acquainted with the Russian plan, the essential features of which I have adopted in my present mode, as given above. The method is applicable to all seasons—summer as well as winter."

NEVER buy what is useless because it is cheap,

FARM TALKS---No. 3.

WRITTEN FOR THE AMERICAN FARMER, BY G. E. BRACKETT, BELFAST, MAINE.

MY neighbor, Smith, is just setting out a new orchard; says he is "going into raising apples." In fact, Smith is just a little excited on the apple subject, just now; and like a good many other worthy men, when he gets deeply interested in any subject, is apt to "run it into the ground." We confess that with apples at $2.50 a bushel as they are now, there is some temptation, for as Smith says, "Don't you see how they pay, and I might as well make the money as anybody." All very true; and far be it from us, to discourage the planting of apple orchards; in fact we consider it a duty we owe to the coming generation, that they may pluck the fruit that results from our labors—as we do of those who have gone before. But our planters should not be too sanguine, nor expect too much, too soon. An orchard is not the growth of a year, nor of five; and though a man may reasonably expect to eat fruit from trees of his own planting, yet he must not expect to have full grown trees from the seed, nor that they are to be raised without labor and care, nor that the fruit will always be as valuable in the market as at present.

We looked over the wall, and chatted a few minutes with Smith, while he was digging holes in the tough sward and setting out his nursery grown trees.

"What do you think of those trees? Two years old, over three feet high, and straight as a candle. Ain't they handsome?" Here Smith "chucked" another into a hole and filled in deep with sods and wet dirt, finishing off with a heavy stamping down. "There, I call them pretty fair. The nurseryman said they'd bear in six years after they were grafted, and I'm going to graft them next spring."

"Better add ten to the six."

"Why, don't you think they are good trees?"

"Oh, these are not bad of the kind; but there are better ones down in your sheep pasture."

"What, those little gnarly, scrubby things!"

"Yes, they are well rooted, and can be taken up with so many fibrous roots that the transplanting will not effect them much, and they are also very hardy, and changing from a poor to a good soil will cause them to grow rapidly. Such stocks are preferable to forced and pampered trees from the nursery."

"What do you think of this field, for an orchard?"

"This early slope is good; but a part of it needs draining. Trees will not do well standing with their feet in the water. You have got to use a little more care in setting them out; and the ground must be manured if you expect them to grow."

"What is best for it?"

"Cultivate it a few years with some hoed crop, only be sure to put on a good deal more than you take off. Then you can put it in grass, only keep the trees well and widely mulched."

"I've got a lot of old, poor hay and straw. Would that make good mulching?"

"Yes, any light vegetable matter. If you do not plow the ground, you can use your old hay around your young trees to good advantage. It seems to keep the soil about the roots loose, open, and moist during the hot summer days."

"I saw you at work in your orchard this forenoon, trimming it up."

"No; June is the best time to prune. The wounds heal up quickly then. I was digging out borers, and cutting off caterpillars eggs."

"Well, I never knew much about them; only I know the caterpillars like to have eaten up my trees last summer before I could get them all killed."

"I will tell you about them briefly. The borer is a grub which lives in the bark and wood of the apple tree near the roots; and if not destroyed, will girdle the tree and kill it. This grub which hatches from a minute egg, lives in the wood three years, eating and growing every summer. On the spring of the fourth year it changes to a beetle which comes out of the tree and lays some more eggs for another generation of borers."

"Can't they be hindered?"

"There is no sure preventive; the only sure way is to examine the trunk of every tree and cut them out and kill them."

"How about the caterpillar?"

"The caterpillar is a different order of insect, it comes from a moth instead of a beetle, you know these little bunches or clusters of eggs on the ends of the twigs. Well, a minute caterpillar hatches out of them, which eats the apple leaves and grows and eats, changing its skin several times during its life, till at last it is full grown at about the last of June, when they leave the trees and cover themselves with an oval shaped silken cocoon, fastened to some sheltered place, and inside of this cocoon they change to the moth, which comes out in about three weeks, flies in the night and deposits her eggs for next year's crop of caterpillars."

"That is strange is it not? What is the best way to kill caterpillars?"

"There are various methods. Cut off the eggs in the spring or fall, and burn them. I have found a good way to destroy them, after they are nearly fully grown or are in their webs on the trees, is to make some very strong soapsuds, then fasten a swob or brush on the end of a pole, and give their nests and all, a thorough soaking, A soaking of strong suds is death to them."

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

SOME WORDS ON GARDENING.

If the basis of your garden soil is clay, coarse manure should be spread on it in the fall; then as it is spaded in, the soil should be thrown up in ridges, so that the frosts of winter can make the soil friable and absorptive. Those ridges should remain until you are ready to plant in the spring, when it is but very little work to level them with the hoe, and the soil is in fine mellow condition for planting. I had peas up on such soil by the 20th of April, while those planted on spring spaded soil, were weeks longer coming up. But even spring spading should be ridged, and lay a few days or even weeks before it is leveled and planted; it is very little more work than plain spading, and the mechanical aid to the soil favors chemical action.

If your garden is sand and gravel, or a light, sandy loam, put on the manure from fall to spring; if very sandy, clay and coal ashes should be spread with the manure, and well worked into the soil in the spring. Although well rotted manure is quicker in its chemical action than unfermented dung—yet the mechanical effect of coarse manure, even in a sandy soil, is to make it hold water by absorption that will keep up the maximum vegetation through hot dry weather. Although sand warms earlier and is quicker in the spring than an aluminous soil—if both have the same quantity of manure, the heavy soil will stand a drouth best, because clay holds more water by absorption than sand, hence sand needs much more manure than clay to increase its power of absorption, and to enable it to stand a long summer drouth. I have seen the corn leaves roll on a sandy soil, and the crop suffer in a drouth, when on a well ameliorated clay, not as rich in nitrogen, the corn was in full, luxuriant growth, yet the sand had beat the clay early in the season and until the drouth set in. The porosity of a soil rich in vegetable debris, is the measure of its productiveness during hot, dry weather, and the nearer a soil approaches to naked sand, the less water it holds by absorption.

Plant early. Many put off planting corn early, lest it should rot in the ground. I have grown garden sweet corn yearly for the last forty years, and I never yet had a kernel rot in the ground, although it is sometimes eighteen days planted before coming up. Beans, cucumbers, and other tender plants, should be planted later; but I have always found that peas, onions, beets, &c., were as well as an earlier crop when planted in April before the late frosts were over; and corn planted in early May, slow as may be its early growth, it stands an early

drouth much better than the later planted corn. In fact, unless the season favors very much, no June planted corn produces as much in ear or stalk as the earlier planted, although it may ripen well. The same with wurzel beets—the earlier they grow, the larger is the size they attain. Late planted beets rarely attain the maximum size, while strong early plants, even when transplanted, attain full size.

THE PRESENT PROSPERITY OF THE COLD DAIRY REGIONS.

A letter from Chatauqua county says the snow fell there nine inches deep on the 24th of April. One New York agent paid 55 cents a pound for 127 tubs of butter the first week in April, and $1,400 a day was often paid out in the village of Sinclairville, for butter alone. Cheese factories are now in full operation there, and farmers are thriving apace on such prices for butter and cheese, as no man there ever dreamed of five years ago. A farmer writing from Illinois, claims that the Rock River Valley is as good a grass region as any part of this State, which must be a great mistake; as much hay may be cut in a good hay season, but it is only up among the clouds in the dairy region proper, that the pastures are always green, and the soft spring water is always running. Once in about seven years they may have a trying drouth there, such as we have in a corn growing region every season. I have seen the white clover nearly a foot high in South Oneida county, when in this lower limestone region it never reaches such a status in the most favorable seasons.

THE IMPERFECT APPLICATION OF MANURES.

It has been truly said that the available fertility of the soil does not depend upon the amount of carbon, nitrogen, hydrogen, oxygen, and salts it contains, but in the relation which the several substances are enabled by tillage to combine and act on each other. A soil may be rich in all these matters, and yet owing to their improper distribution in it, they can make no chemical combinations into available plant food. A clay soil is so compact that until it is made friable, no matter how well manured it may be, no chemical combinations into assimilable plant food can take place, owing to its compact adhesiveness. On the other hand, a soil may be so loose and sandy, that it has no affinity for ammonia, which escapes through it to the atmosphere, and nothing short of continued libations of nitrogenous manure can keep such a soil productive; hence no matter how rich the soil is in other matters when its nitrogen, actual or potential, is exhausted, its fertility is gone. Hence it is, why very concentrated nitrogenous manures like Peruvian guano, has such magical effects on light, sandy soils the first season. Such a soil for the want of the aluminous principle to hold the volatile ammonia, is always grateful for every fresh supply of nitrogen in a nearly soluble form, ready to combine with other elements not yet exhausted into the assimilable elements of vegetable nutrition. A clayey loam having a strong affinity for ammonia, is rarely so exhausted of nitrogen as to refuse to grow crops, if its mechanical structure is only kept loose by the application of vegetable matter, in the form of green sward or clover turned under in the fall, so that the frosts of winter can aid in destroying its adhesiveness. When thus treated, the soil holds the nascent ammonia from the decomposing matter, with such tenacity, that nothing but the roots of plants can exhaust it.

LIEBIG'S CLASSIFICATIONS.

The great chemist of Giessen divides food into two classes. The first is plastic or tissue making, and comprises the organic substances rich in nitrogen; they alone are said to be capable of forming organized tissues, because alone capable of being converted into blood, and are called the strictly nutritive substances. The second class is respiratory, or heat forming, and comprises the substances containing no nitrogen, which are therefore incapable of nourishing the body, and only serve the purposes of respiration and animal heat. They are fats, starch, gum, sugar, pectin, wine, beer, and spirits. Thus all food is nitrogenous or nutrative, and non-nitrogenous or heat-making. But, although Prof. Draper, in his physiology, adopts the above classification, he says he "only adopts it for its convenience," "it having no natural foundation." Hence has arisen the accepted terms, "flesh former" and "fat former," in the food of farm stock. Unfortunately for this fanciful theory, all experience shows that nitrogenous substances are *not* the only plastic materials, and that they are also heat forming as well as flesh forming. If the theory that fat was not a flesh former was true, a lean piece of beef would be more nourishing than fat beef; an Irishman would starve on potatoes, and a Hindoo would grow weak on his exclusive rice diet. The examination of the structure of the blood shows that so far from being composed of nitrogenous substances exclusively, that they only amount to about 72 parts in 1,000.

GLUTEN is not found in animals, but exists abundantly in vegetables, and is the most important of all nitrogenous substances, capable of supporting life when fed alone. It is gluten that gives the superior quality of the famed St. Louis flour, made from Southern wheat alone.

FIBRINE is liquid in the serum of the blood; it is allied to albumen, and was a long time supposed to be identical with it in fibrine muscle.

HOW WE FARM IT IN THE GENESEE COUNTRY.

WRITTEN FOR THE AMERICAN FARMER, BY P. C. REYNOLDS.

NUMBER FOUR.

I FIND that I am getting behind my subject; that is, there are so many kinds of labor performed on the farm, every month, that one is unable, in the limits of a single article, to treat on all of them. I should have written last month on,—

POTATOES.—That crop which has added so much to the wealth of the farmers of portions of the Genesee country. As has been remarked before, the light, sandy loams of the lower Genesee country are peculiarly adapted to the production of potatoes of superior quality. There, in the past, farmers have planted a large proportion of their farms to that popular tuber—principally to the Rochester Seedling, or Seedling Mercer. It is quite common to plant from 25 to 30 acres, in farms of 75 and 100, to potatoes. We are planting coarser varieties, latterly; because, although they sell for a trifle less than the Mercer, their yield is so much greater that they return a larger revenue.

A clover sod is very good ground for potatoes—so is corn stuble. The majority, I think, plant in hills, as it allows of working both ways with the cultivator, and thus saves labor. Most farmers make three assortments of their potatoes; the largest for eating, selling the smallest for feeding stock, and a medium size for seed. I prefer a fair sized potato, cut in four pieces, and two of them dropped in a hill. Would drop two quarters instead of one half, because it scatters the germs more. A whole potato in a hill starts too many vines, and in consequence, too many small potatoes. Were we disposed to *pull out* all the small vines, leaving four to six of the stronger ones, I presume a large whole tuber would produce the largest crop.

In drills, we drop one piece in a place, fifteen to eighteen inches apart, and cover with a small plow, throwing two furrows together upon the drill. This leaves the land in a ridge, which we harrow down level as soon as the vines make their appearance.

Potatoes should be planted four to six inches beneath the surface, and worked out with the cultivator. Hilling potatoes, is an exploded fallacy of our grandfathers. After the vines have become tall enough to fall over, the *horse* should be kept out of them. If weeds start afterwards, cut them up with a hoe.

In the Genesee country, good farmers get from one hundred to two hundred bushels of potatoes per acre; average say one hundred and twenty. We sell at from fifty cents to one dollar per bushel; average, say,—60 cents, which is an average of $72 per acre; paying better than wheat, rye, oats, barley, or corn. Where the ground is tolerably clean, I think from twenty to twenty-five dollars, will cover the entire cost of raising and marketing an acre,—including seed.

WORKING THE HIGHWAYS—Follows the planting season. Formerly, when farmers could hire laborers at fifty to seventy-five cents a day, or $10 or $12 a month, they thought it economy to work out their road-tax, rather than commute it at 62 1-2 cts. per day; but, now, when wages are $1.25 per day, they think it true economy to commute at half the cost of a day's labor. But that is rather questionable economy which to save a few days labor, rides over soft, rough roads the greater part of the year; at great cost of time, wear and tear of horses and wagons, to say nothing of wear of temper. If farmers would cheerfully and honestly work out their whole tax, and more, in applying the best material attainable, to repairing their roads, they would find it the truest economy in the end.

WASHING AND SHEARING SHEEP—Usually succeeds working the highways—although many advocate dispensing with the former practice. Without stopping to discuss this question, I would merely say that many farmers in the Genesee country still follow the time-honored custom, and will briefly describe the practice. We would wait until the water is not uncomfortable; select a place in a pretty rapid stream where the water is about four feet deep, where there is a convenient place to yard the sheep, and a clean one to turn them out after they are washed. One washer should be employed to every twenty-five sheep. The sheep should be driven slowly to the washing place, so as neither to heat nor excite them. A careful hand should catch the sheep (always around the neck, never by the wool,) and hand them to the washers, who should treat them gently, and wash them as expeditiously as possible, squeezing the wool between the hands until the water flows clear from it when the sheep should be aided to the dry land—held a moment to allow the great weight of water to drain off, and then released. If sheep washed in this way, are kept in a clean pasture until dry, and then sheared, their wool will be worth fifteen per cent more than unwashed wool. After the dawn of the temperance reformation, farmers clung to the practice of furnishing liquors to the hands at sheep-washing, after it had been abandoned on all other occasions. Yet I know of no time when liquor was productive of more mischief than at sheep-washing. Hands that had imbibed too freely, would soon begin to maltreat the sheep, catching them by the wool—throwing them into the water, ducking them, &c., and I have known the sheep to grow "mighty strong," throwing the washer down, and ducking him, to the great amusement of the company.

SHEEP SHEARING—is hard work—trying to the back and knees of the workman. There is a great difference in the capacity of men for shearing sheep; some shearing fifty head per day, with greater ease than others would shear half that number. There are but few who will shear very fast, and at the same time do it well. The rapid shearer too often clips the wool unevenly, cuts the sheep and tears and tangles the fleece. The good workman will clip rapidly, cut close, and evenly, and keep the fleece compact and entire. It is a good practice to keep about one hand to three shearers, to roll up and tie the fleece; a box of suitable dimensions facilitates the latter operation. Should cold nights follow shearing, the sheep should be housed.

CULTIVATING.—While sheep shearing is going on, a boy is generally set to cultivating. Young man, while you hold the cultivator, and guide it carefully between the rows of corn or potatoes—meditate! What is the object of the labor which you are performing? The first answer which suggests itself, is to destroy the grass and weeds. Yes; that is an important object, but not the only one. The plants certainly could not flourish with an army of weeds robbing them of their nutriment; but in stirring the soil, you are unconsciously performing the work of the *chemist*. Have you ever seen a chemist at work in his laboratory? He throws into his crucibles, the various ingredients from which he designs to form his compound, and then he proceeds to stir them, in order to bring the atoms of which they are composed, into contact, so that a *union* may ensue; and, to hasten the combination of the ingredients, heat is often employed. In any case, the stirring of the ingredients together, is an important part of the process. You are a *chemist* on a large scale. The earth is *your* laboratory; the soil, is *your* crucible, and your real object in tilling it, is to stir up those various elements which are to enter into your compound—a living plant. Most of the substances known in chemistry are in your crucible, and many of them are capable of entering into your compound.

Many of those minerals in the soil which do not enter into the structure of living plants, hold in combination other minerals which do, and which they will relinquish in the presence of a third party, having a stronger affinity for one of them, than they have for each other. In stirring the soil, you open avenues for the entrance of the atmosphere, and caloric from the sun, to perform their great work, in decomposing, and recomposing. The atmosphere is laden with invisible vapor, which it bears in through the porous surface to cooler soil beneath where it is condensed into water, supplying the soil with that necessary agent in vegetable growth. These are some of the objects of stirring the soil. Formerly, a small plow was the main instrument used in working out corn and potatoes, but now preference is given to the cultivator. We wish to encourage the growth of the roots near the surface, where the best conditions of plant-growth exists.

TO FARMERS AND OTHERS.—Now is the time to kill the caterpillars or worms on the apple trees, while they are small, and have not spread themselves all over your orchards. The late warm weather, has hatched them out on the trees. They may be discovered by the white silken web which they are forming for their nests and may now be killed with a very little trouble, by taking a long pole which will reach all the limbs of the trees. Tie on some tow, or old rope, on the end of the pole, and saturate it with kerosene, and then set fire to it; you may soon clean your trees of the worms by burning them out with very little trouble.—*J. S.*

DECREASE OF THE CATTLE DISEASE IN ENGLAND.—The number of new cases of cattle disease in England had at last accounts diminished from 18,000, (the highest number in any one week) to about 3,600 in the week. This gratifying state of things is attributed wholly to the stringent legislation of Parliament. The measures adopted consisted in stopping at once, throughout the kingdom, the transportation of cattle, and in promptly butchering any and all that were attacked by the plague. Not only were the railways and other means of transportation closed, but a farmer could not remove his own herd from one part of his farm to another, if it chanced that in order to do so they must cross a public road.

TRICHINÆ.—Dr. Reed, of Baltimore, says the eating of pork has nothing whatever to do with the disease known as trichinæ. "They do not inhabit the muscle of the hog more than that of any other animal, or of man himself. I defy any one to prove by the record of the last thirty-five years that a solitary death has been caused beyond doubt by the presence of trichinæ. I assert that the charges made against these innocent worms are without shadow of a foundation in fact, and would advise the community, if they desire to eat pork, to do so."

TREE PLANTING.—Fail not to plant fruit and ornamental trees and shrubs, as the season passes; nick the time; improve the opportunity, and if the planter shall fail to enjoy the good of his labor, posterity will bless his memory. Let every farmer's boy plant a choice apple or pear tree this spring, and so every recurring season until he is of age, thus improving the homestead and providing for good fruit.—*Iowa Homestead.*

SPIRIT OF THE AGRICULTURAL PRESS.

Agricultural Improvement.

The Working Farmer says on this subject: "Improvement in modes of culture means simply that the land shall be underdrained, if wet; plowed deep, subsoiled, and cultivated thoroughly, so as to keep the weeds down, the surface of the ground constantly stirred, and open to the ingress of the air and dews. The atmosphere is a storehouse of moisture, carbon, ammonia, and other vital elements of crops, but it cannot penetrate a baked, closely packed soil, in order to produce those changes in its chemical condition, without which the wonderful processes of plant growth are impossible. But if the surface and subsoil are loosened by deep cultivation and disturbed frequently during the season of vegetation, the air circulates freely among the particles of soil; water, the solvent of all the organic and inorganic constituents of crops, is supplied in proper quantities to produce the right conditions for the free appropriation of plant food. Thus the improved tillage of the soil develops an extra farm beneath the surface not enumerated in the title deed, and many a farmer who to-day starves on a hundred acres, might grow rich on a quarter of that area, cultivated according to the methods we have indicated.

Breaking Colts.

"David," in *The Germantown Telegraph*, says he is strongly opposed, both in principle and practice, to "breaking colts"—that is, allowing them to attain the age of two or more years before they are taken in hand for learning the principles which are to form so important a part in their future life. There should be no "breaking" about it. The education should begin as soon as the colt is born, and, if properly attended to, will be perfect by the time he is large enough to drive. Being led or tied with a halter should be his first lesson, and the sooner he learns it the shorter the struggle and the more permanent the lesson; never give him a chance to break loose, for once done and he will remember it for a long time; and, if the lesson be too often repeated, he will make a proficient in this not desirable art.

Town Farms.

The town of Upton, says *The Massachusetts Plowman*, is talking of buying a superior pure bred Ayrshire bull, of Dr. Geo. B. Loring, for its town farm. Could'nt do a more sensible thing. The town of Sterling, not long ago, bought one of the same breeder, and if each town in each State would go and do likewise, we should soon have a dairy stock to boast of throughout this Commonwealth.

Salt in Fattening Swine.

A correspondent states some interesting experiments to test the use of salt in fattening swine. He selected two pairs of barrow hogs, weighing 200 lbs. apiece. One pair received, with daily allowance of food, two ounces of salt; the other pair, similarly fed, none. In the course of a week, it was easily seen that the salted pair had a much stronger appetite than the others, and after a fortnight it was increased to two ounces apiece. After four months, the weight of the salted hogs was 350 lbs. each, while that of the unsalted, five weeks later, reached only 300 lbs. The experiment was repeated with almost precisely the same results. The correspondent feeds young pigs according to their age, a quarter of an ounce daily; breeding sows very little during pregnancy, and during the heat of summer withholds it in a degree from all, as it induces thirst and a liability to disease.—*Ex.*

A Valuable Ox.

Mr. L. B. Hempstead writes to *The Working Farmer*, an account of an ox formerly owned in Adel, Iowa. He says: "The ox was born in the spring of 1856, and was broken to work in harness, before he was a year old. As the calf advanced in size and age the vehicle was enlarged, until he came to his growth—when he was harnessed to an ordinary one-horse waggon or sled, according to the condition of the roads. For several years the ox performed the draying and hauling of the village, and finally during the summer of 1864 he was sold to a beef buyer for the sum of $110. His weight was something over 1600 lbs. I am satisfied that old 'Bright,' (for that is what he was called,) could not only draw more than an ordinary ox, but much more than any single harnessed animal that I was ever acquainted with."

Carbonaceous Liquids.

All liquids, says *The Germantown Telegraph*, containing carbonaceous matters, are highly valuable for irrigating plants. Cow excrement soaked or macerated in water by placing in a half-hogshead, tub or other suitable vessel, and exposing it to the sun for twenty-four hours, will furnish a most valuable stimulant, and one that may be applied with advantage to every species of crop. Hen manure, macerated in the same way, will, when applied to cucumber, squash and other similar vines, protect them from the ravages of the bug, and tend also greatly to promote their growth.

Plum Trees in the Poultry Yard.

Somebody recommends setting out plum trees in the poultry yard, so that the hens will destroy the curculio that infests the plums. We think well of this plan. We have tried all sorts of ways to get rid of these pirates, without any success, except by keeping the trees in the most thrifty condition, thereby furnishing a superabundance of fruit for them. We hope some of our fruit-raisers will try this plan of setting them out in the poultry yard.—*Maine Farmer.*

Caterpillars.

A correspondent writing to *The Virginian Farmer*, says, a friend of his, a year or so since, discovered by accident while boiling coal tar, that the boiling, or burning of it under trees infested with caterpillars would kill the last one of them. The trees near the boiling, or burning tar, (I saw them myself,) were literally covered with caterpillars, and every one fell, and died under the trees. If the tar be put into a long handled frying pan, and set on fire, it could be carried from tree to tree, and kept under each tree until the desired end is accomplished. This hint to fruit growers should be sufficient.

To Keep Tires on Wheels.

Hear what a practical man says on the subject: "I ironed a wagon one year ago for my own use, and before putting on the tires I filled the felloes with linseed oil; and the tires have worn out and were never loose. I ironed a buggy for my own use several years ago, and the tires are now as tight as when put on. My method of filling the felloes with oil is as follows: I use a long cast iron-heater, made for the purpose.—The oil is brought to a boiling heat, the wheel is placed on a stick, so as to hang in the oil each felloe, an hour for a common sized felloe. The timber should be dry, as green timber will not take oil. Care should be taken that the oil be no hotter than a boiling heat, in order that the timber be not burnt. Timber filled with oil is not susceptible to water, and the timber is much more durable. I was amused some years ago, when I told the blacksmith how to keep the tire right on wheels, by his telling me that it was a profitable business to tighten tires, and the wagon-maker will say that it is profitable to him to make and repair wheels; but what will the farmer who supports the wheelwright and smith say?"—*Ex.*

Cattle Plague.

The Country Gentleman says:—"From the first opinion we had occasion to express with regard to the Cattle Plague, down to the present time, we have seen no reason to change the views entertained as to the supreme importance of the isolation of the infected and the killing of the diseased, as compared with any or all other modes of treatment. These views have been fully corroborated in the experience of Continental Europe, and Great Britain has been brought to acknowledge their correctness, but only after suffering almost incalculable loss. Dr. Voelcker, Chemist of the Royal Agricultural Society of England, in a private letter to Secretary Johnson, of this city, dated London, April 9th remarks:—'At last the Government has adopted stringent measures of isolation, and, I am glad to say, the disease is gradually dying out; and by the time our machinery, which is now set in motion to prevent the extension of the Cattle Plague, shall be in good working order, I trust there will be no more stock attacked by it.'"

Early Cucumbers.

A correspondent of *The New England Farmer* says that egg-shells with the top broken in and filled with earth are excellent for starting cucumbers. The greatest difficulty in transplanting cucumbers from the house to the garden in our climate, is the great change they experience. The air is frequently cold and uncomfortable during the first week in June. It is a good plan to keep them protected as much as possible during such weather. Otherwise, they will turn yellow, sicken and die.

Fetters.

A correspondent of *The Ohio Farmer* finds a pair of fetters buckled around the hind legs of a cow to be the best means of preventing her kicking when milked. One leg acts as a post to hold the other. He thinks it a much better way than to kick and swear at the cow.

Active Manure.

One of the most active manures and readily within the reach of most farmers, is a mixture of leached ashes, plaster, and night soil mixed with fine soil. Let them be thoroughly worked over on a smooth spot, and allowed to stand a week before using, working it over every other day, and you have a most valuable manure at a trifling cost of time. A handful of this mixture in a hill is excellent to give corn a start. Potatoes and garden vegetables generally feel it very quick. Hen manure is an excellent ingredient in such manures, but it should be well slaked with water before mixing with other substances.—*Maine Farmer.*

Bone Meal for Cows.

A writer in *The Country Gentleman* says:—"I have noticed for years that cows, particularly at the time of the greatest flow of milk, chew bones with avidity, and was led to suppose that it was because a pasture constantly fed by cows in milk, whereby the phosphates or bone-making qualities were being largely removed, became deficient in those qualities, and that by the free use of plaster or bone meal the phosphate might be restored, or that feeding cows bone would be a substitute which nature might require.

"Last spring I received from Boston one-quarter-barrel of bone flour, and through misdirection did not get it in time for spring use for crops, and it occurred to me that it might be well to feed some to my cows. Consequently I opened the cask, but found the smell quite offensive, and thought my cows would not eat it; but by mixing it with salt I found, notwithstanding the smell, that they ate it with a good relish and good results; and I suggest that those persons who are troubled with premature calves, try feeding their cows bone meal, and report the result."

Caution as to the Application of Kerosene.

A correspondent of *The Maine Farmer*, writing at Industry, Franklin Co., says:—"A few days ago a neighbor applied kerosene oil to a valuable pair of four-year old oxen, to kill lice. Both were soon after taken sick, and one of them has died. On being opened, the smell of the oil was quite strong, and without doubt it caused the sickness and death of the animal."

Kicking in the Stable.

A correspondent of *The Tennessean* gives his method of curing a horse of the practice of kicking in the stable. He says his method is to put a strap around one of the hind legs, between the fetlock and the hoof, with a small chain, about two feet long attached. Whenever the horse kicks the chain will hit him and he will soon be cured.

Wire Worm.

A correspondent of *The Germantown Telegraph* planted five rows of corn with seed that had been soaked in a solution of saltpetre, and found that these rows were not injured by the wire-worm, although the rest of the field was very much injured.

Illinois Wool.

A correspondent of *The Prairie Farmer* says that 1,400 pounds of very fair fleece washed, fine Illinois wool, shrunk 42 per cent when ready for the cards.

THE HORIZONTAL HOP YARD.

WRITTEN FOR THE AMERICAN FARMER, BY F. W. COLLINS.

A FREE exposure to the sun and air is as necessary to the well being of the hop vine, as to the grape. The common plan of letting a mass of hops run up a twenty or thirty feet pole, is as detrimental to the perfect development of the fruit, as would be the same method with the grape vine. The fruit bearing arms, few of which are thrown out less than seven feet from the ground, need to hang freely in the air to do well. In the horizontal method of training hops, four vines are allowed to run up a stake seven feet in hight, when they are separated, and trained upon twines stretched across the yard in both directions, by which means the fruit-bearing arms, hanging freely from the twines, receive all the light, heat and air requisite to ripen the fruit and prepare it for harvest, several days earlier than hops grown by their side upon long poles.

The twine used may be that known as wool twine, or broom makers twine, either jute or hemp. The best way is for each hop grower to raise a bed of flax and hire his twine spun. A man or boy, on horseback, with a basket of twine fastened to a belt, should put the twine upon the stakes. Fastening it securely to the strong outside stake, he should proceed along the row, winding it once around each stake at the top, to the end of the row, where it is again secured. The same process is repeated for each row in both directions, and thus a network of twine is spread over the yard, seven feet above the ground. Occasionally the hop grower should ride through the yard and place the vines upon the strings, tying them in their places where it is necessary, with old woolen yarn.

The stakes may be either small, round, split, or sawed stakes, except the outside rows, which should be as strong as ordinary hop poles. They should be cut eight feet in length, and set one foot in the ground. The outside row of stakes, in each direction, should be placed one row outside of the outer row of hop plants. The proper distance for the settings to be placed is eight feet apart each way; this will prevent any crowding in the outer rows of the yard, and add much to the neatness of its appearance. Indeed, we do not know of anything more beautiful in an agricultural point of view, than a hop yard trained as it should be in this manner. That it is the most profitable crop a farmer can raise, does not hinder its being the most attractive.

The saving in the expense of training a yard in this way is worthy of note. By the old method two poles from fifteen to thirty feet in length were necessary to each hill, while by the horizontal method one stake, eight feet in length with seventeen feet of twine, is all that is required. The price of hops has been so remunerative for many years that the high prices paid for poles have not been seriously felt in this country thus far; still, if a larger crop as well as a better quality of hops can be produced for one tenth the expense, (at which hops have been for years our most profitable crop,) as they can be by the horizontal method—then the economical plan is the one to be used.

THINGS OUR WAY---PENNSYLVANIA.

MESSRS. EDS.:—Enough rain, 1st and 2d of May, to last till June—about 13° too cold too, though there has been more thunder along through it, than we had in all '65. Country all out in green. Corn planting two weeks behind time—plenty of time yet though. Better promise of more apples, peaches, cherries—all sorts of small fruits, than we have had these five years. Nice fresh shad, 20 cents per pair; cheap as in '61. Eggs fell 11 cents in seven days. Hens are discounting freely. Butter we can't reach, only from second story windows—75 cents for fresh "grass." We let it go to grass, and use Lovering's syrup—28 cents a quart. Down Delaware, across in Maryland, over in Jersey, and all up through the Keystone valleys, more wheat, and looking better than it has done so early, these ten years. Before the summer passes we shall have best stove coal down to the old $5 figure. Cows are away up yet, ($150 down to $80,) for cow and calf. Beef and pork must drop, this way. We are all going into fish and vegetable diet.

COSMO.

SUMMER EVENING—"THE SEE-SAW."

THE "see-saw" on the following page, illustrates its own story. It has been "played at" for years, and will not "wear out." These fine summer evenings we see the boys and girls enjoying the fun. The *fear* is plainly expressed on the boy's face, who is mounted at the top of the plank, whilst the boy at the bottom end, is taking his fill of enjoyment with the boy who is only a looker on. The contrast is so evident that it needs no further comment.

CORN FOR FODDER.—The seed may be sown any time during the early part of June—two bushels will be required per acre. Sow in drills three feet apart. Scatter the seed so that there may be at least forty or fifty grains to the foot. The only after culture consists in running the cultivator once or twice between the rows. Harvest early in autumn, in time for a crop of wheat.

LARGE EGG.—We have on our table a large pullet's egg that measures 6 by 7 3-8 inches. The pullet is of the pure Brahma breed, and about ten or eleven months old.

SUMMER EVENING---See Preceding Page.

Horticultural.

JUNE.

"She hovers around us at twilight hour
When her presence is felt with the deepest power;
She mellows the landscape, and crowds the stream
With shadows that flit like a fairy dream:—
Still wheeling her flight through the gladsome air,
The *Spirit of Beauty* is everywhere!"

June is our month of beauty, and the "Spirit of beauty" is truly everywhere. On the mountain and in the valley, in the wood and in the field, she ministers with unsparing hand. Happy are they who love her sweet influence, and by gentle arts draw her to their homes, and constrain her to dwell with them.

THE GARDEN.

THE *enterprising* gardener, in climates as favorable as that of Rochester, will be able to place upon his table during the month of June, the following vegetables: Asparagus, String Beans, Beets, Early York Cabbage, Cucumber, Lettuce, Onions, Peas, Radishes, Rhubarb, and Spinach—a pretty good assortment for the first summer month.

Among fruits, we may enjoy currants, strawberries, and cherries. I venture to say that ordinary farmers will be unable to supply *their* tables with one-half the above varieties.

ASPARAGUS—Should be dropped when green peas arrive, as that affords a very good substitute, and we should not carry the exhaustion of the asparagus bed further.

BEETS.—The Long Blood can be sown any time this month for winter use. The early sown should be thinned, those pulled out making excellent greens.

CABBAGE AND CAULIFLOWER—May be transplanted the early part of the month for fall use, and the latter part for winter. If the supply is likely to run short, sow early varieties, to be transplanted next month into vacancies caused by the removal of peas, lettuce, radishes, spinach, &c. It is good policy to manure heavy, and keep something growing in all parts of the garden, during the entire season of vegetation.

CARROTS—If not already growing, should be got in without delay.

CELERY.—Part of the crop should be transplanted the latter part of the month for fall use, in trenches made rich and deep, four feet apart, plants from six to ten inches beneath the surface.

SWEET CORN—Can be planted until the middle.

CUCUMBERS—May be planted any time during the month for pickles. There is no variety that will give better satisfaction than the Long Green.

EGG PLANT—Is gaining in popularity every year. Like many edibles that are at first distasteful, it becomes a great favorite when a taste for it is acquired. Transplant, with care, early in the month.

OKRA—is not in very general use, but it is very excellent for soups. It may be yet sown.

PEAS.—Early sorts may still be sown, with a pretty good chance of their producing a crop.

PARSNEPS—Should have been sown in May, but better now than never.

RADISHES.—Long White Naples, and White Summer Turnip, do better in summer, than the red varieties.

RHUBARB.—Keep down the seed-stalks, and bottle or can any surplus.

SQUASH.—Plant winter varieties the very first of the month. Remember that squash can only be grown by keeping up a constant warfare on the bugs. If not resolved to do this you had better not waste your time planting. Nothing equal to hand-picking.

TOMATOES.—Good strong plants; in blossom, may be carefully transplanted the first of the month. All vegetables are greatly benefited by frequent hoeing.

SMALL FRUITS.

CURRANTS—Will make good pies or sauce, quite early in the month, but must be ripe for jelly, and are in best condition for eating when dead ripe.

RASPBERRIES.—If the red or purple varieties, show an inclination to send up numerous stools, they should be treated, precisely as weeds, excepting half a dozen of the strongest canes, which should be preserved for next year's bearing. The same remarks are applicable to the Blackberry.

STRAWBERRIES.—Now is the season of enjoyment of this, with many the most delicious of all small fruits. Your Early Scarlet, or Jenny Lind will first mature, to be soon followed by the Wilson—a little too acid, but very productive, and excellent for canning, owing to its firmness. Many will probably pronounce the Triomph de Gand their best strawberry, quality considered, except those who are so fortunate as to possess some of the new and rare varieties.

PROSPECTS OF THE FRUIT CROP.

We have had some trying weather, for fruits in blossom, during the past week or two; light frosts on uplands, and pretty heavy ones on lowlands, yet we do not despair of peaches. Along the southern shore of Lake Ontario, for a belt four or five miles wide, we have not seen so great a promise of fruit, of all kinds, for several years. We have so far, escaped the cold, dry east winds which we think destroyed our peaches last year. Had rather risk a pretty severe frost, than those cold easterly winds. Upon the whole, we think the prospect for a large crop of fruits pretty promising, thus far.

TREMENDOUS HAIL STORM.—One of the severest hail storms ever experienced in this vicinity, took place on Sunday afternoon, May 21. Our city papers are filled with details. We have only room here to announce that our world-renowned nurseries have suffered great loss. The stock is badly cut to pieces. Budded trees, flowers, greenhouses, &c., were more or less destroyed by the shower of hail stones, some as large as hen's eggs. Ellwanger & Barry's loss is estimated at from $10,000 to $30,000. Other establishments suffered proportionately. The loss of nursery stock is so great that it will materially affect the marketable value. The storm lasted only twenty minutes, and passed over an area of five miles square. It was of such violence as to sweep through dwellings, and destroy birds, poultry and small animals. The damage to fruit trees is heavy.

BEDDING-OUT PLANTS.

In order to assist those who may be new beginners, as housekeepers, or who may not have a knowledge of the flowering plants they might wish to beautify their homes with, we take pleasure in giving the following information under the head of bedding-out plants. The list embraces only a proportion of the whole, but it is believed to be sufficient to meet the wishes of those for whom it is more particularly intended.

Verbenas.—These embrace a pretty extensive family, from which we select the Cherry Ripe, Magnum Bonum, Gem of the West, Ronaldi, Purity, Richard Cobden.

Geraniums.—Culford Beauty, Victoria, Lady Plymouth, Odoratissimum.

Salvias.—Splendens, Cærulea.

Pansies.—To obtain these in perfection they must be reproduced from the seed every year, by sowing in August, and either potting them late in the fall or covering them well where the plants stand. The large specimens we see in nurseries are all grown from seed planted the previous summer.

Petunias.—These have been much improved and greatly increased in numbers of late years. Double ones are now produced, but are not equal to the single. As purchasers can see them all in bloom in May, before the latter part of which month they ought not to be transplanted, they can select for themselves.

Lantanas.—These embrace a number of varieties, are pretty and ever blooming, and should be in every garden. Select Gigantea, Comtesse Morny, Fillonl and Grand Sultan.

Pampas Grass.—This is a *grass*, but is very beautiful, and is much admired.

Snap Dragon.—There is a number of varieties.

The Daisy.—Crimson, white and pink.

Carnations.—Many kinds and very attractive. They will bloom all winter if potted.

Lobelia.—Blue and pretty.

Mignionette.—Everybody knows this.

Mimulus.—Or Musk plant.

Phlox Drumondi.—Many varieties, blooming till frost.

Pines.—Laura Wilmer and Gertrude. These are hardy.

Heliotropes.—There are about a dozen varieties. The dark purple is very desirable, though they are attractive on account of their beautiful foliage and rich fragrance.

Nasturtium.—Flowering dwarf.

Veronica.—Several varieties and very beautiful, but they require in door protection in winter.

Fuschias.—There are many varieties of these now well known and popular flowers; but they are essentially a hot house plant, where they will bloom all winter, as well as in the open ground during summer, if continued in the pots and protected from the sun in the heat of the day. They should be set where there is shade from ten to four o'clock. There are a number of other bedding-out plants, but they are so well known as not to need naming here.—*Germantown Telegraph.*

Propagating by Cuttings.—Propagating by cuttings is not nearly so well understood by people generally, as it should be. We may say by gardeners generally. Nearly all soft wood will grow from cuttings, in the hand of a careful person. It is a common way to multiply grapes, currants, gooseberries, &c.; but few persons, unacquainted with horticulture, will attempt the same thing with flowering shrubs, which are usually "laid down," with which there is not the least difficulty, though with some the success is not so uniform as others. All the Arbor Vitæ can be propagated by inserting the branches of last year's wood four or five inches, without removing the leaves. Prepare the bed, dig deeply, pulverize the soil well, and put it in good order. To be sure of the cutting growing, it should be inserted five or six inches in depth, and place from four to six inches apart, the earth being placed firmly around them. They should be mulched, and watered moderately daily in warm weather when the ground is dry. They can be either potted in the fall, or let remain over winter, slightly protected with a little straw or long manure. Amateurs should plant grape cuttings with two eyes, the upper eye being placed a little below the surface of the ground.—*Germantown Telegraph.*

Dwarf Apple Trees.—The culture of dwarf apple trees (i. e., worked on the paradise stock) is yet very limited in our country, and it is only within a few years that they have attracted any attention; but as they become better known, and their real value appreciated, they will, we are sure, be considered almost as indispensable as the pear. They are less particular as to soil than the pear, grow quite as readily, occupy but little more space than a currant bush, and bear three to six dozen of large and beautiful fruit each. Besides this, they are so completely within the control of the cultivator, that if the canker worm attacks the trees, they can easily be destroyed by the application of the whale oil soap. Now that this pest is so destructive to orchard trees, the bush apples supply their place, and the same ground, covered with a dozen or two tree, will produce nearly the same quantity as a standard, and much larger and more beautiful fruit.—*Hovey's Mag.*

Sheep vs. Borers.—A New Hampshire farmer has discovered that his orchard in which his sheep were pastured was free from borers, and other noxious insects, and very thrifty, while an adjoining orchard, in which no sheep were allowed, was neither thrifty nor exempt from these borers and insects. He thinks the presence and odor of the sheep drive off the insects.

A writer in *The California Farmer* states that two pomologists in that State benefited their fruit trees by driving nails into them near the roots. The growth of the trees was in no ways injured, and fruit was produced on trees that had heretofore been almost barren, while in other trees the quality and flavor of the fruit was improved.

Introduce The Farmer to your friends and neighbors.

DOUBLE ASTER.

THE FRUIT GARDEN.

THIN out carefully the young fruit of choice varieties where too thickly set, and its superior size and flavor will repay the trouble, if designed either for market purposes or home use. Prune away, or rub off any superfluous and ill-placed shoots of the fruit trees, especially those of the vine. Vine shoots near the ground must be removed. If the old vine has a stem too long and naked, a strong shoot near the root may be reserved to take its place, at the end of a couple of summer's growth. The old vine above may then be cut out. Do not pinch back the shoots reserved for next year's crop, but encourage their growth as much as possible. Pinch off the extremities of shoots now in fruit, that the strength of the shoot may go to swell the bunch. Leave four to six leaves above the bunch to shade it and attract the sap. Thin out entire bunches of fruit where set too thick, and remove, if extraordinary bunches are desired, a portion of the berries from each bunch. Try applications of sulphur to drive off insects and protect from rot and mildew. Suppress all injurious shoots that would draw the sap from the newly inserted grafts. Break off the points of young fig shoots, to make them swell their fruit. Water occasionally newly planted trees and strawberry beds in bearing, profusely every other day, in dry weather. All watering at this season should be done in the evening. Destroy caterpillars and other insects on your fruit trees and grape vines; kill aphides by fumigating with tobacco smoke. Destroy all slugs and snails found about fruit trees.—*Southern Cultivator.*

BUDDING must be performed while the stock is in a state of vigorous growth. The bud should have a portion of bark and a little wood adhering to it.

FLORICULTURAL NOTICES.

NOVELTIES FOR 1866.—Quite a large number of novelties are offered by the dealers in seeds, principally from the German collections, where they have been introduced or originated. Among the great quantity too numerous to particularize, we note the following, which appear to be the most remarkable and valuable acquisitions:—

AGROSTEMMA CŒLS ROSA FLORE PLENO.—A new and desirable variety of this old and pretty annual, producing an abundance of double blossoms, about the size of the Portulacca. The distinct foliage and the profusion of blossoms render it a fine plant for masses of dwarf flowering annuals.

CEDRONELLA CANA.—This is a Salvia-like plant, with fragrant foliage, and long spikes of deep purple flowers retaining the purple hue of the calyxes for a long time after the flowers have fallen. It is a hardy perennial, but flowers abundantly the first year.

DIANTHUS HEDDEWIOI NANA FLORE ALBO PLENO.—A new double variety of the beautiful Japan pink, of a very compact dwarfish habit, producing with great constancy pure double white flowers.

PINK SARAH HOWARD.—A new hybrid, grows about two feet high, of a branching habit, with numerous stems terminated with double white flowers. It flowers abundantly all the autumn and winter and appears to be a valuable acquisition.

PALAFOXIANA HOOKERIANA.—A new Texan annual of great beauty, being much dwarfer and more branching than the P Texana. The flowers are larger, with broader florets, and are produced in large corymbs; color, a bright rosy crimson, with a deeper centre. It flowers abundantly all summer.—*Magazine of Horticulture.*

THE ASTER.

We are indebted to Mr. James Vick for the accompanying cuts of these beautiful flowers, which have been advancing in public favor for the last twenty years. They are hardy annuals, and a very pretty effect is produced by planting them in a bed; a foot apart each way is the usual distance. The soil should be rich, deep, and rather moist. A good mulching is very beneficial to them. They are of various colors: red, white, pink, blue, and all possible shades. The tall varieties need a little support; a short stick should be driven into the ground; tie them well up to it. For a fall flower none are more beautiful.

Nothing evidences a taste for the refined and beautiful more than a well kept flower garden, with its different varieties of annuals, biennials, and perennials of different shades and colors. There is a secret influence arising from them which makes every one feel happier and holier, and it has its influence upon all who come in contact with them. Let every farmer have part of the land next the house devoted to flowers. Let him consult his wife and daughters to assist him in laying it out, and it will very soon become the most interesting, beautiful and profitable portion of his farm.

Rose Aster, *(one-eight natural size.)*

Extracts from Correspondence.

J. W. Porter writes from Southern Indiana, May 6, as follows:—

Every one, over forty in my neighborhood that takes your paper speaks in the highest terms of it. I have been getting out Osage seed this week; had no trouble to get those out that were frozen: all that is wanting is large tubs or boxes and plenty of water, as seed goes to the bottom as soon as freed from pulp. I have planted two miles in hedge rows wherever I wanted hedge, and could get the ground in good condition. I planted in rows, about one seed to every inch—will take out, if it comes up well. I have over one acre of nursery stock planted in rows, two and a half feet apart, and drilled very thick in rows, and have a good deal of seed yet to plant. Seed sprouts in two days if kept in warm water. Weather continues very dry and cold, wind from north all the week. Very little corn planted. (May 6th,) farmers all ready for planting next week. Wheat looks very bad—so dry that it does not stool out any. It looks to me as though the dry land will not make anything. I have eight splendid hyacinths, and two tulips, (said by those who ought to know,) that are a wonder to all who see them. If the people do not forget, Mr. Vick will get several extra orders from old Vermillion next fall. I have several tulips that are not in bloom yet, and three bulbs that will not bloom, I think, as they have sent up only one blade. I shall plant another installment of the seed you sent me next week. I could not have done much with them if I had not had Vick's catalogue. I am very fond of flowers, but other business presses so, that I do not get time to give them the attention which is desirable. Much of what I have got has been through the liberality of others. A little from each has at last made considerable of a show.

I got my White Pine I wrote about. Went thirty miles after them. Got 360 little pines of one year's growth. Have them all set out in good rich ground.

The English Walnut.—We desire to say a word for the English walnut. We consider this fruit as more profitable to cultivate than the chestnut. The tree grows readily, affords good shade, and will commence to produce regular crops of fruit in ten years, and will add to the quantity each year as the tree increases in size. The fruit is much sought after in its green state for pickling; and in its ripe state it is better than those imported from England. Its quality every one relishes. The price it commands at the fruiterers will always doubly repay the trouble and expense attending the gathering and marketing. We believe the English walnut can be obtained at the nurseries.—*Germantown Telegraph.*

Ladies' Department.

MADELINE'S KITCHEN CABINET.

A NEW KITCHEN ERA.

WRITTEN FOR THE AMERICAN FARMER.

THE great Parisian *Chef* does not propose that he shall teach any woman, in twenty lessons, of two hours each, all that every woman ought to know, of the science of cookery. That would be a physical and moral impossibility, even if we were all born kitchen maids, with an inherent tact for cookery.

M. Blot's philosophy supposes that the mistress of every household has *brains*, and will turn them to such account, that having gone through twenty practical lessons in cooking the standard dishes, by making the principles taught, the basis of all after kitchen economy, she will be enabled to improvise dishes to suit all seasons and sorts of tastes, and people, in all conditions of life, until variety shall become endless. Indeed, the material afforded as food for mankind in its various forms, may be by the joint action of brains and caloric, transmuted into a hundred thousand wholesome and palatable dishes, as easily as the twenty-six letters of the alphabet in their varied combinations, give us the 85,000 words in our language.

The second lesson at our cooking academy opened with—

1. POTAGE VERMICELLI.—Rich broth, either of veal, beef, or mutton, is first prepared, and kept at a moderate simmer over a slow fire. Then the vermicelli, having been previously soaked in tepid water ten minutes, is put into the broth, and after simmering a quarter of an hour, season with salt and pepper, cook another quarter of an hour, and it is ready to serve.

2. FISH, *Anchovy sauce.*—The fish is boiled in just enough water to cover it. Season the fish, as it begins to cook, with salt, pepper, thyme, cloves, carrots and onion, sliced very thin.

To make the sauce, take a gill of the broth in which the fish is cooking; add to it a tablespoonful of flour, a like quantity of butter, the same of anchovy sauce, stir all together thoroughly, boil three or four minutes, and pour over the fish, send to the table under cover immediately.

3. OYSTERS, *Broiled.*—First, season the oysters with pepper; add salt, if they require it; roll them separately in cracker dust, or very fine bread crumbs, and broil over bright, live coals. For sauce, use melted butter with vinegar.

4. OYSTERS, *roasted.*—Select, so as to have the oysters as near of one size as convenient, place them on the gridiron, the full or rounded shell downwards, over hot coals, not too close; and when the shell gapes open, sift in a little pepper on each oyster. Serve either in the shell, or removed, and placed in a closely covered dish.

5. MUTTON CHOPS, *Jardinier.*—Have the iron frying pan—a thick, cast iron one, is best—pretty hot, two spoonsfull of butter. I shall use nice clean dripping hissing hot; lay in the chops, hurry the frying till brown on one side; turn quickly, brown the other side, make a sauce of a little broth, butter and flour, turn over the chops in the pan, continue the cooking five minutes, and then serve directly.

6. CHICKEN *in salad.*—Cut cold boiled, or roast chicken into small thin bits, spread them over the plate, strew over them celery chopped fine; then salt, pepper, and if you like it, oil. I consider oil on chicken an utter abomination. Take the yolks of two eggs boiled so hard that they will crumble like meal; mix them with fresh, yellow mustard, and spread thin and evenly over the salad. Slice thin, two or three hard boiled eggs, and dispose of them as ornamentally on the dish as you can.

7. VENISON *saute.*—Venison steaks cut thin and simply fried brown in butter—fat is my advice. Butter will frequently scorch, and then it is abominable.

8. CARROTS, *fines herbes.*—Cut carrots into slices a quarter of an inch thick, and boil in a saucepan slowly. When the carrots are soft, add a thick broth made of a few spoonsfull of any sort of cold soup, a spoonfull of flour, a little parsley cut very fine, onion ditto, salt and pepper, and cook five minutes.

9. BEANS *au jus.*—Soak small white beans twenty-four hours. Parboil ten minutes. Change the water and boil soft. Turn off the water, and mix with the beans a little parsley cut fine in a rich broth of butter, pepper and salt, in a gill of water, and cook moderately ten minutes.

10. CABBAGE, *stewed.*—Quarter and cut out all the hard core part of the stump side. Chop the cabbage fine, put in with it slices of fat, salt pork cut thin, onion cut in slices, and when cooked thoroughly done, drain all the water off, and season with butter, vinegar and pepper.

11. GENOISES.—Flour, sugar, eggs beaten, chopped almonds, a little water to make into a paste flavored with lemon juice, and baked in thin flakes.

12. BISCUIT, *a la cruller.*—A very pretty, light biscuit, made up and cooked quick, as we all understand how to make crullers.

M. Blot tells us that no sort of melons should be sent to the table as a dessert. Always take melons next after soup.

Carrots are refreshing food, beans properly cooked, the most nourishing, and venison the most stimulating of anything that we eat in meat form.

(To be continued.)

MOSS ON FLOWER POTS.—Ladies who are fond of cultivating flowers in the house, will find great benefit to the plants by spreading a coating of moss over the earth in their flower pots. This keeps the water from evaporating, and the temperature more uniform. Tea grounds are often used for the same purpose. Where a flower pot sets in a saucer, with a hole in the bottom of the pot, put a little sand in the saucer and cover it with moss, and you have a simple and admirable arrangement.

"WOMAN needs no eulogist—she speaks for *herself!*"

ON THE IMPORTANCE OF BOTTLING FRUIT.

It may be urged by many readers of The Farmer, that the prominence which we give to this subject is uncalled for and unnecessary, because every housekeeper understands the subject, and every good farmer's wife sees to it that her larder from year to year is well stocked with every kind and variety of fruit; but alas, dear reader, we greatly fear that you are mistaken, and that we are correct in our assertion, that, not one woman in ten, understands the simple process, much less the principle upon which success depends. Not long since, a lady friend complaining of want of success with pears and peaches, brought a bottle for our inspection. Its contents represented every shade of color from yellow to green. The cork had shrunk, and there being a deficiency of wax, the air had free ingress, and of course, however well the proper process had been followed, the result was a complete failure. Another lady came to us with the doleful intelligence that all her peaches had fermented, having been bottled only two weeks. Inquiring, we ascertained that the point of the shears had been inserted into each bottle for the purpose of letting out the air. Many are ignorant enough to suppose that as the bottle is not full when cold (as is always the case if the bottling has been properly done,) that the fruit will not keep, and so repeat the boiling process. We could relate some quite ludicrous incidents that have come under notice, but our object at this time is rather to insist upon the importance of the subject itself, and to endeavor to persuade all who do not now do so, to pay attention to it.

Every good farmer has more fruit of all kinds than is made use of at the time of ripening. Now, it is evidently the duty of the wife and daughter to secure some of this surplus for winter use. How shall this be done? Drying is a tedious, unpleasant operation, requiring days for its completion, and the sauce when made, is not in any degree equal to the natural fruit. Pound for pound is obsolete and numbered with the things that were. Bottling has the advantage of being quickly performed, of retaining the flavor of the fruit in its natural state, and of being far less expensive than pound for pound, but you may say, "there are the bottles to buy, and you can not get them for less than $2.50 per dozen." This is true, but are not your bottles worth the $2.50. You do not eat them—if you are careful you need not break them, and if you get a good kind, (Spencer's is infinitely superior to any other, as it is simple, and the lid indestructible,) will last you a life time, and you may leave them as a legacy to your children if you will. The plan of the writer is this. We make it a rule that whatever pecuniary misfortune occurs, a dozen good bottles shall be purchased and filled every year. Do not say, wife or daughter, that you can not afford to purchase a dozen bottles a year. Think a moment. Is there not some ornament or article of dress that could just as well be dispensed with, which would give pleasure only to yourself, the sacrifice of which would be pleasing to many. You will be amply repaid for your self-denial in the beaming countenances of your father, husband and children as they gather around the table. Surely no person can experience more pleasure than that derived from being able to offer to the parched and fevered lips of the invalid the delicious peach or cooling raspberries. If our plan has never been tried, let us urge upon you to commence at once, and if at first you don't succeed, try again.

DOMESTIC RECEIPTS.

Boiled Indian Pudding.—In one quart of boiling milk stir enough meal to make a stiff batter; add one cup chopped suet, one egg, half a cup of sirup, salt, one cup of raisins or dried fruit. Boil in a bag two hours. Serve with cream or sauce.

Red Currant Jelly.—Put the currants into a jar, in the oven, allowing them to remain till the juice is well out of them. If currants are plenty, and you wish the jelly quite clear and of excellent color, strain but gently; not mashing and squeezing the pulp as some do. To a pint of sirup add a pint of well pounded white sugar made quite hot. Before adding the sugar, boil the sirup very slowly for two minutes; then put in the hot sugar and boil ten minutes. Pour into common tumblers or small basins, and set to stand a while in the sun with a little gauze or net placed over them to keep the insects out. When you are ready to store them, cut nice white paper, the size of the surface of the jelly; dip in brandy, if you have it, and place close upon the jelly. Cover the jars.

Raspberry Vinegar.—Every housekeeper should endeavor to have at least a small quantity of this delightful beverage. In cases of fevers it is indispensable, and will often quiet and sooth when nothing else will. Put two quarts of red raspberries, nice and fresh, into a jar, and pour over them a quart of good vinegar. Let it stand twenty-four hours. Strain through a flannel bag. Pour this liquid over two more quarts of fresh berries, and again let it stand twenty-four hours. Strain again. Allow three-quarters of a pound of loaf or good white sugar to every pint of juice. Stir well into the liquid, put into a stone jar, cover closely, and set to stand in a kettle of boiling water to be kept boiling for an hour. Strain it, and bottle ready for use. A tablespoonfull to a tumbler of cold water is the manner of using it.

To Cook Codfish.—Take a piece of fish about three inches square. Freshen for five minutes in boiling water. Take it out, and shred very fine. Add one quart of milk and two tablespoonsfull of cream. Set on the stove to boil, while you prepare thickening in the following way. Take a tablespoonfull of flour and a little butter and pepper. Mix well together, and add a very little milk or water to make a batter. This should be perfectly smooth and free from all lumps. Add to the milk and fish, boil up and serve.

To Prevent Holes in Stockings.—Darn as soon as they become thin.

Miscellaneous.

Two lovers stood upon the shore
Of Massachusetts bay,
Bidding a sad farewell before
Seth tore himself away.
"I'll marry you when I come back,
My Sally Ann," says he;
And then he took a little smack,
And went away to sea.

A LAWYER who prided himself upon his skill in cross-examining a witness, had once an odd looking genius upon whom to operate. "You say, sir, that the prisoner is a thief?" "Yes sir, because she confessed it." "And you also swear that she bound shoes for you subsequent to the confession!" "I do, sir." "Then," giving a sagacious look to the court, "are we to understand that you employ dishonest persons to work for you even after their rascalities are known?" "Of course; how else, pray, could I get assistance from lawyers?" The witness was peremptorily ordered to "stand down."

A LADY writes us to know, why a gardener is the most extraordinary man in the world? We suppose it is because no man has more business on *earth*, and he always *chooses good ground* for what he does. He commands his *thyme*, is master of *the mint*, and he raises his *celery* every year. It is a bad year that will not produce a *plum*. He meets more *boughs* than a member of Congress. He makes *raking* his business, as many fine gentlemen do, but he makes it an advantage, both in his health and fortune which is seldom the case; and gives *heartsease* to whom he pleases, and tho' he is plain in his own dress with his *bachelor's buttons*, yet he encourages *coxcombs* and greatly admires *prince's feathers* and the *Pride of London*. He with pleasure beholds his *love lies bleeding* under a *weeping willow*. He is a great antiquarian having in his possession, *Adam's needle*, *Soloman's seal*, *Jacob's Ladder*, *tree of life*, *the holy thorn*, *Venus' looking glass*, and the *pride of France*. He has crossed the line oftener than any mariner in the United States, but his greatest pride and the *world's envy* is that he can *yew* whenever he pleases.

WAGGS went to the station of one of the railroads the other evening, and finding the best carriage full, said in a loud tone, "Why this carriage isn't going." Of course these words caused a stampede, and Waggs took the best seat. The train soon moved off. In the midst of the indignation the wag was questioned:

"You said this carriage was'nt going."

"Well, it wasn't then," replied Waggs, "but it is now."

YOU CAN NEVER.—Boys and girls, what is it that you can never catch, though you chase after it as on the wings of the wind?

You can never catch the word that has once gone out of your lips. Once spoken, it is out of your reach; do your best, you can never recall it.

Therefore, take care what you say.

A MAN coming home late one night a little more than "half seas over," feeling thirsty, procured a glass of water and drank it. In doing so he swallowed a small ball of silk that lay in the bottom of the tumbler, the end catching his teeth. Feeling something in his mouth, and not knowing what it was, he began pulling at the end, and the little ball unrolling, he soon had several feet in his hands, and still no end apparently. Terrified, he shouted at the top of his voice, "Wife! wife! I say wife, come here! I am unravelling!"

A SUBSCRIBER writes to a Western editor—"I don't want your paper any longer." To which the editor replies—"I would not make it any longer if you did. Its present length suits me very well."

AN Irishman came to Dr. Russell and said: "Arrah, docthor, it is no use at all to give me an emetic. I tried it twice in Dooblin, and it would not stay on my stomach either time."

"I bequeath," said an Irishman, in his will, "to my beloved wife, all my property without reserve, and to my eldest son, Patrick, one-half of the remainder, and to Dennis, my youngest the rest. If anything is left it may go to Terrance McCarty."

"I KNOW every rock on the coast," cried an Irish pilot. At that moment the ship struck, when he exclaimed, "and that's one of them."

ENIGMAS, RIDDLES, &c.

My 5, 7, 8, is a domestic animal.
My 5, 1, 8, is a kind of bed.
My 4, 7, 8, is an unpleasant animal.
My 6, 7, 8, is a grain.
My 3, 7, 8, is to partake.
My 2, 7, 8, is a receptacle.
My whole is a useful article of dress.

What farmers often do to their cattle while plowing.
That which is often done to a horse's tail.
Part of the neck of an ox.
A kind of sheep.
A stomach of a cow.
A kind of harrow.
A part of a watering can.
The farmer's own fruit.
The most useful metal to the farmer.
Part of an animal's face.
What farmers should have in summer.
Part of an animal.
A kind of manure.
The initials of the proper answers taken in order will spell the most useful operation of farm work.

My 345, you do.
When nature tells you to.
But if my whole you do deprive.
Of second, third, fourth and fifth.
It will be no use for you to sow.
For I am sure it will not grow.

Editor's Table.

Prize Essays.

We have, with great care, made the following selections for prize essays, to be published in The American Farmer, and we make the offer, to send a dollar book to the person who will send us the best communication or communications on any of these subjects. The writer to select the book he or she wishes. The essays should be short, as our space is limited. They should occupy not to exceed a page of The Farmer, or less. They must be sent in by the first of August, as we desire to publish them in the October number. They will be submitted to a competent committee, and those accepted will be published, and the books at once sent to those who send in the best. We want plain, practical statements of facts, and we hope our readers will let us hear from them on all of these subjects.

1. On buildings suitable for a large or small farm, with plans.
2. On the importance of shelter for stock in winter.
3. On winter work on the farm.
4. On fattening cattle and sheep in winter.
5. On preparing fire wood for winter use.
6. On preserving roots for winter use.
7. On the best feed for stock in winter.
8. On the management of stock in winter.
9. On making and putting down butter for winter use.
10. On curing pork and hams.
11. On the different breeds of cattle.
12. On the different breeds of horses.
13. On the different breeds of sheep.
14. On the different breeds of swine.
15. On the breeding, rearing and fattening of pigs.
16. On the management of fowls in winter, so as to secure a full supply of eggs.
17. The best method of improving exhausted land.
18. How to keep up the fertility of the soil.
19. On underdraining.
20. On the best rotation of crops on a farm.
21. On the management and application of barnyard manure.
22. On the recreation and amusement of farmers and their families in winter.
23. On the modes, system, and local characteristics of farming in each of the different States—an essay from each State.
24. On the same in Canada.
25. On Bee culture.

Now is the Time to Get up a Club.—Our offer to send The American Farmer for the next six months, for 50, or in clubs, at 37 1-2 cents each, is still open, and we hope our friends will send on what names they have, as fast as they get them. Our printed subscription lists began to come back to us filled with names, before we had finished mailing the last number, and we would return thanks to those who have already sent in clubs, and hope to hear soon from others.

Monroe County Sheep Festival.

On the 2d of May we had the pleasure of meeting a large number of the farmers of Monroe county, at their annual sheep shearing festival, which took place this year on the farm of L. J. Whitney, East Clarkson. The day was exceedingly cold for the time of year, with a strong northwesterly wind blowing, and we pitied the poor animals which were shorn of their warm "overcoats." We started early in the morning, had a pleasant ride through twenty miles of the thickest settled land in Monroe county, and passed through large orchards on each side of the road for nearly the whole distance. The apple and peach orchards looked thrifty and showed the evidence of good cultivation. Here and there we saw one, into which it looked to us as if the light of the sun could never enter, and that the saw and knife were unknown tools to the owner, or at least could not be found in his tool chest. Most of the trees would be improved by a free use of the knife or saw, as they are growing decidedly "top heavy," and require a good deal of pruning. Many new orchards are set out, and several are just coming into bearing. Winter wheat in many places looked well, but the land requires underdraining in many places, and we were glad to see a large number of tiles on some farms, which showed that the farmer knew the advantages to be derived from underdraining.

On arriving at Mr. Whitney's we found about one hundred and fifty farmers gathered there, some of whom had come a great distance. These annual gatherings are looked forward to by the farmers and farmers' wives, who generally accompany them, with great interest and expectation of having a good social time. Mr. Whitney and his amiable wife had made every preparation for their guests, who where most cordially received, their spacious tables being loaded down with good things, and everybody felt perfectly at home.

The fair of this year commenced with the appointment of Alvin Webster, of Ogden, chairman; D. W. Conkling, Secretary, and Isaac Bowers, S. Warner, and F. Fosmire, weighing committee. The sheep, (Merinos,) were then sheared in the following order:

	Age.	Age of fleece.	Weight of sheep.	Weig't fleece.
	Years.	mo's, d'ys	lbs.	lb. oz.
W. Merritt,	B	5	11	182	16-10
L. Babcock,	B	2	12- 2	107	17- 1
H. Quivey,	B	2	12	93½	17- 6
I. J. Whitney,	B	4	12	97½	18- 8
John Pierce,	B	2	11-14	127	22- 4
J. H. Vansicle,	B	2	12-15	70	14- 6
I. J. Whitney,	B	2	12	180	24-11
I. J. Whitney,	B	2	12	101½	18- 6
H. Quivey,	B	1	12	138½	19- 8
H. Quivey,	B	6	12- 2	133½	19- 8
Pierce & Fellows,	E	2	11-14	62	13-08
H. Quivey,	B	2	12	103½	20-13
H. Quivey,	B	2	11	110½	14-13
H. S. Merritt,	E	2	11	56	13-15
Pierce & Fellows,	E	2	11-14	100	18- 1
A. Fishbaugh,	E	2	12	86½	10-12
T. Perrill,	E	1	12		

Mr. Whitney carries off the largest fleece again this year, his three year old Spanish Merino, of last year, weighing 135 pounds, produced 23 pounds of wool. The meeting adjourned to meet the first Wednesday in May, 1867, at J. P. Milliner's Adam's Basin.

Literary Notices, &c.

THE PRACTICAL ENTOMOLOGIST.

In the April Number of THE FARMER page 131, in calling attention to this valuable work, we stated that it would be "distributed gratuitously to farmers and others, who sent twelve cents postage." We learn from the last number, just received, that owing to the increasing demand, the expenses of publication exceed the receipts from advertising, upon which it depended; and the society announces that all new subscribers must remit fifty cents for one year. Please make a note of this.

THE EDINGBURGH REVIEW: Leonard Scott & Co., New York.

The January number of this able review is now before us, with its table of contents, as follows: Modern Fresco Painting, the Youth of Cardinal Mazarin, Public Galleries and Irresponsible Boards, an Economist of the Fourteenth Century, Recent Changes in the Art of War, Boner's Transylvania, Was Shakspeare a Roman Catholic? Corn and Cattle, The Erckmana Chatrian Novels, Mary Tudor, and Brandon, Duke of Suffolk, Extension of the Franchise.

Blackwood's Edinburgh Review for March is out (see notice page 100 AMERICAN FARMER.)

THE PRINCIPLES OF BIOLOGY. By Herbert Spencer, author of the "Principles of Psychology," "Illustrations of Progress," "First Principles," "Social Statistics," "Education" &c., Vol. 1. New York: D. Appleton & Co: For sale by Steele & Avery of this city, price $2.50.

The subject of Biology, or the science of life, now in course of publication, by Mr. Herbert Spencer, is to be treated in two volumes, of which the present is the first. Vol. 2 will probably appear in a few months. The aim of this work, is to set forth the general truths of Biology, as illustrative of, and as interpreted by the laws of evolution, the special truths being introduced only so far as is needful for elucidation of the general truths.

THE COMPLETE FARRIER, OR HORSE DOCTOR.—A Guide for the Treatment of Horses in all Diseases. By John C. Knowlson, an English Farrier of Fifty Years' Experience, Hinsdale, N. H.: Hunter & Co., Publishers. Price 15 cents, including postage, to any address.

HORSE TAMING by a New Method, as practiced by J. S. Rarey. Also rules for Purchasing a Horse. Hinsdale, N. H.: Hunter & Co., Publishers, 1866. Price 15 cents. Mailed postpaid on receipt of price.

These valuable little books should be in the hands of every person who owns a horse. The one contains full instructions on training, managing, and feeding horses and colts; the other complete directions for treating horses in all kinds of diseases. We would recommend our readers to get the two works, which will be sent to any address, postage paid, for only 25 cents for the two.

ESSAYS ON THE SOILING OF CATTLE. Illustrated from Experience, and an address, containing suggestions which may be useful to farmers. By Josiah Quincy. With a memoir of the author, by Edmund Quincy. Boston: A. Williams & Co.

This work is a strong advocate of the soiling system for stock, and contains two prize essays. The first was prepared at the request of the Massachusetts Agricultural Society, and the second at the request of the trustees of the Norfolk Agricultural Society. They both aim to prove from experience the advantages of soiling over the common practice of pasturing. It is beautifully got up, in fine style and on good paper, and should be read by every farmer.

HIGH FARMING WITHOUT MANURE. Six Lectures on Agriculture, delivered at the Experimental Farm at Vincennes, France, by M. George Ville. Boston: A. Williams & Co. Price 80 cents.

The researches of M. Ville, who has been making various experiments for a number of years are given in this book. Farm yard manure he states is not sufficiciently abundant to restore to the soil all that is taken from it. Ten years of assiduous observation and experiment led him to recognize that the aliment preferred by cereals, is nitrogen; by leguminous plants, potassa; by roots, phosphates. These are the preferred, but not the exclusive elements, and that these three substances are required by plants, and even lime must be added. They are plain, simple statements of facts, and are given in a course of lectures that all can understand.

We are indebted to the Secretary of the Pensylvania Horticultural Society for the transactions of the Society for the year 1865.

DAIRYMEN'S REPORT.—We have received from G. B. Weeks, Secretary of the American Dairymen's Association, a copy of the first annual report, together with the report of the Ohio Dairymen's Association, for 1865. The work is beautifully got up, and its contents and general make up confers great credit upon the Dairymen's Association. Copies can be obtained by addressing the Secretary at Verona, N. Y.

TRIAL OF MOWERS, &C.—The New York State Agricultural Society have selected Auburn as the place to hold the trial of mowers, reapers, threshers, and other implements. The trial will commenee July 10, and continue until every machine offered has had a thorough trial.

MAGIC GRAIN BINDER.—This simple arrangement consists merely of a small iron hook with tarred twine, a specimen of which can be seen in our office. A man with this arrangement can bind very fast with no loss of time. It ties up a sheaf to perfection. Manufactured by Gibbud, Bros., Waterbury, Conn.

X. A. WILLARD, of Little Falls, N. Y., has sailed for Great Britain for the purpose of gathering all the information in regard to cheese and butter making that he can obtain for the American Dairymen's Association

NEW YORK STATE AGRICULTURAL SOCIETY.—The next annual fair of this Society will be held at Saratoga Springs, Sept. 11–14.

THE Canada Provincial Fair will be held this year at Toronto, Sept. 25–28.

THE highest fountain in the world is on the estate of the Duke of Devonshire—its hight 267 feet.

Notes on the Weather, from April 15th to May 15th.

The temperature is one great subject of interest. As the first half of April had been very warm, so the last half continued to be. The mean heat was 51.6°, or 4.4° above the general average, 47.1; and the heat of the month was 48.7°, or 4.5° above the due average. With heat above the general mean, and with moderate rain except on the 23d. The last half had been pleasant on the whole. The coldest morning of the last half was 33°, on the 26th; but the coldest day, 36.3°, was the 24th. The hottest noon, 85°, on the 20th, gave the hottest day, 73°, an exceedingly hot day for the season. Only one hotter had occurred in the 29 years previous, in this half, 88°, at noon, April 25th, 1840, and its day, 75°. The midday heat rarely exceeds 80° in the last half of April.

The water fallen was 3.10 inches in the month, of which 2.78 inches fell from 8 A. M. of the 23d, with snow in the evening, and on the next day to 10 o'clock only snow, all which soon disappeared. This storm was a great relief to the country, as it extended over New England as well as this State, and to the south and west. The slight shower of the 14th, ended with a splendid rainbow at sunset of full half circle and very brilliant colors. On the 16th, a fine aurora borealis at the north, a bright auroral cloud with shooting pillars from 8 o'clock to 10, when the arch which had risen from the upper part of the cloud, passing towards the zenith, broke into parallel lines two or three degrees long, and lying from north towards the equator, slowly vanished. The work of the farmers made fine progress. Lilac began to show its leaves about the 17th, and also the Missouri (Golden) currant. Early cherries began to flower on the 22d, but no progress for near a week, proves the power of the rain and snow storm and cooler weather, when the blossoms came out fully at the close of the month. The wild early flowers, trailing arbutus, spring beauty, &c., had also appeared. Many windy days and dusty.

The water of rain and snow in these four months of this year amounts to 9.68 inches, which exceeds the general average by nearly *one* inch, a result not anticipated.

Of these four months the mean temperature is 31.5° only—near half a degree below the general average, and the cold periods have not been so severe as before. The cold of January 8th, 1860, was severe, the mean being fully two-thirds of a degree below zero. But in 1859, Jan. 10, the mean of the day was 6.7° below zero; of 1857, Jan. 18th, was 6.3° below; and of 1855, Feb. 6, was 13.7 below.

May.—The first week of May was cool, and the second warmer; and of the first 15 days, the mean temperature was 51.5°, or 1.5° below the general average. The coldest morning was 37°, coldest noon, 44°, and hottest noon, 80° on the 12th, which was the hottest day, 69°. Little rain fell till the 13th, when there was nearly an inch of water, and in the half month 1.19 inches. Vegetation has made good, not rapid progress; grass and wheat grown finely; cherries blossomed abundantly; pears and apples have begun to flower, and peaches are only a little in advance of them. Lilac, white and purple, just begun to flower; Golden or Missouri currant full in bloom; honeysuckle just beginning to open Many of the Sugar Maples bear no flowers this year; horse chesnut opening some blossoms and yellow buckeye fully in flower.

A frost occurred on the 14th and 15th, not heavy, except in low grounds; it is yet to be seen whether the fruit has been injured; probably, it has not. Whose are the seasons? and from whom should be gratitude?

Back Numbers.—Each number of The Farmer is stereotyped, so that we can at all times supply back numbers to any extent. All who subscribe will receive the entire volume. Any numbers that miss in the mails we shall be pleased to replace at any time. The American Farmer for one year will make a beautiful volume of 384 pages, filled with the experience of practical farmers, and profusely embellished with first-class engravings.

We hope our readers will bear in mind, our offer to send the paper on trial, to any address, for the remainder of the year for fifty cents, or in clubs, at only 37 1-2 cents each. We earnestly request all of our subscribers to assist us in circulating The American Farmer among their friends and neighbors; and now is a good time to interest them, and get them to give it a trial. Those who wish can have the back numbers from January, as we stereotype The Farmer, and can at all times supply them; or if they prefer to subscribe now for a year, they can have it, from July 1860, to July, 1867, for only one dollar. Let all who receive this number try and send one or more names.

If any of our readers have failed to receive any of the back numbers, we shall be glad to be informed of the fact, and will replace any that are missing.

To Advertisers.—All advertisements should be received on or before the 20th of the month to insure insertion in the following month.

See our list of prize essays on page 193, and let us hear from you on one or more of these subjects. Good short practical ideas are what we want. Shall we have them?

Messrs Eds.:—I have but little education, as you will see from my writing, but I like your paper so well that I cannot help letting you know it. I am just starting out in the world, and have but little capital. Hence, I will pay close attention, to what I find in The Farmer, concerning a few acres and large profits; or in other words I have but few acres of land, and wish to know how to till it to the best advantage. It is interesting to me to read about bees, as I have one hive, and wish them to increase.—*M., Ind.*

Thanks, friend M., for your kind letter We shall try to comply with your wishes, and pleased to hear that you like the paper.

THE MARKETS.

ROCHESTER, May 23, 1866.

FLOUR—White wheat, $15@$16. Red, $11@14. Extra State, $8.50@$9.

GRAIN—White wheat, 300c. Red, 275@285c. Corn, 80c. Barley, 85@90c. Oats, 55c. Rye, 80@90c.

PROVISIONS—Mess pork, $31.50@32.50. Lard, 23c. Butter, 25@35c. Eggs, 16c. Chickens, 20@22c. Turkeys, 20@22c. Cheese, 20@24c. Potatoes, $1@1.25.

NEW YORK, May 22.

FLOUR—The market for State and Western flour is a shade firmer, with only a moderate demand. Sales—Superfine State, $7@$8. Extra State, $7.95@$8.40. Choice State, $8.45@$9.80. Superfine Western, $7@$8. Common to medium extra Western, $8@$9. Common to good shipping brands extra round hoop Ohio, $9@$9.65—the market closing quiet. Canadian flour shade firmer, but quiet, at $8.65@$9.65 for common, and $9.70@$12.90.

GRAIN—New Amber Mich, 215c. White Michigan, 300c. Rye, quiet; at 85c for Western and 115c for Canada. Corn, 82@85c.

Special Notices.

THE PRINCESS ALEXANDRA'S CHRISTMAS GIFT.—An English paper tells a little story of the Princess Alexandra, which admirably illustrates her domestic habits, her amiable disposition, and kindness of heart. Crossing the hall of Marlborough House, late one afternoon, a few days before Christmas, Her Royal Highness observed a young girl of singularly delicate and refined appearance, waiting, and also standing, though evidently fatigued and faint.

The Princess kindly told her to sit down, asked her errand, and discovered that she had brought home some little garment which had been ordered for the children, and which the Princess, who is much interested in Sewing Machines, and understands their merits, had desired should be made upon the Grover & Baker Machine. Interested in the modest, intelligent appearance and gentle manner of the girl, Her Highness desired her to follow her to her room, which she did, without the remotest idea who the beautiful, condescending lady was.

After an examination of the articles, the Princess asked who it was that had executed the work. The girl modestly confessed that she herself had done the most of it. The Princess said it was done very nicely, and finally drew from her protege the simple facts of her condition; how she had an invalid mother, whom she was obliged to leave all alone, while she went to the shop to work; how the fashionable rage for the Grover & Baker Sewing had suggested to her to become a finished operator on the Grover & Baker machine, with the hope, oh, very, very far distant, that some time she might own a machine of her own, and be able to work at home, and earn something more than bread for her poor sick mother.

The Princess rang the bell, ordered a bottle of wine, some biscuits and oranges to be packed and brought to her. Meantime she had asked the wondering, bewildered child, for she was little more, where she lived, and took down the address upon her tablets with her own hand. She then gave her the delicacies which had been put into a neat little basket, and told her to take them to her mother.

On Christmas morning, into the clean apartment of the invalid mother and her astonished and delighted daughter, was borne a handsome Sewing Machine, with a slip of paper, on which were the words: "A Christmas Gift from Alexandra."—*N. Y. Bouriloir.*

ADVERTISEMENTS.

RATES OF ADVERTISING—$2.50 per square, or 25 cents a line per month; one column, each insertion, $25.00. Displayed advertisements and cuts inserted at the same rates. Special notices, 50 cents a line.

VOLUME III. NUMBER 1.

HOURS AT HOME.

The May number begins the second year of HOURS AT HOME. The twelve numbers already issued contain over two hundred articles by very many of the ablest and most popular writers in this country and in Europe. For the new year the conductors of HOURS AT HOME announce the following

SPECIAL ATTRACTIONS:

A series of papers on RURAL TOPICS, by

Donald G. Mitchell, ("Ik. Marvel,")

Will be commenced in the June number. Also a series by

Dr. J. G. Holland, ("Timothy Titcomb.")

And by

Rev. Dr. Bushnell.

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	Value.	No. of Subscr's
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All names sent in before the first of June, will receive the June number.

Our summer campaign is now before you—try and do all you can to get subscribers, and by so doing you will do good and encourage us at the same time to make THE AMERICAN FARMER still more worthy the liberal patronage it already enjoys.

CONTENTS OF THIS NUMBER.

STEREOTYPED BY JAMES LENNOX, 62 BUFFALO ST., ROCHESTER, N. Y.

ENTERED according to Act of Congress, in the year 1866, by JOHN TURNER, in the Clerk's Office of the District Court of the United States, for the Northern District of New York.

VOLUME I. ROCHESTER, N. Y., JULY, 1866. No. 7.

JULY

"It is a sultry day; the sun has drank
The dew that lay upon the morning grass,
There is no rustling in the lofty elm
That canopies my dwelling, and its shade
Scarce cools me. All is silent save the faint
And uninterrupted murmurs of the bee,
Settling on the sick flowers, and then again
Instantly on the wing.
* * * * * *
Gentle and valuable spirit of the air
O come and breathe upon the fainting earth
Coolness and life."

The cold of spring is now succeeded by hot summer weather. The sun shines down upon us with all its power, withering up the tender plants, and scorching with its rays all vegetable life, and we sigh for the refreshing winds that come from a cooler clime, and for the gentle showers to refresh the parched earth.

WORK FOR THE MONTH.

HAYING and harvesting are the principal duties of this month on the farm, and consequently the most important, but we must not overlook the minor items, some of which are as follows:

ONIONS—Should be kept free from all weeds, and if large bulbs are desired, they should be thinned out to three or four inches apart in the rows.

BUCKWHEAT—Should be sown early this month, say about three pecks to the acre.

TURNIPS.—See what our correspondent says on this subject, on page 207.

BEES.—Join weak swarms this month. Evening is the best time to do it; then by morning peace will be restored, and one of the queens will be found dead. All swarms that issue after the 10th, should be united, so that they may be strong enough to stand the coming winter.

SUMMER FALLOWS.—Sheep should be turned on to summer fallows as soon as they look green.

CUTTING TIMBER—may still be done this month for fences or posts, and will last as we said in the last number, longer than those cut at any other time in the year.

KEEP DOWN THE WEEDS.—Let the war against these pests still continue. Don't allow one to grow. All are injurious to the growing crops, and the soil, robbing it of the life food of your cereals and root crops, and you of your dollars. Keep the hoe and cultivator going.

DOMESTIC ANIMALS.—"Train up a child in the way he should go, and when he is old he will not depart from it," is also applicable to our domestic animals. Let them be treated from the very first with gentleness and kindness, and they will be obedient and thrive. Do not use them unkindly, but make pets of them. Colts and heifers should have close attention; then there will be no trouble to break a colt, nor to milk a cow when she comes in.

CLEANING—should be the general rule of the summer months. While the stock is running at large, go over stables and cow houses, and have them thoroughly cleansed. Now is a good time to attend to this, and have all buildings sweet and clean before the fall and winter season comes on. Nothing like whitewashing to accomplish this, and your stock will thrive all the better for it.

RAINY DAYS.—Wood should be cut and split for winter use; stables and other outhouses cleansed, stock inspected, doors and gates that are off the hinges should be repaired. See that the plows and other implements are ready for immediate use, so as not to have to wait for them when wanted.

PERSONAL SUPERVISION.—"The farmer's hat in the field will sometimes do more than both his hands," said one of our correspondents in a back number. However faithful men may be, there is nothing like the head of a farmer being in sight, and the use of his eyes, are worth more than several pair of hands.

POULTRY—Should have as much room as possible, if confined. They like their freedom, but if kept in an enclosed yard they will thrive well if supplied with plenty of green food, fresh sods, gravel, lime, and any refuse stuff from the house. The hen

house should be frequently cleansed and well whitewashed constantly to keep them free from vermin. A little sulphur mixed with corn meal once or twice a week, and fed to the fowls, is a good preventive.

GRAIN HARVEST.—The best test for wheat is to take a kernel between the thumb and finger, and press it. If there is no milk in it, it is ready to cut. If the juices have ceased to flow into the berries nothing more can be obtained from the soil, therefore it is ready for harvest.

DRAINS.—Remove the sand which accumulates at the outlets, take a long-handled hoe and draw it all out, leaving a clean passage for the water. This should be attended to after every heavy rain storm, as drains need frequent attention, without which they get stopped up and fail to discharge the water.

FARM ADORNMENT.

IT is much to be regretted that this most interesting department of agricultural improvement should have been so generally neglected by the farmers of this country—that merely the land itself should be made the medium of a circulating currency through the cultivation of wheat and other cereals, thus bringing quick returns and ready profits in dollars and cents, but forgetting the more permanent deposit which every farm should be continually making in the improvement of its landscapes and proper cultivation, and rearing of stock or domestic animals, which seems to have been the mistake of all agriculturists in America from the landing of the pilgrim fathers until now. The great temptation to this has been the natural richness of the native soil, requiring little cultivation and no application of artificial or barn manure, standing as it did ready to receive a nucleus, in the shape of seed, around which to cluster a fund of wealth, to be gathered and garnered by the farmer at the harvest season. But this aboriginal richness of the soil is fast being, if it is not already exhausted, and the farmer of this country will now be obliged, like his less favored brethren on the eastern continent, to make agriculture a study, and to take every branch of his department of industry into earnest consideration, that he may be able to know where the most advantage may be gained, both in ready money and permanent investment.

Now every person of any experience, knows that a city lot or residence that is improved—that is, if its walks, its lawn and garden are properly laid out, and its trees advanced in size—is worth double or treble the value of the neighboring lot which is unimproved, though the climate and situation are equal. This, of course, is applicable to farm experience. A farm, where every field has a tree of some kind, under whose spreading branches the cow, the sheep, the horse, may find a grateful shelter from the summer heat of a noonday sun, and whose graceful foliage adds to the general appearance of the landscape—that farm we are confident to say, is worth from three to five times the value of the adjoining one which is destitute of shade trees, all other things being equal.

Another thought. It is a well known fact that human beings average less weight in summer than in winter, and that perspiration or heat has a tendency to weaken, &c. Surely that which is applicable to man, is applicable to his beast, and if this is so, and we all know how cooling a good shade tree is, and how eagerly the cattle seek its shelter from the sun and heat, it must be perceived at once that the value of a tree or two in each pasture or field is not only apparent in the appearance of the farm, but also in its advantage to cattle, in preventing the evaporation through the pores of the skin of those juices which should go to form milk, fat, flesh or muscle.

It certainly cannot be necessary for the argument to be continued, or that we should urge upon the intelligent farmers of this country an immediate commencing of improvement in this direction. The thing seems so easy, the advantages so apparent, that surely every lover of agricultural improvement, or even every money making farmer, will immediately turn his attention, if he has not done so already, to this branch of farm economy. In regard to the proper kind of trees to plant, the farmer may use his own judgment. Any tree is an ornament, but still some are more adapted for purposes of shade trees than others. We should advocate the planting of such trees as combine both beauty and shade, and which also yield a crop of fruit from year to year, such as the sugar maple, chesnut, black walnut, &c., &c. Quite large trees may be taken with care, from the woods, in the fall or spring, and being properly planted, yield a quicker return than when obtained at the nursery, and which of course, must necessarily be much smaller. This we say may be done with care, but the surest way is to plant small trees, and wait patiently for their growth. Last fall we planted at our back door a willow, a foot in diameter at least, in its widest part, and it is now putting out its green leaves, and showing other signs of vigor, &c.

***

A CORRESPONDENT of *The Ohio Farmer* cleared his farm of weevil, by sowing salt about the granaries and mows, and in every place that could be reached. He has not been troubled since this, although the barn had been infested for fifteen years.

NEVER defer till to-morrow the work of to-day.

AGRICULTURE IN NEW JERSEY.

WRITTEN FOR THE AMERICAN FARMER, BY W. J. THOMPSON.

MESSRS. EDS.:—Our next crop in rotation following the corn crop, is oats; though some of our farmers have given up the growing of oats, under the impression that they are so exhausting on the soil; hence with them, wheat follows corn. Oats should be sown as early in spring as the ground is dry enough to work, as experience goes to prove. Oats sown the last week of March or first week of April, will yield one-third more bushels per acre, are less liable to lodge, free from rust, and will weigh more to the bushel than if sown a month later. If the season is not suitable for early sowing, it is much better for the farmer to plant the land with some other crop, or make an open fallow for winter wheat, or rye, than to sow the first of May, and expect a crop, especially if it is a thin clay soil, for on such ground they would be the poorest and meanest crop he could raise, scarcely growing large enough to cradle, and yielding but few bushels of light and almost worthless grain, not paying the cost of growing. The quantity of seed sown varies from 2 1-2 to 3 1-2 bushels per acre; on a rich, loamy soil 2 1-2 bushels may do, but 3 1-2 is none too much for a light, soil.

We commence to harvest while the heads retain a slight greenish shade, as oats allowed to stand until dead ripe become straw broken and shell badly in gathering. The average yield per acre is about 35 bushels, though in favorable seasons, on good ground, 45 and 50 bushels are often obtained.

The cost and profit on an acre stands thus:

To amount of interest on land, at $100 per acre		$7.00
"	plowing, sowing, and harrowing in	2.50
"	3 bushels seed at 50 cts. per bush	1.50
"	cutting, raking and housing	3.00
"	Threshing 35 bushels, at 7 cts. per bushel	2.45
		$16.45
By 35 bushels of oats at 50 cts. per bushel		$17.50
By two loads of straw		8.00
		$25.50
		16.45
Net profit per acre		$9.05

As the straw almost half pays the cost of growing, there is a profit of 26 cents per bushel, the cost being but 24 cents—a pretty fair paying crop.

As soon as the oat crop is cleared off, the ground is plowed some 8 or 10 inches deep, so as to give the stubble a chance to rot, in preparation for a crop of winter wheat or rye. It is then let lay to the latter part of August, when the manure is drawn and spread on the ground at the rate of twenty-two horse loads per acre, when it is pretty well harrowed, so as to work the manure pretty well with the soil, after which it is again plowed (not so deep as at first,) and during the early part of September the grain is sown at the rate of 2 bushels of wheat or 5 pecks of rye per acre. Different modes of covering the seed are practiced; some use a two-horse cultivator, others a light plow; but the majority still adhere to the old method of harrowing in. Undoubtedly drilling in is the best mode, as it covers the seed all of a uniform depth. After all is completed, from 8 to 12 quarts of timothy seed is sown, and finished by rolling. The average yield is 18 or 20 bushels, though some farmers obtain as high as 30 or more bushels per acre. It is generally cut about the time the grain will bruise between the thumb and finger. The yield of rye is about 25 bushels, and pays full as well, if not better, than wheat, on account of the straw being worth as much again as wheat straw.

The cost and profit of an acre of wheat stands thus:

To amount of interest on land, at $100 per acre		$7.00
"	20 loads of manure, one-third charged to wheat	12.15
"	plowing, harrowing and rolling	4.50
"	cutting, raking, binding and housing	4.00
"	threshing 20 bushels, at 15 cents per bushel	3.00
"	two bushels of seed	4.00
		$34.65
By 20 bushels of wheat, at $2		$40.00
By one ton of straw		10.00
		$50.00
		34.65
Net profit per acre		$15.35

Cost per bushel $1.73 1-4 and 26 3-4 cents profit, not including the straw, which if taken into account, gives a profit of 76 3-4 cents per bushel.

The following spring we sow 15 or 20 pounds of clover seed to the acre, and in case all things prove favorable, we have the pleasure of seeing and mowing meadows which will cut a heavy burden of grass for some three or four years, when they are again broken up and pass through a similar rotation.

OUR EASTERN LETTER--No. 4.

WRITTEN FOR THE AMERICAN FARMER, BY G. A. BEACHETT, BELFAST, MAINE.

The weather during the past spring has been the general theme for conversation, speculation and wonderment. In the first place, we had a spring drouth with cold and backward weather, and to end with almost a deluge of water. One of the heaviest rain storms ever known here, occurred on the 28th and 29th of May, during which over four inches of water fell. It caused much destruction to seed in the ground, badly washing and inundating many fields. It was a very cold storm, and many sheep which had been sheared perished from exposure. The aggregate loss of sheep through the New England States will amount to several thousands. The storm also delayed planting, and not so much seed will be put into the ground as would otherwise have

been. Many fields will require to be re-planted, or else plowed up and sown to late grain. The latest frost was on the night of May 31.

Crop Prospects.—The usual breadth of land is under cultivation, and a considerably greater area has been planted to potatoes. The high price of them in this market this spring, has given an impetus to their cultivation. In fact, we hope to raise potatoes enough this year to supply "all the world and the rest of mankind." The apple orchards are just in blossom, with a prospect of a fair crop of fruit.

Markets.—The potato market has been quick and lively during the past two months. They now command 90 cts., but have been at $1. per bushel. Over nine thousand bushels were hauled into this market one day in March. Wool is a little on the decline. Merino, 50 cents; common, 42 and 45 cents. Butter, 25 and 35 cents, which brought 45 and 50 cents three weeks since. Stock well up and scarce. Farmers are raising nearly all their calves, which is a very hopeful sign. Apples—Baldwins, $8.50 and $9 per barrel. Eggs, 20 cents. Maine is a great egg producing State. Barley, 75 cents. Corn, home grown, $1.25. Hay, $10 and $15 per ton, loose.

Items.—Grass is very backward, and pastures are short. Many fields, particularly "new ground," winter killed badly. Unless we have continued wet weather the hay crop will be lighter than for many years. Hay and potatoes are our staple crops for export. The birds have all arrived; saw first cedar birds or "blow pickers," on 3d inst. The ash is just in leaf. The tent caterpillar is already at work on the apple trees, though I do not think they are so numerous as during the two past years. The soil is very wet, and but little farm work has been done the last ten days. The cold last winter was very sharp, and garden plants, particularly bulbs, suffered severely. A great amount of muck has been used this spring, both clear and composted with other fertilizers, and our farmers will no doubt be able to decide as to its value when the crops are harvested. Plaster is extensively used in this State with good results, particularly for potatoes.

State Fairs.—The annual fair of the New England Agricultural Society will be held September 4–7, at Brattleboro, Vt., in connection with the Vermont State Fair. There will probably be an extensive show of sheep and horses. Massachusetts, Connecticut, and New Hampshire also hold State fairs. Maine has not yet decided to have one.

Agricultural Colleges.—The farm for the Industrial College of Maine has been secured, but no further action has been taken, and there are no indications that suitable buildings will be obtained so that it can go into operation this year. The work of erecting buildings on the Massachusetts college grounds at Amherst has been suspended, owing to the unwillingness of the town authorities to pay the amount pledged towards their erection.

WHAT FEED MAKES THE MOST VALUABLE MANURE?

In answer to this question, lately asked by one of the outside members, Andrew W. Foot, Guilford, Conn., sends us the following table, prepared by Prof. Lawes, from actual experiments made in England, showing the comparative value of a tun of manure made from various kinds of food given to cattle. As but few have the work from which this is taken, it should be kept as a table of valuable reference. It does not increase our admiration of most crops, where manure is valuable, in a country where Indian corn can be grown so abundantly as in the great corn belt of America. But here is the table of values,—

1	Decorticated cotton seed cake	$27.86	
2	Rape cake	21.01	
3	Linseed cake	19.72	
4	Malt dust	18.21	
5	Lentils	16.51	
6	Linseed	16.65	
7	Tares	15.75	
8	Brans	15.75	
9	Peas	13.88	
10	Locust beans	4.81	
11	Oats	7.40	
12	Wheat	7.08	
13	Indian corn	$6.65	
14	Malt	6.65	
15	Barley	6.32	
16	Clover hay	6.64	
17	Meadow hay	6.48	
18	Oat straw	2.90	
19	Wheat straw	2.68	
20	Barley straw	2.25	
21	Potatoes	1.50	
22	Mangolds	1.97	
23	Swedish turnips	91	
24	Common turnips	86	
25	Carrots	68	

N. Y. Tribune.

POULTRY MANURE.—As we have often stated, we believe that our common management of poultry is wasteful and extravagant. We might make a great deal more by care in economizing the manure of the poultry house, and that is worth attending to. Here is what Geyerlin, whose book was alluded to in the *Home for Poultry*, recently published, says on this point:—

In France, as well as in our own country, most eminent chemists have proved by analysis that poultry manure is a most valuable fertilizer, and yet, for want of a proper system in housing poultry, it has as yet not been rendered available to rural economy. The celebrated Vanquelin says that when the value of manures is considered in relation to the amount of azote they contain, the poultry manure is one of the most active stimulants; and when, as a means of comparison, the following manures are taken, in parts of 1,000, it will be found that—

Horse Manure contains	4.0	parts of azote.
Guano as imported	49.7	do.
Guano when sifted of vegetable and stone	53.9	do.
Poultry Manure	83.0	do.

It will be seen that it is worth preserving, even though it may be small in amount.—*Plowman.*

THE stubborn, who bend not, the soonest will break.

HOP CULTURE.

VERMIN AND PARASITES OF THE HOP PLANT, AND THE REMEDIES.

WE give the subjoined communication from the pen of Mr. F. W. Collins, who has been a regular contributor to the pages of THE AMERICAN FARMER since its commencement, on the subject of Hop Culture.

Mr. C. has for many years devoted his almost entire attention to this branch of husbandry, and has visited and examined many of the most celebrated hop-growing districts in America and Europe. His improved method of training by means of stakes and twine, giving a horizontal support to the plant, is becoming deservedly popular, and will doubtless be generally adopted. See cut, page 83.

One of the most discouraging features of hop culture has been the depredations of the louse, and other insects, which have heretofore destroyed a large per centage of the crop. Mr. Collins, on a recent visit to England became possessed of the remedy which we published in the April number of THE FARMER, and was entirely satisfied of its adaptation to the necessities of the case. The knowledge of an effectual remedy for this scourge of our hop gardens, will be of untold value to growers.

Mr. Collins will from time to time communicate to the readers of THE AMERICAN FARMER information relative to the cultivation and condition of the hop plant, and all who desire to be informed on the subject, and avail themselves of his extensive experience as a planter, should possess THE FARMER, and circulate it among their friends.—EDS.

EDS. FARMER:—As this is the season in which the vermin appeared on the hop vines last year, I would call the attention of your readers, who are hop growers, to the remedy for the louse, which appeared in your fourth number, (page 115,) and which I saw applied extensively in England last season. I would also lay before them another remedy, slightly different from that, which I have just received from an agent there, consisting of a simple decoction of tobacco, strong enough to kill ticks on sheep, or the blue louse on colts or calves. It is equally effective against the vermin on hop vines, or the worms which feed upon currant bushes. One gentleman writes: "We use strong soap suds made with soft soap and tobacco water, with one pound of copperas to every five gallons of the liquor." This wash is applied to the vine when trained on the horizontal plan, by a syringe, or, if on the old plan of long poles, with a force pump, or garden engine pump, to throw the liquid with force against the under side of the leaves, as the louse is always there first.

I have full confidence in the remedy, and would recommend every hop grower to be prepared for the vermin, if they make their appearance. It is of great importance to the hop grower to secure a large crop this year, as even if the crop is a full one, the price must be high, and if it should be a partial failure, the price will rise very high. There are two causes for this: first the rapid increase in the demand for hops; and secondly, the great destruction of hop yards the past season, owing to cutting the vines at picking as is practiced in yards on long poles. The vines were cut early, and the open winter left the roots, after a most severe drain upon their vitality by loss of sap, exposed throughout its whole extent to severe frost. Many yards so treated were wholly destroyed, or so injured as to cause them to be plowed up this spring.

Let no one be discouraged from raising this crop, as the indications are in favor of good prices for years to come, and the expense of growing hops is not one-fourth what it has formerly been. Those who have read your paper, if they did not know of it before, have learned a better and cheaper way than to use long poles to run hops on. The only drawback we have yet met with in this country has been the injury done by the louse for three years past in New York and the Eastern States. They have as yet done little injury in the Western States, which are well adapted to hops. The prairies may be used for this crop, as little damage occurs from high winds as with any other crop. Indeed, they need less manure than many of our older soils, although it is poor policy to use any land without using some manure. Concentrated manure or flour of bone will answer. A gentleman from Minnesota writes that he grew 1,600 lbs. hops to the acre the old way, but that he has adopted the new method, using a stake eight feet in length to each hill connected with twine, which will add 50 per cent to his crop, besides improving its quality, and at the same time lessen the labor and expense in every particular step, from setting the stakes to applying the wash for the vermin, should it unfortunately attack his yard this year, which it has not as yet. In fact, I have not seen any appearance of the louse, though I have been visiting the hop gardens for three weeks past, and still hope we may not be visited by this scourge of the hop planter. All are invited to use these remedies, and also to apply the flour of sulphur to their vines should they be affected with the mold, a disease common in Europe, but which has not yet visited our gardens. F. W. COLLINS.

THE soil, by its weight, is constantly trying to form rock under it in the soil. It is the farmer's business to see that it don't do it. His plow and spade are the means to prevent it, but especially the subsoil plow.

HOW WE FARM IT IN THE GENESEE COUNTRY.

WRITTEN FOR THE AMERICAN FARMER, BY P. C. REYNOLDS.

NUMBER FIVE.

WHITE BEANS—Have grown to be quite an important crop with the farmers of the Genesee country. Taken one year with another, I deem them fully as profitable as wheat, and think they will net nearly as much as corn. We prefer planting them soon after corn; but good crops are frequently grown when planted the very last of June. It was once thought that almost any land, however poor, would answer for beans, and the expression, "too *poor* to grow white beans," when used in reference to any soil, was considered enough to settle the reputation of that soil. But we have come to know that it pays to have land in pretty good condition for white beans. The bean crop generally occupies those lots or patches which could not be got into condition in time for planting corn, or potatoes. A sandy, or gravelly loam is well suited to the bean, and it should be in tilth and fertility capable of bearing a fair crop of corn. I consider the Medium variety the most profitable in the long run; for, although the Marrow and Kidney will yield (when they succeed) larger crops, and sell for higher prices, yet they require a longer season to mature in, and consequently, are much more liable to become *weatherbeaten*.

I would recommend planting in rows 2 1-2 feet apart, and hills about one foot in the row—just enough to admit the hoe between the hills. Most of the cultivation should be done with the cultivator. As soon as part of the beans are ripe, pull them, and throw them into small piles, which turn as often as they get wet, and when cured, draw into the barn, and thresh as you draw—if convenient; if not, store on scaffold, rather than bags.

With *good* farmers the yield will run from twenty to forty bushels per acre, and the average price will be about $1.60 per bushel, making a gross yield of from $32 to $64 per acre; and that without exhausting the land much, or requiring a great amount of labor. Some farmers drill in beans with the grain drill, using every alternate drill, thus making the drills about 18 inches apart,—but that does away with the cultivator, which I believe in using whenever practicable.

HAYING.—Clover haying is generally commenced the last of June, the smaller variety maturing first. When all the heads have come into bloom, is the best time no cut clover. With most, the mowing machine has superceded the scythe, and the *charm* of haying is gone forever. Who, that was familiar with rural scenes fifteen to twenty years ago, does not remember with pleasure, the beautiful and animated spectacle presented in a hay-field, where a number of sturdy mowers, with steady and simultaneous stroke were sweeping across the meadow? There was grace, and beauty in their movements, as they swayed to and fro, driving the keen blade through the tall grass. The end of the swath is reached, and they all go through the operation of whetting their scythe, before commencing another. The whetstones ring on the steel blades, with a musical sound, and some one whets a challenge, which is a sort of tune, perhaps "Yankee Doodle," on his scythe. It is accepted, by a few raps on the scythe, and their eyes glisten with eager excitement for the race. The one who led on the last swath takes his "lot swath," which is behind the rest, and the next leads off. They must all *keep stroke*, or there would be danger of cutting one another, so the only way of gaining advantage, is in striking further ahead. If the former ones are the best mowers they will soon distance those behind; but if the contrary, the hinder ones will greatly embarrass the leaders, by rolling their swaths on the heels of their scythes, and if much smarter, will mow past them, and take their swaths. Mowing is hard work, giving vigorous exercise to nearly every muscle, and many a young man, or large boy, has injured himself irreparably, by racing in the hay field. Under favorable circumstances, one and a half acres is a fair day's work, mowing; where the grass is lodged, an expert mower would not accomplish more than half of that.

But these pleasant reminiscences of our boyhood find no counterpart in the scenes of the present. Now, a solitary boy mounts the mower and rides to the meadow, while the rest of the farm laborers are probably hoeing corn or potatoes. He drives about the field until night, when from five to eight acres are cut down and spread evenly over the ground. The next morning, as soon as the dew is off, he goes again with horse and revolving rake, and in a few hours the clover cut yesterday is in *winrow*, and another hand soon has it rolled up into small cocks. These are left to sweat until the dew is off next day, when they are opened, spread around a little, and two men commence drawing into the barn. Not even a boy is required to rake after, as formerly; for the horse rake soon gleans the field. Pitching hay is work that tries the strength, but some make much lighter work of it than others. There is a peculiar sleight in pitching hay, as in most other kinds of labor, which enables the possessor to accomplish more with less expenditure of strength, than those lacking it.

It is quite an art to so cure clover that it shall be dry, and yet retain all its leaves; be bright and green, and yet not musty. To accomplish this, it will not do to let it lay long, exposed to the scorching sun. It should be either constantly stirred until

dry, or be put into small cocks, and allowed to sweat, when an exposure to the sun and air for a short time will complete the curing process. The former is the better way, but requires more labor; the latter is certain provided no drenching rains intervene. Should any of the new hay tedders prove practicable, they would be valuable auxiliaries in curing hay.

Timothy and red top require less curing; indeed, many favor putting them into large mows, with scarcely any curing. Our best grass farmers—those who raise hay to sell—usually cut timothy and red top as soon as the blossoms have fallen; rake up in the afternoon that cut in the forenoon, and draw the next morning as soon as the dew is off. This will answer, if put into bags with tight sides, and the top of the mow is covered with a foot or two of straw. In that case, air not having free ingress, active fermentation does not take place, and it gradually sweats out. The top of the mow, if allowed to come in contact with the air, would mold; but the covering of straw will save the hay. The question of the *best* way of curing hay is an open one. On the clay loams above Rochester the hay crop is an important one, being, in many cases, the leading crop. Good farmers get an average of two tons per acre, which sells at from $12 to $20 per ton. Take the average price, $16 per ton, for good timothy, and we have $32 gross, per acre; at a real cost of not more than $8 per acre, for those living within ten miles of market.

A good timothy meadow, on clay loams, top-dressed with fine manure every three years, will go seven or eight years before it will require re-seeding.

HARVEST.—Close upon the heels of haying follows harvest. Rye is generally ripe first. Sometimes wheat, and sometimes barley succeeds; and last of all oats "whiten unto harvest."

On the small scale we farm it in the Genesee country, I do not set a very high value on the *reaper*. In most instances, considering the delay and accidents incident to working a reaper in a small field, I am of opinion that the hands required to man a reaper, would well nigh cut the field with cradles, and rake and bind it in the same time the machine would. At any rate, I doubt whether the saving in labor actually pays interest on cost and wear of machine. But when you get on the 500 acre fields of the western prairie, there the machine will tire out man. A good cradler, under favorable circumstances, will cut from 2 1-2 to 4 acres of grain a day, and an expert raker and binder will take the last clip off the cradle.

It is quite important that the grain should be perfectly cured before taking from the field. This is done easy enough in fair weather by setting up the sheaves in open Dutch shocks, that is a double row with the tops leaning together. But if the weather is catching, such a shock will not shed the rain well enough. Two cap sheaves set on a shock of this kind, containing eight or ten sheaves, will turn the rain pretty well. Cap sheaves are bound near the butts. The tops are separated and spread over each side of the shock.

Where it can be done, it is a saving of labor, to have a machine set in the field, and the grain threshed as it is drawn together. Where this cannot be done, all the grain should be stored in the barn, if practicable. Settlers in a new country have a plausible excuse for stacking out their grain—the farmers of the Genesee country have none.

TURNIPS.

EDS. FARMER:—Newly cleared land is in almost all instances best for English varieties of turnips. With such, having a surface soil of rich woods mold, little preparation is needed beyond a shallow plowing, thorough horrowing, and perfect pulverization. Turnips grown on new land are least liable to attacks from the fly pests, and as I have never heard of any reliable remedy for, or preventive of the scourge in field culture, either new ground, or very late sowing should be the rule.

If old land is the necessity, it ought to be liberally enriched with well rotted manure, plowed, cross-plowed, and harrowed into fine tilth; then top-dressed with plaster, bone dust, and wood ashes, in equal parts, sown broadcast at the rate of say three barrels to the acre, a week or ten days before seeding time.

If miscellaneous feeding of both stock and humanity is the intention, I should say sow either Robertson's Golden Ball, or the Yellow Malta, in Ohio, from July 20th to August 15th; about ten ounces of seed to the acre. Mix thoroughly with coarse dry sand; an ounce of seed to a pint of sand, and sow broadcast, casting and cross casting lands twenty-five feet wide across the field, taking a calm day, and with a promise of rain near at hand. The seed may doubtless be obtained from any first class seedsman.

COSMO.

WARTS ON CATTLE.—A subscriber asks how warts can be readily removed with caustic, lunar or potash. Five cents worth of caustic or caustic of potash will suffice. Keep the caustic in a vial, take a stick of it, wet the end with water or spittle, and rub it on the warts. Two or three applications will suffice. Be very careful of the caustic of potash, or it will eat too deep and make a sore.—*N. H. Farmer.*

A MOBILE paper thinks the forthcoming cotton crop will reach three million bales, and that the price will fall so much that next year's crop will be reduced to a smaller amount.

FENCE PHILOSOPHY.

WRITTEN FOR THE AMERICAN FARMER, BY "COSMO."

As we shall never come to *ditch* abominations for division or outside fences in this country, and as with all the most earnest preaching, our progressive farmers and energetic agricultural editors are capable of, our out-in the-country friends cannot be driven to any great extent into symmetrical hedges and neat, efficient wire fences, anything inside of three hundred years from this date—anything that shall aid in prolonging the existence of the old fashioned "worm," post and rail, or ordinary board fence affairs, to which we so pertinaciously cling, ought to be welcomed by farmers—particularly those inhabiting regions where timber is already scarce and dear, and is rapidly becoming more so.

Beginning with the old, ungainly worm fence, let us see if we cannot improve our usual practice of laying it. Instead of "*chucking*" the bottom rails right down on the ground, to rot in four or five years at the best; place a comfortable stone or chunk of solid lasting wood under their heads and heels, lay the rails always *sap side down*, for worms will bore into the sap, and water will run into the worm holes and rot the rails, if you lay them sap side up. Then ride the small end of the rail with the big end of the next length always, so as to give *pitch* and proper drainage to all the rails.

Where rails are cut twelve feet long, it is better to make the angles four and a half feet, to give the fabric sufficient solidity. Then stake and rider properly, and a rail fence constructed under these simple rules will last just three times as long as one *pitched* together in the usual careless manner.

Several experimentalists on fence posts have lately been posting publicly the results of their practice of setting posts top end downwards in the ground, accompanied by the declaration that timber thus reversed when exposed to out-door vicissitudes will last many times longer than if planted in the order of growth. Now, the exercise of a little practical common sense, and just so much knowledge of wood structure as every farmer ought to possess, must show this philosophy to be absurd.

Almost all our North American woods are so porous that take a section of any of our fence posts, excepting red cedar, (and it don't matter much which end of that goes down, it will last forever, anyway,) a section, say three feet long. Fix on the top end, a dab of saliva or soap suds. Apply the lips to the other end, and a strong blast from a healthy pair of lungs will send the moisture out in bubbles as if it were boiling. Reverse ends and application, and blow till you burst, you cannot start a bubble. Does not that experiment prove something?

"Yes, but I don't quite understand what."

No; then, your pardon, sir, permit me to instruct you. These pores through which we can blow our breath from the butt end of the stock upwards, are little pumps most beautifully arranged, through which the tree by capillary attraction draws the sap from its roots to the lofty, leafy structure through the whole length of its trunk. By placing a clean, diagonally cut section of any of our woods under a solar microscope, having a power of only a few hundred diameters, and in all these capillary tubes will be found the rudiments and remains of beautifully arranged valves, all opening upwards. The tree during the season of the upward flow of sap must have intervals of rest, otherwise its vitality would be endangered by an overstrain of its physical structure in constant suction. The closing of all these valves placed along the whole length of the tubes within a few inches of each other, sustains the minute columns of water, and permits the tree to relax its strain of lungs until a new supply of sap is required for the foliage. Now, if we set sections of any of these woods in the ground as for fence posts, placing them butt end upwards, and leave the ends exposed to the weather, as fence posts almost always are, by the falling open of all these thousands of little valves, there is an unobstructed water course through the entire length of the post. All these tubes fill with water in showers and storms, and either filter into the earth, or dry out in warm sunny days, and the result is an early decay of the wood. By placing the post normally, butt end down, charring the outside of all that goes below the surface, and giving the top a strong daub of lead color paint, all the service that ought to be expected from a fence post may be obtained. By placing the posts top end upwards, in the event of the paint wearing off, or becoming cracked and leaky, the tube valves of the wood are all closed, and no water can descend more than a few inches from the top. Such has been my fence practice, and it has always been satisfactory so far. I intend to *take* another fence or two some day.

ACREAGE OF CROPS IN FRANCE.—The following table of the number of acres devoted to several leading crops, is made up from the official statistics for which France is distinguished:

Crops	
Natural Meadows	10,000,000
Artificial "	7,500,000
Roots	5,000,000
Oats	7,500,000
Fallow	12,500,000
Wheat	15,500,000
Rye, Barley, Maize, Buckwheat	15,000,000
Other crops	7,000,000
Vineyards	5,000,000
Wood	20,000,000
Uncultivated	27,500,000
Total	132,500,000

The official estimate shows an increase of 647,500 acres of wheat in France, compared with 15 years ago.

POULTRY CRUMBS.

WRITTEN FOR THE AMERICAN FARMER BY C. N. BEMENT.

No poultry keeper has a right to complain of want of success, if he neglects keeping a regular account of food consumed, and profit by fowls and eggs sold. Without this he is groping in the dark, and the usual termination of such undertakings ends in disappointment and loss. This hint we imagine may prove of service to many of those who can least afford to suffer loss by their poultry, and most desire to increase their gains; for after all, it is only by following out a regular system of management that any person can expect to satisfy himself that his fowls, of whatsoever breed they be, do really pay. Many dislike the little trouble it may create, and looking upon the chicken as an insignificant item, are content to go on as before; but at the same time they have no right to be surprised if these rough calculations neither convince others nor fill their own pockets.

It is a fact, and it is not the less true, that most old women, who live in cottages know better how to rear chickens than any other persons; they are more successful, and it may be traced to the fact that they keep but few fowls; that those fowls are allowed to run freely in the house, to roll in the ashes, to approach the fire, and to pick up any crumbs or eatable morsels they may find on the ground, and are nursed with the greatest care and indulgence.

Hens have peculiar fancies in regard to their nests, which like our watering-places, suddenly become all the rage, and are pronounced unfashionable at other times. Out of about ten nests in our poultry house, but three were popular; why or wherefore we know not, as they possessed very different qualities, one of these was in a cold corner on the ground, the second was in a window exposed to light and heat, the third situated in a dark room in an iron pot. Although we are of opinion that nests had better be left an open question for the consideration of the hens themselves, we will give our ideas on the subject. Of all materials usually employed in their construction, we think shavings, pine or any resinous leaves the best, old lime hair, which is a preventive of lice. Hay is bad, as it soon generates vermin. We have almost invariably found that the strongest, largest, and best broods are hatched on the ground.

To clear the poultry house of vermin, about once a month, or when you have no sitting hens in your house, clear out the old nests and stop all the crevices in the doors, windows, &c., procure about a peck of charcoal, put in an iron vessel, and place in the centre of the room, set fire to it, throw on a little brimstone, let it smoulder for an hour or so, taking care to keep the place properly closed to prevent the escape of the gas as far as possible; the vermin, if any, will be completely destroyed, and the house will be clear of vermin. Great caution must be taken to completely ventilate before the fowls are again admitted.

Clucking hens may be relieved entirely from a desire to incubate by administering one or two doses of jalap; and it is supposed by many to be far better for the purpose, than the cold water cure. They have been known to commence to lay in three weeks afterwards.

Hens are in their prime at three years, and at four or five years old they lay unfrequently, and cease altogether or become fat, and should then go to *pot*. Cocks are also in their prime at three years, and should be discarded at that age.

The good health of fowls may be known by the fresh and florid color of their combs and wattles, and brightness and dryness of their eyes, the nostrils being free from any discharge, and the gloss of the plumage.

The color of eggs is not alone affected by what they eat. The color of the yolk can be changed from a bright orange to almost white, by a change of feed. The richness of the egg too, can be affected as much as can that of milk, by a corresponding richness of food.

Fowls, to whom a portion of chalk is given with their food, lay eggs having shells remarkable for their whiteness. By substituting for chalk a calcareous earth rich in oxide of iron, the color of the egg-shell will be of an orange color.

Good health is the most essential thing to make hens lay. Feed cracked corn regularly every day at a regular time. Fowls are grain-eating birds, and their nature is for grain alone. To keep them healthy is the great secret of making hens lay. Who ever heard of a sick hen laying? Wheat is too heating for them; buckwheat is a very good mixture with corn, but not alone. The corn must be of the best kind. Many persons generally feed their fowls on old damaged corn. This is bad policy; they can not keep in health on that which is not wholesome; they must eat what you give them, if they cannot do better, and the owners blame the poor hens for not laying.

Poor hens will not lay much on this kind of management; we have kept hens laying ten months in the year by this process, and in winter have lots of eggs. They want the greatest attention. Give them the same attention you do your horses, and they will soon know their keeper.

There is considerable difference in the number of eggs that the different breeds will lay, as well as the chickens in each breed. Some hens will lay an egg every day; others every other day. Pullets in their first year, if early birds, will probably lay as many eggs as ever after in the year; but the eggs

are small, and such young hens are generally unsteady sitters.

For the abundant production of eggs, we consider the Spanish and Poland fowls altogether unrivalled. And for the reason that they are not only strongly inclined to lay, but as strongly disinclined to sit. There is another variety or breed to be found in almost every poultry yard or farm, whose merits we would particularly recommend, as they possess some merits not found in the Spanish or Poland. We allude to the Dominique fowl, which are good layers and good mothers. They are hardy and healthy in constitution, easy to keep, small in the bone, and plump in their make; flesh tender, juicy and of delicate flavor; besides they are of beautiful plumage, and in all respects a valuable fowl.

It is important to the farmers who cultivate poultry for the profit of its products in the market, and also to the private citizen, who keeps a small flock for the convenience of commanding at all times a regular supply of fresh eggs for family use; to know and to be able to obtain the best and most profitable breeds, the best for the production of eggs, and the best as to quality, size, and value in market, and for the use of the table. If no single breed combines, in the highest degree, both of these items of value, then good policy would seem to require that the farmer at least should keep not only the best breed for the production of eggs, but also the best breed for size, and early maturity for market. It might perhaps cost some little pains to keep for a short period two breeds distinct and separate, so as to have eggs pure and unmixed, in order to perpetuate the stock in its purity and perfection. But no valuable result can be secured without suitable care and effort.

FIRE PROOF PAINT.—The following recipe for fireproof paint is recommended by an engineering firm in New York, and endorsed by insertion in a good English authority, *The Building News:* 1 pound best blacklead, 1 pound of fine gilders' whiting, and 1-4 pound of Quarterman's patent dryer, the whole ground together finely with linseed oil alone, and applied like other paints. Wood thus covered will not take fire from sparks.

HEN'S NESTS.—Sycamore leaves used in place of hay or straw in hens' nests, not only protect the hens from lice, but, with whitewashing, entirely banish vermin from the building. §§

ACCORDING to recent returns, the whole number of cattle in England, Wales, the Islands, Scotland and Ireland, is 8,316,960; of sheep, 25,794,708; pigs, 3,800,399. Ireland has more cattle than England proper.

HORSEMANSHIP.

PREVIOUS to mounting, says a writer who is competent authority, a good horseman will be seen to view his horse with a searching, yet unaffected glance, and fondling his horse as if to conceal his object, he almost imperceptibly, will pass his fingers under the curb chain, or between the girth and the horse's skin, with a view to ascertain their proper tightness, for the latter may be too tight at starting; and a horse will go fretfully as long as the former is too much curbed. His very manner of placing the reins between his fingers, and laying hold of the mane lock, will tell you at once whether he is at home or not: for he will do all this, as also mount, devoid of all embarassment or bustle, thereupon to ride his horse away in a walk, and with perfect ease, which is inseparable from true elegance, and therefore not only distinguishes the riding of a gentleman, but also clearly proves his familiarity with the exercise

Beware of falling into the mistake of marking him down as a novice, merely because you may see him mount or dismount on the "off side;" for it requires a thorough horseman to practice mounting and dismounting on either side; and may such a one not have reasons for prefering the "off" to the "near side"? But when you see a dismounted rider (one that is not compelled to do so by some hurt) shuffle about or shift his horse about, or when you observe his cutting unnecessarily at his horse, and generally hide (as he flatters himself) his own blunders or awkwardness, if you see him clamber up as if his foot was on the round of a ladder, either to lay his chest on the pummel, or to swing himself into the saddle afterwards like a sack, and if he allows the horse to walk off with him before he has fixed himself properly in his seat, then you may make sure that he is an awkward or a new hand. Most of these will mount and start off immediately, at a full gallop, or at a round trot, no doubt pleasing themselves with the idea that everybody must be convinced by such a style of riding that they are "capital horsemen;" that is, if sticking fast (but any how) to the saddle can make them so, in the absence of all other claim

Having finished my critique as to horsemen and drivers, I feel the difficulty of instructing you how to know a really good horse; wherefore, and as the subject is fully and very ably treated in so many publications, I will content myself by tendering you the copy of some ancient, but befitting verses, for I too, say with that poet, give me a horse that

> "In shape, in courage, color, pace and bone,
> Excels a common one:
> Round-hoofed, short-jointed, fetlocks shag and long,
> Broad-breast, full eyes, small head, and nostrils wide,
> High crest, short ears, short legs, and passing strong,
> Thin mane, thick tail, broad buttock, tender hide."
>
> —*Agricultural Review.*

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

It was *May Bueno* to hear once more in my old age, the nautical phrases of my boyhood from an old salt on the prairies. He certainly makes out some hard cases of extortion by the railroad and express companies of the West; but, although the express monopolies of this State, are as obnoxious to his charges as they can be in Illinois or Iowa, yet our N. Y. railways carry freight for a little over one-fourth the price "Bueno" says they charge in Iowa; and the passenger fare is also less than half the rate charged on some of the western roads. As our express companies have no stock to sell, even when offered fabulous prices, dividing it is said, one hundred per cent annually to the stockholders; we challenge the western companies to beat them in extortion; many people now send small articles long distances by mail, at a great saving in the expense; but there is an excuse for the present high railroad charges at the far west, besides the depreciated currency; unlike our railways, they are not studded by a continued succession of manufacturing towns and villages, to give them constant freight and passengers. I suppose the N. Y. Central carries more passengers in one day, than some of the main western roads do in a month, to say nothing of the miles on miles of cattle and freight trains of that great road, that now pass and repass at all hours, day and night. But as empire westward goes, increased population, and increased productions will induce railway competition, and the building of more and cheaper railroads, and those younger than myself, will live to rejoice in cheap fare and cheaper transportation. I trust also that the day is at hand, when other express companies will take the fruit and vegetables of the far west, swiftly and cheaply to market, putting to shame the present bloated monopoly, which has been so long a burlesque on the even handed justice of our republican institutions.

I will now reply to "Bueno's" query, how this country "has been aided to carry on the late triumphant war, by the excess of our imports over our exports," not by the special pleading of a one-sided chairman of the Committee of Ways and Means, but by a very few simple illustrations; to wit, my grandfather once went to Cape Francais, now Haytien, in a little brig loaded with hhd. shooks and hoop poles, returning with a full load of coffee, sugar and molasses, making nearly a thousand per cent for his owners. Again, early in the present century, a large ship for those days, an Indiaman of 650 tons (whose armament caused foreign skippers to call her a Yankee man of war) went to the Isle of France, (Mauritius,) returning with two hundred tons of saltpetre, and a full cargo of coffee; the profits of the voyage was enormous; again, from the same little seaport, a ship went to Alexandria and loaded with flour at two dollars a barrel freight to London; from thence she went to Sweden, when at Gottenberg, her freight money paid for a load of iron, with which she returned home, making as much by the import, as a whaleman ordinarily makes on a load of oil collected from the ocean. I would ask, what is it but the excess of imports over exports that enables our merchant princes to invest capital in banks, railroads, government stocks, &c.

I could also advert to the enormous profits which have heretofore accrued to these United States from the foreign sales of our great cotton crop; but such an argument would be out of place at this time, when the congregated wisdom of the country in the present national councils has consented to tax this great all paying textile to within an inch of its life. The tax is to be five cents the pound. I have lived to see cotton a drug in the market at six cents a pound.

HAY MAKING AS IT SHOULD BE.

Now on the 6th of June, I cut my grass plot for the first crop; it is tall June grass, (*Poa Pratensis,*) in full bloom, with a sprinkling of clover hardly in bloom. To cure such grass properly is a tedious task, but it pays, in the satisfaction of smelling its aroma next December when your cow rejects all slops until she has devoured her savory hay ration. I, last year, followed the stereotyped prescription to cure such hay, by "sweating it forty-eight hours in cock"; this only facilitated the curing process at the expense of the hay's nutriment, completely expelling its aroma, and leaving it no better than the hay farmers generally sell to the poor villagers. Let the mown grass lay in swath until it dries a little, then turn and air it two or three times before sunset, then put it in small cocks, opening them the next morning before they begin to heat. If the weather is good, with a drying west wind, the hay may be exposed and dried sufficiently to put in mow before evening. Salt only induces moisture, a little air slacked lime is better to absorb it, but drying in the open air is best, as your bovines will testify.

WHITE CLOVER.

This leguminous plant, *Trifolium Repens,* is of large growth, and inestimable value to the pasturage of the high, cool, moist dairy regions proper; and it is also a spontaneous plant in the new clearings of the warmer grain growing regions; yet owing to the hot dry summers there, it obtains but a small status, and is of little importance in pasturage. It is said that the seeds of white clover will vegetate with the temperature below 42°, while it ceases to grow with the mercury at 82° On the other hand, the invaluable red clover with its long tape root, delights in the hot dry weather, which dwarfs its pigmy cognate into nothingness.

THE GREAT AND INCREASING COAL TRADE—NIAGARA SHIP CANAL.

As the freighting in farm produce and pine lumber falls off on the canals of Western N. Y., the freighting of coal increases. Thirty years ago, no coal came from Pennsylvania through the Chemung Canal and Seneca Lake; now to one load of grain or lumber, thirty loads of anthracite or bituminous coal pass down the Cayuga and Seneca Canal on their way to the Grand Canal, to go both east and west. Finely painted boats built here this winter at a cost of $4,500 each, carrying 250 tons, the load of a ship at the beginning of the present century, are now compelled from the lack of western freight at Buffalo, to turn colliers and carry coals: Yet there are *soi disant* political economists, now importuning Congress to borrow more millions to build a ship canal around Niagara Falls, lest the far west should lack passage way enough to the ocean, with their products. Forty seven loaded coal boats passed the first lock below Seneca Lake at Waterloo yesterday; some of the bituminous coal went to the North River, but none of the hard coal goes east of Syracuse. Buffalo, Rochester, Syracuse, and Oswego are the principal markets for coal.

THE SEXES OF THE HONEY BEE.

WRITTEN FOR THE AMERICAN FARMER, BY WILLIAM BURTON.

MESSRS. EDS.:—I noticed in one of your columns, in the May number, a few questions respecting the sexes and natural instincts of the honey bee. The honey bee, (*Apis Mellifica,*) as a portion of the insect creation, is composed of two sexes, male and female; therefore, male and female constitute a colony of bees.

The drone is a complete male bee, fulfilling the mission which nature requires.

The queen is the only perfect female.

The *workers* are *females,* whose ovaries are so imperfectly developed by the capacity of the cell in which they are reared, that they are incapable of breeding, and which retain the instinct of females only so far as to take of the brood and provide their own sustenance.

The queen is the parent of the hive, and her sole province and occupation consists in laying the eggs from which originates those prodigious multitudes that people the hive and emigrate from it through the season. The reason why all impregnated eggs produce females, either workers or queens, and all unimpregnated ones drones, or why the queen has power to lay eggs that will produce drones without impregnation, are questions far beyond the power of the human mind to solve. Common sense and religion alike teach us to receive all undoubted facts with becoming reverence, whether in the natural or spiritual world.

In regard to the queen discriminating between the worker and male eggs, I believe the sex is determined by the capacity of the cell in which they are reared; for instance, let a populous colony which possesses a fertile queen, be supplied with drone comb, and the progeny will be drones; on the other hand, supply them with worker comb, and the progeny will be worker brood. I believe that when she deposits her eggs in workers' cells, her body is slightly compressed by their size, thus causing the eggs as they pass the spermatheca to receive a portion of its fertilizing contents.

On the contrary, when she is laying in drone cells, as this compression does not take place, the mouth of the spermatheca is kept closed, and the eggs are unimpregnated. Bees, when deprived of their queen are endowed by nature with the power of remedying this disaster by converting the larva of worker into a royal one, and by means of a cell of greater dimensions, and of a suitable kind of nourishment, producing a queen that shall be to all intents and purposes a female or mother capable of preserving her kind.

It is a curiosity to witness the method they adopt when deprived of their queen to rear one in her stead. They first select an egg in a suitable position to their wants; then they gnaw down two or three cells to their base, and rear a cell in the form of a cone around the egg, and by supplying it with a peculiar kind of nourishment (which apiarians call royal jelly) are capable of rearing a perfect female.

SUGAR NOT AN EXHAUSTING CROP.

THE elements which compose pure sugar are derived wholly from the atmosphere; hence, if from a cane crop all but the sugar is returned to the soil, cane may be cultivated on the same land for any period without exhausting it. The bagasse and skimmings and the impurities which remain in the sirup and sugar, contain elements which are derived from the soil, and which, if not replaced, must render the soil unproductive. Phosphoric acid enters largely into the composition of sugar canes. This may be restored to the soil by returning the bagasse or the ashes produced from it, and the skimmings or their equivalent. If fertilizers are used, they should be such as contain the least ammonia. Fresh stable or barn-yard manure, or Peruvian guano, should not be used, for however favorable the nitrogen which they contain may be to vegetation in general, their presence in excess is inimical to success in sugar making. Mexican and other guanos which are eminent for the phosphoric acid they contain, bone-meal, or well rotted manure, may be used on cane fields freely.—*Sorgo Journal.*

BARN YARDS.

In the construction of a barn yard, many farmers seem to think that little or no planning and skill is necessary. They generally build their barns without any regard to the yard, whether it is to be on the east, west, north or south side. The yard, however, is quite as important as the barns, and should be so situated that the manure in it will not escape and run off, as is frequently the case, down some hill.

There are farmers who think that a stream of water running directly through their barn yards, for watering stock, is a good thing, whereas it is the worst place for one that can be imagined, taking the saving of the liquid manure into consideration, as a large portion of it, must of course, find its way into the stream, and pass off where it does no good to any one.

A great desideratum in constructing a barn yard, is the preservation of the manure; and for that purpose, it should be excavated in a bowl-like shape, on a gentle declination from the circumference to the center, and the bottom made tight with clay made into mortar, while applying it, so that the liquids of the yard will not leach down into the subsoil and be lost.

Such a yard is an excellent receptacle for manure, where it may lie over a season, to ferment and decay, and be in good condition to apply to land.

Into such a yard a compost may be made to great advantage, by carting in muck, leaves, and anything upon a farm that may be gathered up to decay, placing such things in layers, and covering each with a layer of stable manure, all to be mixed by the tramp of cattle in the yard.

No farmer can put too much manure into such a yard, provided he keeps it well covered with coarse litter, to prevent evaporation of the gases (ammonia) which are constantly seeking opportunity to pass off into the atmosphere. These gases are to the manure what blood is to the human system—the life of them; and to allow them to escape, is throwing away the foundation of all success in agriculture.

It is often said that manures keep best under cover; but that is not the case, except in comparison with the ruinous practice adopted by some farmers, who throw their manure out of their stables into heaps, where the rains wash a large portion of their virtues away, where no good is done by them. Manure in a yard as above stated, when well covered with straw or other coarse litter, is actually *under cover*, and in a better condition than it would be under a shed, where it would be liable to injury from a lack of moisture.

Another important consideration in constructing a barn yard, is the protection of stock from the cold north and west winds; and the south side, consequently, is the best side of the barn to have it.

Stock that are well housed in winter, and have warm sheds to run under when not in the stables, will keep in good condition on much less fodder, than when they stand exposed to the raw chilling blasts, from the north and west in the winter season; and the owner actually saves about *one-third* of the fodder they would require, if turned into a yard facing the north or west.

Farmers, you should do more *hard work* than you are accustomed to do, if you would be prosperous in your business. It is not always the hardest *working* farmers who make the most money, but generally those who use their *brains* often, when their hands are idle.—*Agricultural Review.*

ALKALI.

This term is constantly used by farmers in speaking of manures. It is well to understand its derivation and precise meaning. It is of Arabic origin. Dr. Dana says that Kali is the Arabic word for bitter, and *al* is like our word *super*; we say fine and superfine: so kali is bitter; alkali, superlatively bitter, or truly, alkali means the "dregs of bitterness."

Alkali is a general term which includes all those substances that have an action like the ley of wood ashes. If this ley is boiled down, it forms potash. What is chiefly understood by the term alkalies, means potash, soda, and ammonia. Potash is the alkali of *land* plants; soda is the alkali of *sea* plants; and ammonia is the alkali of *animal* substances.

Potash and soda are fixed; that is, not easily raised in vapor by fire. Ammonia always exists as vapor unless fixed by something else.

Lime, fresh slacked, has the alkaline properties of potash, but weaker—so has calcined magnesia, but in less degree than lime. Here are two substances, earthy in their look, having alkaline properties. They are called, therefore, *alkaline earths*. When the tongue is touched with a bit of quick lime, it has a hot, burning, bitter taste. These are called alkaline properties. Besides these, they have the power of combining with and taking the sour out of all sour liquids and acids; that is, the acid and the alkali neutralize each other. Were it not for this, there would probably be no such thing as vegetable growth.—*N. E. Farmer.*

Canadian Exports.—From the last half-yearly trade returns it appears that "there were exported from Canada in *six months*, 15,000 horses, 103,810 horned cattle, 158,000 sheep; the total value of this class of exports being $7,923,355. Of wheat, grain and other agricultural produce, the value of the exports was $11,954,878, the most of which went to the United States. The total exports for the half year were $13,655,463, being an increase over" the corresponding year of more than $10,000,000.

SPIRIT OF THE AGRICULTURAL PRESS.

Broom Corn.

We extract the remarks below from *The New England Farmer:*

The cultivation of this article seems to be extending. In Massachusetts, and in some parts of New Hampshire, large quantities are annually produced, the brush selling for a high price to the broom manufacturers, and the seed, which is a highly nutritive and an excellent food for swine, being retained for domestic purposes. The broom corn requires a rich, warm soil, similar to that required by Indian corn. It is not considered a very strong exhauster, and is generally regarded as a sure crop, being but little liable to injuries from the cut worm or any other insectivorous depredator. It is generally cultivated in drills, the manuring being either broadcast or in drills, as circumstances render most convenient. The brush ordinarily defrays all expenses, and leaves the grain—which often amounts to thirty bushels per acre—a clear gain to the cultivator. Where there is a market for the brush, broom corn can scarcely be other than a very profitable crop. It is said to leave the soil in excellent order.

Early Milking.

Cows, says *The Maine Farmer*, should be milked early in the morning, so that they may feed on the dewy grass. Two hours of such feed is worth as much as that of the rest of the day, towards getting a good flow of milk. So wake up, boys, at father's rap on the partition wall, and hurry to the yard with pail in hand, and have the cows in the pasture before anybody's else. Be sure and milk clean. A boy who will always milk clean will have a good recommendation of being faithful wherever he goes, and such recommendation always goes a great way among business men.

Culture of Mangel Wurtzel.

The North British *Agriculturist* contains the directions given below:

Mangolds prefer a deep heavy loam, but they can be grown successfully on light loams, provided that they are manurially in high condition. The land should be liberally manured. In addition to farm yard or street manure, a mixture of guano, superphosphate, and salt should be applied, from three to four cwt. of each substance to the acre. The land should be prepared in the same manner as for a turnip crop, the distance between the rows being from 26 to 30 inches; 28 inches will generally be found the most suitable width for sowing and cleaning the crop. The most commonly grown kinds are the Orange Globe, Red Globe, and Long Red. Of these the Orange Globe is the most suitable for soil of medium depth and friableness. The quantity of seed necessary for an acre depends upon the quality of the seed. Four to five pounds per acre is generally sufficient. The seed should be steeped in liquid from the dunghill, and afterwards mixed with damp sand to hasten its germination previous to sowing.

Horniess Cattle.

A correspondent of *The Country Gentleman* rather forcibly presents the arguments in favor of polled cattle. He claims that horns are dangerous; that they are mere useless excrescences; that the growing and wearing them require additional food and is equivalent in effect to binding an equal weight on the head of hornless cattle; that they are an impediment to safe transportation in railroad cars, and that horned cattle require more yard and stable room than polled cattle. Some experiments are narrated, showing that it is very easy to establish a hornless family in any breed.

Remarks.—In the Fourth Annual Report of the Secretary of the Board of Agriculture of Michigan, reference is made to the Galloway (hornless) breed of cattle, and they are highly commended, but no more highly than they deserve, to the notice of American farmers. "There can be little doubt," says the Report, "of their adaptation to the northern portion of the country." This fact, and "their obvious merits have caused them to increase and spread rapidly" in Canada West; and at the Provincial Show last autumn, there were no less than 70 entries in this class. The indifference of American breeders to this valuable class of animals is truly surprising.—Eds.

Abortion in Cows.

A correspondent of *The Country Gentleman* writing from Washington, says:—

I wish to call attention to the proceedings of the "Edinburgh Obstetrical Society." At a meeting of this society papers were offered by several eminent physicians, testifying to the success that had attended the use of "Chlorate Potash," administered to pregnant women that had invariably miscarried before. One case is mentioned of a woman who had given birth to 16 still-born children. Under this treatment the 17th was born alive and healthy.

I therefore suggest to your farmers who are suffering by the abortion of their cows, to try the "chlorate potash" as well as other experiments. This salt is harmless, and might be given in ounce doses per day from the period of conception until the birth of the calf. Its cost would be about 75 cents per pound, or 5 cents a day. The action of this medicine, like many others, is not clearly understood, but the *supposition* is that its beneficial effects are produced by the oxygen it is capable of affording the blood. Should this be correct, I would farther suggest in an economical view the use of the nitrate of potash (saltpetre) in place of the *chlorate*, as being very rich in oxygen, and procurable at a much less price. If the cause, however, is from a deficiency of some of the salts necessary to a proper assimilation of the vital fluids, then the phosphate of lime (bonedust) may answer as well as any other.

Remedy for Caked Udders.

It is stated in an exchange that a cow having a caked bag may be cured by tying her in a stable in which horses are kept. A few nights will complete the cure. It is probable that the strong ammoniacal vapors which arise in warm weather from the horse stable is the remedial agent. If so, would not spirits of hartshorn, applied in small quantities, directly to the caked bag, be effectual? Care should be used in making the application, as too much might raise a blister.—*Germantown Telegraph.*

Remedy for Mildew.

A correspondent of *The Horticulturist* writes to that journal, his experience in the use of a remedy for mildew, recommended by the French Government in 1852, and published in the *Journal de la Societe d' Horticulture, Practique de l' Ain:*—"Take one pound of flour of sulphur, and one pound of slack lime, to which three quarts of water are added, gradually, by stirring the mixture; the whole put over a slow fire, and to remain boiling, stirring it until reduced to 2 1-2 quarts. The liquid, after the solid matter has deposited, is to be corked in bottles, and in case of want, mixed with one hundred times the quantity of rain water, and applied all over the plants, first before the buds open, and a second time before the blooming, and the cure generally is radical. I have just applied this remedy, with full success, to a lot of roses which I intend to force."

Management of Butter.

Great care, says *The Massachusetts Plowman*, is required in salting or seasoning, whether for a distant or home market. Over salted butter is not only less palatable to the taste, but less healthful than fresh sweet butter. The same care is needed as to the box in which it is to be packed, whether it be a firkin in which it is to remain till used, or only in the box to take to market as fresh lump butter. The best and richest flavored article will be spoiled by sending it to the exhibition or to market in new and improper boxes.

Rotation of Crops in Orchards.

The theory of rotation of crops in general farm practice, says a writer in *The Canada Farmer*, is based on the fact that constantly growing the same produce exhausts particular elements in the soil, and this fact, no doubt, often accounts for barrenness of fruit trees and the failure of orchards. The soil is robbed of its nutritive qualities year after year—no new supply is furnished, and out of nothing, nothing can come. The practical lesson is obvious, we must feed our fruit trees, if we expect them to feed us.

Grass Seed to the Acre.

A speaker before the Kelso (Canada) Farmer's Club recommended the following quantity of seed per acre, for a medium soil: "To lie one year in grass—3-4 bushel annual rye grass, 1-4 bushel Italian rye grass, 4lbs. English red clover, 2lbs. English alsike clover, 2lbs. white clover, 4lbs. red clover; and for cutting I would recommend 1-2 bushel annual rye grass, 1-2 bushel Italian rye grass, 8lbs. English red clover, 2lbs. English alsike clover: and where the land is clover sick, 2 or 3lbs. of yellow may be added as a safeguard, in the event of the red clover giving way, but it makes a coarse hay when allowed to stand and ripen. The following mixture I propose for two years, with the understanding that it is to be used principally for pasturage—3-4 bushel perennial rye grass, 1-4 bushel Italian rye grass, 2lbs. English red clover, 3lbs. English cow grass, 2lbs. English alsike clover, 4lbs. English white clover, and 4lbs. English yellow clover. English red and cow grass being so much allied, I have included these in equal quantities."

Trees as Live Fence Posts.

Lincoln Fay, of Portland, Chautauqua county, writing to the American Institute Farmers' Club, as reported in the Tribune, says:—"I have a row of cherry trees along the highway, eight feet apart, which serve for fence posts of the very best kind: and the crop of these trees some years equals the interest of $1,000 per acre. Nothing but lightning has ever broken down the fence. I also have forty rods of chestnut trees, eight feet apart, along the highway, which I am also using for fence posts. I have also thirty rods of maples set the same distance. Opposite the maples stand a row of sixty early Astrachan apple trees, giving an abundance of fruit to the owner as well as to travelers. Cherries, chestnuts and apples furnish fruit; and in a few years the maples will yield sugar. These trees add beauty and value to the farm. Upon a new line of road just opened, I have planted apple trees twelve feet apart for fence posts, as I have found eight feet closer than necessary. If a wind break as well as fence posts be desirable, it is better to plant the trees eight feet apart. Upon all division lines ash trees might be planted and cut for fuel at the hight of the fence, as the stumps will always send forth sprouts. In planting trees along the highway the most serious trouble I have had, has been to get the cattle law enforced. Copperheads, hen roost robbers, and all that class, against which we have to guard our granaries, with lock and bolt, call me 'hard to the poor' because I won't suffer their cattle to steal a precarious living in the highways, although I allow them to cut all the grass on the road side."

Product of Sugar per Acre.

The Sorgo Journal gives the following table of the average product of sugar per acre in all the principal sugar-producing countries:

	Pounds.
Mauritius	6,000
Brazil	5,000
Cuba	4,000
Isle of Bourbon	3,800
Guadaloupe	2,000
Vera Cruz	1,900
Martinique	1,700
Bengal	1,600
St. Domingo	1,100
Louisiana	1,000

The average product in the Island of Mauritius which had fallen off to less than 3,000 pounds to the acre, was a few years ago raised to its present standard by improved systems of husbandry, including a free use of guano. The soil is very rough and obstinate, and can not be worked except with hand implements.

Preserving Milk.

An easy way of preserving milk or cream sweet for a long time, or of removing the sourness when it has already come on, is to add to it a small quantity of common soda, pearlash or magnesia, of the druggist shop.

Cattle in Barns.

A correspondent of *The Country Gentleman* says: "I am fully persuaded that cattle not only do not sustain any injury, but on the contrary, are greatly benefited by close confinement to their stalls in cold weather, and chilly winds."

MERINO RAM "DEW-DROP."

DEW-DROP.

Now owned by John Sheldon & Son, of Moscow, Livingston Co., N. Y. Was bred by Colonel E. S. Stowell, of Cornwall, Vt.; is now four years old; purchased of Stowell, in December 1865, at $5,000. Was got by Stowell's Sweepstakes, by the McFarland Ram Peerless, by Hammond's Sweepstakes, by Little Wrinkley, by Old Wrinkley, by Old Greasy, by Wooster, by Old Black; purchased of Atwood: see Practical Shepherd, pages 121 and 412. Dew-Drop's dam, Sukey 1st, by Hammond's Long Wool, from Old Sukey, bred by Hammond.

Peerless dam was also dam of Hammond's Kearsage; a choice ewe by Long Wool, dam of Stowell's ell's Sweepstakes. Light colored ewe by Hammond's Long Wool, from light colored ewe, bred by Hammond. Most of above rams have taken first-class prizes.

FALL PLOWING CLAY LANDS.—Our farmers are learning one very important thing in farming our clay lands—that is, fall plowing, if done at the right time and well done. Although it does not accord with the views of our examplers, yet experience has taught us its great benefit. No machinery yet invented can fine our clay land like the frosts of winter. I can convince any one if they will only look on a piece of barley here, part fall plowed and part plowed this spring. But the benefit to the crop is not all—we can plow for one-half the cost in the fall. Our teams are in good condition, and ready, with a small expense for feed. I close, and may say more on the subject of plowing some other time, as that is a very important part of farming.—*N. H. N.—Country Gentleman.*

GOOD FEEDING.—The productiveness of cows depends greatly on the food they receive. The large products from the Herkimer dairies are obtained by giving the best feed the year round. As soon as autumn feed begins to fail, shorts, ground oats, &c., are regularly given. A small and regular supply of roots would be valuable. They are sheltered from the cold or stabled, and strict cleanliness and pure air attended to.—*Tucker's Register.*

CORN meal fed in small quantities is good, but in larger quantity, although increasing milk at first, subsequently augments fat at the expense of milk. Valuable cows have been seriously injured by too large doses of Indian meal.

A FARMER in Westminster, Vt., has a pair of yearling steers weighing 1,518 pounds.

Horticultural.

JULY.

I.

The swallows skim the bending grass,
Where tiny billows surging wave,
And nodding daisies, bending, lave
My feet with dew drops as I pass.

II

At noon the crooked swath lines show
The clicking mowers' devious path,
Where pliant grasses, in the swath,
Are deftly covered row on row.

III.

The garden smiles with blushing flowers
That scent the sultry languid air,
And mix their sweets with odors rare,
From clover fields and shaded bowers.

IV.

'Tis nature's teeming, growing hour,
When plant-life, throbbing in each vein,
Grows strong and fast 'neath sun and rain,
From seed to fruit, and leaf to flower.

G. E. B.

THE GARDEN.

In the month of July, when harvest and haying are demanding the entire energies of the farmer and his employes, it will require a true appreciation of the value of the garden, on his part, to induce him to divert any portion of the labor from the field to the garden; and, in consequence, there is great danger that the farmer's garden will now be neglected, and suffered to become overgrown with weeds. Better employ an extra hand to attend to the garden, than to have the labor of two or three months partially neutralized, by a few day's neglect at this time.

Another class—amateurs, mechanics, and professional men whose ordinary occupation is within doors, will be liable to be driven from the garden by the excessive heat. This class had better try rising an hour or two earlier in the morning, and devoting that time to working in the garden. We always find it enervating to lie in bed after the sun has risen. There is also an hour or two before sunset, when working in the garden is agreeable, in the hottest weather.

Asparagus.—The season for cutting is now past, and the bed, if an old one, is probably covered with grass and weeds. Give it a shallow hoeing, and a light dressing of fine manure.

Beets.—If your prospective supply for winter is short, sow the Early Blood Turnip.

Beans.—Attend to your Limas, and other pole beans, and see that they are winding around the poles. If not wind them around, contrary to the course of the sun, and tie them.

Cabbages.—Probably some of your plants were too small to use at the usual time of transplanting, but are now fine plants. Set them in vacant spots.

Celery.—Transplant all the month, as directed last month.

Cucumbers—May yet be sown for pickles. Old hills destroyed by bugs, should be resown.

Melons.—Destroy the bugs, and thin to three plants in a hill.

Peas.—Clear off the dead vines, and throw to the pigs. They will find any stray peas. Save the brush, and put under shelter for next year.

Potatoes.—Don't hill up much, keep clean, and when you commence digging green ones, select the hills having the fewest and largest stalks, as they contain the largest potatoes.

Tomatoes.—This now highly appreciated vegetable, will begin to ripen about Rochester the latter part of the month. Cut back the leading shoots.

Turnips.—The Ruta Baga, and Sweet Russia should be sown early in the month; the Yellow Aberdeen in the middle; and the Red Top Strap Leaf, the latter part. It is always best to sow in drills, 15 to 18 inches apart.

SMALL FRUITS.

Strawberries.—As soon as done bearing, clean them out, and give them a dressing of fine manure.

Raspberries.—Allow them to get fully ripe before picking for family use.

Grapes.—Pinch off superfluous shoots after they have formed one leaf, and pick off at least half the bunches of fruit. Nine gardeners out of ten allow too many bunches to grow, and, in consequence, get less and poorer fruit.

PROSPECTS.

Nothing has yet occured to mar the fair prospect of a fruit crop, mentioned in our last. The various insect enemies of fruit are at work, as usual, but nature has made such ample provision, that we can spare two thirds of what is started, and have a good crop left. We notice an unusual amount of dead wood on peach trees, caused by the hot weather last September starting a fresh growth, which had not time to mature before it was reached by the frosts of winter.

CULTIVATION OF AN ORCHARD.

WRITTEN FOR THE AMERICAN FARMER BY P. C. REYNOLDS.

Farmers will often take more pains in starting an orchard, than in its after management. Aroused to a short-lived enthusiasm by the enormous profits which some of their neighbors have derived from a crop of apples, they go to work, acquire the necessary information in reference to varieties, soil, preparation, and planting of an orchard, follow out their instructions pretty faithfully, succeed in getting out their trees on correct principles, and then conclude that their labors are done, and that their orchard will need no further care until it comes into bearing. They probably sow it to oats, seed it down, and mow it for three or four years, and wonder that their trees don't grow more. They very likely blame the nurseryman who furnished them the trees, or those whose advice they followed in planting, for the failure of their orchard. But, should they plant a crop of corn, and give no after culture, they would not expect a full crop. Why not apply the same principles, in judging of their orchard? Horticulturists

are not yet agreed as to the proper culture of an orchard. Some advocate its being kept under continued cultivation, others favor seeding it down.

It seems to me, that there are some general principles of tree culture, that might be definitely settled, so that there need be no conflicting theories. First, it may be considered an axiom, that the roots of all trees and plants flourish best in the surface soil, where vegetable mold abounds, and where they may be reached by the atmosphere, and the heat of the sun, within from three to ten inches of the surface, varying with the depth and porosity of the soil. This principle being established; it then follows that our culture should be such as to encourage the growth of roots in this surface soil. To accomplish this, our culture above the roots should not exceed the depth of three inches, and consequently should not be done with the plow, but with the hoe, the cultivator, or the harrow. The first year after planting, the roots of a tree extend but a few feet from its base, beyond which the soil may be worked with a plow, and hoe crops raised, provided the fertility of the soil is kept up by liberal manuring. The hoe can keep the soil mellow around the tree.

The next year, a greater space must be exempt from the plow, around the trees. As a rule, I think the roots of a tree extend about twice as far from its base, as do its branches, and if we would avoid tearing them up, we must keep that distance from the tree with the plow. After the first season, when fitting the ground for crops between the trees, we could pass over the roots with the harrow, and during the remainder of the season, as we pass through the growing potatoes, beans, or whatever vegetables we may grow in the orchard, with the cultivator, we could also pass over the roots with the same.

So year after year, the spaces between the trees which it is proper to plow, become less and less, until after the lapse of twelve to fifteen years, a thrifty orchard with trees from 24 to 32 feet apart, will extend its roots all over its surface when the growing of other crops, and the use of the plow should cease. Then the entire *energies* of the soil should be devoted to the production of fruit—but its cultivation should continue. The weeds and grass should be kept down, and the surface should be kept mellow. I know of no better implement for this purpose, than the cultivator, the two-horse one of course. Passing over the surface repeatedly with the harrow, has a tendency to pack it, but the teeth of the cultivator, lifting up the earth, throws it up loose, and mellow.

No worse policy can be pursued with an orchard, than to mow it for a succession of years. It is, in fact, robbing the trees of their proper aliment for the benefit of the hay crop.

We see that where the right course is pursued with an orchard from the beginning, its proper culture is tolerably clear; but supposing it has been in sod for a number of years, what then is to be done? The sod is to be broken up, so much is certain, but how? If done with a plow, to a depth of more than three inches, it will be sure to tear up a perfect net-work of roots all over the orchard. But if the plow can be set to a depth of three inches, and firmly held there, that will be the best way of breaking up the sod. Repeated harrowings with a sharp-toothed harrow might do it, but not so well as the plow.

To sum up the end to be accomplished in the culture of an orchard, is to keep a clean, mellow surface above the roots, and leave *them* to grow, undisturbed by any implement of cultivation.

PLANT RUTA BAGAS.

When land lies near large cities and is dear, those crops should be raised which, owing to the distance from a market will require a heavy expenditure in the transportation. All roots are of this character. When carefully cultivated, they produce largely, and are very profitable. Ruta bagas, though they can scarcely be considered a marketable production, is still a valuable crop to raise for winter feeding to cattle. They afford not only good health and are fat-producing, but to dairy cattle they are productive of an additional flow of milk and consequently of butter.

The ground for the crop should be plowed early in June, say ten inches deep, rolled and harrowed thoroughly, then formed into ridges, going two rounds with the plow to each ridge. The ridges should be lightly rolled, and the seed, about one pound to the acre, drilled in. When about three inches high the plants should be thinned out to from eight to ten inches apart, and kept clear of weeds—a couple of hoeings will be sufficient. The crop is harvested in November, and stored in a barn cellar, or buried in the field to use as required. From six hundred to nine hundred bushels are raised to the acre.—*Germantown Telegraph.*

To Protect Cucumbers, &c.—An eastern correspondent of *The Germantown Telegraph* thus writes us on this now timely subject:—"When cucumbers first start they are apt to be destroyed by a small black bug, and we find that the best remedy for them is to make a strong soapsuds and apply liberally, and they will either be killed or will depart at once. The best way to destroy caterpillars is to remove them with the hand and stamp them under foot. It is far better than kerosene oil, which only makes them scatter over the trees."

The Striped Bug.—This enemy to all vines will soon commence its ravages. They may be kept off by means of boxes covered with fine netting. Small cheese boxes, or even circular strawberry boxes, answer a good purpose, by covering them with thin muslin. This method, however, is somewhat expensive, and we know of no better substitute than going over the lines once a day; and pinching them between the thumb and finger. This is a sure remedy.

Large Egg.—We have received from Mr. E. Baldwin, engraver, of this city, a larger egg than the one mentioned in our last number. This one weighs 4 oz., and measures 6 1-2 by 8 3-8, and was laid by a cross-bred hen, of the Dorking and common breeds.

GROUP OF PANSIES.

THESE beautiful flowers are hardy perennials. The seed may be sown either in the hot bed or open ground. July or August is a good time to sow the seed. They like a rich soil, and will flower from early spring to late in the fall. The flowers are small during the summer months, but they increase in size as the temperature gets cooler. The green fly is the only insect that attacks the pansy. It is prevented by fumigating. The German varieties represented above are of fine habit, great beauty, and well adapted to this country, and a large bed of them makes a fine show in a garden or on a lawn.

THE CULTURE OF TREES.

WRITTEN FOR THE AMERICAN FARMER BY "A. P."

MESSRS EDS. :—Allow me to say a word to your readers on the culture of trees; but my remarks at present, will be mostly in reference to dwarf trees, the object being not to convince them that I have made some new and very important discovery, but merely to call attention to facts long since written and often repeated, but heeded by very few indeed. And if aught that I can suggest will arouse and stimulate even a few individuals to strike out in the right direction, and plant and cultivate a fruit garden, or orchard, or even a few trees properly and successfully, my gratification at such a result will be a sufficient reward.

First, the necessity of preparing the ground by thorough draining and subsoiling, or trenching, and reducing the soil to the finest condition to the depth of at least eighteen inches and deeper if possible. These preparations are indispensable to success, and we advise all parties who cannot make these preparations to postpone the planting of trees of any kind until they can do so; for unless this is accomplished they will have nothing but disappointment, failure, and waste of money and labor for their reward.

Next in importance is the selection of sorts, which in consequence of the vast number of kinds cultivated and placed on the lists in the catalogues of nurserymen, renders it a very difficult task for those who desire to cultivate none but choice varieties, and still are reluctant to leave out any that are or may be actually desirable. We have never known a single instance when any considerable number of varieties were planted, but that within a half dozen years the proprietor was dissatisfied with some one or more of them, and would gladly substitute some variety not embraced in his collection, not excepting even those who were well posted up on the subject of varieties. This result may be caused in many instances by a difference in soil, climate and treatment. Therefore it is important when making a selection of sorts, to be governed by the result of such varieties as do actually succeed in their own immediate neighborhood. But, we advise all in want of trees, to consult the descriptions and reports of our horticultural and pomological societies; with which all should be sufficiently familiar, to enable them to make their own deductions, and we are inclined to add reverence, to the opinions of the "Father of pomology," Marshall P. Wilder, and his justly respected co-workers, Downing, Thomas, Barry, Quinn and many others of their pomological associates of careful and long experience, whose opinions are entitled to the highest respect.

Before making a list of varieties, I would suggest that there are two choice pear trees, viz.: Bartlett and Sheldon, that do not succeed when worked on quince stocks, and should therefore invariably be double worked on some strong hardy vigorous variety, like the Vicar of Winkfield, or Glout Morceau, and if the work is carefully and skilfully performed, and the trees then properly planted, and receive proper culture thereafter, there is no good reason why they should not last a life time, excepting only such accidents as the blight, which other varieties, and even standards are equally subject to. If these two varieties cannot be obtained double worked, then select first-class, low-headed trees, worked on pear stocks; and if low-headed standards cannot be found, then select one-year old trees and cut them back so that the lower branches will not be more than eighteen inches from the ground, which should be the criterion for selecting all standards, except such as Winter Nellis which should be worked about two and a half feet from the ground. Some dealers and travelling agents will advise you to plant these varieties deep enough and take other measures to cause them to take root from the trunk in order to make it durable. Discard such advice at once, and if you want a pear tree without quince roots, then purchase a standard on the start, and be not duped or influenced to make any such unprofitable and foolish experiment. Such nonsense should only serve to convince you that the party who utters it is an unscrupulous humbug, and is not to be trusted in any transaction whatever. The same class of men will advise you to purchase trees from four to eight years old at enormous prices, tempting you with the assertion that they will bear a good crop of fine pears the first season, which in some instances may be the case; but such trees will not thrive, and you will certainly be disappointed by the inevitable fate that awaits them, namely, premature and entire failure. The same men who would advise as above, would just as readily strive to sell you any sort of cuttings from the swamps for White Willow, and insist that the "White Willow" is the very best and only reliable hedge plant in America, and they will sell you plants of the common Rhubarb or pie plant, under the name of "Wine Plant," claiming it to be a new and distinct variety, and that it will yield an enormous quantity of wine, far superior and more valuable than any wine made from grapes or other fruits; also that for medicinal purposes, superior to Turkey Rhubarb. The same sort of men would sell you an Isabella grape, for a Delaware, a Diana, or any wildling for an Iona, Israella, or Adirondac; or a wild blackberry plant, for a Kittatinny; and the same men would, if they could get the agency, sell ground plaster (gypsum) for "Flour of Bone," or practice any species of rascality whatever. These frauds are being practiced constantly on the community, as any one may see who reads an agricultural paper; and any man who owns a rod of land, and don't subscribe for some one or more of our agricultural paper don't deserve much sympathy.

I will mention a new kind of sharp practice by propagators, which is to purchase Kittatinny plants by the hundred; and cut off all the roots but one for propagation, and then sell what is left of the original to their customers, who of course expect to get plants as grown by the originators of the variety, whereas no plants have ever been sold until last fall. This is virtually robbing their customers at the expense of the party who produces and supplies the original plants; for, if plants with only one root are sold and do not prove as strong, vigorous and hardy as other varieties planted with their full quota of roots, then customers will become dissatisfied with their investment, and naturally come to the

conclusion that the variety is not what it has been represented to be, and that they have been duped and badly sold, and the originators of the variety will be censured and the reputation of the plant would be seriously injured if not ruined, and the originators unjustly injured. In my esitmation, this is gross swindling; but still, if the Kittatinny blackberry plants with only one root are just as good, and worth as much as plants with all their roots, when well grown in the usual way, then I am making a great ado about nothing. I leave this for the decision of experienced propagators and fruit growers; but I think there is a big rat in this tub of meal, that should be looked after, and we should not be surprised if this same rat had once been treed in a "White Willow Swamp."

INJURIOUS INSECTS.

It is now the season when the insects which prey on fruit trees and vegetables are most destructive, and require the closest attention. "Eternal vigilance" will be the "price" of successful contention with these tiny foes. The tent caterpillar, and the canker worm, prey on the foliage of apple and cherry trees. The apple worm moth lays its eggs in the calyx of the young fruit, and the grub, as soon as it is hatched, cuts its way to the core, causing the fruit to ripen prematurely. In some instances the worm continues in the fruit without causing any apparent damage, and it is only when the apple is being eaten or cup up, that the unwelcome tenant makes its appearance. The Spitzenburg, which is one of the most desirable fruits, seems to be a particular favorite with this destructive insect, for we find a great deal of this fruit wormy. A great many of the moths may be got rid of by building fires in the orchard at night. They will be attracted by the light, fly into the blaze, and be destroyed. Some persons place a lamp in the center of a tub of water; the light attracts the moths, they fly against the lamp, fall into the water and are drowned.

The gooseberry and currant caterpillars begin their work of destruction as soon as the leaves are fully developed. The gooseberry caterpillar is the larva of a species of saw fly, which lays its eggs on the ribs on the back of the leaves, and as soon as the young worms are hatched, they commence preying on the leaves, eating their way into them. Their presence may be detected by the appearance of numerous small holes, like pin-holes in the leaf, and as a whole brood are, at this early stage, confined to one leaf, they can be easily destroyed, by picking off the leaf and trampling on it.

Bark lice are very injurious to fruit trees, as they find shelter under the bark, through the crevices of which they prey on the sap, and injure the vigor of the trees. They may be destroyed by a wash of whale oil soap suds, or a solution of potash. Common soap suds have been used against them with success. The stems of all fruit trees cannot be too frequently washed, as by this means old dead bark, which affords a hiding place to many noxious insects will be removed, as well as moss and fungi which absorb the juices and consequently hasten the decay of the tree.

The flea-beetle, better known as the black bug or turnip-fly, is very destructive to the seed leaves of turnips, cabbages, cauliflower, radishes, melons, cucumbers, &c. It is identical, or nearly so, with the turnip-fly (*Haltica nemorum*) of Europe, which commits such depredations on the turnip fields in Great Britain and Ireland, France and Germany. These flea-beetles lie torpid during the winter in heaps of rubbish, under stones, and clefts of the bark of trees, and in chinks of walls. They lay their eggs in the spring, on the leaves of the plants on which they feed, and as soon as they are hatched, the young grubs burrow into the leaves, feeding on them, and forming in them little cells, in which they undergo their transformations. Several broods are produced during the summer, so there is a constant succession of these pests all through the season. A solution of lime has been found very useful in preventing the ravages of these insects, but a better plan is pulverization of the soil, in order to close up all chinks where they can hide, and the application of abundance of well rotted manure, to force the plants into the rough leaves, as, when they reach this stage of growth, the bugs leave them to seek more tender food. Chickens are very efficient destroyers of these insects.—*Western Rural.*

BUDDING.—This operation can be done throughout the months of June and July. Those who neglected to have their grafting done this spring can resort to budding, as there is entire safety in performing the latter operation yet, where the grafts have been properly preserved. We prefer grafting to budding, as a rule, but sometimes the latter is the best, as in the case of peaches and cherries. From our experience with the two, we think grafting makes more wood the first year, comes into bearing earlier, and we know it makes a handsomer tree.—*Mass. Plowman.*

A CURIOUS HANGING BASKET.—Procure a turnip of large size and scrape out the under side, leaving a pretty thick wall around; fill the cavity with earth, and plant in it some climbing vine—cypress vine or morning glory. Suspend the turnip with cords, and in a little time the vines will twine around the strings, and the turnips sprouting from below, will put forth leaves and stems that will turn upwards and curl gracefully around the base.

TREES transplanted this past spring should be carefully looked over, and if they are not pushing strong will require perhaps more cutting back—perhaps mulching and watering. Thoroughly examine them, and attend to their wants in time.

MANURE FOR EVERGREENS.—Years ago, we were taught that animal manures were injurious to evergreens; but for four or five years past, we have practiced, applying old, *well-rotted* barn-yard manure to evergreens of all sorts, and apparently with the best possible results. Our trees and shrubs grow vigorously, and put on a deeper, brighter green; while kalmias and rhododendrons flower more abundantly than in our old practice of leaf mold manuring.—*Horticulturist.*

Ladies' Department.

DOMESTIC RECEIPTS.

CANNING STRAWBERRIES.—Before picking, or while the berries are being picked, see that everything is put in readiness for the doing up. You will need a good fire, a brass or porcelain kettle, a large spoon, small ladle or teacup, a plate, and a kettle of hot water. Get ready your bottles. Are any dirty, cleanse them, and see that every bottle has its proper cork, rejecting badly fitting or impure ones. If tin lids are used and they are at all rusty, scour them; in fact have everything made as sweet and clean as possible. Wash or rinse the bottles in quite warm water, afterwards pour into each one about a pint of nearly boiling water, and allow them to remain so till used. This, of course must be just before you require them, as the object of the water is that the glass may be properly seasoned, so that they shall not crack when the boiling fruit is poured in. As soon as the fruit is brought from the garden, wash very thoroughly before husking. Take off the husks immediately, and fast as picked place a layer of berries on a dish, and sprinkle over them a little white sugar—any kind of white sugar will do. Another layer of berries and sugar till all are done. By the time the berries are all husked there will be a considerable quantity of juice formed; this should be poured into the kettle and placed upon the fire; if not enough juice, a small quantity of water may be added. Put into this enough berries to fill one or perhaps two bottles; we prefer enough only for doing one bottle at a time. As soon as you are perfectly sure that it boils, empty one bottle of the hot water and fill immediately with the boiling fruit. Have the bottle full up to the rim of the mouth. Place in the cork, seal with wax, if you use that kind of bottle, (we do not use them as long as we can procure any other kind.) If a lid with rubber is used, place it on immediately, and complete one bottle entirely before proceeding further, except sparing one moment to put more fruit into the kettle to be ready for the next bottle. We should have said that no more of the juice from the kettle should have been taken than was sufficient to cover the fruit in the first bottle; also from time to time the juice from the dish should be added to that on the fire.

After one or two bottles have been filled, you will perceive that you may allow more juice to each bottle, as there will be a large increase produced by the boiling of any quantity of berries. Your judgment, of course, must guide you in this matter.

Observation 1st. The bottles before using should be seasoned with quite warm water. Do not put them in the oven as some do, as it is quite a dangerous practice, the bottles sometimes getting so hot that the boiling fruit will even crack them.

2d. The fruit should be boiling when put into the bottles, corked and sealed, and the lid put on immediately.

3d. It is better to do one bottle at a time, do it well, and be certain of success, than several with uncertain results.

Although each bottle was filled to the brim before sealing, as shown in cut (1,) after the bottle is cold every one should have a space of an inch and a half between fruit and lid as shown in cut (2.)

When all are done and you are ready to store them, wipe clean and carefully, and place on a strong shelf in a good cellar, and once or twice during the summer and fall wipe again with a cloth wrung from warm water. This will prevent mold, &c. If the Spencer bottle is used, be careful not to disturb the lid after once putting it on. One lady of our acquaintance spoiled all her fruit by inserting the point of the shears, as she had been told to do when purchasing the bottles. Those bottles with rubber and tin covers, are good, so also are those with screw tops; but we prefer the Spencer. Every one must judge for themselves in this matter, as it does not depend so much upon the bottle as the taking care that each bottle receives the proper application of its own peculiar hermetical sealing. This receipt is the same used for raspberries, currants, &c.

A GOOD FRUIT CAKE.—Take a tea cup of butter and two of good brown sugar and the yolks of four large or five small eggs; beat to a foam; then add part of a tea cup of sweet milk, two teaspoonsfull of cream of tartar, and a small part of about five teacups of flour. Beat to a foam again; add a little more of the milk and more flour, and again mix thoroughly, till nearly all of the milk and flour is in the cake. Mix with about a tablespoonfull of the remaining milk one teaspoon of soda, add to the cake with the remaining milk and flour a pound of currants and a half pound of raisins with a little citron, if convenient, and one or two nutmegs. Grease a pan, placing on the bottom a sheet or two of buttered paper. Add lightly to the cake the whites of the eggs beaten to a stiff froth. Pour into the pan and bake till done. Do not look at the cake till at least ten minutes are passed, and not for an hour, if you are sure that your oven is not very hot. On no account move the cake the slightest till you think it is done. If you find that it is browning too much, place over it a sheet of paper warmed. Never allow the oven to be opened more than a second at a time, as the cold air will spoil any cake at all rich. When you think the cake is done, insert gently into the centre a very fine knitting needle or a clean skewer; if it comes out perfectly clean, the cake is done; if not, allow the cake to remain till it does. Do not take it from the pan till quite cold.

MADELINE'S KITCHEN CABINET.

A NEW KITCHEN ERA.

WRITTEN FOR THE AMERICAN FARMER.

PROFESSOR BLOT does not believe in stuffing humanity with solids *a la grosse*—roast beef, ham, turkey, pot pie, plum puddings, pork and beans, &c., &c., dispatching at a fifteen minute's sitting a bulk of solids that would founder an elephant, and sicken a jungle tiger. Hence the exercise of his philosophy and ingenuity in the many combinations and preparations of food, that shall afford the maximum amount of nourishment in the least bulk, and most economical and palatable form.

M. Blot's third bill of fare is headed with—

1. *Potage aux Nouilles.*—First there is a pastry made of flour, beaten eggs and tepid water, the proportions being four or five eggs to a pound of flour. Mix until the paste can be readily rolled out on the moulding board less than a quarter of an inch thick. Cut in small fillets and cook twenty to twenty-five minutes in a rich broth.

2. *Fish Genoise.*—The fish are stuffed with any sort of filling that may be preferred, baked slowly until thoroughly done through, and served with a rich sauce.

3. *Fish fillets of soles au naturel.*—This dish is made of any sort of small pan fish; not so small, however, as to make the process of boning tedious and difficult. Cut the fish open on the back, remove the entrails, spine and ribs. Wash thoroughly, drain, salt inside sufficiently close, and fry in clean fat till well done. When dished, lay over the fish thin slices of bread toasted and dipped in milk and melted butter.

4. *Tripe in Poulette.*—The tripe is boiled until perfectly tender; and then a sauce made of broth, butter and eggs, as rich as you can afford to make it, is heated and poured over the dished tripe. Serve steaming hot.

5. *Shoulder of mutton stuffed.*—Make the stuffing of crumbs of stale bread, half potatoes boiled soft and mashed fine, a few slices of onions, if you like them, chipped into atoms; season with thyme, sage and pepper, make the incisions in the shoulder obliquely down quite to the bone, cram in all the filling possible, close the lips of the cut, either with skewers or stitches of strong thread, and bake in a hot oven, from two to three hours, according to the size of the shoulder.

6. *Partridge in Chartreuse.*—A very simple and exceedingly neat arrangement of the bird. The partridge is first baked, carved, and laid naturally together in the center of a small platter, and a circular stockade built neatly around it composed of boiled carrots sliced thin, turnips nicely mashed, and cabbage stewed, well done, and minced fine.

7. *Spinach aux Crontons.*—The spinach is boiled soft, laid lengthwise of an oval vegetable dish, and thin slices of bread fried brown, laid over and served with it.

8. *Potatoes stuffed.*—I have no high opinion of this fashion of cooking potatoes. However, as there may be others than M. Blot and every living Frenchman, who will admire stuffed potatoes baked, I shall not erase them from the bill of fare.

The potatoes are cut in two halves, the halves scooped out to a shell, say half an inch thick, stuffed with any sort of filling you like best, then the two halves are joined together, secured with a bit of twine, and baked just as you would bake any potato.

9. *Omelet au Rhum.*—Made with eggs broken, beaten up and fried *a la omelet*, and served with half a gill of best Jamaica rum, having a tablespoonfull of loaf sugar dissolved in it and heated.

10. *Charlotte Russe.*—Every cook book contains three to five of these *haut ton* extravagances. They are nothing for poor folks to eat. Let us go by them.

11. *Maringue and Kisses.*—Kisses are sweet things, and all very well when legitimate. But this sort of kisses are not adapted to the mechanical meridian. *Maringue* do.

12. *Black Tea.*—M. Blot says that tea being a stimulant, ought never to be taken till afternoon. I think he is right there; but I shall never endorse the *Chef's* decision, in which he endorses popular opinion, that *green* tea is unwholesome, and black good to drink. I shall believe my husband sooner, who born a "Celestial" and bred a Chinaman, can manipulate and manufacture teas as deftly as the veriest *Yangst Ti* of them all. He assures me that everywhere in China, black tea is an abomination. "John Chinaman" never drinks it. But he does drink the very greenest and strongest of of all green teas, and a great deal of it too—frequently as many as fifty cups a day—so strong that they say:—"*Jah-ning-ho kang poo haira Josh.*" (It will float a porcelain Josh.) It is only the black teas that are damaged first, and then drugged, adulterated, dyed and made into murderous abominations. I think Mons. Blot is stumbling in the dark over black tea, as well as a great many other people.

(To be continued.)

MEAT FOR CHILDREN.

A PHYSICIAN gives some sensible philosophical suggestions on this subject. Whether our readers agree with him or not, it will do no harm if they think of the matter a little:

"Parents who give their children, under ten or twelve years of age, a meat diet, commit a vital error. The great mortality among children of tender age is, in my opinion, mainly attributable to ignorance on this point. A healthy infant or child glows with animal heat. His little vital machinery, fresh from the ingenious hands of nature, is full of life, electricity, and animation. At birth his palpitating little heart contracts from 130 to 140 times per minute. At the age of three his pulse is above 90, while that of an adult averages 75. Is it not, then, manifestly wrong to give him a stimulating diet? Children of this age are full of electricity; to augment in them that active element is simply to inflame the blood and render them susceptible to positive diseases. What I mean as positive diseases are fevers, bowel complaints, croup, water on the brain, &c. Hence their diet should be plain and nutritious—not stimulant. Vegetable food is the best adapted to the nourishment of their little bodies, and keeps their blood pure and healthful, while flesh generates large quantities of carbonic acid gas, which contains 72 parts of oxygen in 100."

Editor's Table.

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We have secured the copyright of The American Farmer, but shall at all times be pleased to have other journals copy any article or articles they desire, from our pages, provided each is duly credited. We have noticed several of our country exchanges copying largely from The Farmer without credit, and as most of the matter for our columns is prepared specially for it, we prefer to see proper credit given.

A Trip to New Jersey.

Having heard so much in regard to New Jersey land, we have been anxious to see something of it ourselves, and on a recent trip to New York, we had the pleasure of visiting, with the Farmers' Club, of New York, the settlement of Hammonton, situated on the Atlantic and Camden Railroad. Taking the steamboat at the foot of Duane street, we soon arrived at Port Monmouth, on the New Jersey shore, and taking the cars, for the first few miles, noticed nothing particularly different to other sections, but we soon entered what is called "the New Jersey wilderness," which it is, in every sense of the word. For miles and miles, you can see nothing but sand, scrub oaks, and pines. Sand here, sand there, sand everywhere! The cars stopped at several small stations, among others, Red Bank—very appropriately named, as the soil is as red as the setting sun. Passing on, we soon came to the thriving settlement of Manchester, at which place we stopped for a short time to view the cranberry beds. Mr. Lewis B. Brown, of New York, has a large tract planted out to this berry—over 200 acres in all. One large field contains about 35 acres. Banks are formed all around, so that in the spring, (March and April,) they can easily be flooded. More than eighty acres were planted last spring. The beds appeared to be in very good order, and gave every evidence of doing well. Mr. Quinn, a prominent New Jersey horticulturist, picked off a runner which measured four feet, two inches in length, from a planting of May last. The beds are kept clean with the hoe for one or two seasons, after which they entirely cover the grounds. We saw peas in full bloom; strawberries were nearly over. The season there is quite early, and small fruits grow well, and thrive in the sandy soil.

From thence to Hammonton is a continuous wilderness of scrub oaks, pines and sand, with here and there a small settlement. The people of Hammonton are a persevering, intelligent set of men, and are certainly deserving of great credit for making the "wilderness to blossom as the rose."

All small fruits are cultivated with great care. Grapes, berries of all kinds, sweet potatoes, apples, pears, and other fruits look healthy, and appear to thrive in the sand. The principal manure is "forest muck and marl;" they get the latter delivered at the depot for $1.10 a ton. The past winter has been the most severe ever known, the thermometer going down to 10° below zero, which probably is accounted for by the cutting down of so much timber. They will have to plant trees of all kinds, and evergreen fences to break the force of the wind.

The climate is all that could be desired, and a doctor told us that sickness was almost unknown to them. The productiveness of the soil may be accounted for probably by the large quantity of iron which it is said to contain. A pitcher of water taken from a well and left to stand, will deposit iron at the bottom; and as our correspondent says, on page 173, June number, "iron is one of the very best vegetable invigorators known." We certainly were surprised at what we saw, and should think that small farming may do well there, and the growing of fruits of all kinds, and vegetables, for the New York and Philadelphia markets, which are so conveniently near.

Grass averages two tons of hay to the acre, and clover flourishes well, and produces heavy crops. It is surprising when you look at the vast fields of sand, how anything can grow, and the wonder is, from whence plants and vegetation get their nourishment. We were pleased to see the spirit and enterprise shown by the farmers of this settlement, and may refer to the subject again; but at present our space is so crowded that we shall have to defer further notes until another time.

Notes from Canada.

We have great pleasure in introducing to the readers of The Farmer, the following interesting communication from an esteemed correspondent in Canada, formerly connected with the editorial staff of the old *Genesee Farmer*, to which he contributed many valuable articles. "Mac" will hereafter furnish us with the results of his observant eye, in whatever pertains to the agricultural progress of the Provinces. Our neighbors have achieved a high standard of perfection in agriculture, and in their labors American farmers must always feel the deepest interest.

As to the import duties to which our correspondent alludes, we cannot but regard them as excessive. While a due regard may be had to the necessities of the government, and "protection" to a reasonable amount insured in a mutually adjusted reciprocity—a scale of duties which amounts to prohibition *against* a large stock-raising country like Canada is a positive injury to our own farmers. Canada produces some of the finest blooded cattle on this continent; her long wool and mutton sheep are unsurpassed, and in draught horses she is unrivalled. It is our interest under these circumstances, to have every facility for our own improvement by importation of provincial stock. We hope to see a system prevail which may be acceptable on both sides of the line, and tend to the happiness and prosperity of the people of both sections.—Eds.

Eds. Farmer:—Spring opened early, but was followed by a long period of dry cold weather. A very great breadth of spring crops was put in—principally spring wheat, oats, and barley—of the latter not so much as would have been, had the prospect for fair prices been as good as last year. In the townships

bordering on the lakes, and for twenty miles back, a good deal of the fall wheat was winter killed, and many fields were plowed up and resown with spring grain; but further back where the snow lay till late, the fall wheat came out in good condition, and promises a good yield.

About the third week in May, the weather became warmer, with some rain. A constant succession of showers with warm days since then, has given a great impetus to vegetation. The fields have changed from dingy brown to the brightest green.

Fruit trees blossomed rather late, and no frost having occurred to hurt their bloom, they give promise of a fair, but not abundant yield. The meadows look well where grass had been thickly sown; but clover was badly winter killed in spots, and will be a short crop, except in sheltered situations or on warm soils. Owing to the prevalence of cold winds, the sheep were shorn later than usual, and although a heavy crop of wool is anticipated, but little has yet come to market; prices apparently not suiting our farmers, who realized largely on that item last year, and are slow to accept so considerable a reduction as is now offered on last season's price. But it is expected prices will advance as soon as large orders come in, none but small dealers being yet in the market. Our wool being mostly of the long combing class, is in great demand for home made goods, tweeds, and heavy cloths, suitable for winter wear; much of it being manufactured in the country, so that the duty recently imposed in the United States on wool, will rather encourage the home manufacturer to the detriment of the foreign manufacturer.

The exportation of live stock to the United States, which had been going on at a great rate all winter, threatening to bring up meat and butter to famine prices, has been suddenly put a stop to by the United States government imposing a heavy import duty; much to our relief, and our farmers are again turning their attention to stock raising; and what is more, are improving the breed, now that they find it pays to raise stock.

The amount of root crops put in will be large, as it is found to be more profitable to feed roots and cut straw, than hay to young stock, as they thrive better and grow faster, coming in earlier under such treatment, than by the old method of being half starved on dry provender. Owing to the abundant crops of last year, and the high prices realized for grain and surplus stock, our farmers are in comparatively easy circumstances; and with another favorable season will be enabled to carry out many improvements in the way of new fencing, farm buildings, and the addition of many luxuries that have hitherto been a stranger to their homes, not the least of which is the ability to keep a hired girl to relieve the good wife from the most laborious of her household duties. MAC.

The foregoing and following letters were received after the agricultural department was all closed, and as they are particularly interesting at this time, we give them room here rather than defer them to the next number.

Pennsylvania, West Jersey, and "Down Delaware."

LAST DAYS OF JUNE.

MESSRS. EDS.:—I have been round through ten counties of three States since last report, and have looked at a thousand wheat fields, and into ever so many peach orchards. Didn't find many peaches; so I am obliged to retract something, or rather qualify my last peach proclamation. No one is going to give away peaches this year, notwithstanding I did say, and think so, a month ago. The trees *blowed* enough to prelude a break down burden of fruit, and the peaches set thick enough. But most of them got sick, or discouraged, or something else, and fell. Only about a quarter of a very light crop left.

Apples are plenty. All the trees are in bearing—not overloaded; but in the aggregate a big crop of apples this way this season. Cherries, pears, and all small fruits exceedingly abundant. Hay is unusually good in quality, but only barely medium in quantity. Wheat, so far as I have cruised, with very few exceptions, looks a great deal better, and more of it than I ever saw in these latitudes. Rye in Pennsylvania the same. Oats and corn coming ahead fast, and no disaster happening them hereafter, there will be extraordinary crops of wheat, corn, and oats in ten counties through which "we've been roaming" these two weeks past.

We have some dairymen, and dairymen's wives and daughters in Montgomery, and Chester, and Bucks counties, equal to in butter making, and in other amiable accomplishments ahead of our country cousins over there in the "Land o' Goshen." Montgomery county is the star in butter and milk, as it is the garden county of the Keystone State.

From several of the hights northward from the Schuylkill, westward from Shannonville and along either bank of the silvery romantic Perkiomen, the views are more varied and enchantingly lovely than any I have ever seen elsewhere upon the surface of this wide world. Gracefully rounded rolling hills, gently sloping vales, green pastures dotted with grazing herds, broad fields of waving grain, darker belts of woodland foliage fringing the bold banks of serpentine streams—neat, substantial, and cozy farm houses, cottages ornee, and here and there a more pretentious pretty villa, while in the distance rise above verdure and foliage-clad hills the arrowy spires of rural churches, gleaming white in the sunlight, silent fingers pointing erring mortals heavenward.

Such an Eden land—such an earthly paradise—Claude of Loraine, had he lived and looked upon it, would have gone wild with very ecstacy; then dashed from him brush and palett in the madness of despair that he could produce on canvas nothing so enchanting.

Such, in brief, and not a thousandth part of its beauties touched by description is the surrounding of Rose Hill, the residence of Thomas Hopkins. There is where one may witness admirable butter making, and look upon excelsior butter. Down at cream headquarters, under a wide branching tree, at early dawn revolving by horse power, whirls a churn, in dimen-

sions like a young overshot mill wheel—clitter, clitter, swish, clish, goes the many gallons of sweet cream within the immense cylinder, every implement and appliance of butter making, as sweet and immaculate of all impurities as the sylvan shrine of Ceres at fabled Tempe, and the fair maid of Rose Hill, mistress of the golden revel, with sister aids-de-camp, stand prepared for active operations.

In less than thirty minutes a bright, yellow mass is transferred from the churn to the receiving tubs, and down under ground into the cool cave. Then begins the parting and deft manipulations, working out every particle of butter milk, weighing, with two pennies over-weights on the scales, that the purchaser shall in no instance be defrauded. Then a toss to and fro from hand to hand, to fashion, clip-clip, as rapid as one can count, to print, and then down on the snowy clothed table, to lengthen out the lines of the brilliant butter brigade.

And thus the work goes rapidly on; no patent butter workers to break up the "grain;" no washing, to render the butter a mass of greasy, gluey salve—all is sleight of hand and nimble dexterity, and while we stand wondering, the fair butter makers have metamorphosed the great golden mass, as if by magic, into beautiful pound and half pound prints.

COSMO.

Extracts from Letters.

One of our correspondents who is travelling through the West, writes us from Kansas a few interesting items, and says:

"I have been in Lawrence nearly one week, and like it very much. I like the country much better than any I have seen for some time. I think Kansas, in a few years will be ahead of anything in this country. Emigration is pouring into the State in a perfect stream. It is estimated that 50,000 have come into Kansas since the first of January. It has the best kind of society. It is well calculated for stock, has plenty of water, and a good deal of timber along the streams. It is a very good fruit country. You can grow all the different kinds of grapes. Take it altogether, I like Kansas the best of any State I was ever in. It has been and is still very wet. Farmers are afraid it will injure the crops, if it does not hold up soon."

"B. F." B. writes us from Chester county, Pennsylvania, under date of June 14th, the following interesting items:—

"We have had for the past two weeks quite a growing time, plenty of rain and some hot weather. Oats, wheat and hay will be a good crop; the prospects are three times as good as they were two weeks ago; corn is growing luxuriantly; apples promise well; pears and peaches will be scarce; cherries and plums a failure this year; butter is very plenty, and came down with a rush, 25 cts. a pound; beef, and meats of all kinds as well as grain have gone up in price and scarce."

To the willing no labor is really toil.

Notes on the Weather, from May 15th to June 15th.

The last half of May gave us for mean temperature, 53.3 degrees, or 5.7 degrees below the general average, 59 degrees. The hottest day, the 20th, gave 86 degrees, the hottest noon; and its mean was 70.7 degrees. This was the Sabbath, on which the severest hail-storm ever known here by far, passed over us, leaving half a mile wide and three times that length greatly injured. This hail storm extended from the Mount Hope nurseries, on the east side of the Genesee, over the dwellings, gardens, and fine green houses, eastward and northward, and the desolation of plants, exotics in pots, graperies, and glass of windows and conservatories must be imagined, for there is not space to describe it. The hail storm was spread over several miles square, but the ruin produced was happily, much confined. The only hail storm remembered as destructive here, passed over this same desolated tract on the last Sabbath in August, 1841, twenty-five years ago.

The heat of the month was 52.4 degrees, which is less than the general average, 56.2 degrees by 3.8 degrees. Indeed, the last half was the coldest, except two, of this half, in 30 years, and the range of the annual mean of it is between 51.7 and 65.9; and also this May was the coldest but two in that period. A little frost occurred on the 23d and 24th, but fruit seems not to have been injured. The season is rather late, but is giving good indications. Water of the month 2.90 inches.

June began with a cool day, but soon became warm, and this half has been above the average, as its mean temperature was to the general mean as 65.9 degrees to 63.4 degrees. The 13th gave us 84 degrees at 2 P. M., after a series of thunder showers, which began a little after 4 A. M.; and of this day the mean was 72.3 degrees, the hottest day thus far. The rain has given us a bountiful supply of 2.59 inches, much above the average. Much pleasant and fair weather. The season is still backward; roses only beginning to blossom; common locust now in flower, a week late; strawberries brought from the South; not in market from our gardens, but a week, at least, late. Several hail storms have occurred about us, and quite destructive in some fields. Mr. Green, the trout raiser, at Caledonia, had thousands of young trout killed by the hail storm on the 5th. Still, grass and wheat and all cultivated objects of the farm are advancing. The promised seed-time has come and the promised harvest is on its prospective way.

Illustrated Annual Register for 1866.

This valuable annual, published by Luther Tucker & Son, Albany, N. Y., we have heretofore omitted to notice by an oversight. We cannot speak too highly of this work, which should be in the hands of every farmer. It is beautifully illustrated, and got up with the greatest care. Not only is it a model of the typographical art and engraving, but the articles are all well written, and are special contributions to its pages, and not clipped from other works, like some others in which the *scissors* are the chief editor. It is the cheapest and best periodical of its kind published, and we can cheerfully recommend it to our numerous readers.

Inquiries and Answers.

PRICKLY ASH.—"*J. S.*"—Yes, I have had some experience with *Prickly Ash*, enough to know that it cannot be relied on as a hedging material. The shrub will grow far north, on both very wet and very dry land, and petted, growing alone, or left free to grow as it will, oftentimes makes a vigorous growth, and a symmetrical bush. But in company, crowded a mite, it has a foolish habit of dying suddenly as dead as a nit, of some inexplicable heart disease. That you see, friend "J. S.," might leave ugly gaps in your hedges, letting in the pigs; besides, the shrub does not bear cutting kindly. Honey locust is more reliable and manageable.—BUENO.

NAPANDAI HEDGE SEED.—"*J. S.*" *and others.*—Our correspondent writes us, that he will obtain the seed as soon as possible; but, as the Napandai matures its seed in March, and as no one there thinks of sowing it, he may be compelled to wait until next season for it. If it is procured earlier, we shall be pleased to inform you of it.

"G. E. B."—Should think the "varmints in the garden" are snails, as the description corresponds exactly with the English snail, which are quite common in every garden in that country.

Fruit Growers' Society of Western New York.

THE Fruit Growers' Society of Western New York, will hold its summer meeting at the Court House, in the city of Rochester, on Wednesday, the 27th day of June. Session to commence at 11 o'clock in the forenoon. Members are invited to bring any fruits in season for exhibition. It is understood that this, like most summer meetings will continue but one day, and a general attendance is desired. JAMES VICK,
Secretary.

Books for Farmers.

ON page 229, we give a list of valuable books which we keep for sale in this office, any of which we will send, postage paid, to any address, on receipt of price. The list is select, and embraces works of acknowledged excellence. Read over the list, and if you desire any of them, let us hear from you.

EXTRA NUMBERS.—Any of our readers who have soiled their numbers in loaning to their neighbors to get them to subscribe to THE FARMER, can have them replaced with new ones by informing us at any time. We wish all our subscribers to have the volume complete.

PRIZE ESSAYS.—We hope our readers will look over our lists of prize essays on page 193, in the last number, and let us hear from them on each and all of those subjects on or before the 1st of August.

POSTAGE ON THE AMERICAN FARMER—is only twelve cents a year payable quarterly in advance. If any postmasters charge more than this it is illegal and wrong.

The Pleuro-Pneumonia in New York.

The following circular has been issued by the Agricultural Society of the State of New York:

ALBANY, JUNE 9, 1866.

The Rinderpest Commissioners of the State of New York, having been officially informed by Dr. Samuel Percy that the infectious disease known as pleuro-pneumonia was prevailing in several stables in New York and Brooklyn, and that the Board of Health has positively ordered the removal of such cattle from the city; and the Rinderpest Commissioners not being satisfied of their power to act in the cases of pleuro-pneumonia, referred the communication to the State Agricultural Society.

The officers of the Society living in the vicinity of Albany, believing that publication ought to be given before the meeting of the Executive Committee, of the existence of the disease and the danger of its diffusion, requested the President and Secretary to publish such notice and warning.

In conformity with this advice, we do hereby make known the existence of pleuro-pneumonia among the cows in the stables of New York and Brooklyn, and earnestly advise all purchasers of stock to examine those which are offered for sale, with reference to this disease.

We also advise that in case the disease makes its appearance in any herd, the sick animal be immediately and rigidly separated from the rest.

The period of incubation of this disease varies from forty-two to six days.

It is well ascertained that this disease is strictly infectious—it never occurs where the animal has not come into contact with diseased animals.

The meat of animals suffering from pleuro-pneumonia is dangerous when used as human food.

It is very probable that the diseased herds which are now being excluded from the city will be offered for sale at very low prices to farmers. This contingency calls for additional precautions on the part of purchasers.

JOHN STANTON GOULD, President.

B. P. JOHNSON, Secretary.

AMERICAN SHEEP FOR PARIS.—The New Hampshire *Mirror and Farmer* says:

"It is gratifying to learn that this country is to be strongly represented in the Sheep Department of the next World's Fair to be held at Paris, commencing on the first of April, 1867. By a recent notice in the papers, it seems there are already entered with the agent at New York City, 75 rams and ewes for the exhibition, and as competitors for the awards offered. To Mr. Geo. Campbell of Vermont, belongs the credit of breaking the ice and opening the door in this direction, for his success at Hamburg shows conclusively that Americans have nothing to fear in a competition with Europeans for excellency of sheep in husbandry."

OUR premium list, which was published in the last number, is still open to agents. All subscribers for the half volume commence with the July number.

The Cattle Plague in Ireland.

We have already copied from the newspapers the current statement that the Rinderpest, after so long an exclusion, has at last appeared in Ireland, but the notices of it in our agricultural contemporaries subsequently received, leave the matter somewhat in doubt. *The Scottish Farmer* of May 23d, says:

The chief interest in connexion with the cattle plague has been its outbreak in the townland of Drennan, county of Down, Ireland. Eight cows and calves have died, and nine animals were slaughtered by order of the government inspector. A cordon has been drawn round the farms in which the disease appeared. The boundaries are strictly guarded by a body of constabulary, and every means taken to prevent the disease from spreading * * A telegram from Waterford, dated yesterday, states that the cattle disease has appeared in that vicinity, a cow having died, and that "*some* of the symptoms correspond with those of *Rinderpest*." It is extremely desirable in such an important matter as this that people should go upon surer grounds than that of "some symptons corresponding with those of *Rinderpest*," before telegraphing all over the country that the disease has appeared in any vicinity. There are other diseases which present "symptons corresponding with those of *Rinderpest*," but which are no more *Rinderpest* than an ordinary attack of colic is one of cholera.

The North British Agriculturist of the same date remarks:

It being a question so deeply affecting the owners of stock in Ireland, every means should be adopted by the Government to ascertain the true nature of the diseasc. If it is the plague, the Government would be justified in carrying out the most stringent measures for the eradication of the disorder. If, however, it is ultimately ascertained that the cattle plague has not appeared, the sooner this is made known the better.

The Irish Farmer's Gazette, Dublin, May 26th, is not quite willing to admit that the Cattle Plague has actually appeared; there seems to be no way of tracing the source of contagion, and it concludes a leading editorial as follows:

We ought not to forget that for many years spring has invariably brought with it serious mortality among cattle in this country, from pleuro pneumonia and other maladies, and that, in fact, not a few of our cattle from the manner in which they have been wintered, are hunger stricken at this season, and as a necessary consequence, fatally diseased. This is no new thing; pleuro, that fatal disease, which, with other inflictions of a like nature, we owe to the free-traders, has proved a very plague among us, but not *the* plague; and we are strongly of opinion that at present we are merely suffering from the usual malady with which we have unfortunately been too long familiar, and not from any outbreak of cattle plague. While we express this belief, we would at the same time as earnestly counsel the universal adoption of those preventive measures which have been repeatedly pointed out.—*Country Gent.*

French Flour for the United States.—Our Consul at Liverpool, writes under date of May 18:—"Some two weeks ago I advised you of the shipment from this port to New York of some 15,000 bushels of wheat. I now have to inform the department of State that the City of Cork, which sails to-morrow, takes as freight 498 casks of French wheat flour, valued at £1,046. I think this is the first instance of the shipment of French flour from this port for the United States, and probably the first time that flour has ever been shipped as merchandise from Europe to America."

State and County Fairs.—We shall be pleased to have our subscribers send us the dates for holding agricultural fairs in the different States and counties. Also the place of holding the fairs, as we desire to publish the list at as early a day as possible.

The Central Michigan Agricultural Society will hold its fair at Lansing, Sept. 12–14. Kentucky State Fair, Paris, Oct. 2. Pennsylvania State Fair, Easton, September 25–27.

Literary Notices, &c.

AN EIRENICON, in a Letter to the author of "The Christian Year," by E. B. Pusey, D.D., Cannon of Christ Church, Oxford N. Y.: D. Appleton & Co. Price $2.

THE TEMPORAL MISSION OF THE HOLY GHOST; or Reason and Revelation. By Henry Edward, Archbishop of Westminster. N. Y.: D. Appleton & Co. Price $1.50.

For sale in this city, by Steele & Avery.

THE MARKETS.

ROCHESTER, June 23, 1866.

FLOUR—White wheat, $15@$16.50. Red, $12.75@14. Extra State, $8.50@$9.

GRAIN—White wheat, 805c. Red, 000@270c. Corn, 85c. @90c. Barley, 85@90c. Oats, 55c. Rye, 90c.

PROVISIONS—Mess pork, $33.00@$33.50. Lard, 23c. Butter, 30c. Eggs, 22c. Chickens, 20@22c. Cheese, 20@24c. Potatoes, 1.25.

WOOL—40@50c.

HOPS—45@65c.

NEW YORK, June 21.

FLOUR—Market for State and Western flour is less active and 10@20c lower. Superfine State, $6.40@$7.65; Extra State, $7.40 @$8.70; choice State, $8.75@$9.80; Superfine Western, $6.40@ $7.65; common to medium extra Western, $7.65@$9.60.

Canadian flour $8.70@$10.25 for common, and $10.30@$13.80 for good to choice extra.

Corn meal is in moderate request. $4.80@$5 for Western and $5.25@$5.85 for Brandywine.

GRAIN—The wheat market is dull, heavy and nominally 5@ 10c lower. Rye quiet and firmer. Canada, 138c. Corn 91@94c for unsound, and 96@97c for sound new Western mixed, and 97c for old mixed Western in store. Oats, 57@61c for new Western, the latter price for Wisconsin.

HOPS—Quiet and steady at 15@65c for common to choice.

PROVISIONS—Pork lower, but active. $33.18@33.37 for new mess—closing at $33.25—$30.50@31 for old mess, and $26.50@ $27 for prime. Cut meats firm at 18¾@15 for shoulders, and 17½@19¾c for hams. Lard, 19¾@22¾c. Butter, 20@32c for Ohio, and 25@40c for State. Cheese, 9@21c for common to prime.

CHICAGO, June 21.

GRAIN—Wheat dull and declined 8@5c. Sales at 168@166c, and 106@112c for No. 1. Corn moderately active at 54@54½c for No. 1, and 51½@52c for No. 2.

BUFFALO, June 21.

FLOUR—Stock light. Prices firm, and demand moderate.

GRAIN—Wheat, held No. 1 Milwaukee spring at 228c. Corn held No. 1 at 71c. Oats—No. 1 Chicago at 46c. No. 2 at 45c. Rye and barley nominal.

PROVISIONS—Pork $33@$33.50. Lard, 28c.

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7. Unlike other machines, these fasten both ends of the seam by their own operation.

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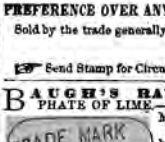

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CONTENTS OF THIS NUMBER.

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THE American Farmer.

ENTERED according to Act of Congress, in the year 1866, by JOHN TURNER, in the Clerk's Office of the District Court of the United States, for the Northern District of New York.

VOLUME I. ROCHESTER, N, Y., AUGUST, 1866. No. 8.

I.

The sun beats down in fierce and burning rays
On shaven fields, and fruits, and golden sheaves;
The Southern breeze scarce moves the pendent leaves,
And languid quiet marks these summer days.

II

Knee-deep in pools the drowsy cattle stand;
No trout dare venture from his cool retreat,
And from the groves, once filled with voices sweet,
No note is heard from all the feathered band.

III.

Adown the meadow and along the plain,
Where heated labor courts the sheltering shade,
The strong-armed mower with his flashing blade
Still cuts the waving grass and bending grain.

IV.

How calm and solemn seem these August days!
This mid-life of the growing, changing year;
How full of promise for the autumn near,
When field and garden yield their annual praise.

G. E. B.

WORK FOR THE MONTH.

HOT and sultry are the days of this month, and the farmer has now reaped some of the fruits of his toil, and should turn his attention to a general clearing up and improvement of the soil for the next year's crop. Let all work be done thoroughly.

Manure of all kinds should be looked after and got ready for distributing over the land preparatory to fall plowing. Then will follow some of the minor items, such as

SHELTER FOR STOCK IN WINTER.—We cannot call attention to this subject too soon. Let preparation be made for protection early. See that you have enough barn room for the stock you intend to keep next winter; if not, get ready to build more at once. It is of great importance to have plenty of shelter for stock during our cold bleak winter season.

A WORN OUT FARM—Can be made rich by thorough culture, and by taking care of all the manure made, and applying it to the land. Let the land for fall planting be prepared in the best possible manner. Do not plow too much land; only just such an amount as you can cultivate thoroughly.

RAINY DAYS.—Harrow wheat and barley stubble, and when the weeds get a start, plow them under; they will help to enrich the land; but do not let them go to seed.

SEED WHEAT.—Select the very best portions of your fields for seed; taking the largest and finest heads, will greatly improve the quality. Take care to have them as free from weeds as possible.

TURNIPS.—It is not yet too late to sow. Plow up a wheat or barley stubble, and sow at the rate of one pound of seed to the acre. If the weather is favorable, you will have a good crop and they will come in very useful next winter.

ROOT CROPS—Should be cultivated thoroughly. Root out all the obnoxious weeds. Thin out to about six inches apart, and you will get a larger yield of bulbs.

FATTENING ANIMALS.—Commence now to fatten all stock you wish to dispose of before the winter commences. Let them be fed regularly, and increase the quantity of extra feed as they advance and require it.

VENTILATION.—Horses and cattle should have free ventilation. Let the cow houses and stables have a free current of air, and your stock will be healthy. It is a good plan to keep them up during hot days, and turn them out at night.

DRAINING.—After haying and harvest is a good time to reclaim swamp land by cutting surface drains, or by laying tiles. We have great faith in good surface drains to carry off the great amount of water which falls, and it has the advantage of being cheaper than tiles.

RED STRING—should be tied around the earliest ears of corn and kept for seed. Seed selected in

this way will ripen much earlier next season than those ears that have been slow to mature.

BEES.—The swarming season is past, and the apiaries require but little attention, except taking off the surplus honey, and our assistance in their defence against the ravages of their worst enemy, the miller worm, or so-called moth.

In this month, they if possible make their inroads into the honey comb, and it being filled with these sweets, renders it next to an impossibility for the bees to dislodge them. Common hives should be raised by means of blocks three-eights of an inch from the bottom, and swing bottoms drop the same. This is very effectual in keeping them out.

In removing the honey box, with a bit make a quarter of an inch hole in the box. Puff in a little tobacco smoke, and the bees will principally leave the box. You can now remove them without the loss of a bee, while in using slides, heads, wings and legs, are severed without number. Besides, thousands of young bees never find their way back to their hives, consequently are lost. What a sacrifice!

POULTRY.—Select out the earliest and best developed chickens that you wish to keep for your future stock, and if convenient put them in a separate place and give them extra care and attention. They will then commence laying earlier in the fall, and with care will give you all the eggs you want during next winter.

WAR should be continued against all caterpillars and obnoxious insects. Stop and see if you cannot find some nests in your orchard or garden; if so, destroy them at once. Massacre every one you find.

WATER—should be within the reach of all your stock, these hot sultry days. Cows can not give a full flow of milk without they have plenty of water in hot weather; and even the poultry will lift their heads in thankfulness for one drop of water. Our domestic animals need water as much as man, and they should have it liberally supplied.

OIL THE TOOLS.—All implements and tools should be kept clean and well oiled, especially in the joints and cracks, where they are very apt to rot. The wood will be more durable and better to handle and last much longer.

STRAWBERRY BEDS—May be made this month. Young plants may be planted as soon as convenient after the first of the month, and will produce some fruit next year. Care should be taken to keep the beds free from all weeds, and if dry weather succeeds and continues, they will require watering every other day. Evening is the time. A good mulching with salt hay will be of great advantage to them.

THE American Pomological Society will meet at St. Louis, Sept. 4.

THE FARMER, A MANUFACTURER.

THE manufacturers of our country are increasing in wealth, and they deserve the success they have achieved. Skill, energy and perseverance are improving the products of our work shops and factories, until they rival in most respects the best products of the world, while in a few we certainly outdo all competition. Happening to be in a wholesale cloth house in New York City some time since, we heard a salesman remark to a customer: "There is nothing in the market equal to Harrison's goods." Knowing something of the prejudice in favor of English and French cloths, we were agreeably disappointed to find in answer to our inquiry that they were the product of one of our Eastern States. We immediately ordered our tailor to make us a garment of these goods, and now, dear reader, we are scribbling these few lines on our knee, covered with Harrison's cloth, in the shade of our orchard—the coolest place we can find; and even here the thermometer showing 96°—not a very favorable temperature this for writing, and with a head full of thoughts not very clearly defined, and certainly not well arranged, we forgot all about our anxiety that the farmers should rival the mechanics and manufacturers in enterprise and well-directed energy—that they should conduct their business by the same clear business rules they find necessary to success, and fell asleep, and dreamed.

Now, we have a good deal of faith in dreams, and perhaps the time spent in dreaming was as profitably occupied as that of any other portion of the day. Once when some were making fortunes in oil and oil territory, and when we were strongly tempted to take a venture, we dreamed that our only chance of success was in the legitimate and honest paths of agriculture; that in a race with the unscrupulous sharpers engaged in the oil speculation, we were sure to lose money, or truth and honesty. Believing in dreams, at least in such dreams, we saved both character and funds. Many farmers we know of, had better been dreaming than speculating about that time. Mortgaging farms to raise money for speculation, is a very unsafe business, and generally ends in financial, and others in moral ruin.

Well, we dreamed this warm afternoon, as we had a perfect right to do, for the hay was all just safely housed and in excellent condition. The weather, although too dry for a rapid growth of spring crops, has been unusually favorable for hay making, and the farmer this season who has bad hay, is just as culpable as the merchant who should leave his stock of goods exposed to the rains, and dews, and winds, until it was so depreciated in value as to be classed among damaged goods, and

sold at a reduced price. We recollect well when hay sold for five or six dollars a ton, almost regardless of quality; butter at ten or twelve cents per pound, in store pay; and cheese at about five cents, no matter whether made of skim-milk or cream. Then there was but little encouragement for the farmer to become a skillful manufacturer. All he had to do was to increase the quantity regardless of quality. But times have changed for the better, and the farmer who becomes a skillful manufacturer of the necessaries of life, is as well paid for his ability, as in most of the other busy walks of life. Butter at thirty-five or forty cents a pound, pays for proper making; so does cheese at fifteen or eighteen cents, and hay at fifteen dollars per tun. We do like hay properly made. How delightfully fragrant! It should always be cured in the cock to retain this delightful aroma. At least this is the best way we have ever tried.

We observed that we had a right to dream because a large crop of hay was well made and safely harvested. The hoeing and cultivating was also finished, that is so far as necessary to destroy weeds and secure a fine mellow soil, but the cultivator must be kept well to work in a dry time. This is a fair and sensible way of warding off in part the effects of a drouth, and a good deal more honest than watering the sirup or sanding the sugar, which some traders are said to do, to save themselves when caught with a large stock on hand, and a falling market. We would not have the farmer copy the small tricks of trade. There is quite enough to learn that is honorable and valuable, and yet vices are more readily learned than virtues. The heathen first learn of civilized men to drink rum, and other vices.

Not only was the work done up pretty close, but as our help had a pretty hard time during the spring and early summer—worked early and late, when necessary, to advance our interests by manufacturing the biggest kind of crops, we had invited them to take the horses and spring wagon, and have a day's fishing. We had designed to go, but THE FARMER needed an article, and so bidding them success and a pleasant time, promised to join them towards the close of the evening. Some folks are always in trouble about help. We are very lucky in this respect, and almost always get good reliable help, and men seldom leave us, except for reasons beyond their control. When among the Eastern manufacturers once, we inquired of a foreman in charge of a successful mill, why one establishment near was closed. The reason assigned was that they had treated their hands so badly, they could get nothing but the poorest operators, and this with other bad management of a similar character, had proved their ruin. Perhaps farmers may learn something useful from this.

In our dream, we visited a neighboring farmer on some special business, the nature of which we did not seem to understand very clearly. It was at the close of the farmer's manufacturing season—a beautiful warm day, the latter part of November. All the crops were made and stored away, more carefully and orderly than I had ever seen before. The hay in the expansive mow looked as though pressed and squared by machinery, and on one of the posts I noticed some marks and figures in red chalk, of which I inquired the meaning. "This, sir," was the reply, "shows the cost per tun, a certain fair price being charged for use of land taxes, and other expenses, all carefully figured; and I find at present price it affords a good profit. I have engaged all I can spare, to be delivered when convenient, so that I can pretty accurately estimate the cost of drawing."

The oat and wheat bins all had similar mysterious figures, like goods on the merchant's shelves indicating cost. This interested me much and caused many questions, to all of which I received very satisfactory answers. But what interested me most was an account book, kept with the stock, by which each animal was charged with the produce consumed, labor &c., and credited with everything of value produced. I suggested that this system required an immense amount of labor, when my friend laughing, remarked: "You preach and I practice. You should not be alarmed at the operations of your own plans." He then pointed to a slate and pencil, hanging in the barn, and also produced from his pocket a memorandum book, the former for the use of the men, and said; "a little care and system, and half an hour's figuring at night will keep all straight, and afford immense satisfaction and pleasure. The loss of an item occasionally through the negligence of a new hand, is the only annoyance. The pleasure and profit of knowing how matters stand, what pays the best, and what is the least remunerative, more than pays for all trouble." He then took me to his large store of manure, and began to give me a statement of its estimated value, but with this, I was not so well pleased. Like most manure made in summer, it was becoming fire-fanged—badly burned. I turned over a portion and it was very hot, a great portion burned to ashes.

AGRICULTURE IN EUROPE.

WE take the following extracts from the pen of X. A. Willard, who is writing a series of letters to the Utica *Herald* on the agriculture of England. Mr. W. went to Britain as the representative of the American Dairymen's Association, to collect all the information in regard to cheese and butter making, as practiced by the English farmers. His letters are full of information which will be of great interest to the farmers of this country.—EDS.

We were in Exeter the last of May, and our host

Mr. Bircket, took us out in his carriage, to visit one of the best farms in the vicinity. The farmer, Mr. Wilcox, a very pleasant and intelligent man, happened to be in the city, and went with us to his farm, at Pengellys, Exminster parish, some four or five miles from the city. The farm consists of some 400 acres of rich land, delightfully located, and commanding broad and extensive views of hill and dale, with the city and surrounding villages. Here we found some of the finest farming and most luxuriant crops that we had seen. The grass was very heavy, and would yield fully two and a half tons to the acre. The wheat and barley were also excellent and very even, and, what was to us a marked feature, not a weed could be found anywhere among it as you passed along. Mr. Wilcox said he did not believe in growing weeds, and all crops are weeded by men and boys going through and plucking out the foul stuff. The soil here is a red sand and clay, and is of excellent quality. The system of farming is what is called the fine course system: 1st, wheat; 2nd, roots; 3rd, wheat or barley; 4th, grass. But one crop of grass, it will be seen, is taken from the soil when it is broken up, and the following proportions are used in seeding per acre:

8 pounds red clover,
2 " white clover (white Dutch,)
4 " trefoil,
3 pecks Italian rye grass.

This quantity of seed would, perhaps, astonish some of our American farmers, but the result, I am sure, would be highly gratifying, for a thicker, heavier coat of grass could not well be desired than that upon the meadows of farmer Wilcox. After taking off the crop of grass, the land is plowed about six inches deep, and fitted for wheat and barley, the former yielding, on an average, about thirty bushels, and the latter fifty bushels per acre. In seeding for wheat, 7 pecks of seed is sown, per acre; and for barley, 3 bushels per acre. The wheat is sown the first week before Christmas, and spring varieties in March. After the wheat is taken off, the stubble is pared and got in heaps, and the land put in condition for roots, either turnips or marigolds. For roots, the land is plowed in the fall, about 8 inches deep, and again in spring 6 inches, when manures are worked in, at the rate of 20 cart loads of stable dung per acre. The turnips are sown in drills, and guano or superphosphate applied, at the rate of 300 pounds per acre of the former, and 200 pounds of the latter, and an average crop of 25 tons per acre of turnips obtained.

STOCK, &c.

The stock upon this farm of 400 acres consists of South Down sheep, 400, or one sheep to the acre; 40 "bullocks" which includes cows and cattle to be turned, 20 horses and 20 pigs. To carry on the work, 12 horses are needed for the different farming operations. A part of the land it is thought, demands a four-horse team to plow. When four horses are used, they are driven by a boy, and without lines, very much as oxen are driven in America. The plows are made wholly of iron with long handles and beams, and look awkward and unwieldy to an American. Sheep are purchased and fattened, their feed consisting of tares, Italian clover, turnips and oil cake. At the time of our visit, the sheep were in hurdles, and were being fed with Italian clover, a large field of which was in flower, and presented a beautiful appearance with its dark crimson blossoms.

The trefolium incarnation, or Italian crimson clover, is sown at the rate of 50 pounds seed per acre. It is an annual, and therefore not suitable for permanent mixtures, but is sown with grain in spring, or upon stubbles early in autumn, and produces an early and heavy crop for feed or hay, in June, the following year. The winter vetches or tares, are sown in October, and the trefolium or clover in Mr. Wilcox's practice is used for the sheep before the tares. The "bullocks" are usually pastured upon permanent pastures.

PRICES.

Wheat brings here now six shillings for sixty-two pounds; barley four shillings per bushel, and hay £7 per ton, or $35. The English shilling, it should be remembered, is nearly double ours. Mutton is sold at 7 3-4d per pound, after shearing time.

COST OF LABOR.

Laborers get eleven shillings per week, and two quarts of cider per day, and commence work at 6 A. M., and stop at 5 1-2 P. M. This is the extreme price for best hands on an average. Ordinary hands, or those of poorer grade, get six shillings per week, and one quart of cider per day, and are paid weekly. No board is included, as in America, for laborers. With the exception of cider or beer, they find themselves in board, and pay a rent for their cottages and gardens—one shilling per week. In going through the country, I find the laborer's cottage much more comfortable than I had anticipated. These are usually constructed of stone, well roofed either with tile, slate or thatch, and look neat, comfortable and cleanly. Such, briefly, is the outline of farming in this section. Mr. Wilcox has the reputation of being one of the very best farmers in the neighborhood of Exeter, and from a personal examination of his farm, and the perfection in which work is done, and the appearance of crops, I can have no doubt that his reputation is well earned.

THE wool clip of Michigan this year is 12,000,000 pounds.

PURE WATER---ITS IMPORTANCE, &c.

WRITTEN FOR THE AMERICAN FARMER BY C. N. BEMENT.

PURE water, forming as it does at the same time, both the emblem and embodiment of refreshment and comfort, is looked upon as a vital element of satisfactory existence by all who dislike dirt, parched lips, dusty lungs, stratified deposits on the skin, and parti-colored linen. It also forms a most agreeable class of pictures for the eye, in placid lakes, babbling brooks, sparkling jets and flashing fountains; and through the ear it gives music of cascades, the roar of cataracts and of the ocean surges.

It is no wonder, then, that all are ready to labor for and welcome so agreeable a companion. The country resident longs for the termination of the severe drouth, when drenching rains shall fill his cisterns, replenish his failing well, and set the brooks in motion. Many are looking with envy at some rare and fortunate neighbor, who happened to have an unfailing spring; and others, as we have often witnessed, placing the water hogshead on the ox-sled, proceed to drag their needed supply from one to three miles, as the case may be, and as they can get it from the creek or pond, or some better supplied neighbor. We have positively seen a wealthy farmer drawing his water a mile after having allowed five times the amount he ever needed, to run to waste immediately before his eyes; and we venture to assert that one farmer in a hundred, who has suffered from a want of water during the past year, but has committed a similar waste, though perhaps in a less degree.

The great mass of country residents seem to have no more conception of the enormous floods of clear, pure rain water which annually pour on the roofs of their dwellings and out-buildings, than if they had never heard of such a huge watering-pot as the clouds in the sky. If all the rain which falls within the year, should remain on the surface of the earth without sinking into it, or running off, it would form an average depth of water of about three feet. Every inch of rain that falls on a roof, yields two barrels for each space of ten square feet, and seventy-two barrels are yielded by the annual rain in this climate. A roof 30 by 40 feet yields annually 854 barrels. That is enough for more than two barrels a day for every day in the year. Many of our medium landholders have at least five times that amount of roofing on their premises and dwellings, yielding more than 5,000 barrels of rain water, or about 12 barrels, or 150 ordinary pails full daily. A very small portion of this great quantity is caught in the puny and contemptible cistern, and tubs placed to catch it; but full-sized reservoirs, fit to hold this downward drainage, we know not where to find, even in a single instance!

It is true, where a constant draught is made on a cistern, it need not hold the year's supply; even one-sixth part will in general answer, as the variations in hot and dry seasons do not often amount to more than the rain for two months. But following all this, where shall we find a cistern, for a 30 by 40 feet barn, that will hold the sixth or 120 barrels? One proportionably large, for a broader roof. Now, what would the large supply of water enable the farmer to do? or rather what might he not do with it? First—all the stock on a farm, well furnished with buildings might obtain all the water needed for their daily use. Second—or, if instead, the usual proportion were supplied them by streams and wells, or a large upper cistern, would furnish all the conveniences of showering, bathing, washing and sweeping off all feculent matter, which are derived in cisterns in cities from pipes and hydrants. Third—Or, if large cisterns were placed in the upper part of farm buildings, they would supply a fountain a quarter of an inch in diameter, spouting 12 to 15 feet high for two hours, every afternoon, the cistern being unoccupied in winter.

Rain water is the best, and generally may be the easiest, supplied to farm stock. A building of sufficient size to shelter the horses and cattle, with the other necessary room for storing the wagons, carts, and field implements, &c., will afford sufficient rain water for the ordinary stock of the farm. Cisterns can now be made comparatively cheap, and properly arranged, water may be always convenient for stock as well as for other uses about the premises. The question now presents itself, how are the animals to procure a supply of water without human assistance. It is presumed the water is to be raised by means of a pump. Here is a difficulty. Cattle cannot pump, to overcome which we would merely mention that a machine has been invented—a most valuable apparatus, of simple construction—by which cattle of all ages are enabled to bring up by their own weight upon a platform a much larger amount of water than they can at any time consume. The advantage of giving animals free access to fresh water without care or labor of the owner, is too obvious to need a word of argument; and the increased value given to the land by thus providing in any locality where water can be obtained by digging a well, so that it shall be brought within the reach of cattle at all times, without further trouble than setting one of these machines, is incalculable.

There are too many instances where farmers fail to make the proper provision for a fresh supply of water for stock; for without it cattle cannot be kept in good condition; and there are many also who make better provision for food for their stock than they do for water. Feeding may be regularly attended to, and a supply of forage always on hand

to meet the demand. Eating the hay and straw induces thirst, and water should always be within their reach, to drink when they choose. If full watered but once, or even twice a day, and then only when it pleases the attendant to afford the opportunity to procure it, animals often drink to excess, which affects the circulation and digestion, and deprives them of the animal heat which will require hours to restore the equilibrium of circulation.

The operation of the machine—the water lifter—is simply this: "A platform, eighteen feet long and 3 or 5 feet wide, is keyed at the ground at one end, and suspended on pullies at the other. These pullies are upon a wrought iron shaft, with a wheel in the centre 4 feet in diameter, over which is a rope suspending a bucket; while the platform is raised, the bucket is under water in the well or cistern. The weight of the animal causes the platform to sink; turning on its descent the wheel brings up the bucket; the water is discharged from a pipe at the bottom into a trough before the animal. Under the platform is fixed a breaking air cushion, causing the platform to sink to its bearings very gradually without jar. The descent of the platform is proportionate to the depth of the well, until the weight of a light animal is sufficient to counterbalance the weight of water, the valve closes and all the water the animal will move is brought up. In ordinary wells the water elevated is about one pound to every 12 pounds of the animal on the platform which is more than is required, being always an excess, which can by a water-pipe be carried to another water trough or back into the well."

We regard this machine, the water-lifter—next to the rain water, a most valuable invention to farmers in general, and more particularly upon the prairies of the West, or where there are no running streams of water.

WOOL.—A correspondent of the London *Agricultural Gazette*, after reviewing opinions and prospects as to the future of the wool trade of the kingdom, at some length, concludes that British wools, especially long wools, will command a high price.

FARMERS, look well after your hen manure. We adopted a plan some years ago, of putting boards about two feet below the roosting poles, upon which they deposit all the manure. Then, once or twice a week, have it well scraped, and put in barrels. You will then have in the course of a year, the very best manure you could possibly use for your corn and other crops.

LATE English papers speak rather unfavorably of the present aspect of the coming crop of hops. Cold weather and the flea are complained of.

OUR KANSAS LETTER---NO. 2.

WRITTEN FOR THE AMERICAN FARMER, BY A. M. BURNS.

MESSRS. EDS.:—An error in my name, under a letter published in THE AMERICAN FARMER, I am afraid has caused a number of letters intended for me, to be sent to the "dead letter office." I am satisfied that about a dozen letters directed to "A. M. Barns," were intended for myself. If they had been addressed to A. M. Burns, I would have taken them from my post office box. These letters I suppose, judging from one I opened without looking at the address, contained querles about the country, &c. Those who received no answer to their letters will now know the reason, and can write again, enclosing enough to prepay postage, and I will give an answer.

One correspondent desires to know if he can "get a good piece of land" in this region, "under the homestead law that will do for farming purposes and vineyard." Of course, all the land in the valleys has been taken years ago, particularly timbered farms or "claims," as they are called; but by going from 80 to 150 miles further west, as good bottom land, with timber, as the heart of man can desire, can be taken under the homestead law. There is plenty of high land, or "bluff land" as the hilly portion is called. This land is the home of the vine, and will do well for fruit farms, and being along the line of the Pacific Railroad, there will always be a market, as fruit can be sent to almost any part of the United States. In some places a small quantity of timber can be obtained on bluff claims. I have no doubt but that good farms can be selected on the high land, as much of it is level in this region. It abounds in the best of limestone. I was fortunate enough ten years ago to get from 40 to 60 acres of timber, yet I plant out timber or "forest seeds" every year. I find that the locust will grow large enough for a post or "pole rail" in from seven to ten years; the cottonwood and other forest trees in less time.

A portion of this correspondent's letter I cannot read, nor can I learn the State in which he lives; but he is a reader of THE FARMER, and in this way he can learn that there will be no earthly chance to sell 25,000 grape vine roots here next year, as the West, (I mean west of fifty miles west of the Missouri River,) have not got the grape fever yet. This spring it was impossible to supply the demand for vines at Hermann—some 500 miles east—and that region of country, although one man sold 100,000 roots of one variety alone. I have no doubt, however, but that there is a "good time coming," and if Mr. S., or any other person, will select 80 acres of bluff land in this region as a homestead, and plant vines, that he can find a ready market by the

railroad in the East and in Colorado. There can be no better climate for ripening the grape than this region. There can be no doubt but that plenty of men can be hired by Mr. S. to pick his fruit, when the time arrives for him to produce it.

Peaches are uncertain here. I planted trees in 1857, and have eaten peaches but once from them. Our apple trees are not old enough to bear in this region, but so far as we can now judge, there is no risk in planting apple trees. Strawberries can be raised here, and as for blackberries no place can "beat Kansas." Bissell & Salter, of Rochester, shipped me some blackberries in 1861. After the second year they produced fruit regularly every year, although one season they were partially killed to the ground. They were the Lawton variety.

Emigrants are pouring into Kansas at a rate unprecedented in the settlement of a new country, and among them I hope to find practical horticulturists.

FARM TALKS---No. 4.

WRITTEN FOR THE AMERICAN FARMER, BY G. E. BRACKETT, BELFAST, MAINE.

"COME boys, hitch up the mower, and we'll cut the ten-acre lot this morning. Here it is, the 10th of July, and I don't believe in feeding straw to cattle next winter. I believe in feeding dried grass, but if that field remains much longer, there will be nothing but dead stalks to cut. Early cut hay is far more valuable for stock, than that which remains in the field until it is ripe."

At this juncture, neighbor Smith, who is looking on, and who usually times his haying operation by mine, because he says I have a "brometer," inquires:

"Aint ye beginning a little airly?"

"No. If the season hadn't been so backward I should have commenced a week ago, but as it is, I hope to get it all cut in time to be palatable to the animals next winter."

"But don't ye think it spends better not to cut it till it's about ripe?"

"No doubt of that. But the question is, when to cut it so that the hay will make the best quality of food, and from practice I have found that time to be when the plant is just opening its blossoms."

"But them scientific fellers say its got the most goodness in when it's ripe."

"Yes, I know they say various wise things, which unfortunately do not always prove to be practicable. Now, I don't know anything about the amount of gluten, starch, or sugar, which there may be in the grass which I cut so early, but I do know that my stock eat it up cleaner, like it better, and keep in better condition than when fed on hay, which remained until ripe before it was cut. And that is all I am particular about knowing in regard to the matter."

"Well, I always kinder thought they liked it best, but I did'nt know."

"Certainly they do. Stock will eat early cut hay, even of second or third quality, and leave but few orts. Grass in which are many brakes and weeds should always be cut early."

"It don't look like being a good hay day—it's so cloudy."

"A clear day with hot sun is not essential to hay-making. I consider a cloudy day with a fresh, warm, south-west wind preferable. Grass should be dried or 'made,' not burned, and scorched. The best herds grass hay I ever saw, was put into the barn green, spread out thin, and made under cover. Clover should be only wilted in the sun, and then made in the cock by sweating. It can then be handled without breaking off and losing the leaves. In my opinion farmers 'make' their hay altogether too much."

"Does your 'brometer' say fair weather?"

"Yes, the mercurial column is pretty high, but I find a barometer is not always to be depended upon. It requires a good deal of practice and observation to enable one to judge of the weather from its changes. And besides, it is not always a true prophet. It will fall and rise without apparent reason. Yet there are many times, as in the case of sudden squalls and showers, when it is sure to give the alarm. I have studied one daily for many years, yet even now I should not attempt to foretell weather with one of our old experienced farmers."

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

A SHORT PLEA FOR OUR COTTON EXPORTS.

Mr. Morrill, the chairman of the Committee of Ways and Means in the House of Representatives, says that it would be better for the country if every pound of cotton we raise was manufactured here, and none of it exported. The census of 1860 gives the amount of the crop of each State, in the aggregate amounting to 5,196,994 bales of 400 pounds each. The English account of cotton received from the United States for the year ending June, 1861, amounted in gold value to $140,961,448, and this was only for the cotton we exported to England, the quantity shipped to France and other ports in Europe was also large.

I suppose even Mr. Morrill will not deny that our exports of cotton has heretofore done at least four times as much to enrich these United States, and to pay our foreign indebtedness, as all the other exports of our agricultural products together, rice and tobacco included.

A late English correspondent says that if the cotton crop of the United States this season amounts to three million bales, England will probably take of it 1,800,000, leaving for the manufacturers of the United States and other countries, 1,200,000 bales.

But Mr. Morrill will come nearer having his wish realized this season than he may have anticipated, as the growing crop will probably fall short of the British estimate at least a million of bales, and the demand for home consumption will be increased.

How imperative it is therefore that we should encourage by all manner of means the growth of this great textile of manufactures, which now owing to the poverty, destitution, and trying transition state of the cotton planter, is at this time only raised under difficulties. Yet so far from giving this encouragement, there seems to be a decided majority in Congress determined to impose a tax of five cents per pound on cotton. This impost is not only most oppressive on the impoverished planter at this trying season, but also on the poor freedman who lives by his labor in the cotton field. It is also a premium to induce the growth of cotton now greatly on the increase in India, China, Japan, Egypt, Turkey, the West Indies, Brazil, Peru, &c. The British estimate of the supply of cotton they are to receive from other countries than the United States the coming season, is 2,250,000 bales, and from the United States, 1,800,000. Few estimate this year's crop in the United States at over 2,000,000 bales, while some who have visited the South, set it down much less.

WURZEL AND SUGAR BEETS.

I asked a clay land farmer the other day, why he did not grow beets for his milch cows. He replied that he had found it an uncertain, puttering business. I then asked him at what time in the spring he had planted them. "Oh," said he, "about planting time, after the middle of May." No wonder he found beet culture a "puttering" business when planted so late on a spring-plowed, tenacious soil. Beets, carrots, peas and onions should be planted in April. A heavy soil should be fall plowed and ridged, and the manure evenly plowed in. As soon as the ground is settled in April harrow or level the ridges smooth, and plant the seed. If cold, wet weather comes on they will not come up before the early part of May; but they then grow strong, and are easily thinned and hoed, and the victory is gained for the season, before the dry weather comes on to make it a "puttering" job with all very young plants. At the second hoeing you will have fine strong plants, some of which may be profitably transplanted. Cut off the tops, and set them out eighteen inches apart, and if there is no August drouth the transplants will be as large as those of the main crop, weighing from four to twelve pounds each. Young wurzel beets are as good for the table as sugar or blood beets. All grow to a large size if they have room to spread their abundant leaves. On a light sandy loam, turnips may be perhaps more successfully grown than beets; but they are less nutritious; and besides the turnip is beset by insect enemies which never attack the beet. "Roots for cattle," says Professor Mapes, "aid the digestion of the ultimates of the dry food in the animal's stomach;" which is in addition to their own specific nutriment. My cow with two daily rations of beets, &c., in winter is milked within two weeks of her calving, when she would go dry three months if fed on such farm hay alone as is generally sold to villagers.

SALT FOR CATTLE.

Strange as it may seem, it has been contended by some agricultural presses that salt is of no benefit to the animal economy. I have seen a cow die from eating too much salt after she had been a long time kept from it; this is at least *prima facia* evidence that regular salting is necessary both for the needs of the animal, and to prevent such accidents. The sea air being so impregnated with salt that cattle in the islands and near the coast will not eat it. But although chloride of sodium is found in all plants, there is not enough of it to supply the animal that feeds on them; hence we often see young cattle so hungry for salt, that they lick the concentrated ashes of burned wood for the trace of salt it contains. As salt is given off from the animal system through the pores of the skin and the excretory organs, there can be no doubt but that it conduces to animal health.

The Royal Academy of Science in Paris have obtained abundant proofs to show the great advantages of salt, both as a manure for crops and to promote the digestion and health of farm stock. It is shown that salt contributes to the nourishment of their food, and that no ill consequences follow when they have constant access to it.

BUENOS AYREAN CLOVER.

I here enclose a specimen of this clover, from the resemblance of leaves and long root to that of our white clover, *trifolium repens*, it might be mistaken for a plant of the same genera, only for the little bur which contains its seed. It is, however, a tropical plant, thriving in a hot, dry climate that is death to white clover. It grows close to the ground, spreading two or three feet from the root, and covering the earth's surface like a mat. It is the bur from this clover that is found in mestizo wool; its seeds are so tenacious of life that after the bur has been boiled an hour and a half in the fleece of wool, the seed puts forth a strong sprout three days afterwards.

ENTOMOLOGY FOR FARMERS.

WRITTEN FOR THE AMERICAN FARMER.

We have in the United States a great many obnoxious insect pests, and farmers generally have a great many other things to do besides sitting down to study out all the mysteries of bugology. Nevertheless, if every farmer everywhere, no matter what his financial status may be, or whether he cultivates one acre or one thousand, would employ but one-quarter of the time he expends every year in doing absolutely nothing, to investigation and the diligent study of such insect pests as infest our grains, vegetables, fruits and flowers, learning all he could of their origin, habits, and the best manner of conducting a war both defensive and offensive with them, it is probable that the time so expended would be the very best investment he could make of it.

Then, if farmers would only go one step further, and communicate to their fellow farmers by communications to agricultural journals, and occasionally by private correspondence, such information as each one has obtained, we might undoubtedly in many instances make the insect war one of successful extermination.

Instead of pursuing this course, the majority of us sit down listlessly, and depend on scientific *savants*, who in reality have no more leisure than ourselves, to work out our agricultural salvation; and the result is, that in eight cases out of every ten, men of mere science wind up their material in such a *wrap* of fog, that we understand very little more about it than we do of the horizontal parallax of one of Saturn's satellites. So we toss the best essay ever written perhaps, scientifically considered, aside, with a contemptuous "pshaw!" and the bugs, and worms, and flies go on undisturbed, eating up our income, grains, and best fruits.

To those who have the leisure to do so, I recommend the course we have cut out for ourselves in the chase after these agricultural, horticultural and floricultural enemies. Study the best authorities you can lay hands on. Learn all you can from them that is practical. Get a start in that way. Then go after the *bugs* themselves. Make their personal acquaintance; watch all their habits and economy of life. Try and find out their vulnerable point; they are all vulnerable somewhere. Then make war. Call on the agricultural press, call in the neighbors. Raise a hue and cry in plain, understandable English. Tell what the thing is, what it looks like, where it comes from, when it comes, how it operates, where it goes to, when it goes, and all you *know* about it—not a word more; all in language that we can readily understand, and the press, and the majority of us individuals will readily volunteer for the war, and the chances are the raid will be successful. The first insect pest I take the liberty of offering here to my fellow-farmers, just as he is—stripped of all his Latin surroundings, and scientific, technical blinders, is the little savage called

THE HESSIAN FLY.

Cecidomyia Destructor (Hessian Fly.) 1. C. destructor (male) natural size and magnified. 2. C. destructor (female) natural size and magnified. 3. larvæ in flax "seed" state. 4. dorsal view of the larvæ magnified. 5. ventral view of the larvæ magnified. 6. lateral view of the larvæ magnified. 7. pupa. 8. Base of leaf sheath swollen from worms having lain under it and perforated by parasites coming from these worms. 9. Place where the larvæ are found in autumn. *a* stalk of wheat attacked by the fly. *b c* healthy wheat plant.—*Kirppart's Wheat Plant.*

This little naturalized foreign thief, in many parts of the country has abdicated the grain fields in favor of his American half brother, the yellow freebooter that Kirby has christened, "*C. trilici.*" But there are still Hessians enough in the field to make it worth our while to keep an eye on them and their movements.

The fly at maturity is one-tenth of an inch in length, with blackish, tawny wings spreading when both are extended, a quarter of an inch. Head, thorax, and antennæ, black. The body is ringed like that of the honey bee—a dark reddish brown, covered with minute gray hairs. Six long, four-jointed, spider-like legs, two forward, and four behind the wings.

The fly comes out in broods twice a year, one in the spring, the other in autumn. The females of the first brood lay their eggs, a pale red mite, a thousandth part of an inch in thickness, in April and May, on the inner surface of the young blades of wheat, close to the base. In four to five days the eggs are hatched, producing reddish maggots, which immediately wriggle down the stalk, piercing

and burrowing in the first joint below the surface of the ground. Here they remain motionless for about six weeks, growing gradually into a flat, chestnut-colored, flax-seed looking insect, about one-sixtieth of an inch in length. It is while undergoing this transformation that the insects do the mischief to the wheat, by sucking the juices of the stalk and causing it to wither and die.

There is another transformation in June and July, in which the insect appears a perfect "Hessian." Then more eggs, more maggots, and a scramble down into the lower joints before the cradle or reaper shall cut off communications. In the fall the majority of the second crop of Hessians become flies and perish. But enough are left snug harbored in the stubble for the next spring's campaign.

Now, there is not an atom of use for any *one* farmer to go to war against this insect army; but if the whole country would unite in one grand raid—if wheat growers would all cut their stubble very high, so that it could be readily laid hold of and pulled like flax, thrown into heaps, and burned directly after harvest, and the practice carried to the third year, I have an idea the last "Hessian," would be extirminated, while the stubble ash would pay at least half the cost of gathering and burning. I am sure freedom from the plague would amply pay the balance.

HOW WE FARM IT IN THE GENESEE COUNTRY.

WRITTEN FOR THE AMERICAN FARMER, BY P. C. REYNOLDS.

NUMBER SIX.

ROOT CROPS.

I DO not know that I am warranted in saying that roots are a staple crop in the agriculture of the Genesee country; but, inasmuch as many farmers grow them, both for market and stock-feeding, a description of our farming would be incomplete without some mention of them.

Carrots, parsneps, turnips, ruta bagas and mangel wurzels are all grown to some extent. Carrots and parsneps are the most nutritious—turnips the most easily grown—ruta bagas the most profitable for market, and mangel wurzels the best to form milk.

One error is too generally committed in raising root crops. The preparation of the soil is deferred too long. It should be commenced the previous year, either by summer fallowing the piece intended for roots, or by raising a crop that can be kept clean. The manure should be spread upon the surface the previous autumn, and simply harrowed, and the land should receive several plowings and harrowings at intervals during the spring, to promote the germination and destruction of weeds, and to make the soil as fine and mellow as possible.

The latter part of May is the best time to sow carrots and parsneps; the first of July to sow ruta bagas, and mangel wurzels, and from the middle of July, to the middle of August, to sow turnips. The Long Orange carrot, Guernsey parsnip, improved ruta baga, and Strap-Leaf-Purple-Top, Early Dutch, and Yellow Aberdeen turneps are the best varieties. They should be sown in drills 2 1-2 feet apart, if to be worked by horse; eighteen inches, if to be worked by hand.

If the soil be light and shallow, it is a good plan to throw it in *ridges* with a small plow, turning four narrow furrows together.

After the plants are about two inches high, they should be thinned to four inches in the row. Ruta bagas can be transplanted as well as cabbages. In England, roots are valued much higher for stock feeding, than here; probably because they cannot grow our great cereal, Indian Corn. With us, they are valuable, as affording a wholesome change of diet; but I think that they are best fed in connection with Indian meal. I doubt the expediency of *farmers* feeding their cows in winter anything specially adapted to promote secretion of milk. They should be fed with such aliment as is best calculated to form flesh and fat, milk being considered of subordinate importance. It is very exhausting to a cow to give a large quantity of milk in the winter season. Mill feed will cause a greater flow of milk than corn meal: but it will soon impoverish the cow. I like a few roots to feed stock during the winter, but would *rely* on more solid nutriment.

I know under favorable circumstances, a great many bushels of roots can be raised upon an acre, but am of opinion with same manure, and one-fourth of the labor, as much solid nutriment can be produced upon an acre of corn, as upon an acre of any of the above named roots, excepting perhaps, carrots and parsneps.

THE decrease in the number of domestic animals in the United States since 1860, is estimated at ten per cent for horses, twenty per cent for mules, seven per cent. for cattle, and twenty per cent for swine; in the Northern States the number of sheep has doubled in the same time.

IN the report of the London market for June 4, it is said that the demand for hops is active, and prices fully 10s per cwt. dearer. The reports from all the plantations continue very unfavorable, fly having made its appearance in large quantities throughout Kent and Sussex, and on the continent.

COTSWOLDS.—The Cotswold buck bought by Mr. H. C. Meriam at Mr. Andrew's sale, sheared fourteen pounds. The best ewe sheared twelve pounds.—*Mass. Plowman.*

THE WEATHER AND THE CROPS.

PENNSYLVANIA—THENCE SEAWARD.

FRIEND FARMER:—Continually on a cruise since last dispatch, I have seen several things that in my opinion ought to be reported to THE FARMER, and other farmers. First, after all the groaning, boo-hooing, and wailing about half crops of wheat, poor show of rye, no corn, and all such nonsense; in the third of Maryland, two-thirds of Delaware, a large slice of West Jersey, and all Pennsylvania east of the Alleghanies that I have either been through and over, or heard direct and reliably from, there has been a bigger and better crop of wheat harvested than the farmers of these regions have seen these dozen years.

There are exceptions to all general rules, you and we all know. So we have unfrequent exceptions to the big stacks and barns full of best wheat in all the regions named. There are always some slouchy farmers in all latitudes. Some people expect wheat to grow its best, where a bull thistle wouldn't grow as high as a hen; and then because it can't, they rail out roundly against everything they can think of but themselves.

In some sections the weevil came in strong, but too late to do a quarter of the mischief they might if they had been on hand ten days earlier. Some mistake, the little red rascals made in time. The wheat got too hard for them. In one field, I found some queer arrangements. Sometimes in a single husk there would be perhaps twenty of the little Tartars all as dead as nits. In others there would be half a dozen or so in every shell, and not a grain of wheat touched, while the bugs are all alive and kicking. This year they have taken as much to the rye as wheat, and eaten it more. Something new to every body this way—weevils in rye. What next?

Hay has not been so good a crop in several years. Not excessive in bulk, but thick, heavy, and every where cured and housed in excellent order. Corn and potatoes look well, even splendid. That's our admiration point this way for the superlative in every thing. More potatoes making than I ever saw on a like area before. Pasture continues good, milk flows freely, butter in abundance—much very bad butter, through neglect, laziness, nastiness, and don't-know-how-to-manage it; some excellent, and reasonably cheap. Very little cheese made in all this midland region.

No better garden vegetables were ever grown than we have this season. Our markets are all abundantly supplied and at rates, mostly reasonable—cabbages an exception. Heads only fair; summer size, ten cents. Green corn, a perfect glut. A "*levy*" a dozen for as fine ears as ever went to pot; ordinarily, seven, and eight cents. Cucumbers—cargoes, and prices next to nothing. Melons—plenty, good, and cheap enough. Biggest and best twenty-five cents. Cantaloupes—very fine—a penny a piece to $1.50 per basket of about sixteen; latter, tip top, "California Sweets." Apples and pears—as many as you please, and as low as you like; some very good fruit. Plums—there is another error of mine to be confessed. I thought the "Saracens" had annihilated the last plum. But, I find through the country, ten times more trees full of fruit, and mostly very good plums too, than I have ever seen this way before. Fine damsons are worth twenty cents a quart, in market; gages twenty-five to thirty cents.

Among all our "truck" farmers, down the "Neck," over in Jersey, and up and down the Delaware, I have seen no one putting on a long face. All of them are jubilant and jolly; and say they are making money, if they do give away corn and cucumbers. I believe them, for they have never had such crops before.

Ah—yes. The peaches. I had nearly forgotten them. A good many coming up from down country, and finer peaches than we have had these many years. But there is a trouble about the fruit that frightens off buyers. You see it is only here and there a peach orchard over in Maryland and down Delaware in bearing this year, and the owners of these isolated orchards happening to know the "lay of the land," put up prices to the jobbers at such a height, that by the time these gentlemen have got their fruit to market and up to a rate that meets their ideas of profit, peaches are a long way above the reach of *short* people. There'll be a great fall of peaches next month, however. There always is here.

I saw one orchard last week, near Odessa in Delaware, as heavily ladened with fruit as any peach orchard ever was any where. Very superior peaches too. The proprietor told me he should send to market twenty thousand baskets, and has refused three offers of $1.75 per basket for the fruit on the trees. None of the neighboring peach orchards will give more than a quarter of an average crop; but all the peaches are unusually large, and fine flavored.

COSMO.

PROSPECTS OF THE HOP CROP.

MESSRS. EDS.:—I have for three weeks devoted my whole time to examining the hop gardens in most of the counties of Central New York, with especial reference to the vermin. For two weeks I could hear of their being very plenty and destructive just ahead—but on reaching that point there were none to be found. I traveled two weeks before discovering any, and now for the last few days have found but very few. I have strong hopes that we shall escape this year and have a fair crop, as the vines

everywhere look healthy. I never saw them more so. The few plant lice that are on the vines seem to increase so slowly, on account of the numerous insects that pray upon them, or from some other cause, that I have strong hopes of a fair crop.

This is very much to be desired, as the country is bare of hops; the old crop is nearly all consumed, and importations from Europe have nearly ceased. The price is very high, both here and in Europe, consequently a heavy crop is much needed here. We should not depend upon importation, for there is no country better adapted to the production of hops than our own, and there is no crop produced by our farmers that pays better than this, where it is steadily pursued.

There is another reason for anticipating a good crop this year, although the acreage is greatly diminished by the operation of the vermin for the last three years, and the consequent effort of the hop growers to head them off by early harvesting the crop, which has exhausted the root of its vitality by bleeding, and although nearly half the hop yards are neglected by their owners to such an extent as was never seen before in the country, yet, all those that are taken proper care of are very promising although late.

Our exemption from the hop louse I attribute to the same Providential cause which destroyed them last year, to wit, a highly charged state of the atmosphere by electricity. The heavy thunder storms that occurred last August, doubtless destroyed most of the vermin before they deposited their eggs to produce their kind this season.

We have had a large amount of wind storm and thunder this season, which I believe is a safeguard. I make this suggestion that others may with me, watch cause and effect. Should the season remain as favorable for the next four or five weeks as it has the last, we shall have a fair crop, but not a large one. We may be certain of good prices in any event, even should the yield be large and the quality good.

The farmers are prepared to meet the vermin if they become numerous. Not only have they the remedy which you have given to your readers in former numbers of THE FARMER, but Messrs. Turney & Niles, Otsego county, N. Y., have patented a wash which they have got into the hands of very many hop growers—so that with the season in our favor, and the remedies that have proved effectual for some years past in England, and the patented medicine which can be had for the buying, which is highly recommended—we are in a fair way to save our crop. By all means use one or other of these remedies, if the vermin increase so as to threaten mischief. In England, as far as I could learn, all hop planters applied the wash to destroy the vermin on the hop vine as soon as it appears in great numbers; but a few scattering lice will be kept down by these insects which prey upon them. The crop is so important, and the remedy so cheap and easily applied, that it is very desirable to be ready to meet it, if necessary. Last spring there was a large breadth of new hops planted. I would recommend every planter to prepare a good lot of bedded sets to fill vacancies in his yard; they are the best to start a new yard with. F. W. COLLINS.

FROM INDIANA.

MESSRS. EDS.:—I see letters from the East giving an account of the weather, &c. Perhaps a few lines from the West would interest the readers of THE FARMER. In this part of Indiana, with the exception of a few hot days, we have had a very cool, dry time. This is the 4th of July, and the ground has not been thoroughly wet since corn was planted. Last evening we had a shower with some hail. Wheat is very poor. It is thought there will not be more than one-third of a crop. Grass and oats are very short. There was a frost last week which left its work in some of the corn fields.—*M., Mooresville, Ind.*

REMARKS.—Thanks, friend M., for your notes. We shall always be glad to hear from you. We have several correspondents in the Western States, but have room for more. THE FARMER is as much a Western as an Eastern paper, and has subscribers already in every State and Territory, from Maine to California, and from Florida to Utah. So please give us more of your Western notes. By the way, let us have your name in full, next time, as there are four subscribers with the same initial at your post office, and we, of course, cannot tell which it is. This is not necessary for publication, but for our information, so that we may write to you when occasion occurs. Give us your name in all cases.

ITEMS FROM MAINE.

THE seasons are backward. Haying will be a week or ten days later than usual, and hoeing will run into the haying season owing to much seed having been planted very late. The hay crop will be at least two-tenths less than for the two preceding years. Other crop prospects are fair so far.

Apples give indications of a fair crop. The tent caterpillar which have been very numerous and destructive, have nearly ceased operations, and are going into the pupa state. They have caused much damage to groves and forests of deciduous trees.

The markets are steady with an upward tendancy for seasonable farm products. Wool 45 to 50c.; butter 35 to 40c.; eggs 22c.; lambs $3 to 3.50 a piece; hay $10 to 12 per ton; potatoes $1.25 per bushel.

The weather during the last part of June, was fine growing weather, with sufficient rain fall to save an entire failure of the grass crop, and give the springing plants a fair start.—*G. E. B.*

NOTES FROM CANADA.

SINCE my last, we have had changeable weather for nearly a month, culminating in a heavy rain storm on the evening of the 7th July, which lasted till 9 A. M., on the 8th. Under the influence of such weather, the crops have advanced rapidly; and so far as I have observed, never promised a better yield. Haying has not yet commenced, but with the present prospect of dry, hot weather, will not be long delayed. The season, however, is later than last year. Strawberries, cherries, currants are just ripening, while at this time last year they were almost entirely gone.

Some two years ago some smart Yankee did a big business round these parts selling rhubarb roots under the name of "Myatt's celebrated Wine Plant;" and it amuses me to see the trouble some of my neighbors are going to in the way of making wine out of such tough material. One man near me has made thirty barrels of wine, and is using sugar by the hogshead to make it palatable. He has to put one cwt. of sugar to each barrel of wine. Profitable wine that, when you consider he paid $250 per thousand, for the roots, and planted them four feet apart! When will people learn that the grape is the only thing to make wine of, fit to drink? The same amount of money expended in planting a small vineyard would have returned a small fortune and lasted a life time; while the miserable thing, misnamed "Wine Plant," will be gone to the dogs in a few years; and good cider is certainly preferable to the stuff that is made from it.

Thanks to those labor-saving machines, the "Mower" and "Reaper," the farmer's work is lighter than formerly, and his bill for hire and board of laborers considerably reduced; but then how effectually they have destroyed the charm of the harvest field, and knocked all poetical sentiment out of the once pleasant harvest days! No more picturesque groups of merry haymakers, will be seen, and the reaper's song is now the click of the cog wheels. How is it that grass lands are not more utilized?—is a question that often puzzles me. Scarcely a farm but shows large patches of old grass, and which is allowed to run to waste and yield a scanty herbage to stock for years, while other fields are cropped with grain and roots year in and year out, and new land added from the forest to the already large farm. Would it not be better to give a good summer fallowing to the old grass land and seed down some of the already overcropped fields, and so find the stock better pasturage. MAC.

FROM OHIO.

"S" writes us on the agriculture of Columbiana county, O., as follows:—"The wheat crop in this county is almost a failure. Oats and barley look fine. Corn coming on rapidly, under the influence of warm weather and seasonable showers. The hay crop will be good. A larger amount of buckwheat is being sown than usual, owing to the failure of wheat.

THE GREY DORKING.

WE extract the following description of the Grey Dorkings from "Wendell's new Poultry Book." These fowls are attracting general attention and are certainly worthy a trial by farmers.

In this class we have the White, Grey, and Speckled Dorkings, these are known in this country, while according to Mr. Bailey an English writer, there are six other varieties known as the Japan, Silvers, Pencilled, Golden, Red Speckled, and Malay Dorkings. The Greys are a good fowl for most purposes, they are good layers, sitters and mothers, and grow very rapidly; when six months old they will often weigh five or six pounds each—nine or ten pounds when they get their growth. The Grey Dorkings are more plentiful in this country than the White, and they find ready sales at good prices, very often bringing from $30 to $50 per trio of one cock and two hens.

We have Mr. Baily's professional and disinterested judgment, which was pronounced "that there is no breed to be compared with the Dorkings, which unites in itself more than any other, all the properties requisite for supplying the table; that the hens are good sitters and good mothers, and that there is a natural tendancy in the breed to fatten, so that the young ones average nine pounds weight, and at the table they surpass all others in symmetry of shape, and whiteness, and delicacy of flesh." The Greys are more hardy than the White, which is the cause of their being more plentiful.

The following are the points of the Grey Dorkings. Carriage large and more erect than the White, head round, comb single, though some have double comb, of bright red, and well spiked behind, gills medium, earlobes almost white, hackles cream white, feathers of the hackles dark along the center, back grey, of different shades, intermixed with black; saddle feathers same color as the hackle; wing feathers white mixed with black the larger wing coverts black, the lesser brown and yellow shaded with white, tail feathers black or very dark, with a greenish black lustre. The hens face is lighter coloured than that of the cock, hackles black and white, back dark grey, saddle and wing grey tipped with black, tail almost black, five toes on each foot, with white legs on both sex.

SPIRIT OF THE AGRICULTURAL PRESS.

Points of a Breeding Sow.

S. Lewis, of Boone county, Illinois, gives in *The Prairie Farmer* his ideas upon the above subject:—"In the first place she should be square built, have a short nose and short ears, short legs and back, with latter hollow or bent. Shoulders should be heavy and deep. Never let her raise pigs until she is a year old, and never but one litter the first year. Then if she proves a good milker let her raise two litters per year. I speak of her being a good milker. This is as essential in a breeding sow as in a good mare. Such an animal will raise better pigs, and, of course, her progeny will be better hogs for market. I find that hasty pudding and milk for the supper and breakfast, and corn for dinner, constitute a very good diet for the breeding sow. A great many farmers have fallen into an error in not allowing plenty of straw for a bed. Many build a warm pen in order to avoid giving her much straw. Let her run to a straw stack and she will build a nest to suit herself. If this is not convenient, she should have plenty of straw in the pen. Attend to these matters, and I will warrant no trouble in raising pigs in the coldest weather."

Vineyards.

The estimated average annual yield of good vineyards in the West is about that of France—200 gallons to the acre. In the South they claim 500, and in California 800. A bushel of grapes (fifty pounds) will make three and a half gallons of good wine and a half gallon of inferior.—*Ex.*

Scale or Bark Lice.

A correspondent in *The Northern Farmer* says:—"For some years my orchard was infested with scale or bark lice. I had tried various experiments to be rid of them, still they increased in numbers, and my trees looked as though they must yield to these pests, when, in an agricultural paper, I found a remedy that laid them out. In the month of June the eggs are hatched, and the louse crawls over the tree until about the middle of August, when they form a scale over themselves. During the time of their travels, wash the tree in strong ley, (tie a cloth to a stick, and save your hands,) as strong as you can make it; it will not do any serious injury. The ley will remove the scale, and the tree will resume a bright, healthy appearance."

The Trichinæ in Germany.

The following paragraph appears in *The Scottish Farmer*:—"M. Depoch, Professor of Medicine, and M. Reynal, of the Veterinary College of Alfort, have recently returned from Germany, where they have investigated the subject of trichiniasis, and have made their report to the French Minister of Agriculture. They declare that the disease is everywhere either extinct or dying out; and, moreover, that with the single exception of the epidemic at Herdersleben, where a concourse of unfortunate circumstances led to the most terrible results, the mortality has been everywhere insignificant. At Zwickau, Seitendorf and Sommertel, out of 80 to 86 cases, not a single death appears to have occurred. The existence of trichinæ is exceedingly common in Germany. Nothing in the appearance of the living animal, nor in its flesh when killed, is to be detected, either by the naked eye or by means of an ordinary magnifying glass; the microscope alone brings the insects or their eggs into view. The report adopts the view entertained in Germany that a temperature of about 160° Fahrenheit, is sufficient to destroy trichinæ."

Farm Work.

The Rural New Yorker speaking of farm work at this season of the year, says:—The farmer has his hands full of work, and if, in addition, the weather is rainy, he is apt to be somewhat gloomy and discouraged. The remedy lies in skillful planning of work, the use of labor-saving implements, plenty of help, and energy in directing and performing the labor. The farmer cannot afford to waste a day's time at present. Visitors that claim his attention from business are seldom welcome, and "city cousins" and friends who admire his strawberries and cream, and the smell of new mown hay, shouldn't object to milking the cows and handling the pitchfork.

Price of Wool in Ohio.

The editor of *The Ohio Farmer* says that "there can be no prediction more certain than that wool must advance from present quotations. He knows of considerable purchases made in Ohio at 55 to 60c, and no good reason why all the better conditioned Ohio wool should not command the outside figure within the next two months."

English Agriculture.

X. A. Williard, who started recently for England, writes *The Utica Herald* on the agriculture of Cornwall, as follows:—"The agriculture of Cornwallis of a mixed character. Much of the land is devoted to grazing, the fatting of sheep for mutton, and bullocks for beef. Dairies are also kept in considerable numbers, averaging, perhaps, from ten to twenty cows, for the production of butter. One of the most striking features of the agricultural districts of the southern part of the peninsula, is the numerous small enclosures of land. All along our way from Truro to Penzance, the cultivated lands are divided up into small fields, say from a quarter of an acre to an acre or two, and sometimes as large as six or eight acres. All these are surrounded with a heavy stone or earthen wall, oftimes with a ditch along the wall. These enclosures are of singular shapes, very irregular, often mere lanes, and hardly ever bounded by any regular straight lines. The almost entire absence of timber gives to the country, divided up into these small paddocks, a very singular appearance. I was told at the mines, that these enclosures were laid out in their present shape hundreds of years ago. Potatoes and vegetables are grown considerably for the London markets, the climate admitting of early growth. Potatoes are planted as early as Christmas, and are ready for market now. In many places cabbages were nearly, if not quite fit for market. Of course, wherever the land is cultivated, it has the appearance of a garden; and yet this is, perhaps, among the least fertile districts of the Island."

Rails for Bars.

"W. D. D.," in *The Mirror and Farmer*, says:—A very convenient substitute for sawed or split rails, may be made of saplings. The spruce or hackmatac, when they grow in clusters, makes very pretty, light and durable rails. Cut in on one side, a third of the thickness or so, commence four to six inches above this cut, and hew down so as to sharpen one side of it, and then the opposite side. Then when cut down, the butt end is ready for the post-hole. The top end may be small enough without hewing. If stout rails are required, take a sapling four to five inches in diameter at the butt, sharpen as before, place the sharpened end of the rail in a hole of an upright post two feet from the ground, and then hew from each side to a proper thickness. It will season through sooner, and be strong and endurable. Fall and winter is the best time to cut them.

Fattening Stock.

Stock, says *The Rural World*, will fatten better in the dark than in the light—better in the fall (on account of the longer nights) than in the summer. With less food more weight can be secured in the dark than in the light. Experiments have sufficiently demonstrated this. The pig-pen should be dark—we have often seen it made so with the finest effect in favor of the fattening of stock. It is known that light toughens the tissue. For a workhorse, the sun is excellent; for the working man the same; but not for the accumulation of fat. Yet how few people take advantage of these things.

Raising Stock.

A correspondent of *The Utica Herald* sends the following sensible hint in regard to raising stock:—"Every breeder of mules knows that a good horse colt cannot be expected from a mare that has borne mules. The common theory of this is that the blood of the mare becomes permanently affected by that of the fœtus, giving mulish characteristics to her subsequent progeny. Applying this to the cow, is it not likely that the blood of the cow is permanently tainted when she is made to bear bad blooded calves? And can farmers expect ever to raise good stock from cows to which, for the purpose of making them milkers, they have been in the habit of using any runt of a bull they could pick up?"

Facts about Osage.

W. Cutter, in *Prairie Farmer*, says: "I have noticed queer facts concerning the Osage Orange that I have never seen in print: viz.: not one tree in twenty bears fruit, and the trees that bear fruit never blossom. The young boll is covered with silk like that of corn and the blossoms on the barren trees are only useful as the tassel is to the ear of corn. A lone tree, if a bearing one, raises no seed and the bolls are very small. I have been watching the above peculiarities for but a few years and would like to hear from others on the subject."

The Cut Worm.

This destructive pest has been very numerous throughout the entire country this year. In this section and in the West, says *The Rural New Yorker*, whole fields of corn have been destroyed by it, and as the season has been cold and backward, replanting has not succeeded first rate. The ravages of this enemy to the corn crop are becoming really alarming, and farmers should study the subject well, and understand the methods, if any there be, of abating the injury. We will briefly mention the best remedies known. Fall plowing, Dr. Fitch says, if done *late*, so as to expose the grubs to the frost, will destroy many. This practice has been found to answer well, but it may cause more work to fit and tend the field the next year. A heavy clod-crusher passed over the field just before or after planting will destroy worms within three inches of the surface. Making small holes in the ground, just after a rain, into which the worms will fall where the hot sun kills them is another remedy. An instrument could be easily made which would surround each hill with holes, or smooth, deep depressions in the earth. This we think would be the best plan. At all events, it is well to study, and prepare beforehand means for destroying these rascals which work underground in the dark, and blast the prospects of the corn-grower.

Budding Fruit Trees.

F. R. Elliott, writes in *The Ohio Farmer*, as follows:—"The time for insertion of buds into the stock for the purpose of changing the kind of fruit, varies with the habit and character of both the tree to be propagated and the stock on which it is to be worked. All buds, in order to be successful, must be well ripened—that is, the tree on which they have formed must have made its terminal bud, or, in other words, the growth of the shoots must present a continuation of perfect formed leaves to its point. This ripening of buds occurs earlier in some varieties than in others: usually early summer fruits ripen their buds earlier than winter sorts. Next, the stock in which the bud is to be inserted must be in a vigorous, healthy condition, but apparently about to close its season's growth. Through our northern middle States, the usual time to commence budding the apple and pear is about the 10th to the 15th of August. Further south they are in condition in June; and so on all the intermediate time, according to latitude and season; some seasons being earlier than others by six to ten days.

In about a week or ten days after budding, the buds should be looked over, and if any have failed they may yet, if still growing, be budded over.

In about two or three weeks the strings will require to be loosened. Some will have to be re-tied, as if not so done the rapid growth will break the strings before the bud becomes well united. Generally the strings may all be cut loose in from three to four weeks after setting the bud. This is done by passing a knife perpendicular at the back of the bud or opposite side of the tree.

Cutting Timber.

A correspondent of *The Boston Cultivator*, writes to that journal on the subject of cutting timber, "that to guard effectually against the ravages of the worm in wood, a very long experience convinces me that all timber having a *sweet sap*, such as hickory, all species of the maple, birch, &c., should be felled in June. What may be the reason for this, I will not undertake to say; I give you the experience of over half a century of a worker in wood."

THE SUMMER FALLOW.

A FALLOW, strictly defined, according to the practice of English and Belgian husbandry, is a portion of land plowed immediately after the crop is removed in autumn, which is frequently as need requires, plowed, harrowed and otherwise made fine until the time for sowing winter grain the following year. In such a course it is for nearly twelve months in a state of movement and æration; and all vegetation, whether of weeds or grass, and most worms and insects which infest the soil, are exterminated. The frequent stirring of the soil burries or uproots the weeds already growing, and brings the seeds it may contain to the surface, so that they vegetate, and are destroyed by the next plowing or harrowing, a new crop succeeding each operation, until the soil at last becomes free from any form of vegetable life. Insects and their eggs and larvæ are turned up and exposed, and from the want of roots and plants upon which to subsist, are also destroyed. Thus two of the worst pests of the farmer are diminished, if not entirely cut off, by a course of thorough fallowing.

That mellowness, and fine tilth, are secured in the highest degree, is also evident. The soil is thoroughly pulverized by this constant stirring and turning, the sod is mixed with the loam and the surface with the subsoil, and the whole prepared for the future crop, so that the plants may send their roots through every part for nourishment and support, and avail themselves of whatever elements of fertility it may contain. Many experiments seem to show that fallowing adds directly to the fertility of the soil, which it may do, in the complete exposure which it gives to the sun, air and dew, and by the action of rain, frost and heat, and the chemical changes resulting from all these, which warm and vivify the soil, and prepare it so as to give an early and vigorous growth to the crop which follows.

Summer fallowing, as defined by Webster, and as usually practiced in this country, "is plowing and working land repeatedly in summer as a preparation for wheat or other crop." We plow green sward in May or June, and harrow or cultivate it a few times in the course of the summer—perhaps, plowing again once, and sometimes twice just previous to seeding. The more thorough the course, the more beneficial—the better the preparation it gives for the ensuing crop. If the land is poorly plowed at first, and the harrowing given in the hurry of haying and harvest, only sufficient to stimulate the growth of grass and weeds, and instead of destroying them, leaving them better prepared to infest the succeeding crop, we shall worse than lose our labor, and might have better left our fields untouched until the proper time of sowing. Such fallows as these have given rise to the opinion which prevails with many, that fallowing is of little real benefit, and the enhancement of the crop thereby secured, more than balanced by the increased expense of team work and loss of the use of the land.

The late frequent rains in this section of the country have forwarded and facilitated the breaking up of fallows, and we hope their future treatment may be of the most thorough kind, so as to go as far as possible in the destruction of weeds and insects and the perfect preparation for the wheat crop, which is yet the great staple of Western New York.—*Ex.*

THE CATTLE PLAGUE.

THE following official statement has been made by the British Privy Council, under date of June 22d:—

"The cattle plague has now completed the 52d week of its prevalence, and during the year nearly a quarter of a million (248,965) of attacks have been officially reported, 80,597 cattle are stated to have been killed, 124,187 to have died, 32,989 to have recovered, and in 11,192 cases the results have not been specified. In addition to the foregoing, 51,848 cattle exposed to risk have been slaughtered while free from disease.

"In the aggregate, more than 50 (50.5) in every 1,000 of the ordinary stock of cattle in Great Britain have been attacked, and to every 1,000 attacks, whose results have been reported, nearly 900 (861.3) animals perished.

"The epidemic has also extended to a considerable number of sheep, and since the commencement 4,463 are officially reported to have been attacked; of these, 4,002 died or were killed, and 461 recovered or were unaccounted for.

"During the week ending the 16th of June, 533 attacks were reported to have occurred in Great Britain—namely, 488 in England, 27 in Wales, and 18 in Scotland. The number of attacks—namely, 533—shows a decrease of 454 on the previous return. Correcting the total, by adding an average of attacks commencing during the week, but which may be subsequently reported, the number for the week will be 666."

HOW TO DRESS POULTRY.—Take a knife and sever the artery or jugular vein, in the neck, or take an ax and cut the head off, let it bleed so as to draw all the fever from the fowl in case it have any. Dip the body in boiling water, then pick quick, when through douse the fowl in hot water again, then throw it into a tub of cold water, let it remain three or four minutes, this will make it swell out plump, and will keep twenty-four hours longer than if it was not thrown in the cold water.—*Wendell's Poultry Guide.*

Horticultural.

The Fruit Growers Association of Western New York.

The summer meeting of the Western New York Fruit Growers Society, was held at the Court House in this city, on the 27th of June.

The weather in the forenoon was very unfavorable, and in consequence the attendance was not as large as usual, and the show of fruit quite limited.

The meeting was called to order by the President, H. E. Hooker, and the minutes of the January meeting were read by the Secretary, James Vick, and approved.

On motion of P. Barry, a committee of three was appointed to prepare and present subjects for consideration. The chair announced as such committee, P. Barry, of Rochester, W. B. Smith, of Syracuse, and E. W. Herendeen, Macedon.

In the absence of the committee, the President called for information from members as to the fruit prospects in the various sections.

Messrs. Moody and Sharp, of Niagara county, reported a light crop of apples and pears. Apples badly injured by the army worm. Peaches, grapes, &c., were better.

Mr. C. Downing, of Newburgh—Peaches very unpromising at the East; pears and apples light. A good show for grapes.

Mr. W. Griffith, North East, Pennsylvania, reported grapes in good condition. Peaches given up for several years. Pears light, summer fruits pretty fair. Weather has been unfavorable for strawberries.

The Chair appointed a Committee on Fruits, consisting of Mr. C. Downing, Newburgh; E. Moody, Lockport; W. Griffith, North East, Pennsylvania, and Dr. Farly, Union Springs.

The Committee on subjects for discussion, reported the following:

1. Under what checks or restraints should Seedling Fruits be introduced to guard the public against deception?
2. Which of the new Strawberries can this Society recommend for general cultivation?
3. What is the experience of cultivators in regard to the hardiness of the new Grapes during the past winter?
4. What varieties of Grapes have been preserved most successfully during the past winter—and in what manner?
5. Is a rich soil necessary for the production of good Grapes?
6. Have there been any recent experiments made for the prevention of Mildew on Hardy Grapes?
7. The Army Worm—its danger and remedy.

The questions were then taken up in order, and Mr. Hooker requested a full and free discussion. He spoke of the introduction of new fruits, by puffing and advertising, by irresponsible parties, and hoped the Society would interpose a corrective of the evil.

Mr. Barry said, the question was a very important one. Fruit growers are frequently imposed upon by buying old fruits as new ones. The Catawba for instance, is known to have been sold under eight or ten different names, at from two to five dollars each. He thought those who originated new fruits, should submit them to some competent society and their merits tested before being sold to the public.

Mr. E. W. Herendeen introduced the following resolution:

Resolved—That new seedling fruits before being sold, should be approved by some competent Society.

Mr. C. Downing—There should be a committee appointed to test new fruits. The American Pomological Society had such a committee. If it performed its duty, the public would be protected from the frauds of vendors of worthless fruits.

Mr. Keech, of Waterloo—I come within this resolution. I am engaged in raising new berries. I have some varieties which I think good, and he invited the closest scrutiny of the Society to those berries he had on exhibition.

Mr. Griffith—This is an important matter—one proper to come under the cognizance of the Society. His speciality was the grape, which is in the same category with the strawberry as to frauds about new varieties. George Campbell had labored thirty years to produce a new variety of the grape and failed. Others produce them at will, or pretend to do so, and flood the country with what is really worthless or no better than many of the old stocks, which in most cases they really are. I have paid from three to five dollars for plants, like the Northern Muscadine, and found them worthless. I distrusted Dr. Grant's Iona and Israella, and held off, but finally tried them, and happily with satisfaction. If the Society should take the matter in hand and attend to it, their recommendation would secure the success of any variety. Let us know what is right, and what ought to be propagated in the market.

Mr. Seelye—I think it will be found impossible to prevent new fruit from being brought before the public, while papers advertise the same. People will be gulled, as long as they will run after new fruits. We have a committee for foreign and native fruits which should be sufficient. It seems impossible to do more than give a warning or put something in the by-laws in order to give the committee authority to denounce any berry that is worthless; but by any general work of committee you cannot stop fruit growers from selling worthless berries.

Mr. Moody, of Lockport—I think the public might be cautioned through this Society, and it would have an influence throughout the West. Let the Society give its sanction to fruits. I think a caution from this Society would do more good than the resolution.

Mr. Codding—I should be influenced by this Society as to what I should purchase. People who have other business to attend to, have not time to investigate, and what we want is for this Society to tell us.

Mr. Vick—In Europe no man of any reputation pretends to put out a new variety until endorsed by the National society. A committee should be appointed to travel around and examine new fruits, and it would have a good effect. Many of the new varieties offered are a disgraceful cheat, and something should be done to prevent it.

Mr. Hoag—I wish to know something about the Golden Queen, which has been sold extensively at from two to three dollars per dozen.

Mr. Vick—It is the same thing as Trollope's Victoria.

Mr. Seelye—The first time it was sold as Tom. Thumb.

Mr. Frost said a special committee should be appointed to look after new berries, and report a year hence.

Mr. C. Downing thought a year hence too early, as the season for berries is already too far gone.

Mr. Griffith said we look to this Society for opinions and authority in regard to new fruits.

The resolution offered by Mr. Vick was then taken up and read as follows:

Resolved—That the Standing Fruit Committee be requested to investigate thoroughly all seedling fruits claiming public favor, and report the facts as speedily and fully as possible.

Resolution carried.

The second question was then taken up as to what new strawberries the Society can recommend for general cultivation.

Mr. Barry—I think favorably of the Agriculturist.

Mr. Moore—Not hardy with me.

Mr. Moody said it had not been fortunate with him.

Mr. Bronson—Its quality not quite equal perhaps to the Triomph de Gand.

Mr. Hooker—We had a few plants, but they were all winter killed.

Mr. Bronson said he did not think it would carry to market as well as some other varieties.

Mr. Downing—Think it will bear carriage; but do not think it will bear as much fruit as the Wilson.

Mr. Langworthy—I wish to inquire about the Russell Prolific. Is it hardy?

Mr. Downing—It is hardy with me.

Mr. Moody—It is a fine, large berry. I think we have not the right fertilizer for it. My experience is that no variety will produce more than one crop.

Mr. Langworthy—My experience is that one crop uses up the plants.

Mr. Bronson—The Russell has done better than others with me.

Mr. Hoag—It wants good nursing to produce fruit.

Mr. Smith—It is a strong grower, but does not fruit well with me.

Mr. Hooker—Not favorably impressed with it.

Mr. Codding—Asked whether the Golden Queen was the same as any other variety.

Mr. Vick—It is Trollope's Victoria.

Mr. Hoag—I think well of the Jucunda. It is a valuable late berry. The Wilsons, Triomphe de Gand and Jucunda are the best berries.

Mr. Hooker—I think well of it.

The third question was then discussed, "What is the experience of cultivators in regard to the hardiness of the new grapes during the past winter?"

Mr. Griffith—The trouble the last winter has been in the roots. Lost a great many. All varieties suffered the same. It is the roots, and not the wood. Soil, gravelly loam. Would recommend covering vines the first season.

Mr. Barry said the new varieties had not suffered more than the old ones.

Mr. Hoag—Left all uncovered. Union Village and Allen's Hybrid are the only ones injured last winter.

Mr. Moody—Had no trouble with them.

Mr. Langworthy said Allen's Hybrid and Adirondack suffered most with him.

Mr. Hooker—The Adirondacks started well, but were injured by the hail storm.

Mr. Smith—We generally cover our grapes.

Mr. Langworthy—If new varieties are covered in the winter, they afford no fair test of hardiness.

Mr. Griffith—I had ten Adirondacks killed. Other varietics stood the winter. I have little faith in the practicability of covering, but it is prudent to cover them.

Mr. Barry—Vines on the ground in spring are more exposed to frost than when raised two or three feet from it.

Mr. Griffith—When buds begin to swell they will be killed, if left on the ground.

Mr. Hoag—Vines should be covered the first season; after that they will stand it, unless the winter is unusually severe. In my experience buds keep and develope better when covered.

Mr. Warner—Will a light covering of earth keep vines through the winter.

Mr. Smith said he had no doubt but it would.

Mr. Moody—Vines grew later later last season than usual, hence the wood was tender. In September some vines made more wood than during any other month. Of course the portion thus made must have been tender when winter set in.

Mr. Griffith—The severity of winter pruning, in some instances, might affect the ability of the vines to withstand the test of winter.

Fourth question, "What varieties of grapes have been preserved most successfully during the past winter—and in what manner?"

Mr. Langworthy—I sent a lot of grapes last winter to New York. They all rotted, as did those I had left at home.

Mr. Barry—That was my experience.

Mr. Griffith had no trouble in keeping grapes in a dry room. Had kept Catawbas, Isabellas, Delawares, Rebeccas and Dianas—the last most perfectly—until April, in ordinary wood boxes from five to fifteen pounds in each. Had no mildew. Put them in a dry upper room. Had no success in the cellar. Picked them early as the stem began to color and before picking for wine.

Mr. Warner said he had been successful in keeping grapes. Put up a large quantity last fall in boxes containing from 12 to 24 pounds. Had Catawbas, Isabellas, Rebeccas, and Dianas. Management is all. The grapes should be ripe, perfectly dry, clean, and kept cold; then they can be kept the year round. They were put in boxes, nailed down and kept in the cellar. Had found some in the cellar this morning all right. Never touch them until we want them. Dianas kept best. Temperature about 28°. No fruit should be put in pine boxes, as they flavor the grapes. Paper boxes will gather moisture, and should not be used when wooden ones can be obtained. The Isabellas and Concords were among the last used, and kept fresh. No other covering than the boxes was used.

Mr. Babcock kept grapes until May in sawdust and shavings put in a cool cellar.

Fifth question, "Is a rich soil necessary for the production of good grapes?"

Mr. Smith—A rich soil is not necessary for the grape, though some kinds like the Delaware, would bear land richer than others.

Mr. Downing—Thought rich soil would produce large grapes. They look well and sell well, but are not so good to eat or keep.

Mr. Farley—Thought a moderately rich soil best.

Mr. Hoag.—Have not manured our vineyard for seven years, with the exception of a small shovelfull to each vine two years ago. Do not approve of manures. They ripen later on rich land.

Mr. Moody—The quality of the soil should be taken into consideration. A clay soil suited him best. They produced finer fruit planted in clay than on a light soil.

Mr. Griffith—A rich soil is injurious to all kinds but Delaware. What is favorable to wood is unfavorable to the growth of fruit. Planted a Catawba vineyard twenty years ago, and it had borne a heavy crop since without manure. Soil that will produce about thirty bushels of corn to the acre, is rich enough for grapes.

Sixth question, "Have there been any recent experiments made for the prevention of mildew on hardy grapes?"

Mr. Herendeen said he was in Washington last winter, and saw one hundred vines in the vineyard of William Saunders, on trellises with a roof over the vine, which kept them free from mildew. The roof is only two feet wide; but it protects the vine from rain and dew. He thought it was a good protection against mildew.

Mr. Babcock thought mildew was caused by too close planting. The air cannot circulate freely among the leaves.

Mr. Moody—Had tried unleached ashes with favorable results. Vines trained on high and open trellises so that the leaves could dry easily would have a good effect.

Mr. Langworthy said he had tried wood and coal ashes. Do not think they will prevent mildew. Sulphur is the best remedy.

Question seventh, "The army worm—its danger and remedy."

Mr. Sharp, of Lockport, said the army worm had been very destructive in some parts of Niagara county. They are proceeding in a southerly direction.

Mr. Bronson said they had been very troublesome about Geneva. They had used hellebore, tobacco and various other remedies without effect. Had employed sixty men armed with pruning hooks, but all to no purpose. Kerosene would kill them and the trees too. Crude petroleum used as a wash he had used with success to kill insects and slugs in the garden. Mixed with water it would not kill the plants.

Mr. Sharp found soap suds effectual. His sons had used two barrels this spring, and they had not been troubled since.

Mr. Ferris said the same, but the cheapest way was to procure a pair of leather mittens and crush the vermin.

Mr. Smith, of Syracuse, had used a mixture of sulphur and lard plastered around the trunk of the tree four or five inches wide. The worms would not pass this, but would cluster below it, when they could easily be destroyed. If any worms have ascended the trees a slight jarring would cause the worms to fall to the ground. In this way an orchard may be cleared of these pests.

Mr. Langworthy—This is the simplest cure, and well worthy a trial.

Here the Committee on Fruits stated that they were ready to report, and the conversation terminated.

The report was then read in commendation of the varieties of fruit mentioned:

J. Keech, of Waterloo, three seedlings—The Agriculturist, Phil. Sheridan and General Meade—good.

W. H. Pillow presented Triomph de Grand and Russell's Prolific.

A plate of Golden Queen was presented, which was pronounced the same as Victoria.

Jacob Moore & Brothers of Brighton, who are extensively engaged in producing new varieties, exhibited some very fine fruit from their seedlings, which was highly commended by the committee. The seedlings were propagated by hybridization of the finest varieties.

No. 99 was pronounced by the committee as excellent in flavor and very productive.

No. 39, Black Prince, by Wilson, very early.

No. 25, Scott's Seedling, by Wilson, medium size and very productive.

No. 66, Wilson, by Triomph de Gand, very good, sweet, large and productive, one of the best.

No. 71, McAvoy, by Triomph de Gand.

No. 14, Scott's Seedling, by Wilson, good.

No. 5, same parentage, pleasant, acid and productive.

No. 88, Genesee, by Wilson, very good flavor.

No. —, Wilson, by Red Bush Alpine, firm flesh, and productive.

No. 46, same parentage, sweet and good.

All these are perfect flowering varieties.

Ellwanger and Barry presented a plate of fine berries of the Agriculturist variety. Their vines, with those of many others of our nurserymen, were nearly all destroyed by the hail storm.

E. Fo'd & Sons, of Syracuse, presented plates of Triomph de Gand and Russell, with some specimens of a fine, new seedling, called Hastings' Onondaga, a cross between Hovey and Victoria. Berries large, but rather soft, good flavor, and is spoken of as a promising variety.

Bronson & Selover, Geneva, presented twelve plates of cherries, fair for the season, and two plates of strawberries.

The report was accepted and adopted.

The meeting then adjourned.

A FAIR correspondent of *The Rural New Yorker* discusses the question, Why don't the ladies attend the Fruit Growers' Meetings? and suggests it is only through fear that they would carry off all the prizes, that they are debarred the privilege by the "lords of creation."

THE GARDEN.

When the first warm days of spring appear, how natural it is for us to long for some fresh vegetables—almost anything, so that it be fresh from the earth. How welcome, then, would be a good mess of *greens*, especially the best of all greens—spinach!

Well, to have a mess of spinach as soon as the snow is oft, and the surface thawed, you must sow it about the middle of August. It will then have time to attain a good growth before winter sets in, when it should be covered with straw. As soon as the straw is removed in the spring, you can cut for the table. It will not be quite so tender as that sown a few weeks later, and allowed to make a new growth after the removal of the covering, but it will be *very* welcome so early. On rich land, two square rods will supply an ordinary family of five or six persons. About the same time, sow a few onions to pull in May. They will form small bulbs which will enable them to endure the winter.

Those vegetables which have not yet attained their growth should have the soil frequently stirred among them.

Asparagus should have the seed cut out as fast as it forms.

Limas, or other pole beans, will do better if the ends of the vines are pinched off when they reach the top of the pole.

Earth up celery every ten or twelve days. Tie the leaves together, while doing so, to prevent dirt getting into the heart of the plant, which will rot them.

Melons will set more fruit than they can carry through. Remove all excess.

Flat turnips can still be sown. Do not get them too thick.

Take good care of the tomato, pinching off the worms that feed upon the leaves.

THE FRUIT GARDEN.

If you have no strawberry bed, plant one this month, when there are a few cloudy, damp days: if you have one, wait until spring before planting another, as that is the *best* time. Plant Wilson's Albany and Triomph de Gand for main dependence; a few Downer's Prolific, or French's Seedling, for early; a few Jucundas, and Agriculturist, to test new sorts, and a few Golden Queens (Trollope's Victoria) for splendid late berries. We have known 20 of the latter to fill a quart box this season.

PREPARATION FOR A VINEYARD.

WRITTEN FOR THE AMERICAN FARMER, BY J. H. FOSTER, JR.

Eds. American Farmer:—We snatch a few moments in which to write an article "about grapes;" and as we are rather of a serious, practical turn of mind, what we shall write, will be of that nature. Well, what chapter shall we take up? We look out of the window in vacant study, and what meets our gaze? William plowing for the vineyard. This, then, shall be our subject, and forthwith, with sleeves rolled up, (for we can never work at vineyard without) we pitch right in to our subject.

We leave out of the question for further consideration, kind, quality and position; all else save how and when to plow. We can do no better than take the history of the few acres that we see William at. From off this land, in '64, we cut rye with a high stubble, which was thickly set with clover. During July we turned this stubble and clover under, sowed one hundred weight of No. 1 guano per acre, and buckwheat, which never amounted to much. There was none to plow under. June, '65, we cut a heavy crop of clover, and nearly ripe rye, for hay. The second crop was very heavy, which was allowed to rot on the surface.

The present season there was a fine growth of clover and weeds, so heavy it could hardly be plowed under; yet we succeeded pretty well. To-day, (July 5,) we will sow one hundred weight per acre of guano and Coes' Phosphate; then three pecks of buckwheat. Harrow about half. Sow three pecks more. Cross the first sowing, and finish by cross-harrowing. In about two months, or ten weeks, the buckwheat will go under, and the teams be set to work hauling rotten leaves, or half rotted sorghum bagasse, or cane refuse, which will be spread about two inches deep, and last of October plowed under in the following manner.

a	*b*	*c*	*d*			
e	*f*	*g*	*h*			
i	*j*	*k*	*l*			

The ground slopes about one in seven. Starting along the lowest side with a large iron plow with steel point, we cast a furrow (*a*) down hill, and take the team back *empty* on the unplowed ground above. The second furrow (*b*) same as first, and to be shoveled over below the first. Third furrow same as second. We now have a section partly opened consisting of *a*, *b*, *c*, being about three feet wide and ten inches deep. The fourth furrow (*e*) is to be made on the same position the first one was taken from. It is loosened up merely, and consists of about six inches of subsoil. It is to be thrown out. Fifth furrow (*i*) subsoil, loosened up under the last furrow, about four inches. Sixth furrow (*f*) cast over on to loosened subsoil (*i*), and takes the place from which (*e*) was thrown out. We might now say we have a section complete.

To form the next section we loosen *j*. Plow over *d*, and shovel it on to the place *a* was cast from. Next plow over *g* on to loosened *j*. Thus we complete a section, and thus we traverse the whole field. Three furrows deep, making twenty inches, (10, 6 and 4)—thoroughly loosening all of the twenty inches, and not reversing the order of any, as some of the old class of vineyardists would have us do. A full equipment for plowing thus would be—plow and team, plowman, driver, (boy,) and man to ride the plow beam, in case the plow does not go deep enough. If you have a steel point, which had better be obtained, the third man may not be needed, as in case the point does not point in enough, it can be pointed down by the blacksmith. Cost of thus preparing, (we mean the last

operation,) will be about seven days for team, two men and boy; and as hire varies, we make no cash estimate. With us at the present it would be about seven dollars per day—not more.

With this hastily written article we close, begging the forbearance of your generous readers. The subject will be further elucidated in our "Manual of Grape Culture," for notice of which see advertisement in this number.

OUR GEORGIA LETTER.

J. D. MITCHELL, an esteemed correspondent, has recently gone on a trip to Florida, and promised us some interesting items on the agriculture and horticulture of that State. We have just received from him a letter dated from Savannah, Ga., addressed to a friend, from which we copy the following particulars:—

"Your letter to the 'Farmers' Club,' in *The Tribune*, about strawberries, reminds me that I am indebted to you for a letter which I have had no opportunity to answer. Your assumed ignorance in strawberry raising, almost trapped me into giving you a few lessons, but I guess your theory is better than your practice, and that you are in more need of some one to do it, than to tell you how. I am not one of those who suppose that my way is the only way, or that my way will do best in every location and under all circumstances, but believe every location has to be experimented upon for itself. Your experience and mine agree as to 'Wilson's Albany.' If I could have but one variety, I should take that. For a selection of three—Wilson's, Brooklyn Scarlet, and Tribune No 1, which I believe is the Monitor. They are all productive, high flavored when well ripened, strong growers, and keep well on the vines, when the birds are not too plenty. When they are, and you have to cover them with grass or hay, they ripen well under it, better than Russell or Col Ellsworth, (Tribune No 2.) The latter in my garden (Lycoming Co. Pa.,) is not worth raising. The fruit ripens unevenly, has a white nose with little provocation, loses its flavor with little reason for it, and is not productive. Russell's Prolific is well described by Mr. Caranach, I think. He says it is large, coarse, and sour. It has no particular flavor, and is among strawberries, what the Rohan and Jenny Lind are among potatoes—monstrosities.

"I am going to test your opinion upon strawberry culture in Florida. I anticipate no difficulty in having two crops a year. Being detained here, (Savannah, Ga.,) to-day, I have been taking the measure of the town. It has become somewhat Yankeefied, but there are still to be seen several of its ancient features. Not long since, I visited the old town of Lebanon, in the Deutchland of our old commonwealth. I arrived at 3 A. M., and going to an hotel, passed the little open market shed so common in our State, and found the farmers already arriving and arranging their 'traps.' I passed on, anxious to secure a short nap, and thinking I would have a look at the Deutcher lasses and their plunder, when I woke up. I slept until 7 o'clock, but my lasses had vanished, and with them every vestige of marketing. Do you suppose there is any political or economical or moral significance, in the fact that Georgians 'change ends' with us, and bring their truck to market late in the afternoon? I hope not, for I have a constitutional antipathy to very early rising, and am not anxious to be convinced that it has any bearing upon the question of thrift between Deutchers and Crackers. The market here, is quite a building—say 100 feet square, with a row of tables outside, upon which the country people display a sample of their productions. They come in one horse or mule carts, with a bundle or two of corn leaves for the animal, and to save labor in watching, leave the bulk of their load in the cart, putting on the tables samples only, making the show very meagre, after one has been accustomed to the wholesale character of a Jerseyman's display. For instance, one man has two melons and two quarts of sweet potatoes; another has a few peaches and two melons; still another has two melons and nothing else. Every one has melons, and you can get one as large as six men can eat, for two '*bits*.'

"The peaches are small and poor; apples ditto. Corned beef and melons form the bulk of the offerings at present. Inside, the market is divided between fresh meat and refreshment tables which take the place of restaurants, which seem not to have become acclimated here. At all these tables are the swinging blue and red cambric fans, imported from Virginia and operated by means of a string, with a juvenile colored individual at the other end. We had at our hotel to-day—melons, native tomatoes, peaches, huckleberries, green apple pies, new potatoes, and New York beef. I intended to demonstrate the capacity of a young darkey for water melons to-day, but he had more time than I had. I once heard of a man who had a pig that ate a pail full of 'slops' and after he had eaten it, he put the pig into the pail, and he did not half fill it. I always had a little doubt as to that man's correctness in measurement, but I am positively sure that I could put this individual's *body* into the rind of the melon that he attacked as though he meant to eat the whole of it, which I have no doubt he did, and unless his legs were hollow, or his corpus gutta percha, I cannot conceive where he put the melon. Melons are the feature at this time. Every few rods you find a colored man, woman, or child squatted upon the curbstone, superintending the sale of a stock of various size and assortment. Fine looking peaches are coming in from Columbus, Ga., for the New York market. They are in crates and wrapped singly in papers. When I ship fruit from Florida, I shall not do it through express companies.

"A man named Kellogg, of this city, proposed to those cotton planters whose seed failed, and when it was too late to replant, to plant the Palma Christi bean. He proposed to lend them seed and pay them at least three cents per pound for the crop. He says it produces from 60 to 130 dollars per acre, and one man and horse can easily tend thirty acres. In our vicinity in Florida, this plant is perennial and grows to a great size. At the above rate of product, a quarter section of land planted with them, would give a man a very pleasant income, with little labor."

Ladies' Department.

I WOULD BE WITH THEE, MOTHER.

I would be with thee, mother,
In that land among the blest;
Where the wicked cease from troubling,
And the weary are at rest.

I would rest with thine, sweet mother,
This weary, aching head;
Within the lonely recess,
Of thy dark and narrow bed.

Earth has few charms for me, mother,
Since thou wast called away;
For I have learned full well, mother,
That the brightest joys decay.

I've found no friend, like thee, mother,
Since thou wast called away;
To guide my erring footsteps,
And love me day by day.

But I've a friend, above mother,
Who will forsake me never;
I'd gladly leave this world, mother
To dwell with him forever.

I trust that thou art there, mother,
In that land among the blest;
Where free from earthly sorrow
We ever more shall rest.

DOMESTIC RECEIPTS.

CANNING PEACHES.—Put into a nice porcelain or brass kettle any desired quantity of water, sweeten with pure white sugar; when boiling, throw into it either whole or stoned peaches as desired. Let these also boil to a certainty, when, with a prong or fork fill one bottle with the fruit, afterwards covering with the boiling juice. Let the bottle be quite full, cork and seal, or cover with the lid immediately, completing one bottle at a time. As the fruit is exhausted in the kettle more should be added, also some boiling water from the tea kettle, and sugar as the supply of juice diminishes. Be careful to season the bottles with warm water before filling with the boiling fruit, or you will be very likely to crack many of them. It will be of no use for you to allow the fruit to remain in any bottle, however slightly flawed or cracked, as the contents will not keep. In such case the fruit should be returned to the kettle, brought to a boil and placed in a perfect bottle; but there is no necessity for cracking or injuring one in ten thousand. Do not allow yourself to be more than a few seconds in filling and completing entirely, each bottle. Care should be taken not to place a bottle after filling and while hot, near to any very cold substance—for instance, on a cold plate, marble, stone shelf, table, or against the cold wall, and in no case sprinkle with cold water. Any one understanding the principles of heat and cold will perceive immediately the common sense of these directions.

ROASTING AND FRYING MEATS.—The English are acknowledged to be the best meat cooks in the world. They never allow any water or broth in the pan where the meat is. The roast, from time to time is basted with the drippings from the fat. In frying a steak or mutton chop, the pan should become thoroughly heated before placing the meat in it, which should have been previously seasoned with pepper and salt. The latter should not be applied till just before the cooking, as it has a tendency to harden. The steak or chop should be turned constantly till done brown.

HINTS TO ICE CREAM MAKERS.—The proportion of ice and salt should be as near as possible—two parts of ice to one of salt. In packing, make one layer of ice, then a layer of salt, and so on, to the desired depth. If the cream freezes but slowly and does not come to an ice as rapidly as usual, the process may be very much hastened by adding a little more salt and a few fresh pieces of ice. Before putting into the freezer the cream or milk should be as cold as possibe.

TOMATO CATSUP.—Pour boiling water on the tomatoes, let them stand until you can rub off the skin, then cover them with salt, and let them stand twenty-four hours. Then strain them, and to two quarts put three ounces of cloves, two ounces of pepper, two nutmegs. Boil half an hour, then add a pint of wine.

TO PICKLE TOMATOES.—As you gather them, throw them into cold vinegar. When you have enough, take them out, and scald some spices tied in a bag, in good vinegar, and pour it hot over them.

TO PICKLE ONIONS.—Peel, and boil in milk and water ten minutes, drain off the milk and water, and pour scalding spiced vinegar on to them.

TO PICKLE CAULIFLOWERS OR BROCOLI.—Keep them twenty-four hours in strong brine, and then take them out and heat the brine, and pour it on scalding hot, and let them stand till next day. Drain them, and throw them into spiced vinegar.

CURRANT ICE WATER.—Press the juice from ripe currants, strain it, and put a pound of sugar to each pint of juice. Put it into bottles, cork and seal it, and keep it in a cool, dry place. When wanted, mix it with ice water for a drink. Or put water with it, make it very sweet, and freeze it. Freezing always takes away much of the sweetness. The juices of other acid fruits can be used in the same way.—*Beecher's Receipt Book.*

THE TOMATO AS FOOD.—A good medical authority ascribes to the tomato the following very important medicinal qualities:

1. That the tomato is one of the most powerful aperients of the liver and other organs; where calomel is indicated, it is one of the most effective and least harmful medical agents known to the profession.

2. That a chemical extract will be obtained from it that will supersede the use of calomel in the cure of disease.

3. That he has successfully treated diarrhœa with this article alone.

4. That when used as an article of diet, it is almost sovereign for dyspepsia and indigestion.

5. That it should be constantly used for daily food. Either cooked or raw, or in the form of catsup, it is the most wholesome article in use.

MADELINE'S KITCHEN CABINET.

A NEW KITCHEN ERA.

WRITTEN FOR THE AMERICAN FARMER.

A Universal Hash.—This, with almost all New England Yankees, a good many New Yorkers, and the more intelligent people of at least five of the French provincial departments, is a common dish—has been so these hundred years, and therefore is neither M. Blot's nor Madeline's by invention, though belonging to both by adoption—a semi-international breakfast dish, so palatable when properly made, and withal so economical, that the other nine-tenths of our fellow housekeepers all over the country, ought to adopt it as their inevitable "orderly" of the breakfast table.

Just so simple, and just so saving as this. First a good wooden bowl or tray, and chopping knife, useful for many other purposes besides hash making. Cost, $1.00, and will last fifteen years. Secondly, whatever of boiled material may have been left from dinner—pork, beef, mutton, or veal; boiled, stewed, roasted or fried; potatoes, cabbage, and turnips—save them, all the scraps, bits and odds and ends,—salt or fresh—chop all together; don't matter particularly about proportions, though "half and half" meat and vegetables, is perhaps preferable. Chop as fine as the finest mince meat, carefully excluding all pieces of bone and gristle. Season with salt and pepper, moisten to the consistency of stiff corn bread batter, and if you care to have the dish extra nice, after placing it in the oven and half baking it, precisely as you would a corn cake, break and beat up say four fresh eggs, pour them evenly over the surface, and finish baking. In this way we shall achieve as good a breakfast dish as ever went to any table, and at the same time utilize a great deal of good material that would otherwise go to waste.

Capital Corn Bread.—Good corn bread is always *good*. Warm, more wholesome than any warm wheaten bread or biscuit. Mine is always good; only better than that of my neighbors, in that, I am more particular in the manufacture. In spring, fall, and winter, we have warm corn bread as *adjutant* to our hash "orderly," for breakfast, five mornings out of every seven.

The first necessity of good corn bread, is good, coarsely ground *yellow* corn meal (white, or finely ground yellow meal will never make the best corn bread or cakes.) The next thing is sour milk. Never use sweet milk. Sour always—the sourer the better, so that it is not stale and stinking. For a corn cake for six persons, pretty hungry, 1 quart of corn meal, 1-4 pound flour, 1 1-2 pints sour milk. Put into the milk a tablespoonfull of clean, brown sugar, 1 1-2 spoonsfull of any clean fat, (dripping always better than butter,) a dessert spoonfull of salt, and beat all together until the sugar is dissolved and fat melted—pretty warm—but don't scald, if you would make light bread. Break, beat up and add to the milk, two eggs. Then with a wooden paddle or stout spoon, begin to stir the meal, pouring in the liquid gradually, and when all is thoroughly incorporated, stir in a teaspoonfull of Babbitt's saleratus dissolved in warm water, turn the batter—pretty stiff, into the pan; let it be about an inch thick, and bake at once in a moderately hot oven till the crusts are a bright brown. In this way you will be sure of capital corn bread. This brings us to M. Blot's

FOURTH BILL OF FARE.

1. *Potage Brunoise.*—This is of turnips and carrots, celery and onion, all chipped very fine, partly fried, then mixed with any rich meat broth, a little burned sugar added, and the whole cooked moderately till tender.

2. *Fish Bechamel.*—Any small, fresh fish, just covered with cold water, placed over a slow fire, and simmered gently till done. Then dressed with a sauce made of milk, flour, and a little butter, flavored with any suitable extract.

3. *Beef in miratin.*—Beef or any other cold meat, baked, boiled, or stewed, left from dinner, cut in neat, thin slices, turning them over and over, and cooking in a sauce made of chipped onion and celery seasoned with salt and pepper.

4. *Fish in matelote.*—Cut the fish in small bits, put in the pan with the fish, a bit of onion, thyme, salt, pepper, butter, and a little flour; add warm water enough to stew. Eels, pickerel, and pike, are very suitable for this dish.

5. *Pigeon in crapandine.*—Split the pigeon in two halves, dip each part in eggs well beaten up; then roll in fine cracker crumbs; place the halves inside up in a pan, put a small lump of butter in each half, pour in a few spoonsfull of broth, and bake till quite done.

6. *Maceedonne.*—Merely a little relish dish made of very finely chipped carrots, turnips, and hard-boiled eggs, highly seasoned with pepper, thyme, and parsley stewed, and flavored to suit.

7. *Celery fried.*—Make a thin batter of flour, butter and an egg. Dip the celery in the batter, and fry in beef suet. Eat warm. Very nice.

8. *Lentiles in puree.*—Soak the lentiles in cold water four hours. Then put them in fresh hot water, with pepper, salt, a little onion, and cloves, and boil slowly until done tender. Peas, beans, and shelled chestnuts are excellent prepared in this manner.

9. *Compote of apples.*—Pare and quarter, and stew the apples soft in clear water. Then rub the apples through a sieve, and sweeten and flavor. All the small fruits, as well as peaches, pears, pine apples, quinces and oranges, are very fine cooked and treated this way.

10. *Daviole aucafe.*—A light delicate cake, made with 1 pint of flour, three eggs well beaten, a quarter of a pound of nice light sugar, two ounces of butter, mixed and flavored with liquid coffee, and baked quickly in small cakes.

11. *Coffee.*—In making coffee, M. Blot uses the "Old Dominion" coffee pot, flannel filter, and practices pouring on boiling water.

Believing my coffee practice to be an improvement on M. Blot's, or any other known to me, I propose to give it to our FARMER's family outside of the cabinet.

(To be continued.)

Editor's Table.

Premiums for August.

See our offer on last page, for single and double subscribers. Everybody can take one. If all our present patrons would send us one name each, then we should just double the circulation of "The Farmer's Own Paper," in one month. Who will not send in a name? Let us have at least five thousand more names, at as many different post offices.

Prize Essays.

Our list of subjects, in the June No., page 193, has called out several valuable essays, but still many are as yet not written upon, and as the time is now short, we hope our friends will let us hear from them, as soon after the first of August as possible. They will be published in the October number of The Farmer, and we think will be found to be of great value, and interest to our readers. We intend to get up another list of essays this fall, and shall be pleased to receive subjects or questions for discussion from any of our subscribers. Let us hear from them, what subjects they wish discussed in future numbers.

The Crops.

From Massachusetts, we learn that notwithstanding the backwardness of the spring, the crops now look well. Corn is growing fast. Oats, wheat and rye never looked better. Grass crop lighter than usual. Potatoes give good promise of a fair crop. Apples will be light.

From Wayne Co., New York.—Wheat is yielding pretty good crops; but on the whole, not as large as some previous years. The weevil has done much mischief, and a good deal was winter killed. Corn looks well, and promises a large yield. Barley is nearly ready to cut. Oats coming on well. Potatoes good.

In Western New York, the hay crop will be about the average. Corn is very backward—but has made rapid strides during the last week or two, and may catch up in time to yield a fair return.

Wheat harvest has commenced, but will probably not yield more than a two-thirds crop. Barley and oats look well, and will produce a large yield. Apple crop nearly a failure. The cold weather, together with strong winds late in the spring did much damage. But still, the fruit that is set may be very fine and the profit to the owners of large orchards quite remunerative. The crop last year was light, but the yield very good.

In Texas, cotton is reported unfavorably. The crop is estimated at about one-fourth the usual quantity. The worms are threatening great damage.

In Tennessee the harvest has all been gathered. Wheat crop in the northern counties is very poor. Southern counties good. Oats yielded finely. Corn will be a large yield. Apples will be plenty.

From Iowa the reports are for a large yield of wheat. Also for the barley and oat crops. Potatoes badly troubled with bugs. The cold weather this spring damaged corn, but hopes are still held of a good harvest.

In England, the prospect is for a light crop of wheat, and in France also there will be a considerable falling off in the yield. Last year's crop is nearly exhausted, in consequence of which prices will probably be high.

Notes on the Weather, from June 15th to July 15th.

The heat is first to be cared for. In the first half of June, the temperature was 2.5° above the general average; but the last half was 68.0°, about one degree below that average, in numbers 68.0 and 69°. This makes the heat of the month quite one degree above the general average. In the last half, the hottest mid-day was 91°, on the 25th, which was the hottest day, 80.3°. The coldest morning on the 19th was 54°, and that, the coldest day, 56.3°. The fore part and the latter part of this half was rather cool, but a week from the 25th, quite warm.

The rain of the month was 3.90 inches, of which the last half gave only 1.31 inch.

The last half was the coldest except two in this half, for 30 years. Vegetation has advanced pretty well. Strawberries have been abundant in the last week—large and fine. In 1865, June was warmer by 4° or 5°; in 1864, but little warmer. Thunder showers heard and felt.

July began warmer, and soon gave a hot term from the 5th to the 8th, and another from the 12th to the end of the first half. The mean heat was 75.9°, and the general average, 70.5. On the 15th, the thermometer gave 93° at 2 P. M., and the mean of the day, 86.3°, the hottest day on the record for thirty years. As several days had been hot, this was exceedingly warm. Very little rain indeed in this half; only 0.2 inch, and not much for the fortnight preceding; so that the people were anxiously looking for rain. The barometer has ranged above the mean a little, and much rain has fallen over the country, but not in this section. Very little dew for several of the latter nights. Fine time for haying, and the beginning of barley and other grains. Indian corn has advanced with great rapidity; but potatoes look dry, and the farmers talk of their being dried up already. Let us wait and see a little. Peaches are said to be falling off, and apples also; but this will make those that hold on so much the better, and it may, as in last year, make too plentiful for profitable speculation. The fine health of this section, and of the country, and the brightening prospects of a fuller harvest, demand consideration and gratitude.

Hon. Anson S. Miller, of Rockford, Ill., has accepted the invitation of the Executive Committee of the New York State Agricultural Society, to deliver the Annual Address at the State Fair, to be held at Saratoga Springs in September.

We are indebted to Sanford Howard, Esq., for the Report of the Michigan State Board of Agriculture for 1865, for which he will accept our thanks.

American Institute Farmers Club.

We take the following extracts of the Report of the "Farmers Club," from the columns of *The New York Tribune*, which will be found of great interest to our readers.

Lupine.—Samuel Carpenter, Ocean Co., N. J., inquires if he can grow lupine as a fertilizer for sandy land.

It is so used extensively in Europe, particular in Portugal. Its growth is rapid, and like clover, it draws alkali from the subsoil. It is considered admirably adapted for enriching sandy soils. It is a leguminous plant, fibrous-rooted, perennial. It is not as good as clover for hay, and for some reason has been but little grown in this country.

Insects from Wisconsin.—C. H. Greenman, Rock Co., Wis.. "I send a piece of limb of soft maple, covered on the under side with what we call bark lice. All the limbs on the trees are in the same way, and the trees are failing. What can we do to rid the trees of this pest which is new to us? We are all interested in this prairie country, where thousands of these trees are planted yearly. The Iona and Israella Grape vines are all dead, as far as I can learn, in this section. Mine, three years planted, are dead, root and all. Delaware, Concord, Roger's Hybrid No. 9 and 13, are all right: Hartford, Allen's Hybrid, and most other sorts are more or less injured."

Dr. Trimble—This is one of the multitude of bark lice which affect various trees, but do not destroy them. We see them here very common some years, and the next year none. This cottony substance which you see attached to the limbs contains the eggs.

Insects in Salt.—Dr. Trimble exhibited a specimen of salt, infested with insects which breed in that substance. This he did to show that salt is not destructive to all animal life.

The Rose Slug, which is very destructive to rose bushes in some localities, Dr. Trimble says, is easily got rid of by jarring the bushes in the same way recommended for ridding plum trees of curculio. Spread a newspaper upon the ground, bend the bush over it and strike it with a stout cane several smart raps. He has thus gathered them by thousands.

Hedges—Osage Winter-killed.—Daniel F. Rogers, La Salle, La Salle Co., Ill., writing about the effect of the cold of last winter upon trees in that section, says: "Solon Robinson's declarations about Osage orange being subject to Winterkill, have been nearly fully verified; the past winter has injured it so severely that the faith of the most sanguine of its friends is badly shaken. Some old hedges are coming out slowly and feebly, some are sprouting well in spots, and look doubtful as fences, and some few are coming evenly. To what extent they are destroyed, we cannot tell certainly; but one thing is certain, the past winter has spoiled a good many fine Osage hedges."

Tree Shelter Needed.—Mr. Rogers says: "The past winter has been the most destructive to trees, plants, shrubs &c., of any for ten years just past, in this part of Illinois. Strawberries are almost universally killed, unless protected from the winds by trees or buildings mulching." There is no further argument necessary to show the advantage of tree shelter upon the prairie. The sooner people there realize the necessity of planting trees the better it will be for their interest.

Quack Grass.—Dr. James Johnson, Greenwich, Washington Co., N. Y.: "I find my farm covered with quack grass. I have tried faithfully to uproot this species of quackery, but like its congener, the more I disturb it the more it grows. Can the Farmers' Club inform me how I can readily exterminate the foul weed, or, what is better, how it may be utilized?"

John G. Bergen said the only way to get rid of quack grass was by thorough and frequent cultivation. Several other members, however, declared that it could be thoroughly subdued by sowing the land with buckwheat two or three times a year and plowing the green crop.

The Whole System of Farming—In Dutch.—Peter Brennersholtz, Tidioute, Warren Co., Penn., who is most evidently a Pennsylvania Dutchman, gives us the whole secret of success in farming in very few words, which, if not exactly the best of English, are very forcible language. He says: "I am a Cherman, be33 years heer in America, has been piket out of moor as 200 farmer, for makes a poor farm rich. So I do et I get them for the half rent, in six year I has them rich. Dear farmer in America, if you has 50 acre clear land, pigs, 8 cow, and a yok of oxen, plant 8 acre af corn, 4 acre potatos, 4 acre weat Spring or Winter. If the ground is strong, 4 acre oats, 4 acre clover; makes all your clear land in 12 lot, 4 acre a lot. Tak you cattel in the morning about 7 o'clock on the paster, an 11 or 12 thek them in stable; tak a good weelbare fall of clover hom and feed your 8 cow with, so your cow rest 19 ours, giv more milk and blanty minur; your clover, field seedet on the first of October with thimothe gras seed; only harre them neeks year; you potatos fild minuret good and put corn in your althest gras land plowed to and corn in your pastor cornt land put potatos in, neekst year, after oats. If you has no paster outsid, thak your oldest gras fild, pasteret in 4 lot, so you has 12 lot, 8 acre corn to 2 lot, I weath in pu thear minuret corn, 1 lot oats, 1 lot clover, 1 paster, 6 lot for hay. Feed your cow in winter time ich day 2 pail ful slops from potatos and corn meal; in 6 year you be well of man, you cattle is rich, your land is rich, and you be rich. You can makes potatos in oats stoppl, and oats in the paster corn-fild makes your cattle a good beth everry day with straw or lives if you has no straw; be careful as you loos no urine from your cattle, them is the best minure." If any of our readers cannot understand and do not appreciate the forcible language of this sensible old German, we pity their ignorance. We have given it in his own words, because they are more forcible than any that we could substitute.

Coal-Tar as a Disinfectant.—J. H. Tompkins, Mich., urges upon the attention of all persons the importance and value of coal-tar as a disinfectant. A small quantity added to the contents of a privy renders it so inodorous that it may be emptied and mixed with soil and formed into a valuable guano.

The Great Implement Trial.

THE implement trial under the auspices of the New York State Agricultural Society, commenced at Auburn N. Y., on the 10th inst., and will result in a grand contest between our principal Mowing and Reaping Machines. The weather so far, has been very favorable, but the attendance of farmers has not been large. The grounds are open to visitors. Below, we give the list of entries, and next month shall give a full account of the result of the trial.

ENTRIES OF REAPING MACHINES.

Adriance, Platt & Co., Poughkeepsie, N. Y.—1. No. 1. Buckeye Mower and Reaper.

American Agricultural Works, 640 Broadway, New York.—1. Columbian Combined Mowing Machine, with hand and Self-Raker.

Aultman, Miller & Co., Akron, Ohio.—1. Buckeye Reaper and Mower. 2. do. do. as Self-Raker.

Bradley & Son, C. C., Syracuse, N. Y.—1. Syracuse Self-Raking Reaper.

Brinkerhoff. C. R., Rochester.—1. Reaping Machine.

Dederer, N. A., Greene.—1. Reaper—self-raker.

Dodge & Stevenson Manufacturing Co., Auburn, N. Y.—1. Combined Mower and Reaper—Hand-Raker. 2. Patent Combined Reaper, with wooden frame, for use as self-raker or hand raker. 3. Dodge's Patent Combined Reaper, with iron frame, for use as self-raker or hand-raker.

Halliday, W. H., Auburn.—1. Marsh's Combined Machine—Self-Raker. 2. American Mower.

Herrington, E. F., Rondout, N. Y.—1. Combined Eagle Mower and Reaper.

Hull, Stephen, & Co., Poughkeepsie, N. Y.—Combined Mower and Reaper—self-raker.

Osborne & Co., D. M., Auburn, N. Y.—1. Kirby Reaper—Hand Raker. No. 2. 2. Combined Mower and Reaper—Hand-Raker No. 3. 3. Combined Mower and Reaper—Self-Raker. No. 4. 4. Combined Mower and Reaper, with Hand and Self-Raker, No. 5.

Seymour & Morgan, Brockport, N. Y. 1. Self-Raking Reaper and Mower.

Williams, Wallace & Co., Syracuse N. Y.—1. Hubbard's Combined Reaper and Mower, with Syracuse Self-Raker, No. 1. 2. Hubbard's Combined Reaper and Mower, with Syracuse Self-Raker, No. 2.

Wheeler, C. Jr., Auburn, N. Y.—1. Cayuga Chief Harvester—Self Raking Attachment. 2. Cayuga Chief Harvester—Dropping Attachment. 3. One Mower. 4. do. 5. do. 6. do. Wood Walter A., Hoosick Falls, N. Y.—1. Combined Mower and Reaper—hand raker. 2. Self-Raking Reaper (chain rake.) 3. Combined Self-Raking Reaper and Mower. 4. Self-Raking Reaper, (sweep rake.) 5. Combined Self-Raking Reaper and Mower, (sweep rake.)

ENTRIES OF MOWING MACHINES.

Adriance, Platt & Co., Poughkeepsie,—1. Buckeye Mower, No. 2.

Allen, R. L., New York. 1. One Horse Pony Clipper Mower.

American Agricultural Works, New York.—1. Columbian Mowing Machine.

Bradley & Son, Syracuse.—1. Hubbard Mower.

Dodge & Stevenson Manufacturing Co., Auburn. 1. Dodge's Patent No. 2. Iron Mower—Ohio and Buckeye Patents combined.

Dow & Fowler, Fowlerville, N. Y.—1. Yankee Mower.

Dutton, R., Brooklyn.—1. One Horse Gleaner Mower.

Herrington, E. F., Rondout.—1. Two Horse Eagle Mower.

Osborne & Co., D. M., Auburn.—1. Kirby Clipper Mower. 2. Kirby Larger Mower. 3. Single Horse Mower.

Peekskill Manufacturing Co., Peekskill,—1. Dutton's Clipper Mower.

Rhode Island Clipper Mowing Co., Newport, R. I. —1. Dutton's Two-Horse Harvest Clipper Mower.

Wheeler, S. G., Auburn.—1. Cayuga Chief Mower.

Wilbur, J. D., Poughkeepsie.—1. Eureka Mower for two horses. 2. do. do. large size.

Wood Walter, A., Hoosick Falls.—1. Two Horse Grass Mower.

ENTRIES OF HORSE POWER, THRESHERS, &c.

Dow & Fowler, Fowlerville.—Lever Horse Power and Separator Threshing Machine.

Emery & Sons, Horace L., Albany.—Endless Chain Horse-Power. Combined Thresher and Cleaner.

Harder, R. & M., Cobleskill.—Endless Chain Horse Power. Combined Thresher and Cleaner.

Wheeler, Melick & Co., Albany.—Endless Chain Horse Power. Combined Thresher and Winnower.

ENTRIES OF OTHER MACHINES.

Barber, Sheldon & Co., Auburn.—Sulkey Horse Rake.

Barnard, A. B., West Fitchburg, Mass.—Bay State Horse Rake.

Jones & Bostwick, Ithaca.—Horse Rake.

Sprout, A. B., Muncy, Lycoming Co., Penn.—Patent Steel Tooth Horse Rake.

Whitney, S. B., Coxsackie.—Revolving Wheel Horse Rake.

Craven Tedder Co., New York.—Hay Tedding Machine.

Herring, Silas C., New York.—Hay Tedding Machine.

Chapman, Hawley & Co., Utica, Hay and Straw Forks.

Niles & Gillett, Little York, Cortland Co.—Apparatus for loading hay.

Sprout, A. B., Muncy, Penn.—Hay Fork for Unloading Hay, and Knife for cutting Hay in the Mow.

Prout, G. W., Ashland, Greene Co.—Apparatus for Unloading Hay.

Tracy, W. N., Vermont.—Warner's Wheel Horse Rake.

Wheeler, Melick & Co., Walker's Improved Horse Hay Fork.

Draper, A., 53 Nassau St., New York.—Excelsior Wheat Cleaning Machine.

Ives & Bostwick, Ithaca.—Sharp's Independent Steel Tooth Wheel Horse Rake.

Prout, S. E., Muncy, Pa.—Sprout's Steel Tooth Horse Rake.

Carver, P. S., Honeoye Falls.—Carver's Improved One Handle Horse Rake.

linkston, D., Leroy.—Horse Hay Fork.

Ve are looking forward to the report of the committ- s on this trial, for the most important results. It l continue until every implement and machine is perly tested; which will probably occupy two or ee weeks. It embraces reapers, mowers, horse wers, horse rakes, hay tedders, hay presses, cutting chines, &c., and will be the most important trial r made, and from the high character of the judges, l those in charge, will be the most thorough, com- te, and satisfactory trial, yet held in this or any ier country.

Inquiries and Answers.

MESSRS. EDS.:—Does the young or old swarm leave hive? *a* Of what do they make their comb? *b* How e may the cap be emptied, or will it do to leave it all winter? *c*

Answer—*a* The old and young come out promiscuously. *b* They make it of the honey. It requires out 15 to 20 pounds of honey to make 1 lb. of comb. The cap may be taken off any time. But enough ney should be left in the brooding department to nish food for the winter, say from 30 to 60 pounds.

MESSRS. EDS.:—I want to know the best method of king a refrigerator. I have lately heard that there a patent on one kind, which produces a current of id air, and does not moisten whatever is set into it. hought this would be an excellent kind in which to milk, where butter is the object. I should like a le information on this subject, if not too much uble to put it in THE FARMER.—*J. S. B.*

EDS. FARMER:—Will some of your readers, through columns of THE FARMER, or otherwise, give me ne information on the culture and training of a istaria, on the side of a building—*W. A. M., Mass.*

MESSRS. EDS.:—We have four twenty-year old apple es of the Paradise sort. They never bore worth entioning. What is the best we can do with them? ey received very little manure if any. They stand good limestone land.—*G. B., Pa.*

Give a few more particulars in regard to the trees. ite the varieties, &c.—EDS.

Literary Notices, &c.

ERRY'S MUSEUM.

The fifty-second volume of this Magazine commences th the July number. All new subscribers commenc- with this month, will receive a fine steel engraving Lieut.-General Grant. Price $1. 50 per year. E. Fales, Publisher, 172 William Street, New York.

TRUST: or Dr. Bertrand's Household. By Amanda M. Douglass. Boston: Lee & Shepard. For sale by Darrow & Bro., of this city. Price, $1.75.

This is one of the most beautiful and touching stories have ever read, and one which old and young can d with pleasure and profit. The noble and christian aracter of young Dr. Bertrand, together with the sctionate trust of his elder sister, and the wild and kless life of his eldest brother, are pictures drawn m life. This book will lead the reader to higher d nobler ideas of the duties of this life, and shows the ty of self-sacrificing our own inclinations, for the nefit of those around us.

EVERY SATURDAY.

A journal of choice reading, selected from foreign current literature, by Ticknor & Fields, Boston. Price 10 cents each number. Full of valuable reading matter.

MERRYMAN'S MONTHLY.

With the August No. of *Merryman's Monthly* will be given a large colored Pictorial Prize Puzzle, the greatest puzzle novelty that has ever appeared. It is full of capital reading matter and illustrations, contains nothing objectionable, and is a great favorite with the ladies. 15 cents a copy, sold by all dealers. Three different samples, post-paid, 30 cents. J. C. Haney & Co., 109 Nassau St., New York.

Agricultural Exhibitions for 1866.

State Fairs.

Am. Pomological So'y.	St. Louis	Sept. 4-7
California	Sacramento	Sept. 10-15
Canada West	Toronto	Sept. 24-27
Illinois	Chicago	Sept. 25-28
Indiana	Indianapolis	Oct. 1-6
Iowa	Burlington	Sept. 18
Kentucky	Paris	Oct. 1-6
Kansas	Lawrence	
Massachusetts		
Minnesota	Rochester	Sept. 11-14
Michigan	Lansing	Sept. 12-14
Missouri		
National Horse Fair	Kalamazoo	Oct. 2-6
New England	Brattleboro	Sept. 4-7
New Hampshire	Manchester	Sept. 18-21
New York	Saratoga	Sept. 11-14
Ohio	Dayton	Sept. 25-29
Oregon	Salem	Oct. 17-20
Pennsylvania	Easton	Sept. 25-28
Wisconsin	Janesville	Sept. 25-28
Vermont	Brattleboro	Sept. 11-14

County Fairs.

NEW YORK.

Albany	Albany	Sept. 25-28
Cattaraugus	Olean	Sept. 18-20
Chenango	Norwich	Sept. 18-20
Genesee	Batavia	Sept. 19-20
Jefferson		Sept. 18-20.
Livingston	Geneseo	Sept. 26-27
Monroe	Rochester	Sept. 18-20
St. Lawrence	Canton	Sept. 25-27
Seneca	Waterloo	Oct. 2-4
Tompkins	Trumansburg	Sept. 19-21

CANADA.

Provincial	Toronto	Sept. 24-27
South Waterloo	Preston	Oct. 3

PENNSYLVANIA

Northampton	Nazareth	Oct. 2-5

OHIO.

Champaign	Urbana	Sept. 26-28
Columbiana	New Lisbon	Sept. 26-28

WISCONSIN.

Brown	Green Bay	Sept. 26-27
Lafayette	Darlington	Sept. 27-29
Polk	Osceola	Sept. 18-19

ILLINOIS.

DeKalb		Sept. 17-20
Jackson		Sept. 18-20
Cass	Virginia	Sept. 4-6
Ogle	Oregon	Sept. 18-20
Peoria	Peoria	Sept. 19-21

MICHIGAN.

Clinton	St. Johns	Sept. 27-28
Jackson	Jackson	Sept. 26-28
Washtenaw	Ann Arbor	Oct. 3-5

VERMONT.

Caledonia	St. Johnsbury	Sept. 18-20

IOWA.

Cerro Gordo	Mason	Sept. 20-21

NITRO-GLYCERINE—WHAT IS IT?—This is the question asked so often, since this terrific explosive substance came into use. From fats or animal and vegetable oils, the chemist easily forms glycerine, so called from its sweetness, from the Greek word for sweet. By the action of a mixture of nitric and sulphuric acid on glycerine, the chemist by a careful process evolves the heavy oily substance named nitro-glycerine. Glycerine is composed of carbon 39, hydrogen, 8.7, and oxygen, 52.3, in one hundred. Nitro-glycerine is composed of carbon 24, hydrogen 4, oxygen 53.3, and nitrogen 4.7 in a hundred, the nitrogen being obtained from the nitric acid.—*C. D.*

HOP INTELLIGENCE.—The *Kentish* (Eng.) *Gazette*, of June 26th, has the following:

"A week of lovely weather has wrought a great change in the appearance of the hop field in East Kent, and indeed all over this district of country. Refreshing rains and strong sunshine have alternated; and the bine in many places where before it was drooping and backward, now shows unmistakeable symptoms of making rapid progress. The storm of Thursday did good service in clearing some of the hop grounds from vermin, and although very many complaints on this score have been made to us privately as well as in the market on Saturday, certainly there is less cause for alarm on this point than there was a fortnight ago. Some extensive growers seem to think that the vines will not reach the top of the poles; and pole changing is going on upon some plantations. Certainly the backward weather we have lately had, and the appearance of many of the vines would warrant such a conclusion being arrived at; but we see no reason for apprehension as to the ultimate yield. In the Maidstone district the plantations are doing well, and the vine is making rapid progress. From the Weald of Kent and from Sussex there are complaints of vermin. The general tone of all the reports since our last notice is much more cheering; and the present lovely weather will do much to carry forward the improvement."

THE AMERICAN BEE GAZETTE.

We have received the first number of this monthly, which is devoted to the culture of Bees. It should be in the hands of all bee keepers. Price $1.00, published by E. Van Slyke, New York.

ERRATUM.—In No. 5, of article, "How we Farm it in the Genesee Country," read *bays* instead of *bags*, as printed on page 206 and 207.

THE MARKETS.

ROCHESTER, July 24, 1865.

FLOUR—White wheat, $14@$15.50. Red, $12.75@13.50. Extra State, $8.50@$9.

GRAIN—White wheat, 250@275c. Red, 200@225c. Corn, 85c. @90c. Barley, 55@90c. Oats, 65c@70. Rye, 85@90c.

PROVISIONS—Mess pork, $33.00@$34.00. Lard, 22@23c. Butter, 25@30c. Eggs, 25c. Chickens, 20@22c. Cheese, 16@22c. Potatoes, 75@1.25.

WOOL—50@55c.

HOPS—45@65c.

NEW YORK, July 23.

FLOUR—Market for State and Western flour is dull and 10@20c lower. Superfine State, $5.60@$7.40; Extra State, $6.75 @$8.10; choice State, $8.15@$9.65; Superfine Western, $5.60@ $7.40; common to medium extra Western, $6.85@$8.55. Common to good shipping brands extra round hoop Ohio, $8.10@9.60. Canadian flour $8.30@$9.75 for common, and $9.80@$12.25 for good to choice extra. Rye flour, $6@$6.90.

GRAIN—The wheat market is very dull and nominally lower. No. 1 Milwaukee, 197@200c. Rye heavy and declining. Milwaukee at 90c. Corn—for unsound new Western mixed, 86c and 88½@84½c for sound do, and 90c for Western yellow. Oats, 48@48½c for Chicago and 78 for State.

HOPS—Quiet and firm at 45@55c for American, and 55@72c for foreign.

PROVISIONS—The market for pork is heavy and prices easier. $31.43@$31.62 for new mess; $29.75@$30 for old mess, and $26.75@$37.50 for prime. Cut meats are firm, at 14@16½c for shoulders, and 17@20c for hams. Lard dull and heavy—18@ 20½c. Butter quiet—sales at 20@38c for Ohio, and 27@40c for State. Cheese dull at 6@19c for common to prime.

CHICAGO, July 21.

FLOUR—Extra, $9@o·50.

GRAIN—Wheat, 143@144c for No. 1, and 91@94c for No. 2. Corn, 56@57c. Oats, 28@29½c.

BUFFALO, July 24.

FLOUR—Extra State, $9.75.

GRAIN—No. 1 Milwaukee spring, 180@185c. Corn, 60@69c. Oats, 39@45c. Barley, 110@125c. Rye, 75@80c. Beans, 125@ 175c.

PROVISIONS—Mess pork $33@$33. Lard, 21@22c. Bacon, 22½c. Shoulders, 15@15½c. Cheese, 19½@20.

BRIGHTON MARKET, July 23.

BEEF CATTLE—Extra, $13.75@14.50; first quality, $12.25@ $13.50; second quality, $11.50@$12; third quality, $10.75@$11.50 ₩ 100 lbs.

HIDES—Country, 8½@9c ₩ lb.

TALLOW—8@9½c ₩ lb.

LAMB SKINS—50@75c.

SHEARED SHEEP SKINS—30@37½, calf.

CALF SKINS—25c ₩ lb.

Special Notices.

ADVERTISEMENTS.

BOOKS FOR FARMERS,

For Sale at the Office of the American Farmer.

Allen's Farm Book	$1.50
Allen's Rural Architecture	1.50
Bridgman's Fruit Manual	75
Bridgman's Young Gardener's Assistant	2.00
Brown's Field Book of Manures	1.50
Buist's Kitchen Gardener	1.00
Burr's Garden Vegetables	2.50
Canary Birds, Manual for Bird Keepers	50
Coles' American Fruit Book	75
Dadd's Horse Doctor	1.50
Dadd's Cattle Doctor	1.50
Danes Muck Manual	1.00
Downing's Fruits and Fruit Trees of America	3.00
Downing's Cottage Architecture	3.00
Darlington's American Weeds and Useful Plants	1.75
Everybody's Lawyer	1.50
Farmer's Every Day Book	2.00
Farm Drainage—French	1.50
Field's Pear Culture	1.25
Flax Culture	50
Fuller's Grape Culturist	1.50
Hop Culture	40
Gardening at the South	1.25
Horse and his Diseases, by Jennings	1.00
Horse Doctor, or Complete Farrier	15
Horse Taming, by Rarey	75
Johnson's Elements	1.25
Johnson's Agricultural Chemistry	1.75
Klippart's Land Drainage	1.50
Klippart's Wheat Plant	1.50
Langstroth on the Bee	2.00
Manual of Agriculture, by Emerson and Flint	1.00
Miner's Poultry Book	50
Miss Beecher's Domestic Receipt Book	1.50
Munn's Land Drainer	75
My Farm of Edgewood	2.00
Onion Culture	25
Our Farm of Four Acres	80
Plin on Grape Culture	1.50
Pardee on Strawberries	75
Quinby's Mystery of Bee Keeping	1.50
Rogers' Scientific Agriculture	1.00
Sloan's Homestead Architecture, 300 engravings	4.00
Ten Acres Enough	1.50
The Practical Shepherd, by Randall	2.00
The Farm	1.00
The Garden	1.00
The House	1.50
The Barn Yard	1.00
The American Rose Culturist	50
The American Florist's Guide	75
Tobacco Culture	25
Todd's Young Farmer's Manual	1.50
Tucker's Annual Register	50
Wet Days at Edgewood	2.00
Woodward's Country Homes	1.50
Woodward's Graperies and Horticultural Buildings	1.50
Woodward's Grapes and Wine	1.50
Wax Flowers	2.00
Youatt on Cattle	1.50
Youatt on the Hog	1.50
Youatt on the Horse	1.50

SEE A

Proclamation to the Fenians,

in the advertising columns of this number. jy-2t

RUSS' PATENT SCISSORS SHARPENER.

EVERY LADY should have one. All canvassers and agents can make money selling this useful little article without interfering with other business. Sample sent by mail for 50 cents. Address W. P. Peck, 18 Gold street, New York; G. W. Ellis, 94 State street, Albany; or C. S. Hall, 29 State Street, Rochester, N. Y. ap-6t

TO THE FENIAN RAIDERS,

and all others who ought to plant a vine, with greeting:

PROCLAMATION.

47,973 persons wanted to send for my New Annual Catalogue, just issued. Illustrated. Sent free. Descriptions of all leading *small fruits*. Our new mode of producing layers, by which we have layered THREE ACRES of leading kinds of grapes. Don't delay, but send immediately.

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SEWING MACHINES,

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1. They sew direct from the spools, and require no rewinding of thread.

2. They are more easily understood and used, and less liable to derangement than other machines.

3. They are capable of executing perfectly, without change of adjustment, a much greater variety of work than any other machine.

4. The stitch made by these machines is much more firm, elastic and durable, especially upon articles which require to be washed and ironed, than any other stitch.

5. This stitch, owing to the manner in which the thread is interwrought, is much the most plump and beautiful in use, and retains this plumpness and beauty even upon articles frequently washed and ironed until they are worn out.

6. The structure of the seam is such that, though it be cut or broken at intervals of only a few stitches, it will neither open, run, or ravel, but remain firm and durable.

7. Unlike other machines, these fasten both ends of the seam by their own operation.

8. With these machines, while silk is used upon the right or face side of the seam, cotton may be used upon the other side without lessening the strength or durability of the seam. This can be done on no other machine, and is a great saving upon all articles stitched or made up with silk.

9. These machines, in addition to their superior merits as instruments for sewing, by a change of adjustment, easily learned and practiced, execute the most beautiful and permanent embroidery and ornamental work.

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CONTENTS OF THIS NUMBER.

THE AMERICAN FARMER.
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ENTERED according to Act of Congress, in the year 1866, by JOHN TURNER, in the Clerk's Office of the District Court of the United States, for the Northern District of New York.

VOLUME I. ROCHESTER, N, Y., SEPTEMBER, 1866. No. 9.

I.

Fair autumn month! the earliest of the three,
Which following sunrise with her livid train
Of glowing life, like a richly laden wain,
Comes bearing in its fruits of harvest free
From many a field.

II

Athwart the hazy sky the molten clouds
Lie loosely stretched in sinuous folds,
And flashing rays of sun, like bars of gold,
Shine slanting down on tree and shrub, low bowed
With promised yield.

III.

Upon the hills, like banners on the plain,
The ripening corn throws out its flaunting leaves,
While in the meadow, waving to the breeze,
Are countless hosts of golden headed grain,
And drooping leaves.

IV.

Oh, Heavenly Father! may life's summer hour
Wear on like these fair months with promise filled;
And may its autumn, like September, yield
A glorious harvest, which the Garner's power
May bind in sheaves.

Belfast, Me. U. K. B.

WORK FOR THE MONTH.

BY the time this number reaches our readers, two-thirds of the year will have passed, and the record be numbered with the events that are gone; but the farmer will look with satisfaction on his well-filled barns. Wheat, barley, oats, &c.,—all safely housed, and feeling grateful to an All-wise Providence, and with a firm trust in the promise that "seed time and harvest shall not fail," he will now redouble his energies to get his land in first-rate order for the future crops. The heat of summer is passing away, and how refreshing it is to sit, these September evenings, under one's own grape vine, and watch the berries as they gently turn their color and ripen for the vintner.

As we said last month, "let all work be well done." The farmer who has his land well tilled, will reap his reward in a bountiful harvest; and now is the time to get the farm into the best state of cultivation before the fields are sowed with the crops for next year. Now is the time to sow—

WHEAT—which should be done from the 10th, to the 20th. Grass land which has been manured last year, and broken up this, will give the best yield. This plan has been adopted by many farmers with favorable results. Where this has not been done, put a good top dressing before seeding, and harrow it in well: then seed and harrow again. Two inches is the proper depth. By drilling the seed in, a larger yield will be obtained than by broadcast sowing.

MANURE—should be applied as a top dressing to grass land this month. It will protect the roots and give an early growth in the spring. Next summer or fall, it can be plowed up for the wheat crop.

THRESHING—should be attended to as soon as you have leisure. Let it be thoroughly cleansed ready for market. By having the work properly done, a better price will be obtained.

MARKETS—should be watched, and the first favorable opportunity when the price of wheat is up, sell your surplus crop.

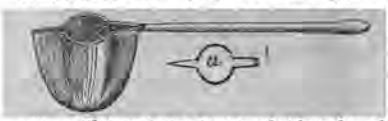
HINTS—will be found in the back numbers, which will be applicable this month, such as shelter for stock in winter, &c, which if not attended to, should be done at once.

STONES—should be gathered from meadows, especially those which are to be mown next year. Stumps and all rubbish should be removed, so as to have a clean surface for the mower next season.

CORN FODDER—when gathered, should be placed where it can have free ventilation, so as not to heat and become mouldy. It can easily be remedied by placing a few poles in the centre to form a chimney.

By this method, it will keep perfectly sweet and good.

PICKING FRUIT.—In orchards it is often difficult, if not even dangerous, to pick the apples on the end of branches by hand, but by a simple fruit picker, as represented in the accompanying cut, there will be no trouble. Take a pole, any desired length, and



with a stiff piece of wire about two feet long, formed as shown at *a*, fasten to the end: then make a small bag, and stitch to the wire. You will have a very simple and effectual arrangement. The narrow part of the wire will cut the stalk and drop the apple into the bag without being damaged in the least.

FAIRS—are now being held all over the country, and the farmer should avail himself of the opportunity to see and examine improved implements, and the stock of exhibitors, learning all he can for the benefit of himself and neighbors. The time will be well spent, and all should contribute something which will help to make the fairs still more interesting and attractive.

SWINE—will be grateful for a clean pen, and fresh straw regularly supplied. Let them have the apples which fall in the orchard, and with their regular allowance of dry food they will fatten much more readily. Feed them at stated intervals. Do not let them have to wait and squeal off their flesh; neither give them too much, so that they shall leave any in the trough. The latter will cause them to dislike their food, and be uneasy.

CATTLE.—Grain should be fed to all fattening cattle. Cows should have a good feed night and morning from the soiling patch. They will also relish the tops from beets, cabbages, &c., from the garden.

SURFACE DRAINS—should be cut in all fields not underdrained, especially wheat fields, so that in the spring the melting snow and falling rain may have a free discharge. Even underdrained fields will be benefited, as they often lie covered with water in the spring when the ground under is frozen hard, so that the water cannot penetrate to the drains. By surface ditches this surplus water will be carried off, and the land will thaw out much sooner and the wheat get an earlier start in the spring.

BEES.—The honey harvest is now past, although a small quantity is obtained from fall flowers during this month; consequently robbing will frequently occur, unless some preventive is applied, and the most effectual is in partly closing the entrance, not allowing more than two or three to pass at a time. All stocks that have not from twenty to forty pounds of honey should be taken up. If the increase of the apiary is desired, unite two light stocks, giving them the honey from both. Place the comb containing the honey in the honey chamber, and the bees will carry it below. Next spring put this nice comb in the top of your honey box, two inches apart. This will greatly increase the amount of surplus honey.

LEAVES—should be gathered either for littering stables or for covering flower beds. If not wanted for either of these uses, put them on the manure heap. They are valuable and should not be overlooked.

ROOT CROPS—will be benefited by thinning out to six inches apart, and a free use of the hoe or cultivator in keeping down weeds.

BUILDINGS.—Look at the barns and stables, and see that they are in proper repair before the storms of autumn come upon us. Let all cracks be stopped and all holes repaired.

HARVEST.—So far as heard from, and from what we see in our latest exchanges, the harvest has turned out better than was expected,—and the prospect is for quite an

average yield, so let us be thankful and rejoice, and when Thanksgiving Day comes round, let us rally around the tables with grateful hearts to the Giver of all good, as the merry reapers rejoiced around the last huge sheaf, at the close of harvest.

SOMETHING NEW.—A neighbor of mine had a very rough cellar bottom, and did not want to go to the expense of the cement, so he took his coal ashes and mixed it with water, to the ordinary thickness of mortar. It does not matter how many lumps or stones there are. Put it on about four inches thick; let it lay twenty-four hours, then stamp it with a heavy block of wood three or four times a day, until it is perfectly hard. It is better than cement, as it will not crack or scale off.—*H.*

THE overbearing and cruel exercise of power, is at best a joyless and precarious safety, as short lived as that of some conquerors, who have died from a pestilence, excited by the dead bodies of the vanquished.

ADVANCE IN AGRICULTURE.

WRITTEN FOR THE AMERICAN FARMER BY C. N. BEMENT.

It is generally admitted, that great progress has been made in this country within the last half century, in the march of agriculture. The consequence is, that farmers generally derive from their farms double and in many instances much more than double the profit they did formerly. Of course they are becoming rich, and the increase of wealth by agricultural industry is altogether unprecedented. Lands too, are proportionally rising in value, and now command in market nearly double the price they did a few years ago. Such facts should be sufficient to induce all who are treading in the old beaten path, to engage heartily in the work of improvement. Excelsior should be the farmer's motto.

It is beyond dispute, that the agricultural journals which for a number of years have been circulating in many parts of the country, have done and are still doing an immense deal of good, and to them chiefly are attributable the great and highly beneficial improvements that have been made in practical agriculture. These journals are not in general appreciated according to their worth, not even by those who read them, and who are immediately benefited by them. They do indeed operate to great effect, yet their operation is not apt to be readily perceived, and of course credit is not given where it is due. It is, however, an unquestionable fact, wherever these journals go, *there* agriculture thrives.

No one can calculate the great good such a periodical will produce—the influence which it exerts over the farming community is immense; and is gradually, though slowly revolutionizing the agricultural world; that is, so far as that world is reached by it.

We know some farmers who patronize an agricultural paper, and who carefully study it; but among the whole number, we know not one whose improved and improving practice does not plainly bespeak the instruction and benefit he derives from his paper. We know of some whose improvement within a few years has been astonishing, and may be attributed mainly to the influence exerted over them by their agricultural paper.

It is notorious that a large proportion of farmers are unsuccessful in their business. And why is this want of success? May we not see that it is in the fact that they are ignorant of the great principles of their own business? And why ignorant of those great principles? Perhaps through the force of education they may never have been taught that it could be useful to them in after life, or that it could promote their happiness to bring science to their labor, or, they may even have been taught that the more learned they were, the more they would be unfitted for the occupation of a farmer. Mistaken, yet too common education! And in it we see the great cause why the farmer does not rank higher in the grades of society, and his influence more felt in the councils of the nation.

Farmers should aim at constantly improving the soil of their farms. They should study the existing defects, and endeavor as fast as circumstances will permit, to remedy them. If their land is too wet, they should drain it; if too stiff and clayey, they should apply loosening manures; if light and sterile, they should make use of green crops of clover, as manure with plaster; if sour, (generally indicated by the growth of sorril moss or broom grass,) they should apply lime, or marl; and in all cases they should apply all the enriching manure they can possibly obtain, for good farming and the application of manure are inseparable. They will thus, not only increase their capital by the increased products of their farms every year, but they will do it by the constantly augmenting value of their lands. Their profits will be two-fold, and in their increase mutually accelerate each other.

Obstacles to Improvement.—Strange as it may appear to a reflecting mind, it is nevertheless true, that the great cause of agricultural improvement in which the happiness and prosperity of individuals as well as the national wealth, strength and resources are so entirely dependent, is more effectually impeded by a belief in a large proportion of those engaged in agriculture that it is not increased knowledge, but addition physical force which they want. We have often heard it said "we already know more than we can practice, and wherefore should we trouble ourselves about acquiring additional knowledge?"

We know that there are many farmers who believe that the "good old way" is best, but let the most incredulous of these visit a farm, which but a few years ago produced but nine tons of hay, and which now produces twenty; let him go into those well mellowed fields and see the corn waving in its beauty and ripening in its golden harvest, yielding nearly one hundred bushels to the acre.

And here, let us ask, what effect have the advances in agriculture for the last few years had upon the comfort, happiness and prosperity of man? What do we see? Better buildings for his use and accommodation—fields better constructed, the hand of industry brushing all that looks like slovenliness or bad farming from around his habitation and enclosures. Implements of modern construction, animals that will often vie with the best of their species—in fine, a regeneration brought about simply by calling on his intelligence to aid in the labor of his hands. The effect of all this upon our general prosperity as compared even now with the olden time, and in older counties of this State, is most won-

derful. His debts, in a measure removed, the incumbrances on his real estate not only paid up, but he is often a lender, and stands side by side with the professional man, not only in wealth and respectability, but likewise in intelligence.

If we would lay a firm basis on which to build up their minds in wisdom and knowledge, we must first convince them that the cause pursued by our forefathers and grandfathers in relation to husbandry, is by no means the best course.

First—convince them that in general a small farm is better than a large one.

Second—convince them, that a little well tilled, is better than much half tilled. Convince them that two loads of manure are better than one, and every load judiciously applied, is better than a greenback dollar.

Convince them that three *good* cows are better than six *poor* ones, and so on of all other stock. Convince them that two blades of grass may easily be made to grow where but only one grew before.

Convince them that experiment is the mother of improvement, and improvement the true source of wealth; and lastly, convince them of these simple *truths*, and induce them to practice accordingly, and the work is done. You will then bring *mind* and *body* to act in unison. You will elevate the husbandman to his natural sphere in the scale of existence. You will place him in the road to higher eminence. He will think for himself, he will be learned, he will be wise, he will be wealthy and influential.

FIRE-PROOF WASH FOR SHINGLES.—The following simple application will no doubt prove of great value:—A wash, composed of lime, salt, and fine sand or wood ashes, put on in the ordinary way of whitewashing, renders the roof fifty per cent more secure against taking fire from falling cinders or otherwise, in case of fire in the vicinity. It pays the expenses a hundredfold, in preserving influence against the effect of the weather. The older and more weather-beaten the shingles, the more benefit derived. Such shingles generally become more or less warped, rough, and cracked; the application of the wash by wetting the upper surface, restores them at once to their original or first form, thereby closing up the space between the shingles and the lime and sand by filling up the cracks and pores in the shingles itself, prevents it from warping.—*H.*

MEDICINAL herbs for family use should be saved just as they are coming well into bloom. Cut them when not wet with rain or dew, and cure them in the shade where there is a good circulation of air. When sufficiently dry, pack them away in paper or muslin bags, with labels of the name of the plant and the year of gathering.

BEE CULTURE.

WRITTEN FOR THE AMERICAN FARMER, BY WILLIAM BURTON.

BEE culture is a science of progression and advancement. Although the science is greatly advanced beyond what it was fifty years ago, yet it is to be lamented that bee keepers are so much in the dark in regard to the wants and necessities of the honey bee. I find it to be a common error among bee keepers to believe that all that is necessary for them to do is to provide good hives for their bees and under such management their fortune is sure. Such management as that alluded to, I consider no management at all. Although a good hive is necessary and useful in its place, yet the bee needs to be under the careful inspection of the apiarian.

Success in bee keeping depends more on the way and manner they are managed, than on any hive the inventive intellect of man can contrive; for there are certain defects connected with the history of the honey bee which nothing can remove but the hand of the apiarian. It is discouraging and lamentable to hear the reports of bee keepers complaining of the unprofitableness of bees. If bees are unprofitable, it is because they are mismanaged, for they are by far the most profitable stock which can be kept on a farm when managed in the right way. Friend, talk no more of the unprofitableness of bees; go at bee keeping on good scientific principles, avail yourself of a knowledge of the science, and you will soon have no reason to complain of the unprofitableness of bees. The bee keeper who allows his bees to remain in the same hive from year to year, without his care or attention, is on a level with the farmer who puts his sheep into an enclosure provided with grass and hay, and tells them to help themselves, and then leaves them for a year or two without any further care or attention. A good apiarian can make bees highly profitable in any kind of a hive, the common box and straw hive not excepted, if he only pursues the good old maxim that "the hand of the diligent maketh rich."

In the spring of the year, as soon as bees are able to fly, their hive should be opened and effectually cleaned out, and if it is an old stock, some of the brood comb removed, (old comb becomes filled with pollen, and depreciated by constant breeding in them, so that the capacity of the cell is diminished)

every three or four years, so that the bees can have room to construct more in its stead, and thus prevent what some bee keepers call "run out."

It may be advisable some years to feed bees in the spring, but if the apiarian has discharged his duty in the fall, it will be very seldom that he will be under the necessity of feeding his bees in the spring of the year. Bees are very fond of salt in the spring, and if they are not supplied with it by the apiarian, are frequently seen around pig pens trying to collect it. I generally make it a rule to place salt near my hives, so that they can have access to it.

In regard to swarming, I prefer the way of artificial increase to that of natural swarming, for by artificial swarming the apiarian is enabled to keep his stock strong, which is almost an impossibility, if he relies on natural swarming. In the fall he should examine his stocks with reference to the coming winter, and if any are weak, either feed them enough to carry them into June of the coming year, or unite them to other stocks. In the winter he should strive to shield them from the storms and winter blasts.

IRON, AS A VEGETABLE TONIC.

WRITTEN FOR THE AMERICAN FARMER, BY "CHEMICUS."

"I've heard that there is iron in the blood,
And I believe it."

ALLOW me to say a few words in regard to an article on "Iron, as an Invigorator," which appeared in a recent number of THE FARMER, as I am afraid it tends to convey impressions which are not quite correct.

We do not allude to the statement that iodine is a form of iron, (every school boy knows it is not,) but to the general tone of the article as regards the knowledge which the public had of the virtues of iron as a vegetable tonic. The *British Medical Journal* may herald such an announcement as new, and pseudo "scientific" journals may treat the subject with "irony," but for the last quarter of a century, at least, all intelligent chemists and horticulturists have been aware that salts of iron are in general beneficial to vegetables, and that for some diseases they are a specific.

Downing, in the first volume of *The Horticulturist*, page 518, (May, 1847,) says, "that the practice of applying oxide of iron to fruit trees is one which has been successfully employed by cultivators for at least fifty years."

The use of iron as a medical agent extends back to a time whereto the memory of man runneth not to the contrary. The preferred mode of application is to syringe and water the plants with a solution of sulphate of iron.

The directions of the *British Medical Journal* to throw old nails, &c., into water, and use the liquid, after allowing them to rust there, are on a par with their other statements on the subject. Oxide of iron is insoluble in water *exposed to the air*. If, however, the old rusty iron be buried in the ground, the carbonic acid, &c., will so far dissolve it, as to make it available by the roots of the plants.

An extensive series of experiments upon the subject was carried on by M. Eusebe Gris, Professor of Chemistry at Chattillon. In relation to these experiments, a very interesting report was made by M. M. Payen and Brogniart (well known names,) to the Central Society of Agriculture, which the reader will find in Volume 1, of Downing's *Horticulturist*, page 467. Meantime the following note, addressed by M. Gris to the Royal Horticultural Society of Paris, will no doubt prove valuable to your readers:

"Allow me to beg my colleagues, and horticulturists generally, who wish to repeat my experiments, to operate with the precautions and in the doses given in my notices previously published. The Society will understand that I cannot be responsible for any success or failure growing out of applications too weak, or too strong, when the temperature is too low, upon glaccous foliage that sheds washes ordinarily applied, &c.; this would be the subject of interminable discussion.

"In all experiments carefully made, like those in the royal garden, I distinctly state that ninety-five cases in every hundred have been successful. This year not a single leaf has been blackened or discolored by the application of the salts of iron, in the long series of experiments to which I have devoted myself in this establishment.

"In the mean time, the following are about the proportions to which it is necessary to adhere. Three to four drams of sulphate of iron (green copperas) to a quart of water, for all applications to be made by watering the roots. One-fourth of a dram, only, (two grammes seulment,) to a quart of water, for showering or bathing the surface of the leaves. (The copperas should be dissolved just before applying the solution.)

"With one ounce of common copperas, (sulphate of iron,) we may therefore prepare sixteen quarts of the solution fit for all usual applications to the leaves of plants."

To the above, allow me to add, that if the sulphate of iron is dissolved for any length of time previous to being used, the *iron* will in part become insoluble, unless the air is excluded.

ON DIT that bruised walnut leaves will protect horses from being troubled with flies, if they are well rubbed with them.

EXTRAVAGANT IMPORTATIONS.

WRITTEN FOR THE AMERICAN FARMER, BY "BUENO."

It is comfortably profitable to have so fair, good-natured an antagonist as shipmate "S. W.," to veer, and haul, and battle the watch with. As a rule, both contending parties and the public besides, are always benefited by a fair, ship-shape discussion, where information of a useful nature is the leading motive. First A sets topgallant sails in the shape of some clear proposition, taking the wind out of B.'s sails, and dropping him to leeward; but waking up ideas inert in his figure-head, and forthwith B. packs on weather studding sails, ranges up on A's weather beam, becalming his head sails, till getting a fresh, favorable start, away he goes to windward again: and so they have it, "saw-got and saw-got," as old "salts" say; both craft improving their sailing qualities, and the public interested in and benefited by the nautical evolutions.

Something of a novel phenomenon though, is'nt it?—two old salt water "shell-backs" crossing each other's hawse in a first-class agricultural journal, banging away broadsides at monopolies, manufactures, hay making, commerce, domestic economy, navigation, exports and imports, &c., &c., as if years of reefing topsails and forecastle high jinks had been a first-class agricultural and commercial high school? Hope we shall never get so excessively "salt" that our shore shipmates will find nothing *fresh* in our nautical "lingo."

So "S. W.," shipmate, "Bueno" sets his light canvas with the intention of crossing your bows on the *importation* tack. Don't you remember that for a good many years before you and I began to look hurricanes and monsoons in the face, and for several after we went from forecastle to quarter deck, American ships had the "call" of the world's carrying trade, and that the commodities we carried abroad were worth just so much more to the countries to which they were carried, than their own wares which we took in exchange, were to us at home above our domestic material? So you see that it was the value abroad of our American productions after all, that purchased our importations with a cash balance in our favor, making us rich at home, because we did not have to send our bullion, or its equivalent (exchange) out of the country to pay a balance against us, as we are now, and have been constantly doing since 1860.

The first fifteen years of my salt water service was from birth, through babyhood and youngstership, passed in the old "Beaver" Indiaman, for twenty-three years commanded by my father, always in the Canton trade. The tonnage of the old barkie that was my birth-place cradle and college, was 359 tons, while of her sister Indiamen in the same line—the Fairfield, Optic, Bennington, Cadet, Carthage and Thorn, not one of them came up to 400 tons burthen. In those days "John Chinaman" used to give us a cargo of teas or silks, with an average balance of $18,000 in Spanish mill dollars, for one of our domestic cargoes. That's the way we got rich then, as we always have, and must do, if we get rich at all, by the excess value of our exported commodities. If we send our ships abroad in ballast, and they bring home cargoes, the imported material must needs be paid for in "very hard cash." That has been the fashion of our commercial features since 1860. As early as 1862, 640 sail of our merchant marine of all classes had either been *bona fide* sold, or placed surreptitiously under foreign flags, mostly British, thus giving to England the command of the majority of all our foreign carrying trade, and very greatly increasing all freights, foreign and coastwise.

Now, let us have a brief review of our foreign commercial transactions during the past five years, taking facts as the platform. During that period, has there been a China cargo purchased by us with anything we had in the way of merchandise to furnish the Celestials? Not one. All had to be paid for with hard cash, and high rates of exchange added to the bills. Have we during the time, bought a cargo of coffee or hides in Brazil, as we used to do with our wares, having a cash balance in our favor? No. Hides and coffee in all Brazilian ports, head off our flour, and demand an arbitrary tribute of thirty per cent in favor of the Brazilians. In the West Indies, our hoop poles, "shooks," and kiln-dried corn meal, will still buy sugar and molasses, honey and bananas; but while our wares are all depreciated, theirs are advanced on the average, 35 per cent; so that here also, the balance is largely against us.

During our four years of war a heavy per centum of our imports were on government account—war material that was either burned up in battle, shot away and lost, or wasted and worn out, the remnant and rags now selling at nominally nothing at auction. Certainly such importations added nothing to the aggregate of our capital, but on the contrary, as they all had to be paid for in hard cash, our Uncle and ourselves are just the cost of them the poorer.

Let us look at our New York custom house figures for the first year of peace, ending on the 30th day of June, 1866. The aggregate invoiced value of imported dry goods for the year, is $137,055,834, about $30,000,000 in excess of importations for the year 1859, which was the largest in the history of our country up to the fiscal year just closed. The imports of metals, tea coffee, sugar, and various articles

of mere show or luxury, foot up for the same year, *over one hundred and-sixty millions of dollars*; or, reckoning the value at gold rates, a total of not less than *three hundred millions* in foreign imports at a single port, in a single year, which at our currency valuation, will amount to *four hundred and fifty million dollars*; and then suppose that all the other ports of our country foot up in the aggregate one-third as much as New York, we shall have a bill of six hundred millions in currency for our year's importations, which have cost abroad not less than *four hundred million dollars in gold*.

Now, let us see how we have paid, or shall be obliged to pay for these importations. We have exported in all, since the beginning of the war about $200,000,000 worth of cotton, besides a little breadstuffs, petroleum, some meats, and other notions—in all, amounting to a trifle over 80,000,000 gold dollars, which is the base of bargaining abroad. Besides this two hundred and eighty millions in merchandise, we have exported over a hundred millions in gold and silver necessary to pay our foreign debts, reducing our stock of hard cash considerably below that of 1860,

Now, as two-fifths at least of all these importations are luxuries or finery that we could do very well without, and material either drank, eaten, worn out, or destroyed, and all have to be paid for at a high rate in gold—don't you see, "S. W.," shipmate, that I cannot see an inch further into the fog bank of our getting rich by a large excess of imports over our exports, your sailing directions to the contrary notwithstanding.

Suppose you are farming for fun, out there about Seneca Falls, Waterloo, or in those latitudes. Pretty place!—nice, fine country, good land! But you are producing very little more than you consume—not much of anything to sell. No matter. That is not a necessity. You are rich. Very well. You deal with your neighbor, a storekeeper—clever chap, who keeps all sorts of goods—everything yourself and family require, at reasonable rates—"terms, cash." You *import* everything you consume from your neighbor, and as you pay him a profit on his wares in cash, it is him that is getting rich by the traffic, not yourself, don't you see?

Then suppose you establish a domestic custom house—a neat, but rather expensive money-box in your parlor, and every time you import a dollar's worth of material from your neighbor's store, you deposit thirty cents in your money-box as a tariff on imports. Will that help to square the balance against you any? Guess not, shipmate! Only your custom house may save for the benefit of the family what you might perhaps have expended for a "Principee," or something cool with a straw in it.

In order to turn the tide of trade in your favor, and grow richer, you will have to produce more than you purchase, sell to your neighbor more than you buy of his wares, and draw the current of hard cash your way.

And that is precisely what we have yet to do nationally. Produce more than we consume. Export more than we import. Protect and encourage home industry, especially agricultural and mechanical—obtain again the "call" of the carrying trade—turn exchange and all balances of trade in our favor, and then away we go again, all summer sailing; everything all ataut, main royals set, everything ship-shape—our brave old ship mounting financial batteries that the commercial world will respect and pay tribute to.

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

A TRIP TO THE BUTTER REGION OF CHATAUQUE, JULY 10TH, TO 18TH.

If you would see a farming country the worst possible side out, only pass through it on a railroad, and you will then escape the high dry land, the picturesque improvements, and golden cereals, to encounter festering bogs, low wet pastures, and stumpy weedy meadows. Wheat fields are not in sight, and the small patches of corn, look as if they had caught a severe cold. If there were any fields of potatoes in sight that would pay the labor, and interest on the land, it was those narrow patches planted by "Pat" and "Biddie" of the road side shanty, on the well drained excavations of the railroad.

After passing through Seneca and Ontario counties, we hardly saw a field of wheat all the way to Buffalo. In Seneca, farmers had begun to harvest their wheat; the crop was very fine and a large yield. Barley, oats and hay were also good crops; corn backward, and potatoes needing rain. It was said that the wheat crop west of Rochester was below the average, but summer crops generally were good. Near Buffalo, heavy wet clays predominate, a good hay-making country when drained, but pastures dry up and many fields are too level to be easily underdrained. On the railroad to Dunkirk, we saw some good, and much wet land. The summer crop, corn excepted, promised well, and this was fast improving under a very hot sun. When we left the railroad at Dunkirk, for Fredonia, the country suddenly improved as if by magic, and such a soil for grain, grass and fruit-growing as we found all the way to Fredonia, three miles, and as far perhaps towards the high lands beyond that fair village, cannot be beat by all Western New York, which is saying a great deal? It was an easily

tilled abso rptive calcareous loam, in which sand, clay gravel and vegetable remains were nicely compounded by nature's hand. We were only surprised to see so few wheat fields; but it was said that the late ravages of the *C. tritici*, had discouraged farmers from wheat growing. Here are some fine gardens, extensive seed growing establishments, and the only bearing peach trees we had yet seen. Next morning we left this region of Ceres and Pomona for the high pasture lands of Chatauque, where butter and cheese are the great paying agricultural products. As we ascended the long hills, the ponderous hemlocks appear in large masses on either side, giving an earnest that grass, oats and potatoes, are the staple products, and not Fredonia corn; hence we were not surprised after seeing corn in the silk at Fredonia, to find it of pigmy growth in this higher region, and in very small patches at that. But such tall, long-headed timothy, both in the meadows and by the road side, such green pastures enlivened by rampant white clover, which in Seneca is as much of a pigmy as the Indian corn is here. I have heard the Chatauque farmers say that as grass was so great a paying crop, they would never plant a hill of corn, if they could be sure of buying enough of it to fatten their buttermilk and whey fed hogs; and no wonder, for many of them sold their butter to the New York buyers in April last for 55cts. a pound. During the hot weather of July and August they carry their milk daily in large tin cans to be made into cheese at the cheese factories, taking back whey to feed their pigs.

I learn from a brother, who keeps a diary of the weather at Sinclairville, that here 800 feet above Lake Erie, they have at least one-third more rain during summer than we have in Seneca county. This alone, accounts for the ever green pastures and never failing grass crop; but the soil is also quite as rich, and much better manured than it is in the lower limestone regions proper, although it is not a wheat growing soil. At the Chatauque Lake, twelve miles south, limestone occurs, and good wheat was now about being harvested there. I had an idea that in this high, cool region, where Indian corn refused to ripen; we should now escape the extreme hot weather of this hot July term, but during the three days we were there, the mercury was often at 92 in the shade; the heat by day was mitigated by a mountain breeze, but the nights were calm and very oppressive, with the mercury at 80 one morning before the sun rose above the hills. There is a growing prosperity in this famous dairy region at this time, that crops out in every farmer's dwelling, which is no longer a log cabin as it was in the beginning, less than half a century ago; but a fine cottage *ornee*, with modern furniture, a Brussells carpet, a piano, &c., &c. Nearly all the butter made here is bought up by agents at the highest price, exclusively for the *delitanti* butter eaters of the City of New York.

On our return, we took the New York Railroad at Buffalo for Darien station, in Genesee county, 22 miles east. There the large pile of milk cans on the platform told that the farmers here helped supply Buffalo with milk; pure milk it was said, not the ordinary watered New York article so long imposed on that long suffering city. After visiting a relative, we went next day across the country five miles, to Corfu, a station on the Central Railroad, reaching home the same evening. Here again, as soon as we left the rail road, the picturesque views of undulating, well fenced fields, alternating with patches of tall deciduous forest trees, crops growing and pastures green, large barns, comfortable farm houses and extensive orchards. 'Tis true, some of the fields sadly needed tile underdrains, but altogether it was a very fertile, well improved grass and grain growing region, rich in calcareous matter, and well adapted to fruit growing. Yet strange as it may seem, good farms here are cheaper than almost anywhere in Western New York. A fine farm of 100 acres with good improvements, and large, well bearing orchard, was here offered for sixty dollars an acre. The purchase money at this time would hardly put on the fences and buildings. Most of these farmers have sons and daughters at the "far West," which is a strong inducement for them to sell out and follow. This alone can account for the fact, that farms in Western New York, are cheaper than any other article, real or personal. They now sell no higher than they did before the currency was debased.

SUMMER MANAGEMENT OF GRAPE VINES.

"Who shall decide when doctors disagree." "F. W. L," in *The Rural New Yorker* of the 28th ult., says, "as soon as the grape is far enough developed, which is generally about the middle of June, I commence cutting or pinching away the young shoots, leaving two or three bunches of fruit on the side shoot, and the leaf beyond the last bunch; those shoots having no fruit are generally cut away entirely; this is to be followed up about once a week during the growing season, which usually ends upon bearing vines the last of August; this throws the whole strength of the vine into the fruit, and produces large well ripened bunches." Per contra, Mr. Keech says, the very opposite effect is produced in our very hot, dry climate by such pruning; that such treatment of the vine may do in Germany or England, where there is less solar heat, and more moisture; but in our hot, dry summer, the vine needs the shade of all its leaves. Mr. Cook, an amateur, also says, that he has tried summer pruning to his cost—the grapes did not ripen well. It is so with potatoes. To avoid the rot, the experiment of clipping the vines was tried. The result was, a few

very small potatoes. I have always found that large potato vines kept back the growth of the tubers much longer than smaller vines; but when let alone until the vines began to die the tubers were large and the yield good. It has been well said that "the leaves are the lungs of the plant;" they evidently collect atmospheric plant food and elaborate it to the fruit. Liebig says, "the leaves as well as the other green parts of the plant absorb carbonic acid, and emit an equal volume of oxygen." It is thus that the plant obtains the greater bulk of its organism—carbon.

BEETS AND TURNIPS AS A SECOND CROP.

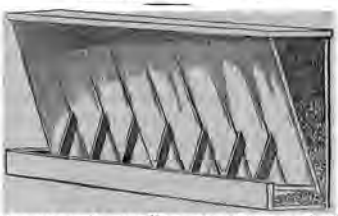
In my garden, I generally spade over my pea ground, early potatoes and corn grounds, as soon as the crop is off. I then apply hen dung, and set out large beet or French turnip plants. Both grow large, and even after the first frosts of autumn. But it is all-important that the turnip plants should be large rooted and stocky; if sown too thick in the seed bed, they will be slender rooted, with long necks and leaves. Such plants never produce a large turnip, as the neck continues its unsightly growth at the expense of the root. Hence, sow your seed scattering, and thin out the plants so that they will grow stocky and large rooted. Beets also should be thrifty and of good size; if the tops of the leaves are clipped off, they may be successfully transplanted when they are an inch in diameter. All plants should be watered when transplanted, but cutting off the bulk of the leaves of the beet enabled it this season to stand even our extra hot dry July—and now, early in August, the light showers and cool weather are very favorable for transplanting.

THE POSTPONEMENT OF THE TARIFF BILL IN CONGRESS.

In *The Rural New Yorker* of the 28th, is a very sensible editorial, on the "postponement of the tariff." It is so concise, temperate, and free from that dogmatism which the "prohibitory trade" advocates so often employ to "make the *wrong* appear the *better* reason," that I forbear any extended remarks to prove the fallacy of such a restriction on our foreign trade, as Mr. Morrill confesses his tariff to be, when he says that the whole duty on foreign wool under it, amounts to 75 per cent *ad valorem*.

It will be well for our wool growing farmers to reflect, that this duty of 75 per cent is not to aid, but only to materially lessen the revenue of the government; and this too, at a time above all others, when we most need a tariff for revenue to lessen our present very burdensome taxation. They must also remember that the foreign wool we import is not paid for in gold, but in *agricultural* and *manufactured* articles—domestic cottons and woolens, and the thousand other articles of our work shops, made of wood, iron, leather, &c., to the benefit of the whole body politic, farmers included. If we do not take the wools of South America, we must give up her trade to the manufacturers and work shops of Europe. England takes cotton, wool and every other article needed for manufacture, FREE, or at a *nominal* duty, to in part pay custom house expenses. It is by this wise policy alone, that enables England and now France to increase their exports and monopolize the trade of the world. But if our tariff raises the price of wool, it will also *raise the price of cloth* and other *articles of manufacture*; and the wool grower will soon find out, as Mr. Clay did, when he was induced by the sober lessons of experience to construct his famed compromise bill, and to manfully confess, after he had long and successfully advocated a protective tariff, to its mischievous fulfillment—that it was emphatically "a two edged sword."

FEEDING POULTRY.



ABOVE we give an illustration of a very simple arrangement for feeding fowls, which any person can make in a short time. We have used one for several years, and would not be without it. In the winter season they are specially valuable in saving food, which when scattered on the ground soon gets covered with snow. The grain is put in through the top, which is made of one board with hinges. The end is left off in the cut so as to show the box partly filled with grain. A few slats are put across the trough in front to keep the fowls out, and the board in front is sufficiently high to prevent their scratching the food on to the floor. It should be accessible at all hours, and kept well supplied, and we always find that our fowls lay better and keep in good condition when they have free access to food, as they require it. Another advantage is that no food is lost, as by the old plan of scattering the grain on the ground.

HIM who has little and wants less, is richer than him that has much, and wants more. A tub was large enough for Diogenes, but a world was too little for Alexander.

TO KEEP OFF TROUBLE.—Keep constantly employed, and always try to do something for others.

HOW WE FARM IT IN THE GENESEE COUNTRY.

WRITTEN FOR THE AMERICAN FARMER, BY P. C. REYNOLDS.

WINTER GRAIN.

If the growing of winter grain is any longer profitable—in the Genesee Valley, it is so only when it receives the very best cultivation. This is emphatically true of wheat. To raise wheat with profit, we must select our best land, and put it in the best possible condition. Our practice is somewhat different now from what it was twenty to thirty years ago. Then we relied more upon the summer fallow. An old pasture or meadow was plowed early in June; generally, with a three-horse team, or two yoke of oxen; harrowed frequently through the summer, to kill grass and weeds; and cross-plowed early in September, when the sod was usually rotted sufficiently to drag to pieces. Sometimes we gave it the third plowing.

Two important ends were gained by the summer fallow. First, the sod was subdued—that is, the grass, weeds, &c., were rotted; and the ingredients of the soil were intermixed, and exposed to the air and sun. When the sod was a clean clover, we sometimes mowed it, allowed the aftermath to attain quite a growth, and plowed it under a few weeks before seed time. As that would not have time to rot so as to plow again, the surface was kept clean and mellow with the wheel cultivator.

Barley was considered a good crop to precede wheat. As soon as it was harvested, in July, the stubble received a shallow plowing, or was cultivated to cover the scattering grain, and cause it to germinate and attain quite a growth before it was necessary to plow it for seeding. In favorable seasons we had quite a green crop to plow under.

Oats were not often followed by wheat, as they were not generally grown on wheat soils, or the traditional belief that they exhausted the soil more than other crops, deterred farmers from sowing wheat after them.

Sometimes a crop of corn was raised, and as soon as the ears were *glazed*, it was cut up; a number of rows of corn put in a row of stooks and the stubble between them plowed and sowed to wheat. The strips upon which the rows of stooks were set, were plowed, and sowed before the stooks were set upon them. This process involved a great deal of hard labor, and was successful, only, when the ground was very rich. If the soil be light, or pretty well exhausted, and it is intended to seed it down, rye had better be sown. Rye will grow on a weaker soil, is quite as good to seed after, and taking one year with another, the value of grain and *straw*, produced upon an acre of rye, is scarcely less than that upon an acre of wheat.

But we rely less upon summer fallows, now, and more upon the direct application of barn-yard manure. Our manure is piled in the spring, and lays in the barn-yard through the summer. When the ground is fitted for wheat, we draw out the manure, and spread it broadcast over the ground, using from fifteen to thirty loads to the acre, (according to the liberality of the farmer,) and harrow it in.

Two bushels of clean, sound wheat is about the quantity required to seed an acre properly. If it is drilled in, twenty-five per cent less will answer.

Manure used thus as a top-dressing, in the fall is much more effectual than when plowed in. It not only is gradually decomposed and absorbed by the soil, but it acts as a *mulch* upon the roots of the grain through the winter, preventing winter killing.

I am not aware that any one has presented a satisfactory explanation of the reason why manure spread upon the surface is more beneficial than when plowed under, but such is the decision of our best farmers and horticulturists. It is probable, that the atmosphere is a better solvent of the manure, than the soil. This question, of the best way of preparing and applying manure, is of the greatest importance.

As regards the time of sowing winter wheat—that depends in a great measure upon whether we have fears of insects; and if so, what species. The midge affects late sown wheat most, the Hessian Fly early sown. So if we fear the midge, we sow the latter part of August, or early in September; if the fly, the latter part of September; if neither, from the tenth to the fifteenth of September.

CORN HARVEST.

Usually covers two periods, with an interval of several weeks between. First, to save the fodder in the best condition, we cut up the stalks near the ground, as soon as the grains are partially hardened, and before the frost has injured the stalks. We generally take either five or seven rows of corn, and set the stooks on the middle row, putting a square, twenty-five hills, if five rows; forty-nine hills if seven rows in a stook, binding the top of the stook well. An acre a day, in pretty stout corn, is a fair day's work. Corn cut up in this way, will shrink a trifle more, I think, than if allowed to stand until fully ripe, but then the value of the stalks for fodder will more than compensate for all loss in weight of corn.

We do not do much husking the second period of corn harvest, until the latter part of October, and the first snows of winter often find considerable corn unhusked in the fields. In husking corn, we pull over the stooks, cut off the central hill, which was left to support the stook, and handle over every stalk, separately, husking its ear or ears. We then tie up the stalks in two or three bundles, and put the stalks from three to four stooks in a stook of stalks. Then drawing, assorting, and cribbing the corn, and drawing and stacking or housing the stalks completes the corn harvest.

FARM TALKS---No. 6.

WRITTEN FOR THE AMERICAN FARMER, BY G. E. BRACKETT, BELFAST, MAINE.

THE time for holding our annual agricultural exhibitions or cattle shows and fairs is near at hand. I was reminded of this fact, yesterday, while over to neighbor Smith's. He is preparing for the cattle show. Smith, in fact, has been preparing for the last six months. He is getting ready at the rate of a little less than a dollar a day. The particular line in which Smith will exhibit this year, is in bulls. He is raising a bull calf, which he says he is "bound shall take the shine off" anything in our county. And it's my private opinion he will get the premium. You see last February one of Smith's cows dropped a large bull calf, and he immediately conceived the idea of making a premium animal out of him. So he has had the milk of the dam, and part of the milk of Smith's other cow all summer, and as a consequence has grown rapidly, being now about the size of my yearlings. Smith has taken the very best care of him, feeding plenty of grass, and what meal he would eat, and now he is a miracle of size and fatness.

"What do you think of him?" said Smith to me, looking admiringly at his bovine pet.

"He's large, certainly, and sleek too."

"Won't he make a splendid bull?"

"Well, he looks like it, but you can't always tell when they are so young."

That was as fully as I dared endorse Smith's opinion. When I remembered that the calf's sire was a "scrub" bull, and the dam only a common native, I knew that nine chances to one, the calf would prove an inferior stock animal. That's why we want blooded or thorough-bred animals for stock getting: they almost invariably work their get with their own valuable peculiarities and characteristics, whereas if a native bred bull be used, be he ever so well formed and fine an animal, his offspring are likely to "cry back" to his "scrub" parentage. These are facts well grounded, and should be heeded by every stock raiser, be his speciality, cattle, horses, sheep or swine.

But Smith will get the premium, and a good deal of praise gratis. There is no doubt of that, but the question comes up, will it pay? "Ay! there's the rub" with Smith. I asked Smith. "How do your pigs grow?"

"They do'nt seem to grow very fast. Takes an awful sight of milk for pigs."

"Butter is pretty well up, isn't it?"

"Don't know; hav'nt sold much this summer."

That shows where the shoe pinches, but Smith has got a fine bull calf and will get the premium, and perhaps a "diplomy." That's a foregone conclusion. The wise and far seeing committee on "bulls, cows and heifers," will view Smith's specimen of adipose matter, with a look of wisdom and knowledge, which only committee men can assume, and pronounce favorably, for fat goes a great way in in their opinion; and like wealth, covers a multitude of sins, and deformities. Thus fat and size is made the criterion, and this false idea prevails extensively.

Do not understand me as decrying the habit of carrying your best to your county fair, and of striving to raise fine stock, or good crops. Far from it. It is just what I would have every farmer do; and here let me advise, even urge, every farmer to attend his county fair and cattle show, and not only go himself, but take his family, particularly the boys, making it an annual holiday. And further, do not go empty handed, or to look at what somebody else contributes; but take your best specimens from your crops, garden, orchard and farm yard, for comparison with your neighbors. That's wherein you gain by learning how others operate, and being willing to yield your own method for anything that is better. But what I condemn, is the practice of pampering and petting certain animals or crops, at the expense of others, for the purpose of creating a monstrosity of size and growth, and also the action of too many committees, who award premiums, to such specimens. My neighbor Smith, is not the only one, who is feeding a pet calf with nearly all the milk of his cows, while his table lacks butter, and his pigs squeal lustily in the stye.

COUNTRY HOUSES.

WRITTEN FOR THE AMERICAN FARMER, BY "W. H. W."

IN the building of a suitable farm house, there are many things to be well considered; only one or two of which I shall briefly allude to in the present article. Too many of our houses are built as if to answer only a temporary purpose. Our population to too great an extent, are of a migratory character, and for this cause, in part, is the reason of the temporary character of our houses. In a newly settled country, abounding in forests of fine timber, having the materials for the structure close at hand, and without that skilled labor available in an older settled country, such structures are a necessity; the ax and saw speedily render the materials thus furnished available. But in the older settled States, where skilled labor and more durable materials are abundant, this necessity no longer exists. Wherever the population has become settled, and social relations permanently established, more permanent structures should be built. In many sections stone abounds, which if used in building would at once give us more durable and comfortable buildings, and at the same time be the means of improving our farms by clearing them

of stone. In other places clay abounds, which made into brick furnish a durable building material.

A house thoroughly built of either of these materials will last several ages, without the necessary frequent repairs of one built of wood, the last requiring painting frequently to keep in repair, and is colder in winter, and warmer in summer than one built of stone or brick.

With greater thoroughness in building of wood, we might have more permanent houses: as a general thing, the timbers put in a wooden structure are too light, the covering too thin, and in short the whole structure altogether too frail. Another failing is too often in the convenient arrangement of the inside structure. Health, convenience, and labor saving arrangements should be the first consideration. The rooms should be so arranged that the fewest possible steps need be taken in performing the various duties of the housekeeper; be well lighted, but not with too large windows, well ventilated, and of ample size for convenience. The sleeping apartments should be of easy access and large enough for proper furniture without being crowded. The parlor, if one, may properly be of less size than the living rooms, as that is the room kept to look at, and the least used, and ought not to occupy the pleasantest part of the house. It should be furnished with a good cellar under the whole for storing vegetables, fruit &c., for family use; have either running water brought to the kitchen in suitable pipes, or be supplied with a pump connected with a good well, and a good cistern for rain water for domestic use.

THE WEATHER AND THE CROPS.

FROM INDIANA.

OUR correspondent, writes from Vermillion county, that "the wheat was all cut in good time; we had fine weather for harvesting; berry very good, but I think farmers will be disappointed when they come to thresh, as I said, when I wrote about wheat in spring. We shall have enough-wheat for home consumption, and not much more, as there was never so little old wheat in the country, and farmers will not run the risk of the next crop, but will keep enough to do till they see the crop made. Corn is good on all lands, all clean, where worked, as there never was a better season to cultivate corn than it has been on my farm, and south of me. A few miles north it was too dry for some time, but they have good corn. My locusts are all dead in the shell, I think, as none have come up yet. Osage comes up well, but every uneven. Some lay in the ground for months. I have had a very hard time with it. I planted it on ground that was very grassy, but have kept the most of it clean, but some the grass took. I keep the grass mowed off, and the plants look as well as those that have been hoed, only not quite so high. My oats are nearly all down. Crop heavy."

FROM WHEATLAND, W. N. Y.

"S. W. C." writes us:—"Seeing notes and items from nearly every section of the country in THE FARMER, I thought that a few from near home would not come amiss. We have had rather a hard season for farming operations so far. First, the cold drying winds of early spring hurt the wheat very much; then the Hessian fly took part of what was left. One farmer near here offered his crop of fifty acres for 100 bushels. Of course, this is an extreme case, but the crop I think is very light in this vicinity. Then after a backward spring for hoed crops, the hail came on the 6th of June to cut vegetation to pieces, and the drouth in July, ending on the first of August. Corn and potatoes are looking well. Oats are a good crop. The hay crop was an average full one. Fruit is nothing."

FROM DAKOTA COUNTY, MINNESOTA.

MESSRS. EDS.:—In looking over your last number of THE FARMER, I find no correspondent from this State, and thinking that you would like a few lines from this portion of the country, I will endeavor to give you an account of the crops in this section.

Wheat, our staple crop, is now about being harvested, and the prospect is a large crop. It has not as yet been affected by rust to any extent. If we do not get any heavy rains for a couple of weeks we are safe. Most of the land will yield from 25 to 30 bushels of wheat per acre, and with a fair prospect of $2 per bushel, we are feeling rather jubilant.

Grass and oats will turn out heavy. There is not much corn raised here, but that which is growing looks well.

Cattle are very scarce. (All native stock.) Horses bring a good price—a good heavy team costing $500. The sheep fever has not reached here, and we earnestly hope it never will.

Butter is worth 20 cents per pound. Eggs, 20 cents per dozen. New potatoes, 90 cents per bushel.

We have had some very hot weather—the thermometer has risen as high as 102° in the shade, which will do very well for this country.

In conclusion, let me congratulate you on the success of your paper, which is a perfect success over the old *Genesee Farmer*. It is what I call a model paper. Although taking other agricultural papers, there is none hailed with more joy than THE AMERICAN FARMER, and as soon as I get over my hurry, I mean to trouble my neighbors for subscriptions for it.—"*Minnesota.*"

(Continued on page 280.)

SMUT IN WHEAT.

THE prevailing opinion among European writers is, that smut in wheat is caused by an insect—an eel-like worm—which is said to be in the seed wheat when sown, and by the moisture communicated to the seed in the earth the insect is enabled to burst the walls of its prison, and, escaping, rises to the surface and secures a lodgment between the leaves of the growing plant, near the centre—as the grain where it begins to develop. It then works its way to the head of the growing wheat and makes its entrance into the embryo grain, which destroys the natural development of the wheat, and causes the diseased transformation which we call smut.

In the Ohio agricultural report for 1857, the able and efficient Secretary, J. C. Klippart, furnished an article with several illustrations, giving the natural history of the insect and its effect upon the wheat plant. The facts given were chiefly derived from the observations of British and continental European writers, and it may be considered presumptive in us to attempt to controvert such distinguished authority. But we will, nevertheless, venture the opinion that the worms found in the diseased grains are rather the *effect* than the *cause* of the disease. All diseased bodies, whether animal or vegetable, are subject to peculiar kinds of parasites. The diseased state of the subject furnishes the requisite conditions for the propagation and development of the insect. We know this to be the case in thousands of instances, and judging from analogy it may be so in the case under consideration. The insect is denominated the *Anguillula Fritica.*

In the *Journal d'Agriculture Practique*, M. Montague, who draws his information from a French naturalist, who has given the subject much attention, gives the following as the means most efficient to prevent its increase. It matters less whether the insect is the *cause* or the *effect* of the disease provided the remedy is effectual.

The author, as a substitute for lime as usually applied, which he says has no good effect upon the living insect, recommends acidulated water, composed of one part sulphuric acid to a hundred and fifty parts of water, in which the wheat is to be steeped twenty-four hours, this he asserts will effectually destroy all the *anguillules* contained in the grain. This process of preservation is neither expensive nor difficult to carry out, and that the germinating properties of the grain are in no way injured by it.

It is also recommended that the screenings from diseased grain be taken care of so as not to find their way back to the fields in the manure or otherwise. It should either be burned, or, if cast to the fowls or other farm stock, it should first be submitted to a temperature sufficient to destroy the life of the insects.

We throw out these hints for what they are worth, hoping that they may lead to such observations as may furnish additional light upon the subject.—*Colman's Rural World.*

ACREAGE IN HOPS IN NEW YORK.

STATISTICS in regard to hops, except as they pass through the custom houses, have never been furnished in this country in such form as to be of very high value. Under the State census of 1855, there was given both the acreage and the crop of the growth of 1854, and these are really the most important and most reliable figures ever furnished relating to the domestic culture of hops. The following table exhibits the area devoted to hop culture in the State of New York, by counties:—

Counties.	1854. *Acres.*	1854. *Acres.*	1860. *Acres.*
Albany	13	185	189½
Allegany	7½	19	24½
Broome	35½	86	121½
Cattaraugus	2½	180½	106
Cayuga	5	14	21½
Chautauque	5½	15½	81½
Chemung	....	20	29½
Chenango	220	1,016½	1,287½
Clinton	2	½	½
Columbia	½	19½	22½
Cortland	11½	198½	243½
Delaware	187½	438	589
Dutchess	4	9	9
Erie	4	53½	100½
Essex	5	3	3
Franklin	418½	507	519
Fulton	....	273½	316½
Genesee	21	69	103
Greene	½	67½	67
Hamilton	....	21	24
Herkimer	594½	1,659	1,621
Jefferson	87½	102	103½
Kings	....	....	....
Lewis	25	43½	67
Livingston	103½	74½	90½
Madison	1,490½	3,088	4,229
Monroe	51	57½	223½
Montgomery	458½	1,071	1,019
New York	....	....	....
Niagara	....	24½	27½
Oneida	670½	2,148½	2,659½
Onondaga	171½	129	176½
Ontario	42½	178½	250½
Orange	....	....	....
Orleans	½	1	....
Oswego	45½	289	360½
Otsego	4,132½	7,078	7,609
Putnam	....	....	....
Queens	....	....	....
Rensselaer	8	61	84
Richmond	....	....	....
Rockland	....	....	....
St. Lawrence	259½	153½	150
Saratoga	183½	176½	143½
Schenectady	14	62	67½
Schoharie	695½	2,803	3,039½
Schuyler	1½	15	15½
Seneca	....	½	3½
Steuben	13	89½	131½
Suffolk	1½	½	....
Sullivan	1	....	....
Tioga	2½	7½	10
Tompkins	1½	4	4
Ulster	62¼	19¾	22½
Warren	....	....	....
Washington	½	8	5
Wayne	6¼	27	40
Westchester	....	....	....
Wyoming	17½	75½	87½
Yates	4	....	....
Total	9,481½	28,417½	25,841½

SPIRIT OF THE AGRICULTURAL PRESS.

Gapes in Chickens.

The New England Farmer pronounces the common opinion about this malady being produced by some worm which is generated in the throat as incorrect. It says the cause is colds and sore throats, which the chickens get by wandering in the wet grass. It asks how many chickens' lives anybody ever saved by running feathers down their throats to scoop out the worms. It says the true remedy is administered before the disease makes its appearance, and that is to confine the chickens away from the early morning grass.

Growing Potatoes under Straw.

The editor of *The Rural World* says:—"On a recent trip in St. Clair Co., Ill., we saw hundreds of acres of land covered with straw. The ground had been plowed and harrowed and marked off, and potatoes dropped, and then the whole surface covered about six inches deep with straw. The potatoes have no further attention till digging time, when two or three hundred bushels per acre are obtained. The straw keeps the weeds down, and the soil cool and moist. The straw is raked away in autumn, and there lie the potatoes white and clean. The straw potatoes bring the highest price in the market."

We think this process a good one for many parts of the West, but it would hardly answer where straw is of much value, for stock.

Cure for Heavey Horses.

A correspondent of *The Massachusetts Plowman* having had a large experience with animals afflicted with the disease in question, always with success, with a small amount of labor, submits the following: First, procure (if you have not one already) a head halter, and tie the horse so that he cannot eat the bedding; give for a few days but little food, and that wet, not more than half the usual quantity, which will relieve the breathing; after which nutritious food is fed liberally with grain, and less hay, and so long as you do so, your horses will not have the heaves. If the owner wishes to hurry recovery, a dose of physic, (an ounce of powdered aloes,) will unload the bowels quicker. I have owned several heavey horses and after treating them as stated above, I have doubted whether they ever had the disease, but after (by accident) a large amount of hay had been devoured, the distressed breathing and double action of the flanks re-asserted the facts.

Weeding Grain Crops.

The following experiments, the results of which show the value of weeding, are reported in the journal of the Bath and West of England Society. 1. Seven acres of light gravelly soil were fallowed and sown broadcast; one acre was measured, and not a weed pulled out of it; the other six were carefully weeded. The unweeded acre produced 18 bushels, the six weeded acres averaged 23 1-2 bushels per acre, a clear gain of 25 per cent. 2. A six acre field was sown with barley in fine tilth, and well manured. The weeding, owing to a great abundance of charlock, cost 12s per acre. The produce of an unweeded acre was 13 bushels, of the weeded 28 bushels, thus showing a difference of 15 bushels per acre, besides the enormous advantage of having the land cleaned for the succeeding crop. Of six acres sown with oats, one acre plowed out well, and unmanured and unweeded, yielded only 17 bushels; the rest, plowed three times, manured and weeded, produced 37 bushels per acre.

Destroying Canada Thistles.

A correspondent of *The Western Rural* gives the following method which he adopted. "Some years before I came to Michigan, I purchased twenty-seven acres adjoining my old farm. I made the purchase when the owner was harvesting his wheat; there were twenty acres of it in with wheat, and some nine loads of it was so full of thistles that it was pitched to the wagon and from the wagon to the machine without binding. The same fall I piled over the straw and mixed in twelve bushels of slacked lime to rot and kill the thistle seed. The next season I summer-fallowed and cultivated and sowed to wheat. The following season I harvested a fine crop, and every thistle on the twenty acres could have been bound in a single bundle."

"Wine-Plant" Hawkers Brought to Grief.

Last year several wise men from the east came to Philadelphia and bought up all the Linnæan Rhubarb plants they could at ten dollars per hundred, and after taking them to Binghampton, Jersey City, and other places, cut them up into little bits, and have scattered the fragments widely over the country as wine-plants, at forty dollars per hundred. Lately they returned here. Among the "Dutch" in Montgomery county, they gathered a rich harvest into their garners:—hundreds of farmers there are at this moment who are down on "book larnin," but who are in holy hope of $6,000 per acre clear profit from their wine patches, from which pleasant dreams they will not awake until the decease of all their hopes about this time next year.

Having well bled the "Dutch," they went down amongst the Quakers of Delaware and Chester counties—but they fell into the hands of the Philistines, and brought up in sadness in the county jail of Media. Andrew M. Brown, Andrew Boyce, and G. A. Martin, of Binghampton, were arrested for obtaining money under the false pretence of selling roots as "wine plants," knowing at the same time they were nothing but Rhubarb plants. After a hearing before the Alderman, they were handed over to the authorities of Media "to do with them as seemed good unto them." When they get out we fancy they will give Philadelphia "Quakers a wide berth," and go where "book larnin" is at a heavy discount.—*Gardener's Monthly.*"

This fraud is well exposed by our contemporary as has often been done by *The Cultivator* and *The Rural New Yorker*. Instead of decrying "book larnin," had the humbugged been readers of any of these papers, they could, like the Quakers, have been prepared to do just what they are reported as having done. So it is with most of those who decry book-farming; it is not a knowledge of books and papers that enables empirics and imposters to succeed among farmers, but a want of it: such fraudulent operators know this full well. Not

that all patrons of the press are exempt from the frauds of wine-plant, tree and ram peddlers, for some, we are sorry to say, who take an agricultural paper, do not carefully read it; for, we have more than once met patrons of the rural press and farmers, too, who could not tell what paper they were taking. This is the kind of "book larnin" that makes willing victims to impostors, who usually are the most noisy declaimers against "book farming," as they call all intelligent farming. It is hoped that the statement copied above may serve to open the eyes and ears of such as have hitherto been both blind and deaf to what has been said of the wine-plant humbug.—*Boston Cultivator.*

A Cheap Smoke House.

A correspondent of an exchange gives the following as his plan for building a smoke house:—"No farmer should be without a good smoke house, and such a one as will be fire proof and tolerably secure from thieves. Fifty hams can be smoked at one time in a smoke house seven by eight feet square. Mine is six by seven, and is large enough for most farmers. I first dug all the ground out below where the frost would reach, and filled it up to the surface with small stones. On this I laid my brick floor, in lime mortar. The walls are brick, eight inches thick, and seven feet high, with a door on one side two feet wide. The door should be made of wood and lined with sheet iron. For the top I put on joists, two by four set up edgewise, and eight and a half from centre to centre, covered with brick, and put on a heavy coat of mortar. I built a small chimney on the top in the centre, arching it over, and covering it with a shingle roof in the usual way. An arch should be built on the outside, with a small iron door to shut it up, similar to a stove door, with a hole from the arch through the wall of the smoke-house, and an iron grate over it. This arch is much more convenient and better to put the fire in, than to build a fire inside the smoke house, and the chimney causes a draft through into the smoke house. Good corn cobs or hickory wood are the best materials to make a smoke for hams. The cost of such a smoke house as I have described is about thirty dollars, but will vary in different localities.

Paying Improvements.

A writer in *The Rural New Yorker* says: "I could recall instances where farmers went ahead with improvements, without counting the cost, till it took the farms to pay for them. Improvements are a nice thing, if one has the ready cash to make them; if not, beware of the temptation. Only those should be made at first that will return the outlay again. Farming should be conducted on business principles. If a merchant is not able to own a store, he rents one. If a farmer has not money to erect new buildings, he had better get along with his old ones. If a merchant invests money, he expects to get it all back, and more too. If a farmer buys manure or Merino sheep, he should see that they are so used that they return the original cost and a *profit*. If a farmer lays out money in ditching, he should do it where two or three crops will pay it back with interest."

Sources of Farm Manure.

W. H. White, of South Windsor, Ct., writing to *The Boston Cultivator*, on the resources a farmer has from which to draw fertilizers for his land asks: "Does the reader make the most of his resources? Is there nothing left that can be converted into fertilizing material? How is it with the hog pen? Is that well supplied with good material to absorb the liquid as well as the ammonia? A free supply will tend to keep the hogs clean and furnish a quantity of manure. Then there is a privy, which is too frequently allowed to waste its ammonia, instead of absorbents supplied to fix it. A tight vault, into which dry muck, plaster, loam, &c., may be introduced and mixed, will supply several loads of poudrette, superior to what the market affords with little labor. The hen roost will supply several barrels of good guano, the quality of which there is no question, when home manufactured, by supply of dry loam, plaster, &c., with frequent overhauling."

To Save Rennets.

Keep the calf from the cow about twelve hours before killing. There will then be but little curd, and what there is, take out carefully and throw away. Do not wash the inside of the rennets, but salt well, and stretch on a crooked stick, and hang up to dry in a moderately cool place. Rennets a year old are generally believed to make milder cheese than those of less age. To prepare for use, put one to a gallon of water, about milk warm, add a little salt, soak about ten days, rubbing it well a number of times while soaking to get out the strength, then take out, salt and dry again for future use. Strain the liquor into a jar, put in a little more salt than will dissolve. Tie up in a bag, about half an ounce each of cloves, cinnamon and sage, also a lemon cut in slices, and drop into the liquor. Keep in a cool place, and stir each time before dipping out. Put enough rennet into the milk to have the curd ready to cut up in thirty minutes after the milk is set.—*Ag. Rev.*

Canker Worm Preventives.

In answer to inquiries in reference to the success of preventives of the ravages of the canker worm, *The Massachusetts Plowman* says:—"There is some difference in the result of experiments with the various forms of tree protectors. Our impression is that for the most part they have failed this year to prevent the ascent of the insect. We know many sections where they have been used, but we do not think any great degree of satisfaction has been derived from them. A friend of ours tried two or three one above another on the same trees and tarred above them. More or less canker worms were caught in the tar. We are sorry to announce this result, for we hoped a good deal from these protectors, and in some instances the failures may have resulted from a neglect to apply them early enough in the fall, that is, till after the insects began to run up. The strip of sheep-skin, with the wool on, as we suggested some months ago, has been effectual as anything. There are also one or two other methods that we shall speak of in due time, which we have some confidence in."

PROSPECTS OF THE HOP CROP.

MESSRS EDS.—After writing you last month, I continued my inspection of the hop gardens through Chenango, Otsego, Delaware and Schoharie counties. Previous to the second week in August, the vines had a healthy appearance, and the aphis had done little damage, although they had made their appearance in many gardens. The insects which prey upon the aphis seemed to be as numerous as they, and to destroy them as rapidly as they increased.

At this time, while the farmers were congratulating themselves that the terrible ordeal of lice was spared them, and that surely "the crops will weather the weather," it was discovered that all through Otsego county, the hops were hanging longer than usual in the bur, and upon a close examination some of the burs were found to be blighted, or were failing to develop into perfect hops; and some of the leaves without any apparent cause, were withering and being dried up by the sun. I notice that the complaint is made entirely in the tracks of one or two severe hail storms which passed through Otsego county, into Delaware county, and which entirely destroyed many gardens in the towns of Laurens and New Lisbon, Otsego county where the hail was most severe. It is probable that this blight wherever it has appeared, may be attributed to hail.

All the gardens I have seen during the past week have a less promising appearance than they had a week since. A few days more of vigorous growth, however, will do much towards brightening the prospects for a crop in these worst looking districts, though many of them cannot rally sufficiently to produce more than a moderate crop. The prospects are on the whole favorable; though the present crop will be an uncven one, in most districts there is every indication of a fair yield.

The present is a very critical season for the crop, and the picking is the point to be considered. Little need be said of the picking under the old system of long poles, as there is no avoiding the necessity of cutting off the vine, in order to raise and carry the pole to the box for the hops to be picked; however, a device has been patented by North & Cummings, of Middlefield, Otsego county, N. Y., which by charring five or six inches at the ends, after cutting the vines, by means of a furnace for that purpose, effectually prevents the flow of sap from the root, and should be used by all who cut the vines at picking; but to those who are so fortunate as to have their hops trained on short stakes and twine, I would recommend by all means not to cut the vine at all, not even the arms, but to use baskets or light boxes to pick in, and move them along under the vines as needed. The vines can be brought down to the necessary hight for the pickers, by slipping the twine off the top of the stake. Experience which is the best of teachers, forces us to believe that this is the only true way to pick hops without detriment to the best interests of the plant itself.

F. W. COLLINS.

How different would our country appear if good farming was the rule instead of the exception.

NOTES FROM CANADA.

MESSRS EDS.—The weather during the last half of July proved fine and warm, enabling the hay crop and most of the fall wheat to be secured in good order. Rain came on the first of August, lasting till the fourth. Since then, the weather has been cool and variable, a heavy shower coming on about every third day, and as I write it is raining steadily. Much of the barley crop it is feared will be badly injured; the crop being a heavy one, was a good deal lodged, and takes time to dry after being cut. Spring wheat is a heavy crop, but late, and ripening slowly, showing signs of being badly rusted. New fall wheat is coming into market; the quality, however, is decidedly inferior, and prices very low, rust affected it considerably. Roots of all kinds and corn are looking well, and the pastures are in fine condition to carry stock through till winter in first rate order.

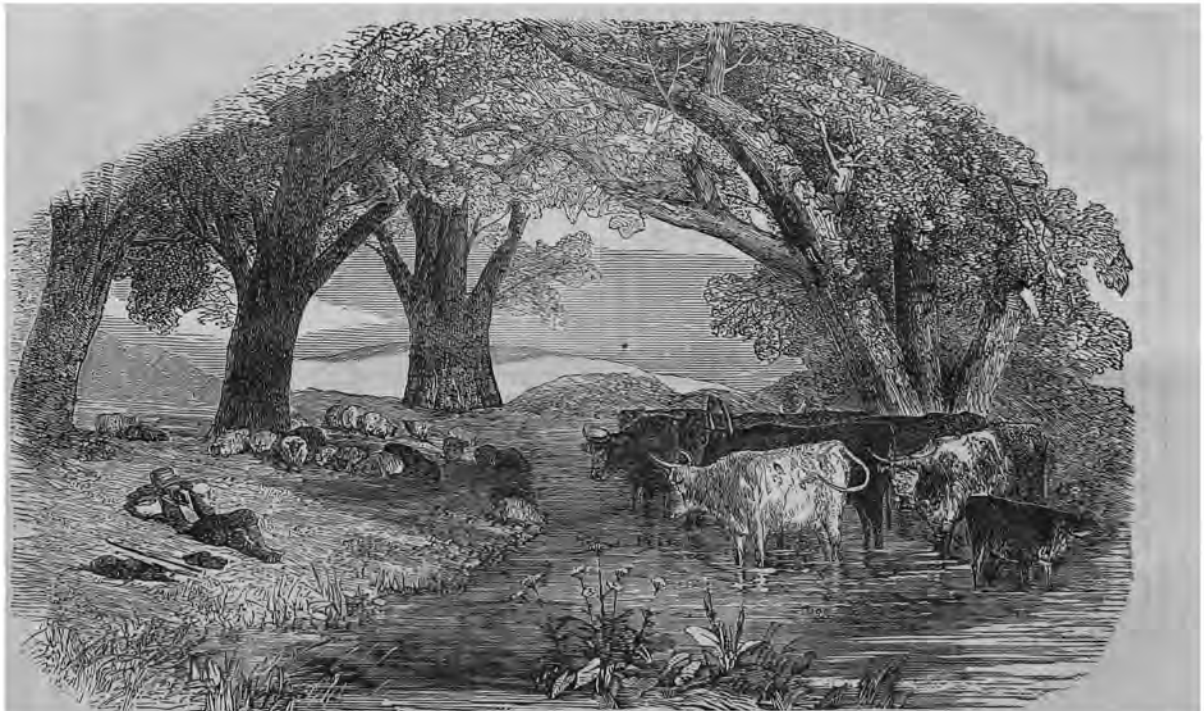
So far, I have heard less grumbling than usual among the farmers, but the present unfavorable weather will tell materially against the spring grain crops which have become our main dependence, since the advent of the midge has made fall wheat a precarious crop. *Midge proof wheat* has been tried in many places in Canada with great success, so far as keeping out the little yellow fly is concerned; but I fear much of it is badly rusted. I would advise all who can obtain it, to sow no other this fall; at the same time it is well to make sure of getting the genuine article, as no doubt many seed dealers will take advantage of the great demand to make large profits by mixing it with other kinds, or even selling old sorts for *midge proof*, a cheat which can only be detected by those who have seen and handled the genuine article.

I see my notes in the August number of THE FARMER has been copied into a local paper here, and some interested party has undertaken to pitch into me about the so called "wine plant" in a long article, but as *somebody* has plants or wine to sell, I can appreciate his getting them advertised for nothing, and have no objection to any one making or drinking "rhubarb wine," but want to see things called by their right names, and guard the public against being humbugged into believing that the "Myatt wine plant" is anything else than the common garden rhubarb under a new name. A variety originally came from England, under the name of "Myatt's Victoria Rhubarb;" and being very juicy, and of a little better flavor than the old sorts, has been taken hold of, and propagated by some speculator who changed the name to "Myatt's wine plant." Any nurseryman could furnish plants at half the price they are being sold at, as wine plants, to those who wish to go into the business of making "rhubarb wine."

MAC.

SHADE.

How refreshing is the picture on the next page, where the cattle switch their tails and stand with their feet in the running brook. There our friend also takes his ease, grateful for the quiet rest which he there enjoys, free from the turmoil of a busy city. Let the world move on, the farmer under the green trees can rest mind and body in quiet and undisturbed repose.



SHADE.

Horticultural.

MEETING OF THE AMERICAN POMOLOGICAL SOCIETY.

THE meeting of the American Pomological Society which has been published to be held at St. Louis, on the 4th of September, has been postponed for one year. The following are the reasons given in a circular, signed by Marshall P. Wilder, President, and James Vick, Secretary:

"Whereas, The American Pomological Society was ordered to be convened at St. Louis, Mo., on the fourth day of September next, for the purpose of holding its Eleventh Session; and,

"Whereas, the existence of Cholera in several of the cities of the United States has become manifest, thereby creating more than usual precaution in regard to visiting places distant from home:

"Therefore, in consideration of this fact, and also of the fact that there is a small crop of fruit in many parts of our country, the undersigned, by and with the advice of the Executive Committee and other leading Pomologists, does hereby postpone and defer the meeting of said society to the year A. D. 1867, when due notice will be given for its assembling, in the aforesaid city of St Louis."

THE GARDEN.

THE gardener has had, upon the whole, a pretty favorable summer in Western New York. The drouth of July, was short, although very severe, while it lasted—the scorching sun, and drying winds, converting the moisture near the surface of the soil into vapor very rapidly. We are of the opinion that vegetation, during dry weather must receive most of its moisture from the atmosphere, through its leaves and stems. We dug post holes the latter part of July, in clover, and found no signs of moisture to the depth of 2 1-2 feet—yet the clover was growing.

A soaking rain on the 3rd and 4th of August relieved the parched and withering vegetation, and insured the corn and potato crops. Two years ago we had a very dry June and July, and a wet August. The potato crop was large. Last year July and August were dry, and although September was tolerably moist, potatoes were light.

July was an excellent time to kill weeds. With such a drying atmosphere, weeds would not retain their vitality many hours after their connection with the earth was severed. Let those which the rains of August have brought forward, be destroyed, and they will be scarce another year. The directions for garden labor, in September, are few, and simple.

Beans—should be pulled as soon as ripe, thoroughly cured, and either shelled or threshed immediately. Where there is but a small quantity, it is a good way to whip them off on the inside of a barrel. Limas will continue to bear until arrested by a frost, when the green ones should be picked and used.

Cabbage and Cauliflower.—Among those planted for winter use, there will be some more forward than the rest, which will mature, and should be used; otherwise they will be liable to crack open.

Celery—Will want earthing up about once in two weeks.

Cucumbers—Can be cut for pickles until destroyed by frost.

Melons.—If frost is feared, cover larger ones with straw or blankets.

Onions.—Potato onions may be set until the 20th of the month. Four to six inches, in rows 18 inches apart, is the proper distance.

Spinach—May be sown until the middle, for early greens. The prickly-seeded is the variety to sow for winter.

Squashes.—Those who have been so fortunate as to save any from the bugs, should cut them before severe frost; expose them to the sun until dry, and then store them in a dry, cool place.

Turnips—Should be hoed, and thinned, whether in rows or broadcast.

SMALL FRUITS.

Raspberry and *blackberry* plantations should be cleaned out, the old canes cut out, all new ones, save four or five of the largest, removed, and those that are left, cut back.

Strawberries—May be set earlier in the month, with a fair prospect of becoming pretty well rooted before winter. Those transplanted in the spring, and last month, should be cleaned. If any one wishes to carry strawberry culture to the highest perfection—let him stop every runner after it has set one plant, and in the spring transplant that one plant into a new bed, well prepared. Such a course will improve the strawberry.

Grapes—Will begin to ripen this month. Let them hang upon the vine until fully ripe. The flavor of no fruit is so much improved by hanging until fully ripe as the grape.

HOP INTELLIGENCE.

The South Eastern Gazette, (Eng.,) says: "good and fine hops are in improved request, at full prices, but inferior produce has met a slow sale at barely late rates. The accounts from the plantations show an indication of a fair average yield. At Maidstone a slight sprinkling of insects had appeared, also at East Farleigh. At Loose the prospect was better than it had been since 1859. At East Peckham it was all that could be desired. At Rochester the plantations looked promising, though the fly was on the increase, and there was an appearance of honey-dew. At Canterbury, there was a continued improvement noticed. The backward vine had grown rapidly, and in the more forward yards there was a capital show of bur. There was a total absence of blight. The American system was in operation in that neighborhood, and in the opinion of practical men, was far superior to the old. At Faversham, blight had made its appearance. At Herne, a fair show for picking. The vermin were decreasing in Sussex; still the crop would be an uneven one. Hops were improving at Worcester."

THE TULIPS.

The summer is almost past—the beautiful autumn time will soon be here, and there is no part of the American season so really delightful as the autumn months; none so favorable for planting, grading, road making and general garden work. Our springs are short, uncertain, and almost always unpleasant. Nothing that can be done in the fall to forward spring work should be neglected, and with proper forethought very much can be accomplished. There seems to be a general disposition to leave as much as possible until the spring, instead of leaving as little as possible. Hundreds of persons every spring order from nurserymen and seedsmen, tulips, hyacinth, and crocuses—just about the time they are in flower, and when it would be the greatest folly to remove them. At the proper time they were neglected—perhaps forgotten, or if remembered, the work deferred until spring.

All the hardy bulbs should be planted in the autumn. This is the only proper season, and as the time is nearly at hand, a word reminding our readers of the fact, will not be unprofitable we trust to the readers of THE FARMER.

Although there are many Bulbs of great beauty, yet if confined to one class, we should certainly select the Tulip as the king of the bulbous tribe. They are are so perfectly hardy, so easy of culture, so gorgeous in coloring, so varied in size, form, &c., so well timed in their season of flowering—that we know of nothing that would compensate for their loss. It is no wonder, then, that the Tulip has been a favorite with the lovers of flowers for more than a century; while at certain times the rage for the Tulip has amounted to a general and ridiculous mania. Nothing in the floral world we have ever known, can exceed the beauty and brilliancy of a good bed of Tulips. Those who have only seen a few common, poor, straggling specimens, may not readily believe this; but it is nevertheless true.

Then the Tulips are so easily cared for. Obtain your bulbs, which can be had at quite reasonable prices, in October or November. Plant them in any good mellow soil, about three inches deep. Before winter cover the bed with straw, leaves, or manure, as a protection from winter frosts, and the work is done. Early in the spring the leaves will begin to appear, and in May the flowers. After flowering, the bulbs can remain in the ground, or be taken up and put away in boxes or drawers until the next October.

The earliest of all the Tulips is the DUC VAN THOL. They often flower here early in April, with the Crocuses, and many of the varieties are exceedingly brilliant. The flowers are borne on short stems, only five or six inches in height. There are several single varieties—yellow, white, scarlet, red, gold, striped, &c., and one double—red.

Following the DUC VAN THOL, we have next the TOURNESOLS, containing only two varieties—the *orange*

and *red*, and *yellow*; both double, and magnificent flowers. Following the *Tournesœs*, and in fact some varieties flowering at the same time, we have a large and most brilliant class of EARLY SINGLE TULIPS, and this perhaps the most useful of all. They are of all colors, and flowering before the sun becomes hot, continue in bloom a long season. They can always be depended upon for a brilliant and enduring bed. It is also a very extensive class, some of the catalogues containing a list of fifty or more varieties.

The DOUBLE TULIPS have been much improved of late years, and are now of fine form, and as large as Peonies. They are of all colors—yellow, the different shades of red, striped, &c. They should have a place in every collection. Every one will be pleased with them. We give an engraving of a good double flower.

The LATE TULIPS are taller than the earlier varieties with tough, wiry flower stems, some eighteen inches in hight. Mostly beautifully striped, and with large, well-formed cups.

The PARROTS are a brilliant class, petals long, loose and ragged, and hence not much esteemed by florists. Each flower generally has three colors, as crimson, yellow and green, with fine fringed edges. Nothing is more gay than a bed of the Parrot Tulips.

LIST OF VARIETIES OF PEARS FOR FAMILY USE.

SELECTED FROM LISTS RECOMMENDED FOR GENERAL CULTIVATION BY THE NATIONAL POMOLOGICAL SOCIETY AND OTHER HORTICULTURAL AND FRUIT GROWERS ASSOCIATIONS.

WRITTEN FOR THE AMERICAN FARMER, BY "A. P."

I SHALL recommend only such established varieties as are obtainable at all good nurseries of any considerable extent, and include none but those that have been sufficiently tested to warrant their selection, leaving all new and untried sorts, no matter how promising or rare they may be, to amateurs, nurserymen and experimenters. Farmers and fruit gardeners should always plant very sparingly, if at all, of any new and untried varieties of fruit trees, however strong the temptation. Still, whenever a new variety has been partially tested for a few years in different localities and by competent growers, and every thing results favorably, then it is well that farmers and fruit growers obtain a tree or two for the purpose of testing its adaptability to their soil and location, before planting it largely, and thereby avoid the risk of failure on a large scale. By growing and fruiting a variety for a few years, they may then decide with less risk, and perhaps avoid an investment that would otherwise prove unremunerative, unsatisfactory and embarassing.

SUMMER VARIETIES.

Madeleine, Rostcizer, Doyenn D'ete &c., Tyson, Beurre Giffard, Manning's Elizabeth.

AUTUMN VARIETIES.

Howell, Duchesse d' Angouleme, Bartlett, Louise Bonne de Jersey, Beurre d'Anjou, Seckel, Buffum, Sheldon, Doyenne Boussock, Beurre Diel.

WINTER VARIETIES.

Dana's Hovey, Lawrence, Winter Nellis, Prince's St. Jermain.

Some parties have objected to the selection of Dana's Hovey by the committee of the American Institute on the Greeley prizes, on the ground that it had not been sufficiently tested in different localities to warrant their placing it on their list for general cultivation. But as five out of six members comprising the committee had fruited it themselves and found it unobjectionable, and in their opinion a great acquisition to our list of winter varieties after due deliberation they felt justified in placing it on the list, and I trust they will never have cause to reverse their decision.

I would recommend Dana's Hovey and Lawrence as the two most profitable varieties for fruit growers to cultivate for market. Some persons recently objected to Dana's Hovey on account of its size, alleging that when the trees become plenty, and it receives only ordinary care and culture (which means no cultivation at all) it will then be no larger than the Seckel, and consequently worthless. I would say in reply to all such advisers, and all cultivators, that unless they intend to and are positive they can give fruit trees the best of care and culture, they had better not plant, for it certainly will not pay to plant fruit trees and neglect their culture. A man who has the means and neglects the culture of his trees, does not deserve any fruit. And as the size of Dana's Hovey and the Seckel, I would suggest that when the quality and flavor of the Hovey is equal to those I have tasted, they will always command a high price in the New York market, however small they are; and the same would apply to the Seckel, if it could be brought to market in good condition at the same time with the Hovey. Quality rules especially with such excellent varieties as the Seckel and Hovey. We trust that no one will deny the fact that the Lawrence is *par excellence* the pear of its season. It has no rival. Next to these for market, I would name Beurre Diel, Beurre Clairgeau, and Seckel. For amateurs, and those having abundant room and means for thorough culture, I would add the following well tested and valuable varieties to select from. But when I name these as additional, I object decidedly, to substituting any of these for any on the list before named. Those are all indispensable, and no collection will be complete without all of them:—Beurre Bosc, Beurre Superfin, Desmonnes, Beurre Hardy, Steven's Genesee, Clairgeau, Urbaniste, Langeller, Windsor Belle, Swan's Orange, Queen of August, Belle Luerative, Jones Seedling, Osband's Summer, Paradise d'Automne, Brandywine, Easter Beurre.

KEEPING ROSES IN BLOOM.—It is said roses may be kept almost continually in bloom by the following treatment:—As soon as the flowers have opened and bloomed one day, the decaying flower should be cut away, cutting back to a good strong bud from which will come a new stem and flowers. It would be but little trouble to make the experiment.

KEEP melons and cucumbers clean while growing and fruiting.

PENNSYLVANIA FRUIT GROWERS' SOCIETY.

THE summer meeting of this society, (formerly Eastern Pennsylvania Fruit-Growers,) was held at Pittsburgh on the 13th and 14th of July.

Friends were there from New York, New Jersey, Ohio, Indiana, Illinois, Missouri, and Maryland, as well as from the various districts of Pennsylvania. From conversations with these gentlemen we learned that except in New Jersey, fruits crops have been almost a total failure this year. Dr. Warder said the scarcity at Cincinnati was such that Strawberries that usually brought from 3 to 5 cents per quart, (pretty low if reported right,) brought this year from 30 to 50 cents. The *hardy* Raspberries, as well as the "other" kinds, had been killed by the winter. The Grape crop was the only one promising much.

Dr. Massey, of Maryland, said there would be about one-third of a crop of Peaches. Pears and Apples were better.

E. Satterthwait, of Montgomery County, gave a discouraging account of all his fruit crops.

Parker Earle, of Cobden, Illinois, referred to Dr. Hull's orchard, who grows Peaches and plums on alternate trees. The curculio has a preference for the plum. By perseverance in the jarring process, tolerable and profitable crops were obtained regularly.

J. M. Jordan, of St. Louis, spoke favorably of the Grape crop there, especially Concord. Strawberries and Cherries nearly failures.

An interesting discussion on the merits of underdraining, in connection with profitable fruit-growing, took place between A. W. Harrison, J. J. Thomas, and others, in favor of extensive underdraining, and Charles Harmer against its use in any but swampy places.

The main point of Mr. Harmer was, that where crops were as "nearly perfection as they could be," underdraining, though perhaps making things a little better, would not be enough so to make it a profitable investment.

The main point of the opposition was that the "little better" of Mr. Harmer was really much better, and "that underdraining paid" in any case.

No one could, of course, think of stopping at Pittsburgh without visiting the world-renowned Knox Fruit farm. Every one went there.

We should suppose those who saw this celebrated place this season for the first time must have been considerably disappointed. The impression was so prevalent that Mr. Knox was especially favored by nature with a soil, a climate, a sulphurous and smoky atmosphere, and other things fancied to be the *sine qua non* of fruit growing, that very little credit has been given him by his contemporaries for "virtue" in his system of management. The present season has shown his situation to be as vulnerable as any other one.

The Knox farm, of 1866, was no more like the Knox farm, as we saw it in 1865, than a monkey is like a man. Indeed, it would be easier for a "progressive development" savan to show the relations of the monkey to the man, than it would be for us to trace the connection between the appearance of things this season here and the same things last, if we had not been there, and had not we seen for ourselves.

We were both sorry and glad to find things in this condition,—sorry for the sake of the Pittsburgh Commissioner of Internal Revenue; and, for the matter of that, for Knox's own sake, for he is a pretty good sort of a fellow, while his example has been of incalculable value to fruit-growing all over the Union,—and yet glad because it shows that fruit-growing is just as likely to be successful anywhere as it is at Pittsburgh,—all locations being evidently liable to occasional mishaps, and none being especially favored as a paradise for the purpose.

Another thing interested us at Knox's. Last year the Jucunda Strawberry came in comparison with several other varieties. The merits of each had to be carefully weighed, and the balance deliberately thrown in favor of Jucunda. This year "comparisons were odious;" at least they should be to the Jucunda, had it any power in the matter, for the others were not even in pomological language, "good," while bad as all other things were, Jucunda was still a very pretty sight to see. Had it not been for Jucunda this year, we fancy the Knox Strawberry treasury would have been bankrupt.

So with Grapes. The Concord was doing beautifully,

"O'er all the ills of life victorious;"

while if there be any good meaning to the classical *Stat Magni Nominis umbra*, it was well illustrated by the miserable looking Delaware's, Iona's, Adirondac, &c., each of which truly "stood a shadow of a great name."

It is much in the favor of the Jucunda Strawberry and Concord Grape, that they should do so well here, when others so nearly failed.

Mr. Knox seems to be largely in the Currant line—acres of these were looking remarkably well, and will pay him handsomely for losses in the failures of other crops: although the extra prices for short supply will perhaps make up somewhat. The best pick of Jucundas brought 18 per quart during our stay in Pittsburgh, against 75, as we saw them last year.—*The Gardener's Monthly.*

BUDDING.—This is the season for budding. Many fruits are propagated by budding, which may now be done, when the bark parts freely from the wood. All cultivators of the garden should acquire this simple and most useful art. Save stones of all stone fruit and put them in the ground at once, or preserve them in moist earth.

PEACHES—may be planted the usual way of growing, 20 feet apart. If shortened in annually, as they should be, 12 feet. Grapes, on a trellis 8 feet high, 25 feet apart. Gooscherries and currants, 4 to 5 feet, and raspberries, 3 to 4 feet.

TO CURE POISON FROM IVY.—Rub the part poisoned with sweet oil. A small portion rubbed on the skin before going among the ivy will prevent taking poison.

Ladies' Department.

POLITENESS.

However wealthy, beautiful, intelligent, or well dressed a woman may be—however stylish her carriage equipage, elegant her house and grounds, and well managed her affairs—if she in her daily contact with her fellow creatures, be they servant, friend, or relation, habitually wound their feelings, by her reckless conversation, whether intentional or otherwise, she cannot be considered a lady.

But aside from this unmistakable evidence of a truly unladylike character, there are often little *acts* performed which indicate impoliteness, but which are unwittingly done by those who otherwise would be entitled to be considered as nature's true gentlewoman. We propose to mention a few things which have come under our own immediate observation, and which appear to us to be impolite. For instance, if a neighbor lend you any article of furniture or household utensil, capable of receiving a high polish, but which at the time of lending to you was rather dull, it would be manifestly rude in you to give it a high degree of lustre before sending home. Is not the lack of courtesy evident? Can it not bear the construction that you assume to teach your neighbor that you understand better how to clean and adorn than she? May it not seem that you think her too careless in such matters. It certainly may, and yet the thought may be as far from you, as pole from pole.

It is always a sign of a lack of good breeding where a lady makes her dress, your dress, or the conduct of her servants the basis of conversation, and nothing so reprehensible as the habit—or even the first occasion of entering a neighbor's house, when the family are absent and holding conversation with the servants, even when no improper information is obtained.

It is rude to urge another too pressingly to visit you, to stay to tea, &c., and to insist upon a reason why they cannot do "so and so." They may have reasons which they do not wish to tell any one, and are by your entreaty compelled to give a false statement.

But we have met with persons who on all ordinary occasions appeared polite and agreeable, making and receiving calls without showing any unladylike disposition, but who, when allowing themselves to become at all excited, talked and acted in a manner far from courteous.

The following conversation which actually occurred, will give you an idea of this. One of the young ladies of a family residing not far from us, and who are really excellent people aside from a peculiar obtuseness in regard to propriety on occasions—came hurriedly one morning not long since to our back door and inquired for "Mrs. Burns."

"There's no Mrs. Burns here," said our intelligent Bridget.

"Yes there is: she is your washerwoman."

"We have no washerwoman. I do the washing."

"Well, Mrs. Burns is here, and I want to see her."

"I will call the mistress," said Bridget. So we came.

"Good morning, Miss. F.—won't you come in?"

"No, I can't stay; I want to see Mrs. Burns."

"Mrs. Burns! I know no one of that name."

"Why, yes you do, she washes here."

"I have no washerwoman. I have a girl, and she does my washing."

"Why, yes you do! She told me that she had washed for you, and was going to do so every week till you get a girl."

"Why, I have a girl now, and have had her for some time."

Bridget all this time stood in the kitchen observing and to be observed.

"Here is my girl—there must be some mistake."

"Oh, no mistake at all! I have known her for years and she never told me a lie, and besides I saw her here."

This was too much; we burst out laughing, overcome with the ludicrousness of the contradictions. Our earnestness and good nature seemed to have its effect, for turning to leave, she said, "Well, perhaps she made a mistake in the name—but I certainly understood her to say Mrs. ——, and I thought I saw her hanging out the clothes last Monday. This was all the apology deemed necessary, and she nods to us as we meet on the street, and probably has forgotten that she ever came on the washerwoman errand.

There are many incidents and conversations which we have seen and heard, and which might add interest to this article, but our space is limited. The subject needs but to be introduced. Our intelligent lady readers can, by careful examination of their past conduct and a little observation of future experience, become better acquainted with politeness, and at the same time be enabled to lend their influence to make the world at large happier and better.

DOMESTIC RECEIPTS.

PICKLES—*Mangoes.*—Mango pickle is made by stuffing small young and quite green musk melons of smooth skin, with any kind of vegetables that grow in your garden and are fit for making pickle, such as small, round onions, nasturtions, raaish pods, pieces of cauliflower, bits of carrot and horse radish, small cucumbers, &c., rejecting beets, which would discolor the whole. Proceed as follows: cut from the melons—large cucumbers will do just as well, and may be used with the melons if desired—a small piece large enough to admit the finger or end of a spoon for the purpose of cleaning out the pulp and seed. After doing so carefully, return each piece to its own melon, and lay on one side till all are done, treating the large cucumbers in the same way. At the same time prepare all the ingredients, skinning the onions, &c. Pack in a crock, and pour over them scalding water and salt, and allow them to remain four or five days. Do not make the brine too strong.

When they are ready to pickle in vinegar, take them

from the brine, and let them drain from four to six hours. Then take each melon or large cucumber and stuff with two or three onions, a small piece of cauliflower, radish pods, a small cucumber, tomato, &c., allowing a teaspoonfull of white mustard seed to each.

With a darning needle and cotton sew on each lid firm enough to hold it in its place. When all are done, pack in a stone crock, filling up the spaces on the sides of the melons with whatever part of the ingredients you may have left, thus economizing in the use of the vinegar. Boil in a porcelain or brass kettle sufficient vinegar to cover them well, with the addition of a piece of alum, a few red peppers, green ginger, &c., rejecting cinnamon and cloves, which should only be used in making sweet pickles. Pour boiling hot over the pickle, cover and set aside. They will be ready to use in a few days. The mustard seed may be procured at the druggist—costs about three shillings a pound, is called white, but is really yellow—a six gallon crock well packed with vegetables will require about one gallon of vinegar to cover them well. A half pound to three-quarters of a pound of mustard seed, a quarter of an ounce of mace, and three or four red peppers will be sufficient spice for the whole. Allow for this quantity at least half an ounce of alum.

Higdom.—This pickle is made of onions, tomatoes, carrots, celery, cauliflower, and any kind of vegetables chopped up fine, allowed to stand a while in a little salt, set to drain, afterwards pouring over it hot *spiced vinegar.*

Tomatoes and Onions.—Green tomatoes sliced, onions ditto, salted and drained; pour on hot spiced vinegar.

To Dry Parsley.—Gather and lay each stem separately on a paper or pan in a good hot oven. Do not close the door. Stay with it, and do not let it blacken. It will dry almost immediately, and may be crushed from the stem and bottled ready for use. If properly done will be as green, if not greener than when gathered.

ONION PICKLE.—October is the proper month for making this pickle. The onions should be white and round, and none used larger than a hickory nut. If the roots and stems are cut off with a sharp knife, and the onions then covered with boiling water, allowed to stand for some time and drained, the operation of peeling may be performed without affecting the eyes. After peeling, throw them into hot salt and water, and allow them to stand for one week in a cool place. Afterwards strain well and pour over them the best vinegar to be got, well spiced with peppers, mace and mustard seed. When white vinegar can be had, the pickle is much handsomer in appearance.

COMMON SENSE COFFEE.

WRITTEN FOR THE AMERICAN FARMER, BY "MADELINE."

ALL the coffee compositions that I have tasted yet,—and they are twenty, I think, have more the flavor of those three-thousand-years-old mummies, the dust of one of which I got in my mouth, by imprudently trying to peep down the old chap's throat, than they do like any christian coffee. And yet quite half our people who pretend to drink coffee, like the poison,—nasty stuff—because it is all bitter, and black, and thick, and tastes like nothing else on earth; so they say, "That's jolly good coffee!" Please permit me to tell what happened here in the coffee line. It won't take long, and is in itself instructive.

John, that's my bachelor, boarding-out brother—said one night:—

"Sis, the old lady and all our boarders up at our house, want to try your 'Common Sense Coffee.' Wish you'd let me have some to carry up."

"Yes, certainly;" and I was going to put up a package, but happening to catch C——'s eye with a queer quirk to it in passing, I took the hint, and had'nt got enough coffee fixed for Mrs. L.'s family. "Come down for it, to-morrow evening, John."

"All right, sis," and the following evening John came down and carried off a pound of *our* coffee.

Last evening John came down, and reported:—

"I like your 'Common Sense Coffee' better than any other coffee I ever drank—always did. But none of our folks up there like it. Can't drink it. Say it tastes so queer. They like the *real* essence—pure coffee."

"Yes, they get it, don't they? I know where your landlady buys her 'essence,' and who manufactures it, and what it is made of—damaged rye, burned black; damaged, sour New Orleans molasses, burned bitter. Mixed and muddled, and put into four ounce cans, and sold for pure essence of coffee, at 30 cents per can—costs *seven cents.*"

"Now, look here, John—I'll tell you, and you tell your coffee drinkers up there, that that coffee they can't drink, is the purest, highest priced *Java* coffee that can be had in this city. Not a particle of anything but pure coffee in it. We bought it green, roasted and ground it ourselves for the occasion. So you see your drinkers of 'pure coffee' are not the best judges of the material."

Our 'Common Sense Coffee' is made of one-third Rio coffee, at 28 cents per pound, and two-thirds Canada peas as we buy them 10 cents per quart. That makes us three pounds of coffee for 38 cents. We roast and grind them together, use the same quantity that we should of coffee alone; put the material in the coffee pot at night, pour in a pint of cold water, let it steep till morning, then fill up and heat, taking care to let it come just to a boil, and no more. Then off with it, pour out and drink, and there is very good coffee, and something besides. As the pea contains 93 per cent, of nutriment, and only 13 per cent has been roasted out, and our coffee is two-thirds peas, we have something more than 50 per cent of food in our cup of 'Common Sense Coffee.'

REMARKS.—This is an excellent *substitute*, but we have discarded all kinds of composition coffee. We have used almost all sorts of "quack stuff" on trial, but have come back to the original "Java." It is quite as cheap in the long run. Get pure, fresh roasted coffee, and see it ground—you then have the pleasure of a genuine cup of delicious coffee, and no "trash."—ED.

Miscellaneous.

THE ART OF VISITING.—Some people visit nearly all the time, and so waste their own lives and their friend's substance; some rarely visit at all, and so deny themselves and their neighbors one of the greatest pleasures of social existence. Some people make visits so short that they are not worth the trouble they cost; others stay so long that the visit becomes a "visitation" like a fever or a famine. As use is always essential to excellence in any art, only those who have a certain amount of practice know how to visit well, while those who visit too much, sin in another way, and become bad visitors from imprudence and carelessness. But we are writing the essay which we began with simple suggesting, and will only add, in conclusion, that all rules must vary more or less with the character of the visitor. As an old epigram says—

"What smiles and welcomes would I give,
Some friend to see each day I live;
And yet what treasures would I pay
If some would always stay away!"

BEAUTIFUL.—At a Sabbath school anniversary in London, two little girls presented themselves to receive the prize, one of whom recited one verse more than the other, both having learned several thousand verses of Scripture. The gentleman who presided inquired:

"And could you not have learned one verse more, and thus have kept up with Martha?"

"Yes, sir," the blushing child replied; "but I loved Martha and kept back on purpose."

"And was there any one of all the verses you have learned," again inquired the president, "that taught you this lesson?"

"There was sir," she answered, blushing still more deeply: "In honor preferring one another."

BE KIND TO YOUR MOTHER.—She guarded you when well, and watched over you when sick. She sat by you when fretful, and put cooling drinks to your lips, and spoke soothing words in your ears. She taught you to pray, and assisted you in learning to read. She bore with your faults, and was kind and patient with your childish ways. She loves you still, and works for you, and prays for you every day you live. No one is so kind or so patient with you as she. No one loves you so much. Are you kind to her? Do you love her? Do you always obey her?

FRENCHMAN: "Madame, you sharge ver mooch too big price for zat room." Landlady: "Oh, you know, we at the watering-places must make hay while the sun shines." Frenchman, (indignant): "Madame, you shall nevare make de hay of me. You must not zink zat because flesh is grass, zat you can make hay of me!"

WE should give as we receive, cheerfully, quickly, and without hesitation, for there is no grace in a benefit that sticks to the fingers.

LIFE.—Life is an enigma. We are here to-day—all activity and bustle, and to-morrow we are gone. We die, but the world moves on as when we were actors on the stage. As we drop away, others take our place and we are scarcely missed. Thus, since the creation; man breathes, moves, and dies. If there were not a solution to this enigma, beyond the confines of the grave, how dull, meagre and unsatisfying would be the few hours we pass on earth.

HAPPY HOME.—Hamilton says that six things are requisite to make home happy. Integrity must be the architect, and tidiness the upholsterer. It must be warmed by affection, and industry the ventilator, renewing the atmosphere, and bringing fresh salubrity day by day, while over all as a protecting canopy and glory, nothing will suffice except the blessing of God.

VALUE OF KNOWLEDGE.—Knowledge is the true alchemy that turns everything it touches into gold. It gives us dominion over nature, unlocks the storehouse of creation, and opens to us the treasures of the universe.

NOT MISSED.—If your sister, while engaged in a tender conversation with her sweetheart, requests you to bring her a glass of water from the adjoining room, you can start on your errand, but you need not return. You will not be missed.

"FIRST class in astronomy stand up. Where does the sun rise?" "Please sir, down in our meadow; seed it yesterday." "Hold your tongue, you dunce. Where does the sun rise?" "I know—in the east." "Right. "And why does it rise in the east, my boy?" "Because the 'east' makes everything rise." "Out, you booby, go to the back seat."

Two Irishmen were travelling to Portland, Me., when they stopped to examine a guide board. "Twelve miles to Portland," exclaimed one. "Six miles apace, jist," said the other. And they trudged on, apparently well gratified at their sudden proximity to the forest city.

AT Adrian, Mich., a lady saw an engine house with a steeple, and innocently asked a gentleman attendant, "What church is that?" The gentleman, after reading the sign, "Deluge No. 3," replied, "I guess it must be the Third Baptist!"

"PA didn't I hear you say the other day you wanted a cider press?" "Yes, daughter; where can I get one?" "Why, you try 'Zeke' Stokes; he hugged me the other evening at the party, an' I tell you, he made me grunt!"

Two men fired at an eagle at the same time, and killed him. An Irishman observed, "They might have saved their powder and shot, for the fall would have killed him."

APPREHENSION of ill the best pleasures will spoil.

Editor's Table.

To Our Patrons and Agents.

As we draw near the close of the volume, for the year 866, we cannot but feel grateful to our numerous agents in all sections of this vast country, for the liberal manner in which they have labored with us to extend the circulation of THE AMERICAN FARMER. Commencing the publication of this paper after the time when clubs were made up for 1866, and with every obstacle to overcome, which always meets a new paper, we had great faith we should succeed; and it will be gratifying to our host of readers to know that THE FARMER is rapidly increasing in circulation, and that it is gaining in public favor with every succeeding number. And for this we are chiefly indebted to our numerous correspondents who have so liberally contributed to its columns.

THE AMERICAN FARMER is the Practical Farmer's Own Paper. In its pages they can meet and discuss on friendly ground, drawing out the ideas, opinions and results of practical observation from experienced farmers and other writers, who have written for the agricultural press for a number of years. Therefore, to our intelligent correspondents and our voluntary agents, we are indebted for placing THE FARMER on a solid and enduring basis, and it is cheering to us to know, as we do from our numerous letters, that THE FARMER is giving general satisfaction. We shall spare no efforts or expense to make the future numbers still more interesting and profitable. Our list of correspondents is gradually increasing, which will make the paper still more valuable.

As the time is now approaching to form clubs, for 1867, we desire to call the attention of our friends to that fact, and hope they will still labor with us to further increase our list of subscribers for 1867.

With the new volume we shall have a fresh design for our heading, which we think will give general satisfaction; and with other arrangements which are in progress for better paper, and better illustrations, we hope to make the next volume, for 1867, still more worthy the liberal patronage THE FARMER has enjoyed during the present year.

At the agricultural fairs, which are soon to be held in every county and State, will be a good opportunity to interest those who do not take the paper, and to form clubs. Let all our friends and readers speak a good word for THE FARMER, when they meet their neighbors, and ask them to subscribe. It is the *cheapest* agricultural journal in America, and no farmer can well refuse so small a sum when asked to subscribe, at our club rates, for the Practical Farmer's Own Paper. Form clubs early, for 1867, and as they are sent in, we will enter the names on our books, and send to all new subscribers the remainder of this volume free. Now is the time to get up clubs, and with this number we issue *a supplement, containing our list of Premiums*, which are open to all. We desire to compensate our numerous agents in some way for their disinterested efforts, and hope they will do all they can to create a large circulation for the "Farmer's Paper" for 1867.

Inquiries and Answers.

Miss B. asks, "How can I get rid of lice on fowls?" Our method when troubled with these pests, has always been to give the hen house a thorough cleansing, then a good whitewashing, filling up all the cracks with lime, and afterwards sprinkling the floor and roosting polls with ashes or dirt. Get some corn meal, and boil it, mixing in with it when cold, some powdered sulphur, and feed to the fowls once or twice a week, and continue until all the lice have skedaddled. A little sulphur well rubbed into the feathers will be a great impetus to their departure. This plan has never failed to clear them out, and our fowls are seldom troubled with them.

MESSRS. EDS.:—I have eight peach trees on the north side of my house that never bear. Can some of your readers tell me what to do with them? They are thrifty to all appearance, and loaded every spring with blossoms, but which fail to mature. What is the cause, and is there any remedy?—*J. S.*

MESSRS. EDS.:—Will your correspondent "F. W. C." inform me where I can get a bushel of hop roots to plant out, and what the expense would be. If you will let me know, you will oblige. Yours, &c., G. A.

MESSRS. EDS.:—I take your paper and like it very much, and should like to have the following questions answered through your columns:—

1. Do bees smother in the winter, or freeze, as they do with me, with plenty of honey in the hive, and the hive put into a snug place? (*a*)

2. What will keep moths out of the hive, or kill them when in it? (*b*)

3. Would putting them in the cellar prevent smothering in the winter, and would it be injurious to the bees to be in the dark? (*c*)

4. What kind of clover makes the most honey for bees? (*d*)—*Young Farmer, Mills Co., Iowa.*

(*a*) Bees both smother and freeze to death. The greatest loss is caused by suffocation. Top ventilation is important in winter.

(*b*) We know of no way of keeping the moth out of the hives or destroying them when in. J. H. Graves, of this city, invented a moth detective bottom, and it is said to be the best remedy known.

(*c*) A dark dry cellar is good for wintering bees, but a thorough top ventilation is indispensable.

(*d*) White clover is our main dependence for honey. Very little is obtained from red.

THE LAMB FAMILY KNITTING MACHINE.—This valuable invention is fast gaining in public favor, and we are glad to learn that the demand is very great for this labor-saving machine. The Lamb machine is acknowledged by all competent judges to be superior to any other now manufactured. It has taken the highest premium at every State and County Fair where exhibited, and obtained the gold medal at the last fair of the American Institute, New York. It will do any kind of knitting desired, and is fast becoming an household necessity.

THE latest returns (July 21,) of the cattle plague give 207 cases for the week, and a total of 251,085 attacked.

Agricultural Exhibitions for 1866.

State Fairs.

California	Sacramento	Sept. 10–15
Canada West	Toronto	Sept. 24–27
Illinois	Chicago	Sept. 25–28
Indiana	Indianapolis	Oct. 1–6
Iowa	Burlington	Sept. 18, 21
Kentucky	Paris	Oct. 1–6
Kansas	Leavenworth	Oct. 9–12
Louisiana	New Orleans	Nov. 20
Minnesota	Rochester	Sept. 11–14
Michigan	Lansing	Sept. 12–14
Missouri	St. Louis	Oct. 2–6
National Horse Fair	Kalamazoo	Oct. 2–6
New England	Brattleboro	Sept. 4–7
New Hampshire	Manchester	Sept. 18–21
New York	Saratoga	Sept. 11–14
Ohio	Dayton	Sept. 25–29
Oregon	Salem	Oct. 17–20
Pennsylvania	Easton	Sept. 25–28
Wisconsin	Janesville	Sept. 25–28
Vermont	Brattleboro	Sept. 11–14

County Fairs.

NEW YORK.

Albany	Albany	Sept. 25–28
Cattarangus	Olean	Sept. 18–20
Chenango	Norwich	Sept. 18–20
Delaware	Bloomville	Sept. 25–27
Genesee	Batavia	Sept. 19–20
Jefferson	Waterloo	Sept. 18–20
Livingston	Geneseo	Sept. 26–27
Monroe	Rochester	Sept. 18–20
Niagara	Lockport	Sept. 19–21
Cortland		Sept. 19, 20
Putnam	Kermel	Sept. 13–14
Queens	Minneola	Sept. 27, 28
Rensselaer	Troy	Oct. 2, 4
Seneca	Waterloo	Oct. 2–4
Susquehanna Valley	Undilla	Sept. 26–28
St. Lawrence	Canton	Sept. 25–27
Tompkins	Trumansburg	Sept. 20–21
Washington	Salem	Sept. 19–21
Wayne	Palmyra	Sept. 27–29

MAINE.

Waldo	Belfast	Oct. 3–5
Franklin	Farmington	Oct. 3–5
Aroostook	Houlton	Sept. 26, 27

NEW HAMPSHIRE.

Merrimac River	Concord	Sept. 25–27

VERMONT.

Addison	Middlebury	Sept. 19–21
Caledonia	St. Johnsbury	Sept. 18–20
Chittenden	Burlington	Sept. 19–21
Rutland	Rutland	
Windham	Newfane	Oct. 3, 4

MASSACHUSETTS.

Barnstable	Barnstable	Oct. 9
Bristol	Tannton	Oct. 2
Berkshire	Pittsfield,	Oct. 2
Essex	Haverhill	Sept. 25
Franklin	Greenfield	Sept. 27
Housatonic	Great Barrington	Sept. 26
Hampshire, Franklin and Hampden, Northampton		Oct. 4
Hampshire	Amherst	Sept. 26
Hampden	Springfield	Oct. 2
Hampden East	Palmer	Oct. 9
Highland	Middlefield	Sept. 13
Hoosic Valley	North Adams	Sept. 16
Middlesex	Concord	Sept. 20
Middlesex South	Framingham	Sept. 18
Middlesex North	Lowell	Sept. 27
Martha's Vineyard	West Tisbury	Oct. 16
Nantucket	Nantucket	Sept. 25
Norfolk	Dedham	Sept. 27
Plymouth	Bridgewator	Sept. 27
Whately	Whately	Oct. 2
Worcester	Worcester	Sept. 20
Worcester West	Barre	Sept. 27
Worcester North	Fitchburg	Sept. 25
Worcester South	Sturbridge	Oct. 4
Worcester Southeast	Milford	Sept. 25

CONNECTICUT.

Pequabuck	Bristol	Oct. 10

PENNSYLVANIA

Bucks	Newtown	Sept. 25, 20
Chester	Westchester	Sept. 27, 26
Doylestown	Doylestown	Oct. 3, 9
Northampton	Nazareth	Oct. 25
Susquehanna	Montrose	Sept. 19, 20

OHIO.

Ashtabula	Jefferson	Sept. 5, 7
Ashland	Ashland	Oct. 2, 4
Clinton	Wilmington	Sept. 19–21
Columbiana	New Lisbon	Sept. 25–27
Champaign	Urbana	Sept. 26–28
Delaware	Delaware	Sept. 19–21
Erie	Sandusky	Sept. 18–21
Franklin	Columbus	Sept. 11–14
Garrettsville	(Portage Co.)	Oct. 3–5
Greene	Xenia	Sept. 13–15
Geanga	Burton	Sept. 25–27
Geauga, (free,)	Claridon	Sept. 18–20
Harrison	Cadiz	Oct. 3–5
Highland	Hillsboro	Oct. 3–5
Loraine	Elyria	Sept. 11–14
Licking	Newark	Oct. 3–5
Muskingum	Zanesville	Sept. 12–14
Portage	Ravenna	Sept. 19–21
Plymouth	(Richland Co.)	Sept. 25–27
Richfield	(Summit Co.)	Sept. 26–28
Seville	(Medina Co.)	Sept. 20–22
Summit	Akron	Oct. 2–5
Stark	Canton	Sept. 28–28
Twinsburg	Twinsburg	Sept. 4–6
Trumbull	Warren	Sept. 19–21
Warren	Lebanon	Sept. 5–7

KENTUCKY.

Bourbon	Paris	Sept. 3–6
Central Kentucky	Danville	Sept. —
Harrison	Cynthiana	Sept. 18–21
Nelson	Bardstown	Sept. 18–21
Warren	Bowling Green	Sept. 18–20

NEW JERSEY.

Monmouth	Freehold	Sept. 19–20
Morris	Morristown	Sept. 10–11

MICHIGAN.

Clinton	St. Johns	Sept. 27–28
Jackson	Jackson	Sept. 26–28
Washtenaw	Ann Arbor	Oct. 3–5

ILLINOIS.

Cass	Virginia	Sept. 4–6
DeKalb		Sept. 17–20
Jackson		Sept. 18–20
Macon	Decatur	Sept. 17–21
Ogle	Oregon	Sept. 18–20
Peoria	Peoria	Sept. 19–21
Stark	Toulon	Sept. 5–7

WISCONSIN.

Brown	Green Bay	Sept. 26–27
Lafayette	Darlington	Sept. 27–28
Polk	Osceola	Sept. 18–19
Horse Show	Milwaukee	Sept. 11–18
Sauk	Baraboo	Oct. 19–21

IOWA.

Cerro Gordo	Mason	Sept. 20–21
Central District	Des Moines	Sept. 11–18
Floyd	Charles City	Sept. 19–20
Page	Clarendon	Sept. 20–22
Scott	Davenport	Oct. 3–7

CANADA.

Provincial	Toronto	Sept. 24–27
South Waterloo	Preston	Oct. 3

Literary Notices, &c.

THE PHRENOLOGICAL JOURNAL for August—

Contains portraits of Benj. Franklin, Lewis Cass, C. F. Brydges, Brunell, Mrs. Parkhurst, &c., with articles on Responsibility; Sowing and Reaping; the Servant Question; Getting Married, Writing, the Philosophy of Phonography; How to Live; Air and Sunlight; Summer, and its Lessons; Over Eating; Head and Body; Man Monkeys; Insanity, and Religious Excitements; Physiognomy, Time, Tune, Veneration, Double Chins, Large Ears, &c. 20 cents, or $2 a year. Fowler & Wells, N. Y.

GET up a club for THE FARMER.

Notes on the Weather, from July 15th to August 15th.

When the last notes were given to July 15th, we were in the midst of the *heated epoch*, as it proved to be. For taking five days, ending with the 17th, the mean heat was 83.4; the hottest day, the 15th, 86.3°, and its noon, 93°; but the hottest noon, 95° on the 16th, and the day, 86.0° This is the hottest five days on the record of 30 years. The successive days at 90°, and above, never have exceeded four, and above 90° only on three days in succession. The hottest noon or 2 P. M., was 102°, in 1845; and the next hottest, 98°, but rarely above 95° or 96°. This was a very hot period, wide over the country, and more severe, and on more days at the South.

The mean heat of last half of July was 72.8°, and the general average, 71.0°; and the mean of the month was 74.3°, exceeding the general average, 70.7 by 3.60°. The hottest month in 30 years, was July, 1857, 74.8°, only half a degree higher than the present. The hottest half month was in June, 1858, 77.7°, last half.

The rain of the month only 1.36 inches; very small and getting dry. Harvest of wheat chiefly in the fourth week, and admirable weather for haying and harvesting. Crops exceed the anticipations, contrary to the predictions.

August came in dry, but in four days there fell 2.33 inches of water, and all nature smiled again. In the first half we had 3.80 inches from the rains, chiefly on the 3d and 4th, the 10th and 13th. The potato crop and the grass much improved by the rains.

This first half has been cold for August, the mean heat being 64.9°, and exceeded by the general average five degrees, that being 70.0° We have had this half month colder once in 30 years—1839, and then only one-tenth degree lower, 64.8°. The hottest noon, 76°, and hottest day 67.3°. On the 15th, the lower wind was from the northeast; clouds low and rain-like, the barometer above the average, and rising all day. When the lower clouds disappeared towards evening, the upper were moving from the west or northwest, as they were the day before, and doubtless had been all the time showing reason why the clouds were rainless.

The pleasant weather for the for tnight has advanced farming operations, while the fall harvest has become promising. With some diseases of the season, the health of this section is uncommonly good. Flowers and fruits of the season too abound. What a call for gratitude and praise.

Prize Essay Number.

In our next, we shall publish a lot of valuable essays, which we have received in response to our call in previous numbers, and which we think will be worth more to our readers, than a year's subscription. We shall have the number out early, so that all new subscribers for 1867 may at once receive their first number. All new subscribers for 1867 sent in this month will commence with the October number of this year. Let all our friends try and increase our list of subscribers.

Extracts from Letters.

"J. F. W." writes us from Green Co., Wis., under date of August 12th, as follows:—

Messrs Eds.—It has rained for two weeks past on an average of every third day, and yesterday, Saturday, commenced about 1 A. M., and rained almost incessantly until 7 P. M. Wheat is mostly cut, and in shock, and reports are that many shocks and bundles lying on the ground are sprouted 'right smart,' and the prospect is that much will be spoiled.

"The crop is full an average. Oats are very heavy and badly lodged. Corn in the first part of the season did not promise much, but for three weeks past has come on rapidly. Hay was a good crop and plenty; but the last of hay'ng was wet, and some was not saved good. Fruit prospects are very fair considering the State of Wisconsin, which will in time be a good fruit State, the opinion of some to the contrary notwithstanding. Buckwheat, not much sown in this vicinity. Markets lower:—Wheat, $1 to 1.25; corn, 45c; oats, 28c; hay, $6; wool, 40c to 50c; butter, 25c; eggs, 12c; beef, $4; hogs, $8. The abundance of rain for a few days past will give a start to grass for fall feed."

"J. W. P." writes us, August 13th, from Middleburgh, N. Y.—"Crops look well through the valley, and nearly all secured. Hops are backward, hanging in blow ten days longer than usual, and in many yards there is blight."

H. A. Pease writes us from West Virginia as follows:—"It is very dry here. The corn crop will be short. There was not half a crop of hay. Wheat better than a year ago. Fruit generally a failure. My tobacco crop will be light. I am the only one in this neighborhood that raises the weed."

From our Hammonton, New Jersey correspondent, we learn that "the strawberry crop was almost a failure, but the blackberry crop has been equal to last year in cash received. Several of our fruit growers have net $1,500 to $2,000, and that too, in a season dryer than ever before known. We are having a fine rain to-day, (Aug 13th,) and with one exception, the only rain that has soaked the ground since early in June. Yet with all this drouth, crops grow well and none have been injured by it."

THE MARKETS.

Rochester, Aug. 20, 1866.

FLOUR—White wheat, $14@$15.00. Red, $13.00@13.50.

GRAIN—White wheat, 240@250c. Red, 220@225c. Corn, 85c. @90c. Barley, 75@80c. Oats, 42c@50. Rye, 80@90c.

HOPS—50@70c.

WOOL—45@50c.

PROVISIONS—Lard, 22c. Butter, 28@30c. Eggs, 20c. Cheese, 15@19. Potatoes, 75c.

New York, Aug. 18.

FLOUR—Market for State and Western flour is 10 to 15 cents lower. Superfine State, $6.00@$8.00; Extra State, $7.50 @$9.10; choice State, $9.15@$10.25; Superfine Western, $6.00@$8.10; common to medium extra Western, 7.00@$ $9.00. Common to good shipping brands extra round hoop Ohio, $9.00@10.50. Rye flour, $6.85@$8.50.

GRAIN—Wheat—Chicago spring, 222c; New No. 1 Milwaukee 225; new amber State, 278@285. Rye active and firmer at 85@ 90c. Canada, 110c. Corn—86@81c for inferior, and 86@87½c for shipping mixed Western, 77½ for damaged, and 98c for white Western. Oats—43@47c for Chicago, 47@52c for Milwaukee, 54 @56c Iowa, 56c for Jersey, and 59c for State.

WOOL—Market dull and somewhat irregular, at 50@62½c for domestic fleece, 57c for tubbed, 34@36c for Texas, 33@37c for California.

HOPS—Market quiet at 15@55c for American and 55@75c for foreign.

PROVISIONS—$32.66@32.87 for new mess—closing at $32.62 cash; $30.25@30.75 for old mess; and $27.25@27.75 for prime. Cut meats—15@16¼c for shoulders, and 20@22c for hams. Lard, 18¾@21¼c. Butter, 26@33c for Ohio, and 30@43½c for State. Cheese, 6@19c for common to prime.

BUFFALO, Aug. 13.

FLOUR—No. 1 spring wheat at $10.50.

GRAIN—Wheat—Michigan at 230c. Corn—69¾@70c for No; 1,69c for No. 2, and 68¾c for Toledo. Oats—prime No. 1 Chicago at 39c. No. 1 Milwaukee Rye sold at 80. Green Bay held at 90c.

PROVISIONS—Pork, $54.50. Lard, 21c for city, and 21¾@22c for Western.

CHICAGO, Aug. 13.

GRAIN—New wheat, 185@195 for No. 1, and 185@184c for No. 2. Corn—56¾@57¼c for No. 1, 55¾@56¾c for No. 2. Oats dull at 21¾@22c for No. 1, and 22@23½c for No. 1.

PROVISIONS—Mess pork $34.

* The hop crop both in this country and England will be light, so that prices will probably rule higher than ever before. From private information from England, we learn that the hops are not looking well in that country, and will not yield half last year's crop. The season for picking will be late in this country as also in England and on the continent of Europe.—EDS.

ADVERTISEMENTS.

AUTUMN, 1866.

Rochester Commercial Nurseries,

ESTABLISHED 1830.

W. S. Little, (Late H. E. Hooker & Co.,) Proprietor.

A CARD.

Having sold all my interest in the Real Estate and Nursery Stock, known as the "ROCHESTER COMMERCIAL NURSERIES," to my late partner, WILLIAM S. LITTLE, Esq., I take this method of expressing the hope that the good will and favor which the public have so long shown towards these Nurseries, may now be extended to them under their present proprietor. With ample resources, undiminished by the war, and unimpaired by losses, he is prepared to fill large orders, and to fill them well.

His extensive grounds, conveniently located, and consisting of varied and excellent soils adapted to the growth of all varieties of Nursery Stock; his numerous bearing specimen trees; and his improved propagating houses, will be found well worth a visit from those wishing to purchase.

I hope and believe that the honorable position which these nurseries have held in the public estimation, will be long maintained in the hands of the present owner. H. E. HOOKER.

Rochester, N. Y., January 16, 1866.

☞ These nurseries now occupy nearly THREE HUNDRED ACRES of ground, all in a thorough state of cultivation. The office and HOME GROUNDS, (occupying 60 acres,) are situated on East Avenue, one of the finest avenues of the city of Rochester, in the immediate suburbs, and I cordially invite all our friends of these nurseries, and all those interested in horticulture, to visit the premises and inspect the growing stock.

W. S. LITTLE.

Extract from the new "Circular of Wholesale Prices" for Fall of 1866.

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Pine, Dwarf—PINUS MONTANA—Good, stocky young Plants of this handsome Evergreen, now rapidly coming into favor.

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CONTENTS OF THIS NUMBER.

THE AMERICAN FARMER.
A MONTHLY JOURNAL OF
AGRICULTURE AND HORTICULTURE.
ILLUSTRATED WITH NUMEROUS ENGRAVINGS OF
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THE American Farmer.

SUPPLEMENT—ROCHESTER, N. Y., OCTOBER 1, 1866.

CLUBS! CLUBS! FORM CLUBS!

We feel deeply grateful for the warm response which our offer to send the remainder, (or last three numbers,) of this year, has met at the hands of our friends and agents, who have added so largely during the last month, to our list of subscribers, and would respectfully ask all our readers to lend a helping hand to still further extend the circulation of THE AMERICAN FARMER. *Now*, is a good time for those who have not yet done so, to commence forming clubs for 1867; and we feel assured, from the numerous letters which we have already received, that our friends in all sections are determined to create a very large circulation for the paper for the year 1867. The circulation of THE FARMER depends entirely upon the efforts of our voluntary agents in its behalf. In order to reward them in some measure for their kindness, we publish a very liberal premium list on page 328, and hope our friends will avail themselves of some of these prizes.

With the new volume, we hope to make many improvements, which have been under consideration for some time. Neither labor nor expense shall be wanting on our part, to make the next volume far better than the present one, so far as the general appearance of the paper is concerned. We hope, therefore, that our subscribers will make THE AMERICAN FARMER widely known among their friends and neighbors, and form clubs early. Let all feel personally interested in creating a large circulation for the "Farmer's Own Paper," and we shall both be mutually benefited, and in addition feel still more our obligation to make the paper the best Agricultural Journal in America.

From Indiana.

Our Morgan Co. correspondent writes us:—"Since my last letter, we have had rain enough to make corn, and we therefore expect a large yield. Pumpkins look well; vines of all kinds appear to be bearing good fruit, but the melons ripen very slowly. Farmers here are preparing to sow wheat. I think I must tell you something about my cucumbers, or at least one I saved for seed. It weighs four pounds and a quarter. Its length is eleven inches, circumference seventeen inches. This is the largest cucumber I ever saw. We have a large yield."

OUR EASTERN LETTER—No. 5.

WRITTEN FOR THE AMERICAN FARMER, BY W. E. BRACKETT, BELFAST, MAINE.

THE weather during August, was what the farmers denominate, "catching," and rather bad for late haying, and the harvesting of the grain crops. This year we have had plenty of rain, and the ground is now full of water; whereas, in 1864 and '65 we experienced drouths, and farmers were suffering for water for stock and domestic uses, and threatened by fire in every direction. The first frost of the season was in sheltered localities, on the morning of the 25th. August was a very cool month, and the indications are that the autumn months, will give fine weather for farm work.

The crops are looking well. The grain crops are all harvested, and the yield is good. Our principal grain crops are oats and barley. We sow but little wheat, but I learn, those who cultivated it this year, are harvesting a good crop. Corn is a little late, but looking well. Potatoes are promising; no disease on them yet. The hay crop was something less than an average; though the old hay kept over, and the extended amount of fodder saved, will make up this deficiency in the forage. Fall feed is also very good, and thus, stock will not come to the barn so early as in previous years. The apple crop will be light. Of peas and beans, this State raises a great many bushels, more it is said, than the rest of the New England States. They are yielding well.

Stock.—All kinds of farm stock is in fair demand, at prices pretty well "up." Oxen range from $150 to $200; three year old steers, $125 to $150. New milch cows $45 to $75. Not much demand for stock sheep yet. Horses are plenty, and to be had at all prices, according to quality. There is much fine trotting stock in this State.

Markets.—The markets for farm produce are varying at this season, and prices changeable. Potatoes 45 to 50 cts.; apples, 62cts. for cooking, and $1.25 for eating; wool dull, averaging 50cts.; eggs in good demand at 26cts.; butter, 38cts. to 40cts.; blackberries, 15cts. a quart; cranberries, 10 cts.

Agricultural Exhibitions.—During the last of September, and the first of October is the season of the far-

ner's annual holidays, throughout New England. More than an avarage number of County Fairs will be held this year. Massachusetts advertises twenty-five; five of which are within one county. Maine will hold about twenty of all kinds. These county exhibitions have become an institution, and are an invaluable aid towards progress in agricultural pursuits.

Notes From Canada.

RAIN, rain! nothing but rain for the last month. It rained twenty days in August, and ten the first half of September. Much of the spring grain in the townships north of the Grand Trunk Railway yet remains in the field, and will be saved in a damaged condition; and much of the grain that is being now threshed out, is too damp to be marketable; old wheat bringing 25cts. to 30cts. per bushel more than new. The country is literally being eaten up by grasshoppers, which are destroying the grain, and even the root crops. I never saw them so numerous as they are the present season, and the wet weather seems to be favorable to their increase. No frost as yet.

Our Provincial Exhibition comes off at Toronto, September, 24th, to 28th, and promises to be well attended and well filled, should the weather turn favorable by that time, which is likely, as so long a continuance of wet must soon have an end. We hope to see many of our American friends present, and the steamers from Rochester and Lewiston to Toronto, will give them great facilities to come over, and bring stock and implements to the Exhibition. I think they will say, that our Exhibition will compare favorably with anything of the kind they can get up. All horse racing, gambling, &c., will be strictly prohibited. MAC.

"F. M." writes us from Oakland Co., Mich., that they have had rain there, every two days since the 12th of July.

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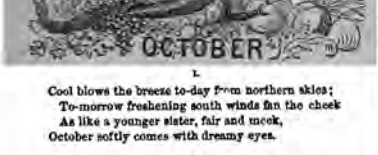
THE
American Farmer.

Entered according to Act of Congress, in the year 1866, by John Tuthill, in the Clerk's Office of the District Court of the United States, for the Northern District of New York.

Volume I. ROCHESTER, N, Y., OCTOBER, 1866. No. 10.



I.

Cool blows the breeze to-day from northern skies;
To-morrow freshening south winds fan the cheek
As like a younger sister, fair and meek,
October softly comes with dreamy eyes.

II

Her hands o'erflowing with the luscious spoil
Of furrowed field, and tree, and clinging vine,
Whose oozing life-blood pours in richest wine,
A cheering tribute to the laborer's toil.

III.

Along the meadow in the early dawn,
The silvery frost is glittering sheen;
While yet the moon, so late the reigning queen,
Fades slowly dim beneath the beams of morn.

IV.

The groves and woods are flecked and all aflame
With rich-hued beauties stained in every leaf;
Kissed by the frost their reigning all too brief,
Seems dying out in robe of crimson shame.

Belfast, Me. G. E. B.

WORK FOR THE MONTH.

October is the month of beauty, coming as it does, between the two extremes of summer and winter, and reminds us, as the days draw shorter, of the decline of another year. Time is passing, and soon the stormy winter's blast will be upon us. Are the barns, stables, sheds and styes, all in good repair? Is the wood shed well supplied with seasoned lumber for the good housewife, and is it conveniently near the back door, or better still, connected with the house? These are questions that cannot long be deferred. If not already attended to, delay not. There is a great deal to do this month—nothing should be put off; soon the keen northwest piercing winds will blow, and old Borealis put a stop on all out-door work. The harvest is passing, summer is gone, sober autumn will soon pass away, and winter, with its cold, chilling blasts, be upon us; nothing should be put off that can be done this month towards the comfort of the house, and for the proper shelter of the stock.

Buildings—should be thoroughly overhauled and repaired. Sheds should be built, if you have not room enough for all the stock in the barn, and you will be rewarded by seeing the dumb animals made comfortable.

Cattle—will do best kept up in the barn during the nights in this month. Commence early to protect stock from the cold weather. Let them be fed in the barn in preference to the yard or fields, and less food will be required, and none wasted.

Pigs—that are fattening, will thrive faster by having a variety of food. Let them have a change frequently. Feed a few roots, boiled potatoes, sour milk, corn, apples, cabbage—anything that will keep them eating. A little extra feed and care this month to the early spring pigs, will bring them forward rapidly, and they will be ready to kill by December or January.

Potatoes—that are still in the ground should be dug, and placed in the cellar, or in trenches which ought to be on a dry spot, well underdrained. Be careful to have them dry, and let them have good ventilation, if in heaps, until cold weather sets in. If in the cellar, they should be kept in the dark.

Corn for Seed.—If selected as we suggested last month, should be hung up in traces in a good, dry, cool place, where mice and rats cannot get at it.

Tools—that are done with, should now be well oiled and put away in a dry place ready for next season. Have "a place for everything, and everything in its place," and especially for tools and implements. They should not be left lying around to get rusty and worthless, but taken care of, and the expense of getting new ones next year saved. "A penny saved is a penny got."

Barn Yards—should be well supplied with straw, if you have plenty. It will absorb the liquid, which

would otherwise be lost. Your animals will appreciate the favor, and it will be a pleasure to spend some time there, and see that they are comfortable. Cattle always do well when they are looked after, and thrive best when your presence is in the barn yard. Let the leaves, litter, road scrapings, mud, and all refuse matter be collected together, and well trampled by the stock, and converted into manure. Let us save all we can, for the land needs it.

CIDER.—To those of our readers who have the good fortune to have any apples this season, this month will be the time to make cider. The ripest apples should be used, ground into pulp with a good cider mill, then pressed, the juice all extracted and barreled at once. A barrel of cider will take from eight to ten bushels of apples.

WEEDS.—Do not overlook the fall weeds; some will yet grow, and if a few warm days should come, they will mature and leave the seed for next year. See that they are killed in time. We had the pleasure of going over the farm of one of our valley farmers a short time since, in which we were agreeably surprised to find but very few weeds on the whole one hundred acres. They made it their rule and practice *not to let them grow*. The garden was large, and nicely laid out—one acre devoted to onions, kept perfectly clean; but the crop not as large as usual, owing to the unfavorable season. One-quarter of the ground was quite wet, in consequence of which the onions on that part were very small indeed. The other parts of the garden devoted to beets, carrots, &c., were also as clean as could be desired, and it was a pleasure to go over such thoroughly cultivated grounds. In the field adjoining, eight acres were devoted to potatoes, all growing luxuriously, and free from weeds, and the same may be said of the other parts of the farm. If farmers would make it a rule, from spring to fall, to follow up the obnoxious pests, they would soon be got rid of, and the crops reap all the benefit to be derived from a clean, fertile soil.

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

A TRIP TO AURORA, CAYUGA COUNTY, AUGUST 28.

Left Cayuga Bridge in the brisk morning steamer Aurora; another, the Kate Morgan, leaves at 4 P. M., for Ithaca, &c. An elegant, all-fertile farming soil on both sides the lake; land gently rising from the shore; soil, a calcareous loam, generally clayey, but well adapted to grain, fruit culture, red clover, and grass for hay; but the climate is too warm and dry for continued good pasturage during the summer months. Three miles from the Bridge we begin to pass the plaster quarries. Then comes our first landing at Union Springs village, in the town of Springport, six miles from the Bridge. This is said to be the best wheat-growing town in Cayuga county. A growing, manufacturing village, with the water power of two large sulphur impregnated springs—hence the name Union Springs. It is beautifully situated on a bay, protected by a bluff point on the north; Indian cove and Point on the south, and a picturesque little island in its front. Here we landed several tons of freight, including tents and tent poles for a Methodist camp meeting; took on passengers and manufactured wood as way freight. Our next landing is on the west side of the lake, in Varick, at Clark's Landing, twelve miles southwest from Union Springs. Here a large hotel is being built by a wealthy farmer, who expects it to be thronged by summer visitors in pursuit of a pure atmosphere by the crystal lake. Our next landing is Aurora, four miles distant, directly across the lake in its widest part.

Aurora is finely situated by the lake shore in a broad, open bay. The land rises here more precipitously from the lake than at Union Springs on the opposite shore, and the soil is harder generally; yet capital and labor have made fine fruit yards, and gardens here. At this time vegetation was suffering from long protracted drouth, more than at any other location I had yet seen. Here are several palatial residences; the only one we noticed at this time was that of Henry Wells, President of the American Express Company; here he luxuriates, *otium cum dignitate*, in an Italian towered villa, of Cayuga limestone, with tasteful and elegant sylvan and floral surroundings; an ornamental cold grapery on one side, a fountain and *jet d' eau* in front, and a short distance south on the same rise of ground is building the Wells Seminary for young ladies, an imposing, costly building, the walls of Seneca limestone. Mr. Wells is the projector and the principal contributor to this fine edifice. It is pleasant to reflect that a man who is daily made richer and richer by the enormous profits of an extortionate monopoly, has the heart to do so much good with his money. This villa is on the rising ground, a land mark to the lake sailor, with an extended view of the lake and landscape, at once grand and picturesque. A gully with shaly bed has been formed just south of the village, by the wash of the hill, from whence issues a spring that supplies the *jet d' eau* even at this dry season.

In passing through the fruit yard and nicely kept vegetable garden, not a weed was to be seen—but, oh, how seer and thirsty the drab soil! and only for the want of one soaking shower, which the clay now made porous by vegetable manures, would so greedily absorb and hold for the benefit of the roots of the plants growing on it. We did not go into

the splendid cold grapery, but the outside Isabellas covered a long range of trellis; they were severely summer pruned, both in wood and leaf, so that the clusters were generally exposed to the sun; yet they were no larger, nor more forward, than the Isabellas on the trellis of J. E. Williams, which had only been winter pruned, and are now in very exuberant wood and leaf, which shades the clusters from the sun. The grape vine is no doubt an exceptional plant in relation to cutting in and pruning. But there can be no doubt that both the leaves and new wood of plants absorb carbonic acid from the atmosphere, which forms the carbon of the plant, without which there is neither plant structure nor fruit.

THE SUPERIOR CONDITION OF A DAIRY REGION SOIL.

That which struck me most forcibly in Chatauqua county farming, was the highly productive condition of the oldest farms, as compared with the old farms in the grain regions which have been so hard cropped with cereals, that they yield but short crops when lightly manured with a rotation of a clover crop. I am aware that the greenness of the Chatauqua pastures, and the abundance of large white clover, is due more to the frequent summer showers and cool atmosphere of that region, than to the extra fertility of the soil; but while this climatic advantage favors grass growing, it also prevents plowing, and exhausting the soil by cereal crops. Another great advantage due to the climate, is that they have no sward-bound meadows or pastures in this region. Here are meadows yielding two tons of timothy hay to the acre, that have never been plowed from the beginning. In the grain growing regions, the breaking up and re-seeding grass lands every few years is indispensable to a grass crop.

A FEW WORDS ON "BUENO'S" POLITICAL ECONOMY.

"Bueno" fairly admits that the profits of our foreign trade made the country rich up to the beginning of the war for slavery; but since 1860 he says, "we have been continually sending our bullion or its equivalent (exchange) out of the country to pay a balance against us." Very true; and for this reason, before the rebellion, the South raised about five millions of bales of cotton, the greater part of which went to Europe to pay our foreign debts, and the balance was used by our cotton mills at the North, and they and our other work shops supplied the South with goods, wares, and merchandise towards paying our southern debt. But the rebellion put an end to all that, and we no longer had that great textile of export, cotton, to pay for importations, which the demand for goods and war supplies only increased as our means of payment in agricultural staples decreased. But the moment peace was restored, the long hoarded cotton of the South came into market again, and with an unprecedented demand from the hungry, threadbare South, for all sorts of supplies, breadstuffs even included. It was this great demand from the South, together with the increased luxury of the shoddyites enriched by the spoils of war, that has induced the unusually heavy importations of 1866, which "Bueno" alludes to. If the next cotton crop of the South should prove a failure, our imports from Europe for 1867, will show a great falling off from those of the present year, and the South will have to eat hog and hominy, and wear the home made cotton of butternut dyes again.

"Bueno" says, when he was out in the Beaver Indiaman, a boy, or as the French say facetiously, a *portecaton*," a domestic cargo from the United States, sold to John Chinaman, left a balance due for a cargo of teas and silks, of $18,000, which had to be paid for in Spanish mill dollars." We send neither gold nor Spanish dollars to China to pay for teas now; since that day, if "Bueno" has not been in a Rip Van Winkle sleep, he has seen the manufactured exports of this country increased one hundredfold, and our shipwrights and foundrymen have supplied China with a fleet of steam vessels of war, to the value of millions of dollars; to say nothing of Japan, which has also had her war vessels from us. The exports of our staples and manufactures to China in 1861, amounted to $5,809,724, and to Australia, $3,410,000. For our exports to Australia, we get gold or bills on England, which now pay for teas and silks, as silver did formerly.

But suppose we do send gold to Europe to pay balances, is it not a legitimate trade? Our manufacturers and importers sell their goods for gold in California, Colorado, Montana, Australia, &c. And why should not they buy their supplies where they can buy them cheapest? I would ask "Bueno," as an honest shipmate, if it is not better for the whole people that we should buy our pig iron in Glasgow, at ten dollars per ton, in gold or exchange, than to pay the iron masters of Pennsylvania, forty dollars per ton in greenbacks. Such is the specious effect of a prohibitory tariff to protect American industry! It favors the manufacturer at the expense of all other classes, and it has also proved suicidal to the manufacturers thus protected, as it induced extravagance and waste, and paralyzed improvements and mechanical invention, as the fate of our over-protected cotton mills proved, before the compromise act reduced the duties. Even that great statesman, Henry Clay, was justly chargeable with aiding the passage of the mischievous high tariff bill of 1828. He made long speeches in the Senate, to show the impolicy of importing our cotton bagging from Inverness and Dundee, when it could be made just as well in Kentucky, of Kentucky hemp, only not

so cheap. But Mr. Clay soon saw that the cotton planter was right in buying his bagging at the lowest price, where he sold his cotton, and that Kentucky had no right to tax the planter in the premises.

"Bueno" must reflect that the necessities of the late war has fastened upon us for an uncertain period of time, an abnormal condition of things, which a debased currency and unusual taxation, can in nowise ameliorate. But as industry and production have already made the country what it is, it is to our industry and economy, and not to legislative restrictions on trade, that we must look for our future prosperity.

THE PROSPERITY OF WESTERN NEW YORK FARMERS.

A letter from Chatauqua county, of the 25th inst., says they "have had the coldest August known there since the first settlement." They had a light frost on the nights of the 16th and 17th; yet grass and oats have been heavy crops, and potatoes promise to be abundant. The farmers' share of the sale of cheese at the Sinclairville Factory, for the month of June only, was $12,784. July being a hotter month, more cheese was made, and of better quality; but during the cool weather of August more butter and less cheese was probably made. Butter now sells at 40 cents per pound there, by firkin, for the New York market. In Seneca county the hay crop and the harvested grain crops have been above the average; potatoes and corn promise well, but pasturage was very much dried up in July, and we have had no soaking showers to reach the roots of the grass since early June. In the wheat market our farmers have it now all their own way. When the price of flour fell in New York, after new wheat came in, our millers put up the price a dollar a barrel. Their excuse is, that farmers will not sell their wheat, even at New York City quotations, and they now pay them $2.50 per bushel, for red winter wheat. The white wheat they yet keep out of the market, hoping to realize the early July prices, $3.25 per bushel. If our farmers do not get rich now, it is only those who raise nothing to sell. While the retired old ones, the widows and fatherless, who live on a small seven per cent income, have to receive greenbacks for the interest on the gold they loaned, the farmer's income from the products of his farm has more than doubled, giving him a large profit over the depreciation of the currency, and his increased taxation.

But if I was asked, do Western New York farmers now in their great pecuniary prosperity, enjoy life better, and take more real comfort than they did fifty years ago, in their log houses, in simplicity and privation?—I could hardly reply in the affirmative. Some farmers worked very hard then, clearing and fencing land, but it was under a sweet, uplifting stimulus, which the daily routine now fails to supply. The women did not work as hard then as they do now. True, they had to spin and weave, but they had no paint to scour, chambers to paper, or carpets to take up, shake, and put down, and very little to do for other people's eyes, for all were alike poor, and in the same category of life. Farmers now work much harder, in plowing, harrowing, manuring, and preparing their now worn out fields for crops, than they did with the virgin soil.

THE MALLARD DUCK.

WRITTEN FOR THE AMERICAN FARMER, BY C. E. BEMENT.

THE WINGED MALLARD.—The Mallard is supposed to be the original of our common domestic ducks, of which we have so many varieties on both continents. It is an inhabitant of all the countries of Europe, especially towards the North, and is also abundant in this country. Here it is migratory, and is commonly found about most of the lakes in the interior of this State, as well as the sea coast. It leaves us in the autumn for the South, and has been observed from Mexico to the sixty-eighth parallel.

Eminent naturalists of our own as well as other countries, acquiesce in the supposition that the domestic stock derived its origin from the Mallard; but other writers on the subject hold a different opinion. Mr. A. Williams, in a note to the authors of the London Poultry Book, says: "I do not think that our domestic varieties are descended from the wild Mallard. At farm yards there often occurs a cross between the two, and I have known the wild birds kept by a gentleman whose property adjoins mine. These never altered either in color or habits, many of them flying away unless pinioned."

Mr. Dixon says: "I know of no instance in which any one has finally succeeded in founding a permanent tame farm yard race of ducks by breeding from the Mallard, though the attempts have been numberless, and a few parties have been on the brink of success. Crosses between the mild and tame birds have answered better; but the progeny have retained their full share of independent temper and movements."

Mr. Dixon, who is considered good authority on the natural history of birds, regards the Mallard as an importation from India and China, probably about the same period as witnessed the discovery of the passage by the Cape of Good Hope, in the year 1493; and we have of late years received a permanent variety, if not a distinct species of tame duck, (the Black East Indian,) from the Cape or South American continent. Such an importation may be regarded as a link in the chain that would connect our domesticated duck with an Eastern origin independent of its wild congeree.

"The squatters of the Mississippi," says Audubon, "raise a considerable number of Mallards, which they catch when quite young, and which after the first year are as tame as they could wish. These birds raise broods which are superior to the old ones for a year or two, after which they become similar to the ordinary ducks of the poultry yard. The hybrids produced between the Mallard and the Musk Duck, are of great size, and afford excellent eating. Some of these half breeds now and then wander off, become quite mild, and have by some persons been considered as forming a distinct species. They also breed with the Black Duck when tamed."

Though the domestic duck is polygamous, the wild birds pair, but do not naturally assist each other in the work of incubation or care of the brood, for when the female begins to sit, the male deserts her and joins others of his sex, so that it is not unusual after May, to see the males in small companies by themselves, as in the case with the Wood Duck, Teal, Pidgeon, Pintail, &c.

The Mallard, in a wild state, always pairs, and during the period of incubation, although he takes no part in the process, always keeps in the neighborhood of his mate, and it is singular that the half-bred birds between the Mallard and tame varieties, always exhibit the same habit, although the ordinary domestic drakes are polygamous, always endeavoring, like the Mormons, to get as many wives as possible.

"The Mallard is supposed to be the parent of our domestic varieties of duck, of whatever colors—the White Aylesbury as well as the more gaily colored Rouen. The Mallard is supposed to be the type of the natural family to which it belongs—the duck of ducks. We often find among our domestic ducks, those whose color resembles more closely the Mallard, and there seems to be no probability that the breed of tame ducks gained from the original stock would possess any advantages over those we now have."

The beautiful engraving—the Winged Mallard—and the pair of affrighted companions at the head of this article, "show from their positions and direction of their flight that the gunner waited till he had a rear sight and could see the color of their legs, by which convenient measure duck-shooters estimate distances."

Beautiful Mallard! Well mayest thou be vain of that beautiful plumage—of those intense hues which rival the rare glories of the breaking dawn, or the decaying twilight of autumn, or the intermingled dyes which tinge the stripes of the shadowy bow. But, alas! the most venial vanity will be indulged no more, for the red drop of death is trembling on that polished beak, and thy heart's blood is oozing over thy downy bosom! Thine affrighted mates have left thee to breathe out thy last gasp, and on the wings of fear, are now hastening away with the rest of thy brethren to the distant country of thy destination. Many a time will she, while swimming in some lake, or lagoon, with her brood, (thy offspring,) relate the cruel story of thy death, and caution them to make a wide circuit whenever they shall chance to espy a small, suspicious-looking wherry, with a long gun and a rough face peeping over its side into the waters of the bay. She will caution them to keep farther out to sea along that piratical coast, and thereby avoid that treacherous picaroonish sort of craft which there lies in wait between two billows, ready to pounce upon and pop over the unwary cruiser.

OUR FLORIDA LETTER.

WRITTEN FOR THE AMERICAN FARMER, BY J. D. MITCHELL, FROM VOLUSIA COUNTY, FLORIDA.

MESSRS. EDS.:—I have discovered a new place for a summer resort for northern people who have to leave home to escape the heat. I had thought of securing a patent on my discovery, but being very much engaged at present in getting ready to move my colony, I have not time to devote to red tape, so have decided to make a present of it to the unfortunate people aforesaid, for which I trust they will be duly grateful. The point referred to, is 60 miles south of that 300-year old town, St. Augustine—that paradise of invalids from the time when the memory of man runneth not to the contrary. It is 200 miles from Savannah, and 900 from New York, or four days sail. The inlet from the sea is one of

the best on the Florida coast below Fernandina, and leads into a wonderful extent of inland navigation, itself an object of interest and attraction beyond conception. One can take a small steamer or sailing vessel, and starting at the head of Halifax River, about 30 miles south of St. Augustine, can sail in a direct line nearly 200 miles, through rivers, lagoon, and lakes, varying from one to eight miles in width, and not more than that distance from the sea shore. The rivers and lakes are protected from the encroachments of the sea by a ridge of sandy beach land, probably built upon a reef of coral. In the whole length of this connected system of inland navigation, there is one inlet from the sea for vessels drawing ten feet of water. This is at Port Orange, and it is near this inlet that I found the cool place that I hereby recommend as before mentioned, for a summer resort. The other inlets are upon Indian River to the southward, and are of varying capacity, from three to eight feet. The mainland bordering this long line of pleasant sailing ground furnishes a variety of soil whose capacity of production, in connection with a semi-tropical climate, is unapproachable and unequalled by any portion of the known world. A list of the products for which it is *peculiarly* adapted, would include almost every known fruit and vegetable, from the tropics to the poles. It is the only part of our country in which I can learn that the sugar cane tassels. It is the only one in which sugar cane is perennial, producing crops year after year from the same roots. It is the only one in which sugar cane stands upon the ground all winter without injury from frost, waiting without damage, three or four months, the slow motions of the easy going native manufacturers. It is the only one where the northern garden vegetables and table fruits flourish side by side with the pine apple and cocoa nut of the tropics, and where you can gather from the same field and almost at the same time, the products of every quarter of the globe. These facts would argue to the uninitiated, a high range of the thermometer—a sort of roasting sunshine—rather uncomfortable than otherwise, to live in, except to a Hottentot; but here is the very point of our little joke. Herein lies the peculiarity of the location. Every one knows that the eastern coast of Florida has the most delightful winter climate—that its balmy atmosphere is a last resort and never-failing panacea for all the ills that flesh is heir to—that it gives new life and vigor to the healthy, and that in some parts of it, they have even been obliged to shoot a man in order to get a start for a graveyard. All this is generally well understood, and one can find volumes of enthusiastic testimony upon this point, stowed away in the moss-covered archives of the War Department, contributed officially and unofficially, by enraptured army officers, and consigned to oblivion. More recently, contributors to the press have delighted to sing the praises of this Utopia—this land of eternal spring and sunshine, orange blossoms, and mocking birds—where you breathe the perfumed airs of Araby, the Blest, and drink at the fountain of perpetual youth, almost of immortality. All this is now accepted and adopted into the general belief, as to the fall, winter and spring; but there is yet an universally prevailing idea that the summer is hot, scorching, miasmatic, deadly—fit only for negroes and alligators.

A few observations made recently, during the "heated term," which you all enjoyed so much in July throughout the North, enable me to demonstrate the erroneousness of this opinion, and to show that instead of being hotter in summer, East Florida is actually cooler than New York or Massachusetts. Up to this time, the thermometer at this place has not exceeded 90°, and only for a very few days, has it exceeded 86°. This has been the usual maximum during the past two weeks, while at the same time the northern papers report 103° in New York, 103° in Elmira, 104° in Williamsport, Pennsylvania, 106° in Springfield, Massachusetts, and an equally broiling temperature throughout all the Northern States. I spent most of these hottest days in an open boat, with no protection from the sun, but my every day clothing and straw hat—rowing, sailing or walking, and found myself no more uncomfortable than with the same exposure among the mountains and valleys of our old Keystone Commonwealth. The summers here are showery, which adds very much to their comfort. Most of the rain that falls during the year, falls during the summer months, but the great secret of the comparatively low summer temperature is to be found in the constant sea breeze, so modifying the effect of the vertical sun as to make even the hottest days delightful.

The reason why the fruits and other products of every range of climate, here find their best development, is that there are certain seasons of the year when they each and all are fitted with just the temperature and opportunity they need for their perfection, and if attention is given to times and seasons, there are very few productions of any part of the Union, that may not be successfully cultivated here. The early vegetables required by northern markets, such as tomatoes, Irish potatoes, peas, cabbages, celery, lettuce, beets, radishes, turnips, onions, &c., must be planted in November, and they come to maturity in March. For summer crops, such as melons, beans, corn, squashes, cotton, &c., planting is done in February and March. Melons ripen in June, corn in July. Sweet potato vines are planted by cuttings. One setting is done October 1. This

crop gets rooted before the cool weather and short days, and then remains nearly *in statu quo* until warm weather, ripening in June and July. Another setting is done in July, and the crop ripens before December, furnishing a winter supply, which is dug as wanted, and remains good in the field until May. The same attention to seasons must be observed in the cultivation of fruit, and by an intelligent application of means now in common use at the north, there seems no limit to the capacity of this favored region, in the perfection of every desirable fruit, and in the indefinite extension of the bearing season. Oranges hang upon the trees, and retain their flavor and juiciness a full year, and I have heard the opinion expressed, that strawberries can be kept four months in bearing. Stranger things than this come under my observation almost daily, and I would advise any man with a reputation to sustain, not to commit himself upon any question of probabilities, in connection with this subject, until our Yankee community have had an opportunity to experiment upon it. When loggerhead turtles who love a warm climate in the superlative degree, are found moving toward New York to spend the summer, it becomes proper for New Yorkers to improve the hint and change places with them. St. Augustine has heretofore been the only town or spot upon the coast that has furnished hotel accommodations for visitors, but a company of New England gentlemen are now engaged in building a hotel at this place, beautifully located, in sight of both the sea and the inland waters of Halifax and Hillsborough Rivers, and in full view of the magnificent lines of breakers that border the channel, and make the sea at this point an unfailing source of delightful interest. When they get ready for guests, I presume they will advertise.

There are many items of agricultural interest that want of time prevents my giving you in this letter. Farming, or as it is dignified at the South—planting—is in a very forlorn condition throughout the State. Previous to the last Indian outbreak, there were many very extensive plantations carried on in various parts of the State, but the houses were burned and the owners driven off by the Indians. They have never returned in any number, and the rich plantations—once so fruitful and prolific of wealth, are now overgrown with an almost primeval forest. The sparse population, yet unsettled from the effects of the "rebellion," obtain a scant and precarious living from a few little patches of crops, eked out by the wild game, and fish, and oysters, which are each so abundant; but anything like planting on the former aristocratic scale, or even farming on our more democratic plan, as a business, is nowhere to be seen. Water melons seem about the only thing that any one has as yet found time to raise to sell, and these belong principally to the freedmen. They are very abundant in July, and sell at retail at about 25 cents each for twenty-five pounders. Sweet potatoes are very fine now, and occasionally a man comes into market with a few in a pony cart—not because he has any to spare—but because there happens to be some more urgent want that they must be sacrificed to gratify. The State is filling up with northern men, who are settling permanently. Some of them have a fair crop of Sea Island cotton and corn for a beginning. You can look for a Yankee State in this direction in a very short time.

OUR KANSAS LETTER---NO. 3.

WRITTEN FOR THE AMERICAN FARMER, BY A. M. BURNS.

MESSRS. EDS.:—All kinds of crops this year in Kansas have surpassed that of any former year since its settlement by white citizens. I need not specify any particular crop. It is enough to say all crops were heavy enough to satisfy the heart of the pioneer. The wheat, oats, barley, &c., stacked, and hundreds of farmers have their grain threshed. The corn was far enough advanced in ripeness to be cut with safety; but on September 1st, the sun was hid from our view by grasshoppers, which soon attacked tens of thousands of acres of corn fields, and in a couple of days stripped every leaf off the corn stalks, although the ears are safe, and to-day, (September 5th,) I learn that in some places they have commenced on the ears of corn. In many places the ground is literally covered with them; in fact, I could not find language to convey a correct idea of the number that infests this region. I have not yet learned the extent of their depredations, but I am informed that for thirty miles up the Big Blue River they are as numerous as in this immediate locality. You may call to mind that Utah was infested as bad with them a few years ago as we are now. They have been coming East ever since. I mention this fact, because a few years hence may find them at Rochester and other cities which we call eastern, and may to you then become as serious a matter as it is to us now. They did not confine themselves to corn fields alone, but made an attack upon all garden vegetables and potato tops, and in some instances the forest trees and grape vines, all of which they stripped bare of leaves. I am trying to save my layered grape vines by covering them with prairie hay. So far I have been successful. What the result of this scourge may be no person can now surmise.

The remainder of this letter is crowded out for want of room, and will appear in our next.—EDS.

ALWAYS feed your lands as well as you do yourself.

OUR PRIZE ESSAYS.

ROTATION OF CROPS.

THE object of a rotation of crops is to obtain the greatest product with the least injury to the productive capabilities of the soil. By a continual planting with the same crop, year after year, the properties of the soil required by that particular crop are exhausted, which is in a great degree avoided by alternating with other crops. Thus, if wheat be sown for several years in succession, the crop will gradually decrease until hardly worth gathering, while the same ground would produce a tolerable crop of corn or grass, owing to the chemical ingredients required by corn being different from those required by wheat. This is obviated in a measure by judicious manuring, but even then it will not do to cultivate one crop exclusively. By cultivating wheat or corn but once on the same ground in four or five years, the soil is enriched by the process of nature in those constituents required for each product. In most parts of the country grain is the principal object with the farmer, and that system of rotation is the best, which produces as much grain as possible without depriving him of hay and fodder for his stock. The system which I shall most discuss in this article, is known as the five-year or five-field system. The order adopted in this system, is as follows:—1. Corn. 2. Oats. 3. Wheat. 4. Grass for hay. 5. Pasture.

This system gives corn, wheat and oats every five years. Taking this as a standard, we will make such changes as circumstances demand. By this system corn will come on sod. Sorghum or potatoes, early or late, may take the place of corn, if it is desired to raise these articles. Spring wheat, flax, barley, peas, or early potatoes, may be raised instead of oats. Any crop which will come off the ground by the last of August, may be put in instead of oats. After oats are off, the ground is thoroughly plowed and sown with winter wheat or rye, and seeded with timothy after harrowing. The next spring, in March, clover seed is sown, thereby securing a mixture of the two grasses. If the timothy has been sown rather thickly, the clover will be crowded out after the first year, and timothy will take its place, and it will yield as much hay as it did before; this is often an advantage. If the stand of grass is pretty good, it will sometimes be a benefit to leave it for more than two years. I have known it to be left for seven years, although four or five is as long as is profitable. Some farmers omit sowing timothy, and sow clover thicker, in which case it will not do to leave in grass more than two years. After grass the ground is again planted with corn, and the same process again repeated.

In the four-year system the ground is left in with grass but one year, which necessitates fencing a part of the grass for pasturage. In this case, it is hardly worth while to sow much timothy.

In the West, this system may not be the best, as the distance from market renders the price below a profitable standard. The system there must be based upon raising stock, more than in the East. As far as I can learn, the majority of farmers have a rotation of corn and wheat, corn and wheat, without manure in many cases; a most injurious plan, in the long run.

In the rotation I have named, the ground is manured for wheat, and sometimes for corn. Lime is applied to wheat or corn, as is most convenient to the farmer. Corn is generally manured in the hill with poudrette, ashes, plaster, hen manure, or a mixture of any or all of them. Plaster may be sown on clover, if the season is likely to be a dry one. Thus I have endeavored to explain a system as it is in actual operation in the Middle States, and which is there believed to be the best, and will continue in operation for some time to come. G. F.

Readington, N. J.

MAKING AND PUTTING DOWN BUTTER FOR WINTER USE.

THE science of butter making is governed, like other sciences by general laws, but there comes in judgment, a strict observance of cause and effect, and the stirling virtue, *cleanliness*. According to our judgment, it is not the water, nor the meadow, nor the stock, that Western New York is not famous for good butter. It is the management, I propose here to hold up for investigation and trial.

Boiling water for pans, and for all utensils used for milk, is of the first and greatest importance. Trust not Bridget, nor Dinah, if they say "it is indeed hot," but see to it yourself, that it is *boiling* hot. The sour of old or fomented milk or cheese, needs not description. After the cream has risen on milk, which is placed in pans in the cellar, it should be skimmed, not waiting for it to lopper, which should be done by a tin skimmer, into a tin cream tub, which is placed on the cellar bottom until filled for churning, stirring somewhat daily. The churn which we deem to make good butter, should be an up and down one, and ought to be rinsed with cold or boiling water, according to the temperature of the atmosphere. On being required to give my preference for such a churn in *The Genesee Farmer*, I did so, a year or two since, which is the too great power brought to bear on the cream. All know the effects of heating butter—it will eventually turn to cream.

When gathered, take up in a bowl, wash in two or three waters, and when drained from it, salt, incorporating the salt well, an ounce to the pound.

After standing a suitable time, work over with a ladle, as long as buttermilk and brine appear. This working should be done slowly. If soft, it is advisable to work it more than once, when it is ready for packing. This should be in an oak firkin, well scrubbed and scalded, with boiling water. Then fill with cold water and soak for twenty-four hours, and dry. The firkin, while being filled, should be kept covered with a thick, doubled cloth, to preclude all air. When filled, place a thin cloth upon it, with a slight covering of salt, and head up, keeping it in the cellar, which we would desire should be dry and cool, and free from all substances from which would arise an effluvia or smell. Butter quickly imbibes both from anything that is placed near it, even from a rose, which, strange to say, does not add to the delightful flavor of good butter. The old adage, "delays are dangerous," was never more appropriate in business of any kind, than in that of making good butter. If you want to make the cream, wait until you are ready to skim it. Very likely you will find what it loses in thickness, it makes up in that strength peculiar to butter. We have succeeded best when milk was skimmed as soon as sour, as we think there is not much cream rises after that.

Butter making is a nice science, and will not succeed, if entrusted to the ignorant or those not interested. There must be an intelligent mind over all, and if so, even when dairies are small, we see not why good winter butter may not be made which will last a voyage of a year, from here to California.

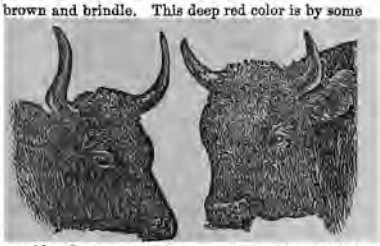
M. S. B.

THE DIFFERENT BREEDS OF CATTLE.

It will be impossible in an article as limited in space as this, to give any but the merest outlines and most meagre notice of the different breeds of cattle in our country, and even then we can only refer to the leading or more generally prevailing breeds, leaving out the many varieties caused by numerous crossings. We will endeavor to give the name, general characteristics, and peculiarities of these leading breeds.

1. *Shorthorns.*—Very fine animals. Large size. Good feeders, requiring rich pastures and high keeping. Colors red or white, or the two colors of all shades of admixture. The leading breed for beef, but only fair for milk, and as workers.

2. *Devons.*—A handsome and valuable breed, widely disseminated, particularly in the New England States, and peculiarly adapted to the rough, hard land of that section. Medium size, color almost invariably a dark red, though a few are brown and brindle. This deep red color is by some



considered a test of pure blood. The oxen of this breed are superior for workers, combining in a remarkable degree docility, quickness, and adaptability to all kinds of labor. The cows are fair milkers, and fatten well.

3. *Jersey.*—The Jersey or Alderney is a small and ill-shaped breed, and one much esteemed for the richness of their milk. Color, light red, dun, or fawn.

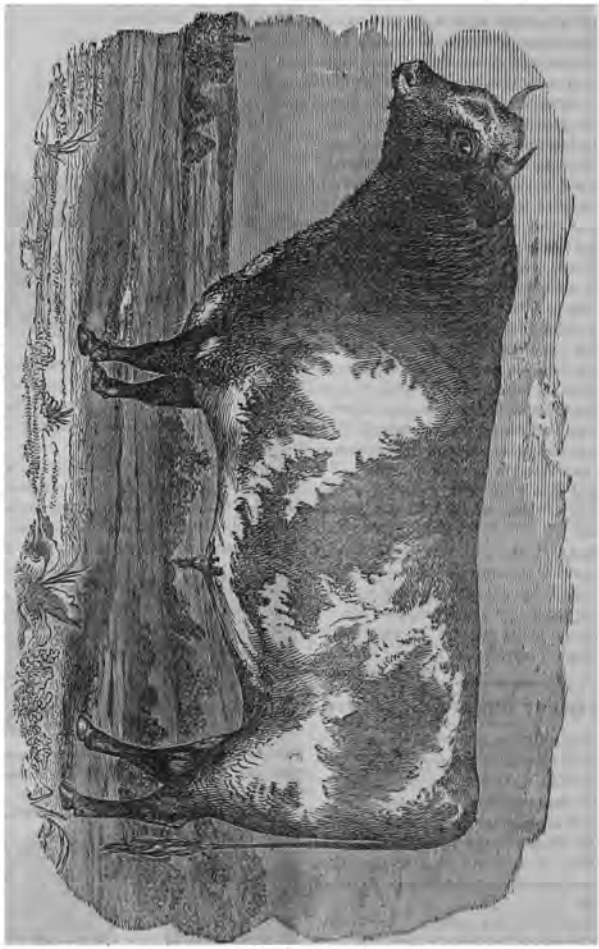
4. *Herefords.*—Large size. Fine beef animals, and good workers. Milkers fair. Color, red with a

white face and neck. They are very hardy, and a fine breed of cattle. The white face is considered a test of the purity of blood.

5. *Galloways.*—Small and hornless. Flesh of fine

quality. Milk very rich, but of moderate quantity. Prevailing color, black.*

*Sanford Howard, than whom there is no better authority in this country, says of this breed, in the last Report of the Michigan State Board of Agriculture, that "in hardiness and ability to stand rough weather and rough fare, they are excelled by no cattle except the West Highlanders, and that they are particularly adapted to the northern portion of our country.—Eds.



AYRSHIRE BULL.

5. *Ayrshires.*—Medium size, generally hardy, compact, well proportioned, and said to be peculiarly adapted for dairy purposes. They are not so extensively bred in this country as the two preceding breeds. See cut above.

Of other breeds and varieties which are to be found in small numbers in our country, are Dutch cattle, Welsh cattle, and Irish cattle. A breed called the "cream-pot" breed was originated in this country, being a cross between the Shorthorn and our native New England cattle, whose prevailing characteristic was the production of a great quantity of milk. But little is known of it at this time.

Of the previous named breeds, the Devons, Short horns and Herefords originated in England, though they have been much improved here. The Ayrshires and Galloways are from Scotland, and the Jerseys from the Island of Jersey, near the French coast, but under the British government.

The common, so-called "native cattle" of our country, are descendants from various crosses and grades of the above-mentioned breeds, and frequent

ly present the characteristics of their originators very strongly. They are valuable as producing workers, and many cows cannot be surpassed as milkers; but breeders cannot depend upon them to perpetuate their good qualities, as in the case of the thorough breeds, hence the superiority of the latter for breeding purposes. B.

PREPARING FIREWOOD FOR WINTER.

I am glad THE FARMER has called for essays on this subject, as it is one that needs agitation, and has never been referred to as its importance demands. I think I can say, without fear of contradiction, that not one farmer in ten takes pains to provide fuel in a suitable, or rather the best form for consumption during the cold of winter.

Every farmer who is not ambitious to be behindhand in his work, will be pretty sure to see that enough fuel for spring, summer and autumn use is prepared during the last of winter, or the leisure days of early spring, but the same provident man will in nine cases out of ten, burn green, wet wood all through the winter. He lets the supply run out, or thinks that winter being the natural wood-cutting season, to him, it is well enough to burn it as it comes from the forest. This should not be so, and it need not be so. Let him take as much pains to see that his wood is cut and housed for winter as well as summer use, and he will thus rob winter of some of its cold by having the wherewith to heat up his house at any time, at short notice.

There is always a season in the fall, and just before the early rains come on, when there is leisure for getting together enough wood to last through the coming cold term. Everything is dry at this time, and wood of poorer quality, which if wet would be valueless, can be drawn together and housed, making good fuel. This season is also a good time to go through the wood growth and pick up the fallen trees, limbs, and decaying trunks, and thus save much which could not be got after the snow falls.

This latter item is worthy of notice, for the time has come to most of us when wood is becoming scarce, and we must economize, to be sure of having sufficient fuel, and nothing must be allowed to lie on the ground and decay, which can be put to a good use. If it is housed while dry, it will remain dry all winter, and even the smallest and comparatively poorest, is good kindling.

So brother farmers, don't burn green, wet wood, another winter. Fill up your woodsheds in the fall, and my word for it, you will be repaid by the added convenience and warmth, not to speak of the good temper of your cook and housekeeper. E. B.

CURING PORK AND HAMS.

THE management of pork and hams, though brought under the same head, is essentially and wholly different. We will begin in the very important item of curing hams. Trichinæ, who fears them? All of us make way in some sort, with thousands of animalculæ in our time. Look through a microscope at a draft of delicious cool water, and take a peep at the vinegar cruet. But I will tell you what to fear—rancid meat. In this world it is best for us all not to stop at *little* things. There are great ones enough, and one of these is ill-kept meat, to say nothing of those animals that need hoppling.

A bright, sweetly-flavored ham, may at all times be obtained with a little care. Weigh 16 pounds of ham to 1 pound of salt and 1 ounce of saltpetre finely pulverized; rub them with this in some vessel until well incorporated; then lay these hams on a shelf, or if more convenient, in a barrel, placing on them the surplus salt; in a few days rub again, and if necessary again, until they have taken in all the salt, when they are ready for smoking, which should be done before flies make their appearance in the spring, and until they are quite dark, or almost black, when they must be taken down, and sewed up in a close fitting cloth or bag, with a paper doubled several thicknesses on the flesh side. Then tie closely, hang up and give two or three good coats of whitewash. They may then hang in the garret all summer, or in any dry place. By observing this method they can be kept any length of time, unless they prove so excellent, that you eat them very soon.

Pork, though derived from the same animal, is of an entirely different taste, and requires different management. In these days of double refinement, it will be thought quite vulgar, we suppose, to give much attention to the curing of pork, and especially to advocate the eating of it. But where is there a family in the days of flies and heat, who do not turn with disgust from all kinds of fresh meat, and open with pride a well kept and well filled pork barrel, and if any meat is required, prefer it from these! Nay, say not, that may do for farmers. We once knew a very delicate invalid, a young lady—for whom kindness and love had gleaned from almost every quarter of the globe that which would strengthen and invigorate the appetite, but was only at the last refreshed from this source when all others had proved unavailing. Broiled and prepared in a peculiar manner by dipping in water, it becomes a very delicate dish. The manner of curing pork is very simple—a layer of pork, and a layer of salt, (coarse is the best,) then a strong brine (that will bear an egg,) to fill up the barrel. The old brine may be boiled and scummed, and when cool fill up with that. It is of importance that the brine should be

turned off in the spring, or before warm weather, as it will become somewhat bloody—boiled and replaced. A good barrel of pork, how good it is!

Aurora, N. Y. B. M. S.

MANAGEMENT OF POULTRY IN WINTER, TO SECURE A FULL SUPPLY OF EGGS.

FOWLS, like most, if not all animals, yield returns according to the manner they are kept, though we will admit that a warm house and plenty of corn will not always secure a grateful return. It then becomes us to inquire what will. If we study the habits of fowls, we need not be long in coming to conclusions.

Like the human family, they like condiments with their food, and they like also a large, cheerful home or house. Give them a window or two, so that they can peer out at the snow and ice, enjoying their warm home more fully, and that the trusty patriarch may give timely notice of the approach of day, and that each hen may know her own nest, for which light is necessary. Like the human family, their health is greatly promoted by change in their food, and this ensures a greater supply of eggs. For pepper and salt, give them lime, charcoal gravel, &c. Boiled potatoes, buckwheat cakes, bones, and refuse meat, either boiled or raw, will not be refused. If their food is warm, it will tend to their laying. The ladies of a family can easily find amusement, if they wish, by feeding the chickens and poultry in winter, and then they will be entitled to the eggs. Besides, as we view those mute animals, dependent on our hands for sustenance, it awakens a sense of *our* dependence on the great "I AM," who in wisdom has made all things, —who openeth the hand and satisfieth every living thing. Oh! that they would turn more to the study of nature and nature's works.

There is a source of amusement with it all, in observing their ways. Throw to them something that is peculiarly relished, and the chivalrous chanticleer will call his wives with great enthusiasm, and they in great haste get there just in time to see him eat it himself. Plenty of nests prepared with straw or litter, will often promote the laying in winter. Air is necessary, and the door of the henery should be left open, that they may go out and in at their pleasure on pleasant days. If any one wishes to pursue this study, many pages can be found devoted to it in THE FARMER, by C. N. Bement, who has pursued it with much patience and intelligence. I have now passed my limits, and will only say that the study of obtaining fresh eggs in winter is worthy of more time and talent than has yet been given to it.

Aurora, N. Y. M. S. B.

SHELTER FOR STOCK IN WINTER.

A HEALTHY animal requires a certain amount of food in either warm or cold weather, but we find that in warm weather an animal will keep in condition on a less amount of solid food than in cold. The reason of this is, that there is a less amount of carbon consumed in order to keep up the heat of the body in warm, than in cold weather. As carbon is the heating principle whereby the system is kept at a healthy temperature, that element must be supplied in some way; if not by food, it must be drawn from the fat of the system. As a less amount of carbon is required in warm, than in cold weather, it stands to reason that if the body is kept protected from the effects of the cold by proper covering and shelter, that a less amount of fuel or food, is required to keep up the temperature; thus we make a saving in feed without any expenditure of the carbon of the system already accumulated.

The temperature of the animal body is much higher than the surrounding atmosphere at all seasons of the year, with the exception of a few hours in summer, and unless thus protected, outward, artificially, a large amount of food is required to furnish the necessary elements of heat. If this food is not furnished, the system must nevertheless keep up its temperature, and this is done at first by drawing on the fat, and afterwards on other parts of the body. As a necessary consequence, the animal grows thin, and can endure less labor or exposure than when well fed. Different animals, under similar circumstances require, some more, and others less food to keep in good condition, their appetites varying as greatly as among the human family.

Where accurate experiments have been made to test the gain of animals with and without the protection of suitable shelter in cold and inclement weather, it has been found that those having adequate protection, gained flesh on less food than would keep those unprotected from actually falling away.

In providing stables, which are found to be the best protection for stock, provision should be made for ventilation, as pure air is as important as good feed or warm stables. Horses, neat cattle and hogs, will do well in quite warm stables, if good ventilation is provided; on the contrary, sheep will not do well if kept very warm. A much freer ventilation is required to keep them in health. Shut up simply for rapid fattening, they feed better and fatten faster if their pens are airy: when kept for breeding, it is essential that they have goood protection from storms and high winds, with liberty for free exercise in the open air at all times, and plenty of good food; their pens should be well ventilated at all

times to insure the health of the old ones, as well as their young.

In view of the foregoing facts, it is the better economy of the farmer to provide good warm stables and shelter for his horses, horned cattle, and hogs, with suitable pens and shelter for his sheep, instead of giving them only the protection gained by the shelter of some stack or fence corner, where they will double themselves into the shape of a dromedary, shivering with the cold, and consuming very much larger quantities of food to keep the fire within from going out. Stock provided with good and suitable protection from the inclemency of the weather of winter, or cold seasons, not only consume less food, but come out in spring looking better, in better health, and in every respect healthier, requiring less care, and consuming less food in the fore part of the season to adapt the system to the warmer season to follow.

My advice, then, to all farmers and owners of stock is, provide suitable shelter and protection for all of your stock; if you cannot furnish good, comfortable barns and stables, provide straw stables, where your stock may stand dry, and be sheltered from driving storms of snow, rain, and wind.

W. H. W.

UNDERDRAINING.

Why, Where, When, and How To Do It.

Why It Should Be Done.—There are but few farms, especially in the eastern portion of the United States, that have not places upon them which would be benefited by underdraining. A surplus of water injures the roots of cultivated crops, and benefits bulrushes, alders, and a host of other unprofitable plants. The opening through the soil, formed by a drain, admits the air, and it is supposed by some that the ground does not become as dry as that which has not been underdrained. Certainly it does not become so hard. As our space is limited, we will not enlarge more on the reason why, but will next consider—

Where It Should Be Done.—While a "blind ditch" would be a benefit almost anywhere, still as most farmers can put in only a limited amount of drainage, it is expedient to locate it most advantageously. The ditch should run, as much as possible, along the lowest portion of the piece of land to be drained, and should have a continuous fall that the water may run freely. It should also run through any springy spot, or a side ditch may be made to such a spot, if the main ditch cannot conveniently do so. Many drains are not as efficient as they might be, from a desire to have them *straight*, when a curved or crooked ditch would be of much greater value.

When It Should Be Done.—Any time of the year when you can get it done. But in the spring or autumn is the best time. In summer the ground is hard and dry, and the season too warm for ditching. There are places, however, that can be worked only at this time, and with them it is summer or not at all. If dug in the fall, the ditch should be filled up before winter, as the freezing and thawing will be apt to spoil the sides and bottom. In the spring the ground is softer than at other times, and also more surface water, which may be easily let off by turning a furrow where the ditch is to be made.

The next and last step is—

How It Should Be Done.—It should be done well. The ditch should be of sufficient depth to resist the action of frost, and should have a smooth, hard bottom. Two feet deep, or two and a half will be sufficient. The bottom need not be any wider than

the tile to be laid in; the sides cut sloping; the top wide enough to work in conveniently. Several machines for ditching have been introduced: none of them operate well on stony land, without an extra hand or two to pick out the stones ahead of the machine. Consequently, they have not met with universal favor, and the greater part of ditching done is by bodily labor. The laborer should first draw his line, if his ditch be a straight one, and cut with his spade where the sides of the ditch are to be. This will keep the sides smooth when throwing out the dirt. The tools needed are a line, a spade, shovel, and a pick for hard ground. The spade should be half an inch narrower at the bottom than at the top.

Underdrains may be laid with either stones or tile. The accompanying illustration represents some of the methods of drainage. A is a ditch laid with tile, and filled in with earth. B is a stone drain, made by setting two stones of equal hight on edge, and covering with a broad stone, filling the ditch half full with these and smaller stones; then lay in a little straw, and fill with dirt. The straw will keep the dirt out of the stones until it rots, by which time the earth will have settled so as to keep itself out. C is another method which can be used only where there are flat shell stones. D is a ditching spade. E is a horse shoe tile, the kind most

generally used, and the best, if the ditch has a hard bottom. F is a form of tile but little used. C is a round tile fitted with collars; good if the ditch has not a hard bottom, but more expensive than the horse shoe tile. G. F.

FARMING IN MAINE.

In this necessarily brief essay on the "modes, system, and local characteristics of farming" in Maine, we must be confined to a very brief outline of the subject. The system in vogue is not essentially different from that of the other States of New England, neither does it comprise any point peculiar to itself. We follow what may properly be considered a mixed husbandry, which in our diverse and naturally hard soil, is, taking all things into consideration, the best adapted to our purposes and needs. But few farmers make any branch of husbandry a speciality, but most of them divide their time and labor in producing stock, vegetables, grain, grass, and fruit.

Our State is well adapted to stock raising, and the attention of farmers has turned particularly in that direction during the past few years, so that we can now boast of some of the best stock for the yoke, dairy, or shambles, that can be found in the country. We have many fine herds of thorough bred animals of all the leading breeds, and their grades are distributed throughout the State. Sheep husbandry has also received much and needed attention, and our flocks have been doubled the past three years. They are mostly of the so called native breed, but improved blood is found in almost every flock. Horse breeding is extensively carried on both for farm and carriage use, and trotting purposes, and Maine horses are known and valued over the whole eastern portion of the United States. Fruit growing is not entered into to any great extent, except in apple raising. Large quantities of apples, particularly Baldwins, are raised annually, and sent out of the State. Many thousand tons of hay pressed in bales, are also sent out of the State every year to a southern and western market. Of the grains, corn is grown to some extent, producing fair crops; but enough is not produced for consumption. But little wheat is raised. Barley and oats are grown for sale, and much of the former is sent out of the State. Of vegetables, we grow a large amount of potatoes—hundreds of thousands of bushels being annually exported, furnishing employment for a large number of men, and being one of the chief means of replenishing the farmer's purse.

The methods of tilling and system of rotation of crops, is principally as follows: If the soil is rough and hard, it is plowed in the fall, cross-plowed and thoroughly harrowed the next spring, and sown to oats. The next spring it is plowed and planted to potatoes, liberally manured, and plastered. The third year planted to corn, manured well, and cultivated clean, and the fourth year sown to barley, and seeded to clover and herd's grass. Another system is, if the ground is smooth and friable, to break up in the spring, manure and plant corn or potatoes on the sod, and the next year seed down to grass with barley or oats, giving the land a good manuring. These fields generally remain in sward until showing signs of running out. These methods vary in some cases, of course, but this is the general rule.

Upon the whole, farmers in Maine are generally improving in their methods of farm operation, and are advancing in intelligence and social position. B.

FARMING IN NEW JERSEY.

The great extent of our country, its diversity of surface, soil, and climate, prevents the same system of cultivation, and the same general selection of crops being adopted in all sections. Thus, that which would flourish in the Southern States, would not survive the winters of New England, and that which would perfect itself during the New England summer, would be almost useless in the long summer of the Southern States. The prairies of the West do not require the same cultivation as the hills of the East. Great differences exist between Maine and Texas, Florida and Oregon. Even in single States the variety is great.

To treat of the system and local characteristics of agriculture in the State of New Jersey, is the object of this article. The northern part of the State is very hilly, the middle moderately so, and the southern, level and sandy. The modes of cultivation in use in the central and northern portions of the State are hardly adapted to the sandy soil of the lower counties. These counties also contain considerable deposits of green sand marl, which is extensively used by the farmers for fertilizing purposes, giving a "body" to the soil. This part of the State is well adapted to the raising of sweet potatoes. Melons are raised for the Philadelphia and other markets.

I shall dwell more particularly on the manner of cultivation of the central and northern counties. The soil is of all classes, shell, clay, loam—with or without rocks or stones, limestone hills in places, and so on. The system of cultivation of crops known as the five-year system, is in vogue. In the first year, the ground is plowed and planted with corn or other "hoe crops;" second year—oats, flax, or barley, which is harvested, and the ground sowed with winter grain for the third year. Fourth year—clover, or other grass for hay. Fifth year—

pasture. The four-year system is adopted by some, which is the same as the other, excepting that the land is allowed to remain in grass, but one year, a part of the young grass being fenced off for pasturage. Barn yard manure is sometimes applied to corn, but chiefly to the winter grain. Corn is generally manured in the hill, with hen manure, poudrette, ashes and plaster, or whatever is handy. For tending corn, we use a common plow, sometimes a cultivator, or "crab" harrow. We do not husk the corn until two or three weeks after cutting, stack the stalks, and feed them to cattle in winter in the open yard. A few have cow stables.

Oats are sown on corn stubble, plowed as early in spring as practicable, and sown at the rate of two bushels per acre. It is bound in harvesting, if long enough. Barley or flax are sometimes raised instead of oats. The latter is more profitable, and is sow from twelve to thirty quarts of seed per acre according to whether seed or lint is desired. The oats, flax, or barley ground, is plowed in in the fall, and sown with winter wheat or rye. Lime is applied at this time, twelve to twenty-five bushels per acre. Timothy seed is sown after harrowing in the wheat three to five quarts per acre. Clover seed is sown next February or March.

Most farmers raise their own stock—a few the improved breeds, but the majority the common natives. Sheep are not raised to a great extent. But few hogs are marketed. Fruit growing is increasing in importance. Peaches, for a number of years have been been grown for the New York and Philadelphia markets, in the central and southern parts of the State. More peaches are probably grown in this State than any other. Underdraining is done more in the central than other parts. The market gardens in the vicinity of New York city are well cultivated, and exceedingly productive.

REMARKS.—Among the many valuable essays that we have received, (several of which will appear in our next number,) we regret that we have only received the two preceding ones, "on the modes, system, and local characteristics of farming in the different States." This we regret, as we think it would be highly interesting and instructive to have a short, concise history of farming in the different sections of our country. We will keep the offer open of a one dollar book to any person who will send us an essay on this subject from any of the other States. Will our numerous friends and correspondents from other States, let us have essays from them, and we will publish them as received, especially from the Western States, where we have many valuable correspondents that we should like to hear from. We earnestly hope that our Western subscribers will keep our readers posted up on the agriculture of the Far West.

Berries for marketing are grown along all the railroads by a few enterprising men. As a farming State, New Jersey is far from being in the rear. In no State of the Union are the *mass* of the farmers more intelligent. The soil requires more labor than the rich prairies of the West, and less than the cold hills of the north; and will amply repay the husbandman for his toil by the products of its fields and gardens. G. F.

Readington, N. J.

ON THE MANAGEMENT OF STOCK IN WINTER.

I do not pretend to say that what I may offer will be the best method of managing stock during the winter, but I give it as what has been found to be well adapted to a small farmer's situation.

The first thing in the morning after rising should be to visit the barns and see if the stock is all right, and to give them a good foddering of hay. After breakfast feed again, and in half an hour turn them out, water them, and cleanse the stables. If warm and sunny weather, and the yard is sheltered, let the stock remain in it, keeping cows, sheep and horses separate. If stormy or very cold, tie them up again. At noon feed with a good foddering of hay or some coarse fodder, if you have it, and water again just before sunset, feeding them with hay again to last for the night. Four times a day is sufficient to feed any stock except working oxen, which may well have an evening foddering. If possible, the barn work should be all closed up before dark to prevent the use of a lantern. Stock which is fed with provender of any kind should be fed at the second feeding in the morning.

The points to which we would call especial attention, is regularity in feeding, whatever number of times it may be. Stock accustomed to be fed at regular hours, are more quiet, and do better than those fed on the "just as it may happen" principle. Again, we call attention to the value and necessity of good water and plenty of it for stock. Every farm yard should have a well of water sufficient for all such purposes. He who drives his stock a half mile, or even a few rods to a brook to water, is far behind the times.

In conclusion, I will only remark, that the true stock raiser and feeder will see that his animals are treated with care and kindness. It is a disgrace to a farmer's yard to have an animal so wild as to be unapproachable, and not less so, to have poverty-stricken specimens. Feed generously, but never surfeit. Keep them in warm stables, well bedded, and perfectly ventilated, and you will have the satisfaction of knowing that you have done your best for the enjoyment and well-being of your share of the brute creation. G. E. B., (Maine.)

THE BREEDS OF SWINE.

LIKE all other classes of animals, to speak in detail of the different herds of swine which have been produced by crossing, would require a large volume. I propose here to speak of only the recognized breeds originally introduced into this country, and one produced here.

The Chester Breed.—This is an American breed, having originated in Chester County, Pennsylvania,

from which it takes its name. It has been widely distributed during the past few years, and seems to give general satisfaction to all who have raised them, and are considered by many as the greatest and best breed in this country. The breed is said to be the result of breeding and crossing the best specimens in the country during the past thirty-five years. The genuine Chester is pure white, long body, square build, with small, fine bone, and produces a large amount of meat in comparison with the amount of food consumed. The fact that the Chester will readily fatten at any age, makes them *the* breed for the people, being suitable to slaughter in the fall when nine months old, or they can be kept growing two years. Well fed spring pigs will range from 250 to 400 pounds, when slaughtered in early December. We have had them go above that figure. This is the most desirable kind of pork for general farm raising, and which is for home consumption.

Berkshires.—This old English breed was one of the first introduced into this country, and is widely disseminated. They attain the largest size of any of our breeds. Its distinguishing color is tawny

white or reddish brown with black spots. Legs short, hair thick and curly, and flesh apt to be rather coarse. Make very fine bacon hams, and are of a tough, hardy nature and disposition. They are perhaps the most widely distributed and generally approved of any breed in the United States.

The Suffolk Breed.—This is an English breed, but has been improved in this country by crossing with others, especially the Chinese. The Suffolks are very handsome animals, generally of a white or light color, and well proportioned. They do not make large hogs, but are of medium size, with good feed, ranging from 250 to 300 pounds at a year old. Comparatively small feeders, and produce sweet, fine-flavored pork.

Essex.—This is another English breed, whose characteristics are a black and white color, though sometimes a pure black, which Youatt says is a test of their purity, particularly "if they have small teat-

like appendages hanging beneath the neck." They are of medium size, small heads, well "set up" on legs, small upright ears, short bristles, small boned, and delicate flesh.

There are various other breeds and mixtures, among which is the Chinese, which is a small, fine animal, making nice meat, but not often found pure as a breed. It has been quite extensively crossed with others, making, it is said, a desirable variety. In fact, except in the case of the Chester, it is hard finding specimens of the other fixed breeds which can be proved of undoubted purity, they having been crossed so extensively. The old native breed, sometimes called "land pikes," have gradually been driven out, and a better taken its place, so that it is difficult to find an animal of the hog kind in the agricultural States but what shows and possesses some points that prove his parentage as having been of purer blood.

Horticultural.

THE GARDEN.

THE seed time, for this year, is past, and the harvest is mostly gathered. The warm, pleasant days, when it was a delight to walk into the garden, view the growing plants, and watch the ripening fruits, have passed away. The gardener will be loft to perform the remaining labors of the season undisturbed by the intrusion of those, who, in brighter days, sought the garden as a pleasant ramble.

It is too early, yet, to put the garden in condition to meet the frosts of winter, or to harvest those vegetables which are improved by remaining in the ground until it is about to be frozen up; but a great deal can be found to do.

The beds of onions, spinach, strawberries, &c., that were planted in August or September, should receive a good cleaning this month.

The process of earthing up celery is to be continued as long as it is growing. If the cloudy, showery weather of August and September caused the weeds to get the start of you, cut them up, and take them to the compost heap.

It is very bad policy to allow the weeds to get a start; but we have had some weather the past season when it seemed impossible to hoe them at the proper time, without working the ground when it was too wet.

Now is a good time to try an experiment in trenching the garden. Try a small plot, inverting the soil, and loosen the subsoil ten or twelve inches, and watch the result. We predict that you will try a larger plot next fall.

It is a good plan to throw heavy soils into ridges, to expose more surface to the action of winter frosts and the early suns of spring. The soil will be earlier for it.

VINEYARDS.

On the 4th of September, at the invitation of P. Barry, Esq., we left Rochester, to visit the vineyards of Naples, Ontario County, in this State. Taking the 6.50 A. M. train, on the Erie Railroad, we had a delightful morning ride. The sun rose clear and bright in a cloudless sky, but over Rochester and the surrounding country lay a thick fog, which enveloped all nature. But "old sol," with his fierce and burning rays, soon dispelled the thick vapor, and left all nature bright and cheerful, and the country looking as if it had put on its brightest apparel especially for the occasion. A finer and more lovely day could not have been desired than the 4th day of September.

The party consisted of P. Barry, G. Ellwanger, H. E. Hooker, W. S. Little, H. E. Boardman, E. Frost, of Rochester and E. W. Herendeen, of Macedon. As the train passed rapidly along we had only a faint glimpse of the country. Here a man plowing up a pasture field for wheat, there a man showing his head just above ground, ditching. The orchards along the route looked bare of fruit. Corn appeared very unsatisfactory and backward. At 9 A. M., we arrived at Blood Station, on the New York and Erie Railroad, and were met by J. W. Clark and E. B. Pottle, of Naples. They are the largest grape growers in that region, and to see and examine their vineries was the object of our visit. Taking a seat in open carriages, at this place we had a delightful ride through the valleys of Conhocton and Naples. The valleys run north and south, and on each side are high hills, one of which is a thousand feet in elevation, and with a gentle, running brook on the low lands, formed a most beautiful and picturesque scene. The hills on the west side are being planted extensively with vineyards, and we learned from Mr. Clark that over 1,500 acres were already set out.

After a pleasant ride of five miles, we arrived at Mr. C.'s vineyard, which is situated on a side hill sloping towards the southeast. The soil is a gravelly clay, and very strong. The vines are planted fifteen feet apart each way, and run north and south. In the spring the land is plowed about four inches deep, with two horses, and then cultivated once or twice through the season. No pruning is done through the summer. The grapes are grown on the lower arms, none being allowed on the upper canes, which are removed in the spring, so as to throw all the fruit on to the lower canes. Five acres of Isabellas are in bearing, which were just commencing to ripen. Some of the bunches were already quite dark colored. The grapes were quite large, and very even. They have never been troubled with thrip, and very little with mildew or rot. The vines and fruit looked in the healthiest condition, and gave promise of a very large yield. They generally commence to pick by the 20th of September, yielding on the average about eight tons to the five acres. The yard, in the centre, is quite low, sloping towards the southeast, forming a kind of basin, and we noticed that the vines on the lower wet land seemed as healthy as the others, but bore very little fruit—quite a contrast to those on the bank, which had a very good crop. This we should think might be remedied by laying an underdrain through that part, as at the time of our visit it was quite damp and wet, while the banks were dry.

Mr. Clark has kindly furnished us with a written report of his method of cultivation and management, which we give below.

"My vineyard now in bearing, consists of about four and a half acres, facing the southeast. It may be called a side hill soil—or, as it has been called, a stony loam, very loose, and poor drift land, and requires no drainage. The vines were planted in the spring of 1857 and 1858; set 15 feet apart each way. In planting the vines, the holes were dug 18 inches deep, and 2 feet across. A composition was added of seasoned swamp muck, leached ashes, and soil, about equal parts, and about a half bushel in each. The same season planted corn among the vines, both making a very poor growth the first year. The second season the vines were tied to stakes. The third season put up posts, cut 11 feet long, for the purpose of using the second and third time, as they rot off at the top of the

ground. Set them 7 1-2 feet apart, use wooden slats, 1 by 1 1-2 inches, 15 feet long, of pine or bass wood, commencing 18 inches from the ground, making a trellis 6 feet high, with 6 slats, running the whole length of the vineyard, north and south.

"The vines send up from the roots, 3 and sometimes 4 canes; use 2 as base vines, tied to the lower slat, running 7 1-2 feet each way, on the lower slat on the trellis. The other vines are cut shorter, dividing the spaces on the trellis, and when trimmed should only reach the third slat, leaving the fourth and fifth slats for the growth of the vines the next season.

"I usually trim in the month of March, having more time than earlier in the season; but should prefer to trim them in the fall, soon after the frost has killed the leaves, and trim on the spur and cane system, i. e., leaving the canes on the lower slat to reach each other, leaving two buds on the spur for next year's growth. In the month of June, when the vines have made from 4 to 6 inches growth, I go over the vineyard, and with my hand break off all the imperfect shoots or limbs, and double buds, and suckers coming up from the roots, except occasionally a strong shoot, which I leave for a base vine the next season, and cut out a weak vine in the place of it. Great care should be taken not to leave too much wood.

"The trimming is very easily done. You require no knife or shears. It is all done with the hand. The trellis should be full on the lower slat, on which most of the fruit should grow; and by careful trimming at that season of the year, you can leave just enough wood to cover the trellis, and at the same time avoid an excess of wood and foliage so as to admit all the air and sunshine to perfect the ripening of the wood and fruit. Very little fruit should be allowed to grow above the third slat.

"I do no summer pruning after the middle of June; have an abundance of room above the fruit for the vine and foliage, and do not allow over 25 pounds of grapes to grow to the vine; 20 pounds would be better still, covering a space 15 feet, by 6, on the trellis. Grape growers make a great mistake in raising too many grapes to the vine. *A large crop is a sure indication of poor fruit.* Other fruits will throw off what they cannot ripen, although the fruit may be small or imperfect from over-bearing; still it ripens. Not so with the grape, which will carry a large quantity of fruit along, all of good size and late in season, turn red or change color until the frost finds it; whereas, if only one-third or half had been allowed, would have ripened.

"I have a grape house near the centre of the vineyard, octagon in form, two stories high, 24 feet across, with a cellar for making wine. On six sides I have slats, one above another, to run each end of the picking trays or boxes on, commencing at the bottom, to above in the trays and boxes, as drawers, enough to hold 12,000 pounds, where I keep them until they are packed and have as little handling as possible. When carefully packed, they will keep for a long time without losing their bloom, or shrivelling.

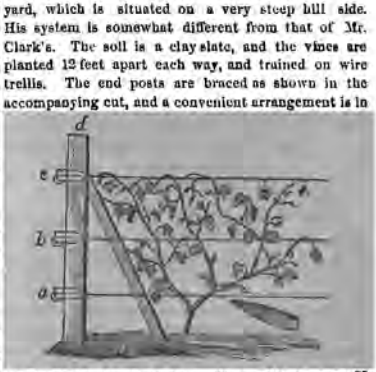
"Adjoining the grape house, I have a packing room where 4 to 8 girls or women are employed, commencing about the 20th of September, and ending this year, 12th December. Pack them in 2 and 4-pound round pasteboard boxes with wooden bottoms, and enclose them in tight, light wooden boxes or cases holding from 18 to 24 of the 4-pound boxes and 45 of the 2-pound fancy boxes, and send them by express to market. They were sold up to the middle of October in the 4-pound boxes, at 25 cents per pound; in smaller fancy 2-pound boxes, at 31 cents, in Philadelphia, and at 20 and 25 cents each in Baltimore and New York. After that time prices went down, there being so many inferior grapes thrown on the market. Those that I packed and shipped through the whole season, netted me after paying express charges, commission, &c., 14 cents, delivered on the cars at Blood's Station.

"I packed from my vineyard, 11,500 pounds, and sold to the wine company, Crooked Lake, 10,000 at 4 cents. In consequence of being disappointed in the receipt of boxes, I delayed until after the frost came, and injured the balance of my grapes for packing, and sold nearly one half for wine.

"I have now 12 acres planted to several varieties, including a large share of Catawba, Diana, Delaware, &c., and intend planting as many more acres in the spring."

Mr. C. thinks it is of the greatest importance to grape growers not to allow too many grapes upon the vine, and to grow them on strong canes.

From here the party proceeded to Mr. Pottle's vineyard, which is situated on a very steep hill side. His system is somewhat different from that of Mr. Clark's. The soil is a clay slate, and the vines are planted 12 feet apart each way, and trained on wire trellis. The end posts are braced as shown in the accompanying cut, and a convenient arrangement is in



use for tightening the wires. The trellis is some 70 rods long, and at each of the end posts are plugs, *a*, *b*, and *c*, to which the wire is attached. The end of the plug is made square, to which a wrench is used to turn it, and the wire being put through it, the plug is gently turned until made quite tight. Figure *f* will show the shape of the plug, which as soon as the wire is drawn perfectly tight, is driven fast into the post. In the fall after the vines are through bearing, it is loosened, the wire slackened, and in the spring again tightened up. Very little sagging occurs, as at each post the wire is nailed to keep it up in its place. Hickory wood pins are used. Mr. P. has about five acres in bearing,

principally Isabellas, which are allowed to carry all the fruit that matures. None are picked off, and the show gave prospect of a very large yield. The fruit was fine in appearance, and was coloring. Three trellises were devoted to Catawbas, which hung very heavy on the vines. Clusters quite large, and fruit fine. No thrip at all, but here and there were marks of the hail storm which swept over that locality this spring. There were marks on many berries, of black spots, and the fruit spoiled. Very little mildew was to be seen. From our observations in this vineyard, we felt more convinced of the importance of thinning out fruit, and leaving only as many bunches as the vines can perfect.

Mr. Clark provided a bountiful repast for the company, at which Adirondack grapes, (perfectly ripe,) raised by Mr. Pottle, were introduced and enjoyed. These gentlemen omitted nothing that could afford pleasure to the party, and it was with feelings of regret that we took leave of them. Returning home by way of Canandalgua, we had a pleasant sail up the lake that bears that name, but its beauties our pen can not describe, and want of space forbids.

GOLDEN DWARF PEACH TREE.

BELOW we give a cut of this remarkable tree which originated about the year 1856, on the grounds of Mr. Van Buren, of Georgia. Messrs. Miller & Co., of Setzler's Store, Pennsylvania, are the only parties who have these trees for sale, and in a letter received from them, they give us the following history of the Golden Dwarf Peach.

MESSRS. EDS.:—It is supposed to be an accidental cross between the Italian Dwarf and Van Zandt's Superb. Dr. J. F. Evans, formerly of Chester county, Pennsylvania, but now of South Vineland, New Jersey, in 1859, succeeded in securing a few stumps of trees, with the pledge that he would not part with any buds before the year 1861. Mr. Van Buren expected to get his stock north before that time, but the rebellion thwarted his plans. Besides Dr. E., there was but one man in the north who had possession of this tree; he received two from Mr. Van Buren, and kept them for his own use. We received the buds from the doctor. The original tree when four years old, was but twenty-eight inches in hight, but by being budded on a stronger root, it is somewhat enlarged. The foliage is large, of a rich, dark green, and so dense, that not a ray of light can traverse the head in any direction.

Very Respectfully,

MILLER & Co.

It is a golden yellow peach, and the cheek, which covers half of it, is of the richest carmine. The accompanying cut was taken from a tree that is making its first year's growth from the bud. We saw one of these dwarfs a short time since, and the accompanying cut gives a very good representation of this new member of the fruit family.

THE KITTATINNY BLACKBERRY.

MEETING OF FRUIT GROWERS AND MEMBERS OF THE FARMERS' CLUB.

REPORTED FOR THE AMERICAN FARMER.

ALL lovers of good fruit will be interested to know that there has been a Blackberry recently introduced to the horticultural world by E. Williams, of Montclair, New Jersey, which for flavor, size, and productiveness, combined with several other desirable qualities, is so much superior to the Lawton, or any other variety in cultivation, that it cannot fail to become a general favorite with all.

We learn that the Kittatinny was first discovered in the town of Hope, New Jersey, near the base of the Kittatinny mountains, ten or fifteen years ago. Since then, it has proved to be perfectly hardy, even where the Lawton has been winter killed.

About the first of August, by invitation of Mr. Williams, in company with about thirty fruit growers from several different States of the Union, we had the pleasure of visiting the original plants in full bearing, on the grounds of Mr. G. H. Courson, Newton, New Jersey, where each could test the merits of the new berry for himself, an opportunity which none failed to improve. After spending an hour or two among the Kittatinnies, the "blackberry party" returned to the Anderson House, where a meeting was held. The Hon. N. C. Ely, of New York, presiding. A committee of five was appointed to make a report, and draft resolutions, as follows: Dr. J. A. Warder, of Cincinnati, Ohio; S. B. Parsons, Flushing, Long Island; William Parry, Cinnaminson, New Jersey; P. Quinn, Newark, New Jersey; M. F. Cowdery, Ohio.

Dr. Warder, chairman of the committee, presented the following, which were passed unanimously:

Whereas, Having this day, August 2, 1866, observed the fields of Kittatinny blackberries in cultivation at Newton, New Jersey, and tested the fruit, now in full perfection, we deem it due to Mr. E. Williams, of Montclair, and to the horticultural public, to state that we regard this new variety recently introduced by Mr. Williams, worthy of unqualified praise. The hardiness, vigor, and productiveness of the plant, together with the size and unsurpassed flavor of the fruit, would seem to leave nothing further to be desired in a blackberry ripening at this period of the summer, either for private gardens, or for the market.

Resolved, That the thanks of this gathering of horticulturists from different States, be tendered to Mr. E. Williams, of Montclair, and Mr. G. H. Courson, of Newton, for their candor, kindness, and courtesy, in aiding the prosecution of our investigations, and also to the citizens of Newton for the interest they have manifested in our visit, and the attention they have shown us.

Resolved, That to the proprietors of the Anderson House, Newton—Messrs. J. & H. Ward, our consideration and thanks are eminently due, and are hereby heartily tendered for the attention they have shown us, and the excellent manner in which they have catered to our comfort and pleasure.

HOW WE FARM IT IN THE GENESEE COUNTRY.

WRITTEN FOR THE AMERICAN FARMER, BY P. C. REYNOLDS.

NUMBER EIGHT.

GATHERING APPLES.

In nothing connected with farming has a greater change taken place within the last forty years, than in the relative importance of the orchard. I have a vivid recollection of the orchard as it was, nearly forty years ago, in the eastern part of this State, near the Connecticut line. The few grafted trees were well known to the boys—their number being quite limited. Farmers never thought of selling *table* fruit; indeed, few had enough of good, improved fruit for their own families, but usually buried, somewhere in the garden, some of the more durable of the natural fruit. Those who were boys in those days, can well remember how the apple pit was cherished. The orchard was a source of profit, then, not from the sale of the fruit, but from the sale of the *alcohol* it contained. The farmer carefully excluded his swine from his orchard that he might save the *cider* apples. These were ground into cider, and that distilled into cider brandy, or apple jack, which was a staple article of traffic, as well as of home consumption. There was a distillery of cider brandy near the school which I attended when a boy, and I remember the aversion with which the scholars regarded it. Several of the distiller's sons and sons-in-law died of that frightful disease, "delirium tremens," and the horrible agonies of their last moments as related by eye-witnesses, were a powerful temperance lecture to the children who attended that school. I am not aware that cider was ever distilled in the Genesee country, but *corn* has been to an alarming extent.

For several years after our removal to the Genesee country, (which was thirty years ago,) we used to put all our winter apples into the cellar, and those not consumed by the family rotted down, or were fed out to the hogs. Now, however, the apple crop is of much greater importance—often the most important crop on the farm. I know of a farmer, with a poor farm, on which is an apple orchard of about three acres. A mortgage of seven hundred dollars had rested on the farm for several years, he being unable to reduce it. Last year he sold his crop of apples for twelve hundred dollars, removed the mortgage, and had a nice sum left for improvements.

The fruit crop is becoming quite a lottery, in which the blanks are full as numerous as the prizes. I know of an apple orchard of fifteen acres, which produced, in 1862, 2,000 barrels, but since that time has not yielded 200 barrels in any one year, and will not have twenty of good, marketable fruit this year. When an orchard happens to produce a large crop, in a season of scarcity, the profit is much greater than that afforded by other farm crops.

In modern orchards, the trees are pretty much all grafted, and generally with select varieties, consequently the surplus is all saleable. Summer and autumn apples are raised to some extent, but the bulk of the crop are winter apples. These should not be picked until after the middle of October, to enable them to attain their full size. Fruit enlarges considerably in the latter stages of maturing. Some think that by picking them so late they lose more by windfalls, than they gain by the increased size. If that be true, there is certainly a great gain in quality. It is mainly the imperfect fruit that falls before the maturity of the crop, and they are really unfit to barrel, as they will probably perish themselves, and cause the sound fruit in the same barrel to rot. They can be turned to profit in other ways.

Before the apple harvest comes on, the farmer should provide a suitable number of ladders of various hights, step-ladders for the lower limbs, and round ladders for the higher ones. One rule should be forcibly impressed upon every one engaged in handling apples, and that is, handle carefully, so as not to bruise. A handle-basket, with a hook attached to hang it upon a limb, or a bag with two corners tied together, with a twig in the mouth to keep it open, should be used in picking from the tree. The apples should be placed in the basket or bag, not dropped in, and carefully emptied into a pile for assorting.

Whenever practicable, the farmer should himself attend to assorting and packing the fruit. Dealers usually require that the bottom of the barrel be *faced*, that is, that large, fair apples be placed upon the bottom, stems downward, so that when that end is opened by the broker, in New York, or elsewhere, they may show to the best advantage. The honest, high-minded farmer will see to it that the barrel is *filled* with honest fruit. In filling the barrel, it is well to use an ordinary peach basket, so that it can be put down into the barrel, and the contents emptied out, not poured in from the top. As each successive basket is emptied in, the barrel should be slightly shaken, and it should be filled a little more than level with the top, so as to be pressed down with the apple screw. If properly packed, there will be no sound from the apples as the barrel is rolled.

Every farmer who ships apples, should be provided with a self-supporting, inclined plane, to facilitate rolling the barrels into the wagon. An apple rack, where many apples are barreled, is necessary to carry a large load. Three strong cedar poles, 18 feet long, held together by cross-pieces, will carry 20 barrels, in three rows, the barrels lying down lengthwise of the wagon. Dealers usually require the name of the apple, and of the producer, marked on the head of the barrel.

TREE PLANTING.

WRITTEN FOR THE AMERICAN FARMER, "BY MAC."

WHEN you are notified that the trees ordered are ready for delivery, lose no time in bringing them home, and before you take them from the agent, see that you have what you ordered, and that they are healthy and thrifty, and properly labeled; if not, take only such as are, and leave him to do the best he can with those left. He may not like it, but cannot make you pay for a worthless article. When taken home, bury the roots at once, and plant them at your leisure, taking care that the job is properly done.

Strawberries are best planted in spring; but if they come in the fall, too late, or after the first of September, they can be kept over winter by being planted close in boxes of moist earth in the cellar; or in the garden, and covered with six inches of straw. Grapes, roses, currants, gooseberries, and the like, are best to be heeled in in a dry, sheltered spot in the garden till spring, well covered, nearly to the tops, with earth or straw; the latter, however, attracts the mice. If you are wise, you will have your ground ready, and the holes dug before the trees come, and then you have only to throw in a little fresh earth. Place the trees in their proper position, and hold them straight while the roots are covered in with loose earth, which should be settled among them by the application of half a pail of water to each tree just before the hole is quite filled; then cover with more earth, and heap up around the tree a foot high. That will keep it from heaving out with the frost, and keep the mice away. If it is settled too much, heap up a little more just before the first hard frost comes. If you want to do the business first rate, have a heap of composted muck, leaves, scrapings of the road, &c., with a few bushels of slacked lime added, and put a barrowfull to each tree, when filling up the hole in planting. It should be made some time beforehand, and well composted by turning over two or three times. *No barn yard manure should ever be placed among the roots of trees*, but it is a good plan to mulch them afterwards with a little of it. Trees should not be planted deeper than an inch from the crown of the roots.

THE bearing stems of all raspberries except the ever-bearing kinds, should be at once cut away as soon as they have done fruiting. Blackberry plantations are also much easier handled by cutting the bearing canes away immediately after they are done fruiting. —*Horticulturist.*

THE DOVE PLANT.

THIS plant is now in flower, in the conservatory of A. Erickson, Esq., of this city, and through his polite offer, visible to the lovers of such rare and curious productions of the Divine Hand. It belongs to the Orchis family, and is a native of South America, Island of Cuba, &c. He has been carefully cultivating it for several years in the hope of seeing its singular and wonderful flowers. These have begun to open, supposed to be the first of the kind in Western New York. The plant is far from beautiful, but its flower—that is the admiration. Its form is that of a dove, head and bill, body and wings, in the centre of the flower, as about to sit in a brooding state on its nest below; the whole nearly pure (almost waxy) white. As an Orchid, its name is *Peristeria elata*, winged Dove-flower, or Dove-nest, from the Greek, which means a dove. The Spanish have named it *Espiritu Santo*, and the English have called it *Holy Ghost* plant or flower. It is not strange that this flower should remind Christians of the baptism at the river Jordan. It should be known, however, that the Orchids have long been famed for flowers which indicate at once the forms of animal life. An author wrote nearly two centuries ago, that the Orchids showed, more than any other, "diverse genera and species, figures and resemblances of animals and of their parts, wonderfully drawn." Indeed, he gives figures of the flowers, of one of the Orchids which contain a beautiful bird; though the leaves show that the plant is very unlike the one here in flower. Among Messrs. Ellwanger & Barry's splendid plants are several rare and wonderful Orchids in flower. C. D.

FLOWERS.—At the State Fair held at Saratoga, Mr. James Vick, of this city, entered a number of flowers, and took *all* the first prizes for which he competed. *The Saratogian*, of September 15, says: "James Vick, had a splendid exhibition of flowers at the Fair, that attracted much attention from visitors, and took several prizes, namely, the first on cut flowers, the same on pansies, ten weeks' stocks, collection of dahlias; and also for twenty-four dissimilar blooms of dahlias, and German asters, and American seedling verbenas. All these were in the professional list, as Mr. Vick is one of the largest dealers in the country, both native and foreign."

WE have just received from J. O. Weeks, West Webster, N. Y., some fine specimens of the Tilden Tomato. They are very large, and of first-rate quality, and are rapidly gaining in public favor as the best variety to cultivate.

The Gardener's Monthly says that experience has shown that a scythe, grass hook, or even a pair of box shears will get over the lawn faster amongst trees than a narrow mower, and on the whole no lawn mowing machine that has been tried in that section can be recommended.

POTATOES are rotting badly in this section.

Ladies' Department.

MADELINE'S KITCHEN CABINET.

A NEW KITCHEN ERA.

When we are all better cooks than we are to-day, we shall be universally better men, women and children, and have fewer occasions to employ doctors, and on an average, live longer, and more happily, and put on pecuniary independence more rapidly, and well; let us learn to be better cooks, as fast as we can, and let us tell The Farmer everything we can think of that is likely to be new or valuable to somebody, and the probability is we shall prove a mutual blessing society of American farmers' wives, and daughters, and sisters.

Now, permit me to present Mons. Blot again, and his

FIFTH BILL OF FARE.

1. *Potage au lentiles.*—The lentiles should be soaked five or six hours in cold water; then boiled in meat broth with parsley, pepper, thyme, cloves, and onion, for seasoning. When done, the soup to be pressed through a cullender, first placing in the tureen a few pieces of bread sliced thin and fried brown.

2. *Oysters en Croquilles.*—Boil the oysters one minute in their own liquor. Then lade them into a saucepan, having a broth or thin batter, made of flour, eggs, and a little butter, seasoned with pepper and salt. Boil in this two minutes, and set away to cool. Clean the deep shells, lay in each one an oyster, fill in as much batter as it will hold, sift over cracker crumbs, lay on a bit of butter, and bake fifteen minutes in a moderately hot oven.

3. *Fillet of Beef.*—This is simply roasting a nice fillet of beef in a quick oven, and dressing it towards the last, with rich, high seasoned Madeira sauce.

4. *Partridge en Crampandine.*—The birds are split and quartered, the larger bones removed, then dipped in beaten egg, rolled in fine bread crumbs, placed in a dripping pan in a moderately hot oven, and when half baked, a sauce made of some meat broth, butter, flour, a bit of fried onion, and a spoonful of vinegar is turned over the birds, and the cooking completed.

5. *Potatoes in Croquettes.*—Raw potatoes sliced very thin, fried brown in hot, clean drippings, and a dressing of sweet, thick cream, poured over them at the moment they are done.

6. *Eggs a la Neige.*—Eggs and white sugar, with enough fine, sifted flour, are to be beaten together into a stiff batter. Then the batter is dipped by spoonsful into boiling milk, boiled three minutes, and then skimmed out into a covered dish. When done boiling cakes, add three beaten eggs and sugar enough to sweeten, to the milk, cook five minutes, and pour the custard thus made over the cakes. This is a delicate dessert. Here follows

BILL OF FARE, NO. 6.

Just a little pretentious, but simple, economical and excellent. The soup, which leads off, M. Blot informs us, was invented by His Royal Highness the Prince of Monaco. But that does not matter a mite. It is just as good as if any of us cooks or kitchen maids had invented it.

1. *Potage a la Monaco.*—Bread cut in thin fillits and dried hard in a hot oven. Then the pieces of bread are placed in the soup tureen, and a little sugar and grated orange peel sifted over, some very thin bits of butter laid on, and boiling milk turned over. Then the soup is ready.

5. *Bass a la Genoise.*—Almost any good pan fish will do. Score the sides of the fish quite through, place them in the pan with a little carrot and onion chopped very fine, and an inch in depth of rich meat broth, and bake till done through. Then some butter gravy, thickened with bread crumbs, is to be turned over the fish while hot.

3. *Mutton Chops a la Jardinier.*—Nice, juicy, mutton chops are first beaten flat, then put to try with sweet butter. Carrots and turnips are sliced into wafers, boiled soft. Then a beaten egg, a spoonful of butter, and two of flour are whipped together with a little warm water turned over the vegetables, and the whole over the chops, and the cooking continued five minutes.

4. *Pheasant en Propillates.*—The fowl is to be trussed, salted, and put into a pan and baked until about half done, small bits of fat pork, onion cut fine, parsley, thyme, pepper, and a little butter being all cooked with the bird.

Then it is cut in pieces, each piece being laid separately on clean, white paper, with a spoonful of pork and gravy. The edges of the papers are then folded over, and being replaced in the dripping pan, they are returned to the oven and baked fifteen minutes.

The following dishes to follow in this bill of fare, have already been given, and need not be repeated here.

5. *Carrots Bechamel.*
6. *Turnips glaces.*
7. *Apples en fritteur.*
8. *Meringues.*

BILL OF FARE, NO. 7

Is more for *our folks* at home, but fit for an emperor at home or abroad.

1. *Mock Turtle Soup.*—A quarter of a pound each of butter and flour is stirred thoroughly into two quarts of warm, rich, veal broth, and put into a kettle with a carrot, an onion, thyme, and parsley, all chopped very fine, and pepper and salt to season. When the soup has boiled three-quarters of an hour, add a gill of good port wine, or brandy. Then slice the inside of a lemon, and three hard-boiled eggs, lay them over the veal which has been boiled and placed in the tureen, and pour the soup over it.

To those who object to the use of wine or liquors in cooking, I have to say that mock turtle soup can be made very good without either, but not so good as with them.

2. Beef boiled—*Bibert sauce.*
3. *Calf's Head Poulette.*
4. *Calf's Tongue a la Italienne.*

All these are given elsewhere.

5. *Potatoes Stuffed.*

Take large-sized, round, smooth potatoes, wash, pare

thin, cut in halves, and scrape out the interior, leaving a shell half an inch thick. Then boil and mash thoroughly, good mealy potatoes, mix with them parsley chopped fine, an onion fried in butter, and minced, and an egg to every three potatoes. Stuff the scooped out shells pretty close with the material, skewer together, enclose separately, and tie in bits of clean rags, and boil half an hour.

6. *Cream Renverse.*

Take a pint of sifted flour, and wet up to a dough with cold milk; then thin it to a batter with as much boiling milk; set it on the fire in a saucepan, and stir vigorously as it thickens, and when it has cooked three minutes, take it off; add four eggs well beaten up, white sugar to sweeten, and lemon to flavor. Then turn it into a tin mold, place the mold in a pan of hot water over a slow fire, and in five minutes the material will be as light as a puff ball. Then bake twenty minutes in a moderate oven, and turn upside down. To be eaten cold.

7. *Croquignoles with Almonds.*—This is made of equal parts of flour, sugar, eggs, butter, and two ounces of finely pounded sweet almonds, wet up with milk, thoroughly mixed into a stiff dough, then well kneaded, rolled out a quarter of an inch thick, cut into fancy shapes, and fry in hissing, hot lard.

DOMESTIC RECEIPTS.

E. HARRIS' BAKING POWDER.—If any of our lady readers are in the habit of making soda biscuit, they will thank us, if they only try it, for recommending Harris' baking powder. We are satisfied that it is a superior article. Three teaspoonsful of the powder sifted with a quart of flour, a pint of salt, and mixed with about a pint of sweet milk, made into biscuit and baked immediately, will produce delicious cakes for tea, or any other time. We know nothing of the party who makes the powder. It costs only 80 cents per pound.

MAKING BREAD.—Set a yeast cake to soak in a little warm water. Sift into your bread bowl the required quantity of flour. Pour into the centre, one quart of boiling water, cool with new milk, if convenient, and add the soaking yeast cakes and water; sprinkle a little flour over the batter, and let it stand over night. Early in the morning add to the emptyings one quart of milk warm water, mix, and knead thoroughly, and form into loaves. Let it rise in a warm place, and bake at least one hour.

"A READER" writes us that she has tried "Madeline's" receipt for "Common-Sense," home-made Coffee, as published in the September number of THE FARMER, using "Java" in place of "Rio." She paid 45 cents per pound for Java, and 20 cents per quart for peas—producing about two pounds of good coffee—a better article than is sold at 40 cents per pound, and costing but 65 cents. To furnish your own coffee, purchase a small grinding mill, the raw material, and follow "Madeline's" directions, and you have an excellent substitute coffee, free from deleterious compounds.

Miscellaneous.

A MOMENT OF HORROR.

FOR twenty-three years old Jake Willard has cultivated the soil of Baldwin county, and drawn therefrom support for self and wife. He is childless. Not long since, Jake left the house in search of a cow. His search was through an old worn out patch of clay land, of about six acres in extent, in the centre of which was a well twenty-five or thirty feet deep, that at some time, probably, had furnished the inmates of a dilapidated house near by with water. In passing by the spot, an ill wind drifted Jake's "tile" from his head, and maliciously wafted it to the edge of the well, and in it tumbled.

Now, the old gentleman had always practiced the virtue of economy, and he immediately set about recovering the lost hat. He ran to the well, and finding it was dry at the bottom, he uncoiled the rope which he had brought for capturing the truant cow, and after several attempts to catch the hat with a noose, he concluded to save time by getting down into the well himself. To accomplish this, he made fast the end of the rope to a stump hard by, and was soon on the way down the well. It was a fact, of which Jake was no less oblivious than the reader hereof, that Ned Wells was in the dilapidated old building aforesaid, and that an old blind horse, with a bell on his neck, who had been turned out to die, was lazily grazing within a short distance of the well. The devil himself, or some other wicked spirit, put it into Ned's cranium to have some fun; so he quietly slipped up to the horse, and unbuckling the strap, approached with a slow and steady "ting-a-ling" to the edge of the well.

"Dang the old blind horse!" said the man at the bottom of the well. He's coming this way sure, and ain't got any more sense than to fall in here. Whoa, Bill!"

But the continued approach of the "ting-a-ling" said just as plainly as words, Bill wouldn't whoa. Besides Jake was at the bottom, resting before trying to shin it up the rope.

"Great Jerusalem!" said he, "the old cuss will be a top of me before I can say Jack Robinson. Whoa, dang it. Whoa."

Just then Ned drew up to the edge of the well, and with his foot kicked a little dirt into it.

"Oh, Lord!" exclaimed Jake, falling on his knees at the bottom. "I'm gone now—whoa! Now I lay me down to sleep—w-h-o-a! I pray the Lord my soul to—whoa, now, Oh, Lord have mercy upon me."

Ned could hold in no longer, and fearing Jake might suffer from the fright, he revealed himself. Probably Ned did'nt make tracks from the well. May be Jake was'nt up to the top of it in short order, and you may think he didn't try every night for two weeks to get a shot with his rifle at Ned. May be not; I don't know. But I do know that if Jake finds out who sent you this it will be the last squib you'll get.

Editor's Table.

THIRTY-SIX PAGES THIS MONTH!

OWING to the large amount of matter this month, and the unusual number of advertisements received, we are obliged to publish *four pages extra.* We endeavor to give all the leading and latest news, as well as our regular reading matter, but the list of fairs and Fair reports crowd our pages at this time, in consequence of which, a large number of interesting communications are necessarily deferred. We would call the particular attention of our readers, to the many valuable advertisements in this number. They are exceedingly interesting, and particularly appropiate at this season of the year, and we would request our subscribers, in all cases to mention THE AMERICAN FARMER, when writing to our advertising patrons.

New York State Fair.

THE Twenty-Sixth Annual Fair of the New York State Agricultural Society, was held this year at Saratoga Springs, September 11-14. The grounds were located, about one mile from the town, and embraced some twenty acres, surrounded on all sides by a high board fence. The surface was almost flat, and consequently not favorable for calculating the number of visitors, but the attendance each day seemed to be equal to former exhibitions. On Thursday, the principal day, it was estimated that over 20,000 persons were on the grounds. The number of entries of exhibitors reached nearly 2,200. The weather on the second and third day was unusually fine and pleasant, which added materially to the pleasure of the occasion. These annual gatherings are the farmers' holidays, and to see them turn out with their wives, sons, and daughters, is always to us one of the greatest attractions.

On arriving at Saratoga, we procceded at once to the Fair grounds. Let us look around. The first thing that meets the eye on entering, is

VEGETABLE HALL.

Here the visitor finds mammoth squashes, cabbages, large beets, and fine corn. Henry Moody exhibits three fine summer squashes and six good heads of cabbage. Walcott & Campbell, of York Mills, show some fine mangel wurzel, and Mr. Walling exhibited "some pumpkins," twenty-two, said to have grown from one vine. J. T. Johnson, of South Corinth, had a large ear of corn, eight rowed, about fifty kernels to the row, raised by him on a cane 13 feet high. Cucumbers, melons, egg plants, carrots, &c., were all represented, but no extra fine specimens that we noticed.

DAIRY HALL.

The visitor here sees factory made cheese looking very tempting, and exhibited by G. H. Eddy, Gansevoort, N. Y., and also a parcel by R. C. Wickham, Powlet, Vt. Here also is to be found wheat, oats, barley, and rye, but the exhibition in this department was much smaller than usual. Next in order we come to

DOMESTIC HALL,

which we find crowded at all times. The numerous attendance of ladies was more than enough to fill many such buildings. The first thing on entering which meets the eye, is the Lamb Knitting Machine, previously noticed in THE FARMER. It was exhibited to the great admiration of the ladies. A beautiful shawl and carriage robe knit by this machine, and scores of other little articles, were greatly admired. Among the Sewing Machines on exhibition were to be found the Singer, Howe Sewing Machine, Elliptic, of which several were on exhibition; also Wilson & Gibbs, all machines of great beauty and finish. A milk rack, made by Albert Jackson, of Clifton Springs, N. Y., is said to be superior to any other now in use. The revolving is done entirely on the center pole with laterals, and the improvement is in preventing the milk from shaking when being turned round to be skimmed. Also a portable fence and patent hay rack by the same exhibitor. Following the crowd up stairs, we find all kinds of "notions," such as knitting work, flowers, pictures, bed quilts, gloves, fancy cushions of divers colors, and in fact a general dry goods assortment; but as we are no judges of such matters, we pass on to

MECHANICS' HALL.

Messrs. H. and E. F. Cooper, of Watertown, N. Y., have their improved cheese vat for factory purposes, on exhibition. We noticed one large one for 150 cows, and also a self-heating one for farm use, for a dairy of 30 cows. Washing machines are exhibited in great force. Doty's Clothes Washer is in the center of the crowd. R. C. Browning, of New York, is the agent for this machine, which with the Universal Clothes Wringer, are becoming a household necessity. It has been greatly improved since we saw it last by applying a brass spring on the sides, instead of the india rubber elastic to work the washers with. Several new patents were on the ground, but they are too numerous to mention in detail.

Emery Bros., of the Emery Agricultural Works, exhibit their cotton gin, worked either by power or hand. Many improvements have been added to it, which makes it now complete. Next we find Woodworth & Harwood's Water Elevator, which by the application of a crank on the friction wheel, allows the bucket to descend into the well, and by brakers can be at once stopped at any elevation. W. A. Palmer had a similar invention made by J. B. Brown, Peekskill, N. Y. This is also a self-regulating water lifter. It is covered by a box, and the ascent or descent of the bucket is regulated by the balance wheel and regulator. Hawkins & Dodge, of Newark, N. J., exhibited a suction and force pump, which will force a stream of water eighty feet, is very simple and a great convenience for a garden, or in case of fire. It will draw water from any depth.

Also by the same parties, a mitre cutter for farmers and carpenters for cutting mouldings, at an angle of 45°. In this department we find mangles, churns, churn powers, refrigerators, and a great number of inventions, too numerous to mention. Here also are stoves which

are too hot to receive close attention, so we pass them by.

Outside the building we find the self-acting cattle pump, manufactured by E. C. Kellogg, Rome, N. Y. This valuable invention was well described by our esteemed correspondent, C. N. Bement, in the August number of THE AMERICAN FARMER, page 237, and we were pleased to have this opportunity of seeing it, and from its working, should think it a useful invention, and one that farmers would do well to adopt.

Blymyer, Bates & Day, of Mansfield, O., have on exhibition Cook's Sugar Evaporator, of which over 5,000 have been sold this season. Its excellence consists in its rapid process of boiling, and in making sugar of the finest quality. Next in order is a lot of patent gates and fences, machines for making bricks, horse drag saw machines, &c. Then we come to Wheeler & Melick, of Albany, who show their well known horse powers, with threshers and cleaner. They work each day to the great satisfaction of every one. R. and M. Harder, of Cobleskill, N. Y., exhibited a two-horse power and thresher and self-cleaner, for which they received the gold medal at the trial of implements, at Auburn. Close by we come to J. W. Faust's Patent Improved Hay Loader, which picks up a winrow as fast as a horse can walk. It is manufactured at Evansburg, Pa. Among the

IMPLEMENTS,

we discover every class of machinery represented. Here was to be seen a splendid display of mowers, of every patent, with self-raker and reaper attachments. The Buckeye Mower, manufactured by Adriance, Platt & Co., Poughkeepsie, took the gold medal at the late trial of implements, at Auburn, N. Y., and in this connection we give below the result of the recent Implement Trial which was held under the auspices of the Society at Auburn, N. Y. The report was read at the meeting, for discussion, on the evening of the second day of the Fair. The following is the list of awards:

In Class 1, for Mowers, the Buckeye Mower, entered by Adriance, Platt & Co., was awarded the gold medal. The Rhode Island Clipper took the second premium, and Wood's Mower, third premium.

Class 2, for Reaper and Raker combined, D. M. Osborne & Co., were awarded the gold medal, and C. Wheeler, Jr., the second premium.

Class 2½, Self Rakers, Seymour, Morgan & Allen, of Brockport, were awarded the gold medal, and C. C. Bradley & Co., second premium.

Class 3, Combined Mowers and Reapers, and Hand Rakers. Walter A. Wood took the gold medal, and J. L. Herrington the second prize.

Class 4, Combined Reaper with Self-Raking attachment, Williams, Wallace & Co., Syracuse, N. Y., gold medal, Seymour, Morgan & Allen, second premium.

Class 5, only two entries, and neither thought worthy of premium.

Class 6, R. L. Allen took the gold medal, and D. M. Osburn second premium.

Class 7, Endless Chain Horse Power, R. and M. Harder, of Cobleskill, took the only premium, a gold medal.

Class 8, Horse Power Lever and Sweep, Dow & Fowler, Fowlersville, gold medal.

Class 9, Two Horse Power Thresher, and Cleaner. No premium.

Class 10, Two Horse Power Combined Thresher and Cleaner, R. and M. Harder, Cobbleskill, gold medal.

Class 13, Horse Rakes, Barber, Sheldon & Co., gold medal; A. B. Sprout, second premium.

Class 14, Hay Tedders. No premium given, as the machines were defective in workmanship.

In Class 16, Horse Hay Forks, J. L. Mansfield & Co., of Clockville, were awarded the first premium, and Chapman & Hawley, of Utica, the second.

In Class 18, Hay and Straw Cutters, no award was made. Sanford, Wasson & Co., were named first, but the machine of Dow & Fowler was thought so nearly equal, that both were commenced together.

Cromwell & Wanzer, of Chicago, Ill., exhibit their One Horse Steel Tooth Hay Rake. J. L. Mansfield & Co., of Clockville, have a hay rake also on the ground, which is very simple and effective. Horse hay forks, cultivators, cutting boxes, plows, &c., are very numerously represented, but particulars of each would take up more room than we can at present give. Albert S. Skiff, of Trenton Falls, exhibited an improved roller, which is adapted to uneven ground. There are two wooden rollers, the one in advance of the other, with a sort of box on top of each for stones when necessary. They overlap each other, and the centre bars are divided with a hinge, so as to allow of their slightly doubling up, so that the ground is rolled well in the centre.

FLORAL HALL.

In this department are to be seen many good collections of fruits and flowers, handsomely displayed on the tables, which extended all around the tent. First we noticed fifty-two varieties of fine apples, but by whom exhibited we could not learn. Frost & Co., of Rochester, have a very fine collection of forty varieties of apples, twenty-five of pears, two of quinces, three of crabs, and twenty-two of grapes. We noticed in this collection two large lemons which were grown in the open air, but the plants were protected during the winter in the greenhouse. The largest weighed seventeen ounces, they also exhibited a gourd (sypho,) which attracted general attention. David Thompson of Green Island, exhibited twenty seedling grapes. E. W. Sylvester, of Lyons, N. Y., some forty varieties of apples, twenty of pears, twenty-one of grapes. Dr. Grant exhibited some fine Ionas and Israellas. F. C. Brenm, of Waterloo, N. Y., had eighteen varieties of grapes, which made a fine display. Israellas, Hartford Prolific, Allen's Hybrid, and Rogers' Hybrid, No. 10, were exceedingly fine. Ferris & Caywood, Poughkeepsie, exhibited a Delaware seedling named "Walter," said to ripen very early, a great grower, and a large bearer. There were several other collections of very excellent fruits, but we could not learn the name of of the exhibitors.

THE collections of flowers were very fine, and well displayed in the centre of the large tent. Mrs. Van Namee was on hand, as usual, with a choice collection. J. Dingwall, of Albany, presented some fine phloxes, asters, and double zinnias. Frost & Co., of Rochester, a good show of asters. L. E. Smith, of Mechanicsville, some fine dahlias and asters. Mr. James Vick, of this city, had a very large collection of superior flowers, including most of the choicest varieties. His show of gladiolas was superb, and the whole were beautifully displayed, making a very brilliant show. Mrs. Chan-

cellor, of Walworth, showed a large pyramidal bouquet of choice flowers.

SHEEP.

The show of Merinos was very large, and in the majority; but long wools were well represented with fine specimens. William Chamberlain, of Red Hood, showed some fine Silesian Merinos and several pens of grade animals. James Kathan, three fine Merino grade lambs, five months old. Baker & Harrington, Comstock Landing, exhibited a full-blooded Silesian ram, one year old, which sheared eighteen pounds of wool for its first fleece. J. Winne, Bethlehem Center, exhibited good specimens of Leicesters. S. and W. S. Allen, Vergennes, Vt., several fine Leicester lambs, and two year olds. Burdett Loomis of Windsor Locks, Conn., exhibited imported Cotswolds, among which, we noticed "His Royal Highness," 2-year old, a fine specimen of this splendid breed. Of Southdowns, Mr. Lorillard, of New York, was the only exhibitor.

STOCK.

In this department are represented many fine animals, but not as numerously as we had hoped to find. The long lines of unoccupied sheds were not very creditable. Those on exhibition were splendid animals. Of Ayrshires, there was a grand display. A. A. Dalton exhibited a fine four-year old steer. Wolcott & Campbell had on exhibition a handsome three-year old bull; also six cows of the same breed. Devons were well represented. James Swart showed a beautiful Deven bull, three-year old. W. B. Dinsmore, Staatsburg, N. Y., a fine six month's old. Alderneys though not very prepossessing in appearance, are very valuable for the dairy. There are several on the grounds, among which we noticed several bulls and a cow, by R. H. Pomeroy. Shorthorns were particularly fine. Here is a noble animal bred by R. F. Alexander, and now the property of Ezra Cornell, of Ithaca, who also exhibited fifteen Durham cows and full-blooded Durham heifers—the best on exhibition. J. O. Sheldon, of Geneva, exhibited a 2d Duke, of Geneva, eighteen months old, and weighing 1,800 pounds. G. H. Brown, of Washington Hollow, showed a fine calf, dropped January 10th, which now weighs 850 pounds. C. R. Frink, of Norwich, showed a Durham bull, three years old, weight 1,800 pounds, a noble looking animal. In Herefords, B. G. Morp, took the first prize for one five-year-old cow.

GRADE ANIMALS.

Silas G. Smith, of Mechanicsville, N. Y., had on exhibition several fine animals, but the centre of attraction was a pair of three-year old steers. They certainly are "mammoth animals," the pair weighing over 6,000 pounds! There were many other good specimens of stock in this department, but we cannot spare room to specify each, and must pass on to the

PIGS,

which were not as numerous as at former exhibitions, but many excellent specimens were on the ground. A. C. Clarke, of Henderson, exhibited some superior White Chesters. F. E. McLean had two one-year old of this breed, fine animals, and two sows, two-years old and over. The sow probably weighs 600 pounds, while the boar may average 900 pounds. H. D. Jacobs, of Adams, N. Y., showed a large number of very fine, handsome pigs. Jos. Brodie, one fine large sow, ten months old, of the improved Yorkshire breed. J. T. Cavanagh, of Watertown, also exhibited several fine specimens of this breed. Of Berkshires there were only one or two pens, containing sows with fine litters of young.

THE POULTRY DEPARTMENT,

as at former exhibitions, drew a large crowd. The "cock-a-doodle-do" of the gay chanticleers, was distinctly heard over the grounds, and their lordships must be seen as well as heard. S. & W. S. Allen, of Vermont, had a large number of the different breeds on exhibition. Almost every variety was represented, together with geese, ducks, turkeys, pigeons, and rabbits.

New England Fair.

THE combined Fair of New England and Vermont was held at Brattleboro, Vermont, September 4–7, and was a decided success. On the third day over 20,000 persons were present. The number of entries amounted in all to 1,756, as follows: Cattle, 350; sheep, 600; swine, 30; horses, 212; implements, 145; floral hall, 188; sundrics, 221. Mechanics Hall presented a very respectable appearance, and labor-saving machines of all kinds were in full force. Hay loaders, patent sheep racks, plows, &c., were here on exhibition, but the show of fruits, flowers, and vegetables, was very small and the dairy department poorly represented.

Messrs. Tilton & Co., of Boston, made a splendid display of their choice books. They publish the works of the New England Agricultural Society, and their publications are always got up with the greatest care, and they have a reputation for doing their work in the most skillful manner. The show of sheep was of the very best; many animals of superior quality were on exhibition. The Merinos predominated, but the Southdowns and Cotswolds were well represented. Of the latter our esteemed correspondent, "H. G. W.," had thirty-three on exhibition.

Of poultry there was a creditable display, all of the leading varieties being on exhibition. Of swine, there were many choice animals of the Chester, Suffolk, and Essex breeds shown, and of excellent quality.

BIG CHEESE.—Our Canada neighbors have succeeded in making a big cheese; in fact, the largest in the world. The milk of 800 cows was used, and the weight of the cheese itself, is *three and a half tons*. It measures six feet eight inches in breadth, and three feet in thickness, and was manufactured by Messrs. Raney & Harris, of Ingersoll. We learn that it is to be exhibited at the Provincial Fair at Toronto, on the 25th September, and from there, it will be sent to the Paris exhibition of 1867.

As long as the premium on gold continues, we shall send THE FARMER to our Canada subscribers at sixty cents in clubs, or seventy-five cents single subscriptions in Canada money.

Greeley Prize for Grapes.

THE Committee appointed to award the $100 offered by the Hon. Horace Greeley, President of the American Institute, for the best grape for general cultivation in the Northern and Middle States, have decided to hold an exhibition for that purpose, on Tuesday, October 2, 1866, at the rooms of the American Institute in the Cooper Building, corner of Eighth Street and Fourth Avenue, in the city of New York.

Exhibitors must present 12 bunches of each variety to entitle them to compete for the prize. Grapes for competition should be forwarded to JOHN W. CHAMBERS, Secretary Horticultural Association, on Monday, October 1st, who will see that they are properly displayed.

Grape growers are cordially invited to compete for this premium. The committee will use every effort to make this exhibition an attractive feature. It is expected that many of the leading horticulturists of the country will be present. JOHN A. WARDER,

P. T. QUINN, Secretary. President.

Notes on the Weather, from August 15th to September 15th.

THE first half of August had but one colder in thirty years, 64.8°, while this was 64.9°, a mere trifle. Of course the general average was much higher, or 70°. The last half has given the mean temperature, 60.5°, and the general average, 66.9°; the next warmer mean was 63.3°, in 1856; and this is very cool. So the mean heat of this August is 62.6°, or 5.8° below the general average; and the next warmer August was 65.3°, in 1844. This, then, is the coldest August in 30 years. The hottest day at noon was only 76°, while it is often from 84°, to above 90°; and the hottest day was 69.7° on the 1st, but in 1865, the hottest day in the first half was 83°, on the third, and the hottest day of the second half was 77.7°, on the last day of August. The coldest day in the month was 53.3°, on the 24th, and its morning only 48°.

The barometer has ranged rather low, 29.44 inches for the month; the rain having given in the last half only 1.11 inches of water, and in the month, 4.91 inches, much above the average.

Of the three summer months, the temperature of June, was near the average. This July was the hottest, 74.3°, except 74.8° in 1854; and this August was the coldest, 62.6°, and that of 1855, the hottest, 71.7°, in thirty years. The heat of summer was near the general average, or as 67.9° to 68.4. Slight frosts were said to have occurred in the last week of August, as the 23d to 25th were cold days; but vegetation has not been injured. The cold of the month has delayed the maturing of our important maize crop. The flowers of the shrubby Althæa, or the Syrian Hibiscus, are now fine, at the close of August. The fruits have appeared; pears and plums plenty, apples a small supply, peaches far more than was anticipated, grapes in abundance; the various berries of the season have appeared, all at a rather high price. Health of this section has been uncommonly good.

SEPTEMBER began warm, but soon became cool, and has thus continued. This half gave the mean heat, 61.8°, or 2.3° below the general average. This half was 57.1°, in 1859, its coldest; and its hottest was 72.7° in 1865. The rain has been in plenty, 2.31 inches. Grass has made good progress, but maize has matured slowly, the more so as August was so cool.

Peaches still are plenty; apples, scarce; and most productions rather high. The harvest has been plenteous over the country, and health excellent. Let us look up and be thankful.

OUR MARKET REPORT.—We would call the attention of our readers to our monthly report of the markets, which appears in this number. This department of THE FARMER, during the past, has not been what we desired, but we have now secured the services of S. E. Todd, of New York, a gentleman in every way competent, and who has had very great experience in this branch of information for farmers. We shall place this department entirely in his hands, and feel great pleasure in calling the attention of our readers to it. Mr. Todd not being engaged in any business, his advice and statements in regard to prices, fluctuations, &c., will be entirely disinterested, and will prove of great value.

VICK'S ILLUSTRATED CATALOGUE OF HARDY BULBS, AND FLORAL GUIDE.—What is more beautiful and refining than a well kept flower garden? What adds more to the good will and unalloyed happiness of a family than sweet, fragrant flowers? and especially is this the case early in the spring, when bulbs that have lain in the ground all winter, shoot up their fresh stems, as the sun begins to warm the earth after a protracted winter.

Anything that adds to a knowledge of flowers, adds to the comfort and intellectual improvement of the family, and the catalogue of Mr. Vick, which we have just received, is what every person *should* have. It is the most complete treatise on hardy bulbs we have ever seen, is got up with the greatest care, and evinces the taste for neatness, which Horticulture instills into all who take an interest in it. It is sent free of postage to any person, who sends fifteen cents to Mr. James Vick, of this city; and we hope all our readers will at at once send for this guide to the flower garden. It is beautifully illustrated with sixteen engravings, and contains a full description of all the hardy bulbs, together with remarks on cultivation, &c. A copy should be in the hands of every lover of flowers.

MANUAL OF GRAPE CULTURE.—We have received from J. H. Foster, Jr., West Newton, Penn., his Manual of Grape Culture and Catalogue of Small Fruits, which is profusely illustrated and well got up. His entire energies are devoted to the culture of small fruits, in which he excels, and his catalogue contains a discription of all the different varieties of grapes, strawberries, raspberries, blackberries, and other small fruits, with full particulars as to the manner of planting, cultivation, &c. The remarks in this catalogue on the culture and training of the grape, during the first four years, coming as it does from a practical grower, are valuable;

THE MARKETS.

ROCHESTER, September 25, 1866.

FLOUR—White wheat, $15@$16.00. Red, $10.00@14.00.
GRAIN—White wheat, 280@290c. Red, 240@255c. Corn, 90c. Barley, 90@100c. Oats, 50c. Rye, 85c.
HOPS—45@65c.
WOOL—50cts.
PROVISIONS—Lard, 21½@23c. Butter, 35@38c. Eggs, 24c. Cheese, 17@20c. Potatoes, 50c.

New York Markets.

REPORTED FOR THE AMERICAN FARMER, BY S. EDWARDS TODD, OF THE NEW YORK TIMES.

NEW YORK, September 21.

BEEVES—The price of beef is firm, at high figures. The demand for beef cattle is active, and the supply for the last week was all exhausted in a short time, after the cattle were yarded. A small number of the best bullocks sold, the past week, for 19c per lb., net weight. Common to good cattle sold readily at 16c @17c per lb. In a few instances, entire droves were sold 17c per lb., net weight. Rough old oxen, and stags, and coarse bullocks, half fattened, sold for 12c@14c per lb. A drove of bulls was divided into small lots, most of which were sold at about 4c per lb., live, gross weight. The entire number of beef cattle for the weekly supply, up to date, is 6,350.

MILCH COWS—Have been offered during the past week quite freely, many of which were beautiful animals, and appeared to be superior milkers. But dealers affirm that cows are worth more in the country than in the city. The number received for the week is 142. Poor cows have been sold the past week for $45@$50 per head. A few of the best ones at $100@110 per head. Common cows about $80@$90 per head, with slow sales.

VEAL CALVES—Calves of a superior quality, such as farmers usually slaughter for their own tables, are in active demand, at 13c@14c per lb., live weight, and quick sales. Most of the calves offered are grass-fed, which sell for about $8@18 per head, according to quality and size. Ordinary calves sold for about 8c@10c per lb., live weight. The supply for the week numbers 1,458.

SHEEP AND LAMBS—The supply during the past week was heavy, numbering 25,960. The demand for good sheep, and thrifty, fat lambs, is active, sales quick, and prices firm, at 9c@9½c per lb., live, gross weight, for the best lambs, and 5c@7½c per lb., live, gross weight for sheep. Poor sheep and thin lambs sell slowly, and at low prices. Full one-half of the sheep and lambs are quite poor—not even in decent store condition. If a drover has a lot of good sheep or fat lambs, they are taken in a short time, at the above prices. There is no apprehension of our stocking the market with meat, as the population of New York and Brooklyn is rapidly increasing; and the demand for meat will, no doubt, continue active with firm prices, at least till next summer.

SWINE MARKET—The demand for pork is seldom better than at the present time. During the past week about 12,050 hogs have been received, all of which were readily sold at 11¼@11¾c per lb., live, gross weight, for the best Western corn-fed animals. Rough and shabby swine sold for about 10¾c@10¾c per lb., gross, live weight.

APPLES AND PEARS—Have been sold at almost every price, from $1 per bbl. to $5 per bbl. For good lots of hand-plucked, smooth apples, the price is about $5. Common apples, $3@$4 per bbl. Virgalieu pears, $12@18 per bbl. Seckels, $12 @$15 per bbl.

BUTTER AND CHEESE—Choice lots of butter sell readily at about 40c@43c per lb., whether in firkins or in tubs. There is an untold amount of deception in the butter market. Most of the New York market reports are prepared by butter dealers, who report the prices to please themselves, and thus promote their own pecuniary interests. The supply is large, at present, and prices are dull. Butter that is collected in country stores during the summer, is miserable stuff, and will sell here for not more than 17c@20c per lb., as it is very streaked, unpalatable, and rancid. Fair butter in good condition will bring about 35c@38c per lb.

Cheese of common quality sells at about 10c@15c per lb, Factory dairies and good farm dairies bring about 16c@17½c. As everything depends on the quality of cheese, no person can determine what his cheese is worth till the quality is known. The market is full of horrid cheese, which is not fit for baiting rat traps. A good article will always command a remunerating price.

EGGS—Are in good request, and those that are fresh and good sell for 30c@31c per dozen by the barrel.

POULTRY—The demand for poultry is active, and the arrivals, if in good condition, are exhausted in a short time after their arrival. Geese are worth 20c@25c, not drawn. Turkeys, 25c@28c. Ducks, 25c@28c, or 37c@$1.37 per pair. Fowls, 24c@25c.

BEANS AND PEAS—New kidney beans sell slowly at $2.20 @$2.95 per bushel, with slow sales. Marrow beans, $2.50@$2.60 per bushel. Medium quality, per bushel, $1.80@$1.90. Canada peas, $1.20@$1.30 per bushel.

POTATOES—Rough and Ready variety, cheap, $1.80@$1.88 per bbl. Jackson Whites, $1.50@$1.75 per bbl. Peachblows, $1.75@$2 per bbl. Prince Alberts, $1.75@$2 per bbl. Mercers, $2.50@$2.75 per bbl.

ONIONS—The best red per bbl., $1.75@$2. White onions, per bbl, $2.25@$2.75. Turnips—Russian, per bbl., $2.50@$3. Pumpkins, per 100, $7@$10.

FLOUR.—The tendency of Flour and Grain is upwards, and prices are firm. Superfine Flour is now selling for $8.50 @ $8.75 according to quality. Extra State Flour, per bbl. $7.25 @ $11.90, Extra Genesee per bbl. $11.90 @ $13,75. Extra Missouri Flour, per bbl. $12.20 @ $16.00. Rye Flour, per bbl. $5.30 @ $6.35 for the best. Corn Meal, per bbl. $4.10@$4.90.

GRAIN.—The unfavorable reports concerning short and light crops at the West, has had a tendency to increase the demand for grain, and the prospect now is, that grain will advance far beyond the present figures. White Wheat now sells for $3.00 @ $3.25 per bushel. Red Wheat, winter and spring, $2.75 @ $3.25. Western Corn mixed, 84c. @ 86c. per bushel. Yellow Corn, 88c. @ 95c. White Corn, 94c. @ 98c. per bushel. Rye, $1.00 @ $1.20 per bushel. Barley, $1.10 @ $1.25 per bushel, for new. New Oats, 45c. @ 50c. per bushel.

Rye is in fair request for milling purposes. Oats have been in good demand, but at variable rates. Indian Corn fluctuates in value with the supplies and the rates of Exchange—the late foreign news being more favorable, and some speculative inquiry existing—the closing rates were a few cents better. The export Clearances for the fortnight from this port foot up: To Great Britain and Ireland, 3,180 bbls. flour; 13,283 bush. of wheat; 538,247 bush. corn; and 7,241 bush. barley. To all other ports, 26,465 bbls. flour; 19,996 bush. corn; 1.990 bush. oats; 6,852 bbls. corn Meal—making a total to all ports of 29,645 bbls. Flour; 6,852 bbls. corn Meal; 13,283 bush. wheat; 7,24I bush. barley; 1,990 bush. oats; 557,643 bush. corn; 114 bbls. Rye Flour.

Special Notices.

A HOUSEHOLD BLESSING.—Among the arts and inventions of the day, the most important are those which contribute to the saving of labor and the protection of health. Viewed in this light, the Sewing Machine occupies a prominent position, not only from its humanitarian characteristics, but from its adaptation to all classes. In the drawing rooms of the rich it is an ornament and a pastime, while to those in humbler circumstances, it is a fruitful resource, a faithful friend and benefactor. The men who have been instrumental in giving to the world the benefits of the Sewing Machine, have accomplished a noble work, and among their number, Grover & Baker are entitled to special distinction. These gentlemen are the patentees of what are known

as the "Elastic Stitch," and the "Lock Stitch" machines. The Grover & Baker "Elastic Stitch" machine is preferable to any other, for the reason that it is more simple in its construction, more efficient, more easily operated, and less liable to get out of order. We have been at some pains to speak advisedly on this matter, and have no hesitation in pronouncing it incomparably superior for domestic purposes to any other instrument. We are sustained in this high estimate. Wherever these machines have been exhibited in competition with others, both in Europe and America, they have elicited the same encomiums. The proprietors have labored to incorporate in their magnificent invention, the highest merits of which the Sewing Machine is susceptible, and their efforts have been crowned with success.—*Philadelphia Press.*

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We also take this opportunity to offer the following

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12 Fine Mixed Crocus	
1 Bulbocodium Vernum	

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No. 2—ASSORTMENTS OF

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15 Beautiful Named Early Tulips	
25 Fine Mixed Crocus	
3 Polyanthus Narcissus	
6 Double Narcissus	
3 Bulbocodium Vernum	
3 Persian Iris	
12 Double Snowdrops	

By Mail, 38 cents additional.

No. 3—ASSORTMENTS OF

18 Fine Named Double and Single Hyacinths for pots, glasses or open borders	$10.00
50 Fine Mixed Crocus	
24 Beautiful Named Early Tulips	
12 Fine Named Double Tulips	
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12 Double Narcissus	
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3 English Iris	
1 Crimson Crown Imperial	
6 Bulbocodium Vernum	
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THE
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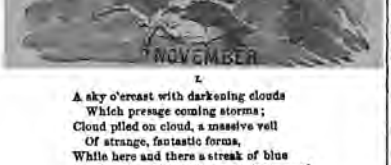
VOLUME I. ROCHESTER, N, Y., NOVEMBER, 1866. No. 11.



I.

A sky o'ercast with darkening clouds
Which presage coming storms;
Cloud piled on cloud, a massive veil
Of strange, fantastic forms,
While here and there a streak of blue
Just lets the glimmering sunlight through.

II

A searching wind from a frosty shore,
That stings with its biting breath;
Dries up the blood of the latest leaf
With the chilling hand of death,
And whirls its mates into eddying waves,
And leafy mounds like hidden graves.

III.

The russet fields and the beaten paths
With yellow leaves are strewn;
The north wind sounds through the naked trees
With a sullen, fitful moan,
And earth in her mourning vestments clad
For the dying year, looks drear and sad.

Belfast, Me. O. K. S.

WORK FOR THE MONTH.

WITH this month the farmer's work in the fields will close, and Jack Frost will lay claim to the earth, and the wind and snows of winter will drift over the meadows which were lately so pleasant, and where the birds sang so sweetly, and the children enjoyed so much to romp.

The thick falling early dew drops, and the sharp frosts that we have already experienced, should bestir us to see that all things are in order for the winter that is upon us, and we can think of nothing more important at this time than to call attention to the

BUILDINGS—which should be looked carefully over, and all loose boards nailed tight, and all cracks properly stopped.

IMPLEMENTS AND TOOLS—should be well oiled, painted, and put away in a snug, dry place.

MANURE—of all kinds should be scraped together in the barn yard, and carted to the meadows or wheat fields, and applied as a top dressing. The finest manure should be used for the wheat fields. It will protect the roots of grass and wheat from the winter's frost.

ROOTS—and potatoes that are in the ground must be gathered early this month. Let them be dry and clean, and put away in a good dry cellar.

FATTENING ANIMALS—should receive extra care this month. See that they are kept warm and comfortable, and that they are fed regularly. This is of great importance, and applies to all animals. Water should not be forgotten, as they require it now constantly. Let all stock be well taken care of this month, and get a good start for winter.

PIGS—that are fattening will require extra feed and care. Let them have good protection from the storm's blast, for they cannot thrive without, and see to it now that the

POULTRY—Have a suitable hennery to roost in. Do not let them perch in the trees, or on the fence, but provide them with good compartments, and they will reward you with plenty of fresh eggs during winter. Spring chickens that have commenced laying should be supplied with lime, sand, broken shells, and once a week some refuse meat, and with proper management will continue laying through the winter.

CALVES—will thrive faster by having a little meal fed to them now, and the quantity may be increased during the winter to one or two quarts a day, which will bring them on rapidly. Then the

COLTS—will relish a little grain, and some cut feed. Let the boys handle them carefully, or rather pet them a little every day during the winter, and get them broken in by degrees, ready for the spring work. Nothing is lost by the gentle care of all our farm animals.

UNDERDRAINING—"Why, where, when, and how to do it," was well explained by one of our corres-

pondents in the October number. Where water would be apt to lie in the spring, it would be well this month to cut a small ditch from it, and get the land into good condition earlier. It can be done much more readily now than when the ground is frozen hard in the spring. As long as the weather keeps open and fine, keep the

PLOWS—going. Get all the land possible plowed this fall, so as not to be hurried or crowded in the spring, when there is so much that demands attention. And any leisure time this month may profitably be employed in gathering

LEAVES—from the woods or road side, and have them spread over the manure heap in the barn yard, or if short of straw, they can be used to advantage for littering the stable or hog pen.

THE PIG.

His Characteristics, Usefulness, &c.

WRITTEN FOR THE AMERICAN FARMER BY O. N. BEMENT.

PIGS, it is said, "are a happy people." We may talk disparagingly about living like a pig, is to live like a gentleman. Although it is not permitted by the order of nature that a pig should laugh or even smile, he enjoys the next blessing of humanity—the disposition to grow fat. How easily he goes through the world! He has no fancy stocks to purchase—no bank notes to pay—no reconstruction meetings to attend—no political caucuses to hold! He has no occasion to take the benefit of the bankrupt act, or to have his estate confiscated to defray the expenses of the war—no income tax to pay. Free from all the troubles that disturb the country, he is unconcerned about national affairs, as was the man who was awaked in the earliest light of morning by being told day was breaking: "Well," said he, as he turned again to his repose, "let it break—he owes me nothing."

The pig is the personification of independence. He acknowledges no law save that of his stomach. He is no teetotaler. Give him a chance, and he will drink ale or wine unto drunkenness, and in those countries where grapes grow, if they come into the vintage, they get drunk with eating grapes, for which he has an intense liking, and often does terrible damage in vineyards. The worst of the matter is, that the animal so riots and revels among the vines, that he destroys and tramples down many more grapes than he can eat, and does irredeemable damage. If the lees of wine be mingled with their food, they will grow fat without measure.

In China they have a proverb that every gentleman works for his living except the pig. In Illinois, a few years ago, he was made to work. When a chimney was to be built, or a cabin to be daubed, a hole is to be dug in the earth of sufficient dimensions, and water poured into it—the hogs called, and a few grains of corn thrown into the hole, when the hogs plunge in, and soon prepare the lump of clay for the hand of the dauber.

It is rather remarkable that the Irishman and the negro hold much the same opinion of the pig. Both consider the pig as the only gentleman, for he does no work; all his meals are brought to him; eating, drinking, and sleeping are all he has to do; and the more he eats, drinks, and sleeps, the better his duty is performed. But then the motives for the opinion are widely different. The negro—that is, the negro slave—thinks that the very summit of human felicity is to do no work. This is likely to be the case, for he has no motive for work, and therefore only looks upon his daily work as a terrible task, which he is bound to evade in every possible way. Therefore the pig is his ideal of enjoyment; eats, does no work—he eats and he sleeps.

But the opinion of the Irishman is founded on more rational grounds. The pig, in his opinion, *is* a gentleman, and ought therefore to be treated as such. Does not the pig pay the *rent*, and sure is'nt he a gentleman to do that? So the pig has the full range of the cabin, and pokes his nose just where he pleases. Indeed, he is often better off than his master's children, for he is never in want of a meal, and the food which he gets is precisely that which he ought to have, namely, potatoes: while as the children get the same food, which is *not* the proper food for man taken by itself, the pig has no care, and no fear for the morrow. He continues to enjoy himself until the knife is at his throat, and even then he knows nothing about his coming death until he is actually in the hands of his slayers, who probably do not inflict on him more pain than the children suffer when flogged by paternal or maternal authority, or when pumelled by larger boys.

A pig, in Ireland, is often the saving of a family, and his inquisitive snout, peeping out of a cabin door, should be considered a mark of prosperity rather than a sign of decreasing finances.

Pigs are an obstinate race, and are not easily driven. Boys generally succeed better than men in driving pigs, always excepting Irishmen, whose treatment of pigs is a perfect art. An Irishman never seems to *drive* a pig, but coaxes him along. A little push one way, a little pull another, a whistle, a few endearing expressions, and the pig trots comfortably along, giving no trouble "at all, at all." If a pig is very obstinate indeed, and utterly refuses to go where he is wanted, the Irishman manages him by putting his nose in the direction he is intended to take, and then pulling his tail. The result is evident. The pig imagines he is wanted to come backwards, and therefore with the perversity of a porcine nature, runs forward as fast as he can. This method is generally used in getting pigs on board ship, where they evince much dislike to the planks on which they are required to walk. The Chinese also make use of the tail-pulling process when they wish their pigs to enter the bamboo cages in which they transport them when fat.

There exists perhaps in creation, no animal which has less justice done to him by man than the pig. We see him gifted with every faculty of supplying himself, and of providing even against the approaching storm, which no creature is better capable of foretelling, and we begin our treatment of him by putting an iron ring through the cartilage of his nose. Having thus barbarously deprived him of the power of searching for and analyzing his food, we then generally condemn him for the rest of his life to solitary confinement in a pen.

While his faculties are still his own, only observe how with a bark or snort he starts if you approach him; and mark what shrewd intelligence there is in his bright, twinkling little eye. But with pigs as with mankind, "idleness is the root of all evil." The poor animal, finding that he has absolutely nothing to eat—having no enjoyment, nothing to look forward to but the pail which feeds him, most eagerly, or as we accuse him, most greedily he greets its arrival. Having no business or diversion, nothing to occupy his brain—the whole powers of his system are directed to the digestion of a superabundance of food. To encourage this, nature assists him with sleep, which lulling his faculties, leads his stomach to become the ruling power of his system—a tyrant that can bear no one's presence but his own. The poor pig thus treated, gorges himself, sleeps, eats again, sleeps; awakens in a fright, screams, struggles against the blue apron, screams fainter, turns up the whites of his little eyes, and dies!

It is very amusing to watch the pigs when "ringed," as their behavior is not at all that which ought to be expected of them. Indeed they seem to be actuated by the oriental ideas of fatalism, and after struggling as much as they can, they give up the matter as hopeless, and resign themselves to their fate. When they are about half grown, a man armed with a coil of rope, a pair of pincers, and the rings, one for each pig, enters the pen and seizes one of the pigs by the ears. The aggravated animal instantly proceeds to remonstrate most audibly at the proceedings, and sets up a series of ear-piercing screams. But screaming is of no use, and he is dragged out of the pen. A rope, with a slip-knot is now thrust into his mouth, the knot is drawn close, and the pig is held in a kind of curb. He is now thrown down, the point of the ring inserted into the cartilage of his nose, and the end turned over with a pair of pincers, until it nearly meets. The ring is now complete, and when the pig tries to root or grub up the ground, the pointed end curves round and pricks his nose, so that he is warned to cease. During his struggles, his cries are loud and incessant; but the moment the point enters the nostril, piggy exchanges his squeals for a series of half-satisfied grunts, and probably says to himself, "Oh, is that all? I thought I was going to be converted into pork or lard at the least, and perhaps salted afterwards. Who cares for rings?"

A pig is a more clever animal than is generally supposed; that is, if he can find a chance of exercising his abilities, and is left tolerably to himself. We remember seeing several persons engaged for half an hour in catching a pig, which had got into a small enclosure. They tried managing it by throwing in an ear of corn for the animal to engage himself with, while they crept up behind him; but the pig was much too cunning for that, and continued to keep one eye always on his foe. When a number of them come up to surround him, he picked up the ear of corn, and ran away to another spot.

Not only is the pig naturally clever, but it is capable of instruction, and has been taught to perform duties that belong to other animals. They are often sufficiently tame to permit children to mount on their backs, and one person actually put some of his pigs through a course of training for the saddle. A team of four hogs has been trained to draw a carriage, such an event having taken place at St. Albans some years ago, when an old farmer of the neighborhood threw the town into such excitement by driving a carriage into town drawn by four pigs. He drove round the market-place several times, and had his porcine steeds put up at a stable, and fed corn and wash. In a few hours the pigs were again harnessed and trotted off briskly with their master.

In some respects the pig resembles man, so that there may be some ground for calling children, pigs, besides those generally given. The pig and the

man are both omnivorous ; that is to say, they both can eat vegetable or animal food—the one being an omnivorous quadruped, and the other an omnivorous biped or "omnivorous tripod," as the negro called it, on the authority of Tom. Cringle, so when the trough is filled with potatoes and vegetables, it will make a very good dinner upon them ; if the butcher chooses to throw in some of the offal of the slaughter-house, the pig will eat the offal ; if a thriftless housekeeper lets the pigs have plum pudding and slices of roast beef, the most inveterate gormandizer could not attack them with greater zest than does his omnivorous companion. If the brewer has pigs and gives them grain, they will devour enormous quantities of the sweet, soft compound, and if any ale is mixed with the grains, as is often the case, they will get gloriously drunk upon it. Many is the time that a pig has been seen staggering about the yard quite unable to direct himself, merely because he had taken too much of the deceptive mixture, hence the saying, "as drunk as a hog."

Among the many qualities and properties which the pig is acknowledged to possess, there are some which are not generally known. For example, ninety-nine of every hundred pots of bear's grease are obtained exclusively from the pig, and have had no connection whatever with the bear. Bears are not quite plentiful enough, or so easily killed as to supply all the vast amount of "bear's grease" which is usually consumed in the whole world. The fact is, lard is purified, scented, put into pots, decorated with colored labels, called bear's grease, sold at high prices, and has the double advantage of bringing in a very large per centage to the sellers, and doing quite as much good to the buyer as if it were the genuine fat of the bear.

The pig quite revels in an oak wood or under the oak trees in autumn. We cannot, however, praise the good taste of the pigs quite so much in this instance, for acorns are detestable. It is true that we used to eat them at school ; but then school boys, like ostriches or sharks, will eat anything. Even we, however, could not manage them until we had roasted them.

Yet this shows the degeneracy of our race, or rather it would do so in the ears of some people, for our early ancestors used to make acorns a considerable portion of their diet. The Acadians (happy race !) were said to live almost exclusively on that delectable food. This reminds us of an amusing print published where a pig was represented as seated under an oak, and exactly facing him an Acadian also seated under another oak. The ingenious artist contrived to infuse so much of the pig into the Acadian, and the Acadian into the pig, that there was some difficulty in discovering which was quadruped and which biped.

GAS TAR FOR POSTS, &c.

WRITTEN FOR THE AMERICAN FARMER, BY F. W. COLLINS.

THE question of the efficacy of gas tar or coal tar, for posts, and other timber, exposed to the weather, or set in the ground, in order to preserve them from decay, has been much agitated during the last few years, and the conclusion to which the experimentists seem to have arrived, based in all cases upon a surface application as a paint, is inimical to its use. The conclusion, established on this basis, is a legitimate one. The basis, however, is wrong. That portion of the wood at least, which comes in contact with the earth, either in hop poles, telegraph poles, or fence posts, should be well saturated with the tar, which can only be done by boiling in the tar, or when that is impracticable, by repeated applications of boiling tar.

In England, almost every large hop-planter is provided with an iron tank or pan, placed over a brick arch for boiling the lower end of the hop poles, in a preparation of coal tar, which is then called creosote. The thick portion of the tar, resembling resin in appearance, is extracted from the tar by distillation to be used for roofing purposes, while the liquid portion that remains, resembling spirits of turpentine, and which goes by the name of creosote is that used for the hop poles. The usual dimensions of the tank used for this purpose, are three or four feet by ten feet more or less, with perpendicular sides two feet in hight. The arch is built in the usual manner, with a chimney at the end opposite the fire place. The hop poles, after being sharpened ready for setting in the spring, are placed on end in this tank, supported by a frame some ten or twelve feet above, so that the poles stand upright in the pan, which is then filled with the creosote or gas tar. Thus about two feet of the hop pole is boiled until it is completely saturated. I have seen poles that had been in use seven years after being subjected to this treatment, which were apparently as sound as when first used. Railroad ties are subjected to this process ; only with them, the treatment is continued for a greater length of time. Fence and telegraph posts are served in the same manner. The process just mentioned is the most effective method of applying the creosote or tar, although many of the smaller hop planters, probably from motives of economy, apply the liquid several times in a heated state, until it penetrates far into the wood.

In preparing stakes for the horizontal hop yard, the best and most economical ones are those sawed one and one fourth inches square, and eight feet in length, for all except the outer rows, which are large and strong. These stakes, after being sharpened at each end, are laid lengthwise in the vat,

and boiled in the tar or creosote for half an hour. The pan, if of the dimensions described, will hold about enough to stake an acre. The expense, when preparing for a yard of ten acres, will be less than one cent per stake. The stakes should be reversed each year; the end placed in the ground this year, will be the top of the stake next year.

Gas tar is offensive—indeed destructive to insects, and stakes saturated with it are insect proof. They can neither become a harbor for lice, nor a receptacle for nits. Search carefully as you will, the microscope will discover no enemy, while an ordinary hop pole will be alive with vermin. The twine used in the hop yard should be tarred also. The tar can be purchased in its crude state at the gas works for from one to two dollars per barrel, where the cask is furnished by the purchaser. Crude gas tar is as efficacious as that which is distilled to creosote, or that which by continued distillation becomes naptha, and may be advantageously used to preserve timber on many farms. But its great economy is most conspicuous in the hop yards. The English planters have taken the lead in this. It is there used very extensively, and we must do likewise, as our poles are as expensive as theirs. This furnishes another argument for the short stakes and twine, as they can be creosoted the whole length at small expense, the vermin and other enemies of the plant can be so easily met or overcome, and the vitality of the root preserved by this process. In fact, every step in the process of growing hops is so benefited by it, that it commends itself to every beginner, and overcomes the natural repugnance to change in the old hop planter.

OUR KANSAS LETTER---NO. 3.

WRITTEN FOR THE AMERICAN FARMER, BY A. M. BURNS.

(Continued from page 309, October Number.)

THE science of numeration would fail to give anything like an idea of the immense number of grasshoppers. It is very difficult to walk through fields where they are congregated, although on the approach of man or beast they attempt to rise to fly, but are so numerous that they impede the effort to escape. In 1864, we were troubled with immense numbers of grasshoppers, but nothing in number to compare with those of the present year. Their appearance was in a dry time, and they remained only a single day; but on Monday night, September 3d, we had a very heavy rain. I have no recollection of hearing or seeing such a quantity of rain fall in the same length of time. The very portals of heaven appeared to be opened—the firmament was a continuous vivid flame of electricity, while the loudest peals of thunder I think I ever heard, made the houses fairly tremble, while the rain descended in torrents; since that time it has been cloudy, and to-night (Sept. 5th) it is again raining, although such cloudy, wet days, are an unusual thing in Kansas this time in the season. It may be the reason why they have remained so long in one locality.

It was supposed by many that the year following their visit here would find large numbers of them, but that year, (1865,) they were not even as numerous as they generally are other years. What became of their eggs is more than I could say; it may have been that a few wet days at the time they were hatching, put an end to their existence.

I have written at more length than I would have done if I had thought there was no danger of their appearance in the future in the Eastern States. If such unfortunately should be the case, it is much better that the attention of Eastern agriculturists should be called to the matter. The vegetable and fruit gardens of the East are of far greater importance than they are here, and some of your experienced correspondents may be able to devise some plan by which their depredations might be prevented, upon at least some portions of the crops, and as the question is and no doubt will in future be a very important matter to the people of some portions of the United States, it would be the duty of any of your contributors who have or could devise any plan for their destruction, or which would even partially prevent their havoc on vegetation. I tried the scattering of air-slacked lime over the foliage of the grape vines. I could not see them eat where vines had been dusted, but on account of the rains washing the lime off, it was not as practicable as covering them with prairie hay. Yet the vines should have air.

Any information that you or your correspondents could give upon this subject would certainly be read with deep interest by the citizens of some portions, at least, of the United States, and I hope that all the light that can be obtained, will be cheerfully given, as we cannot now even surmise how important it may some day be to the people of the United States.

OUR TEXAS LETTER.

MESSRS. EDS.:—I am a subscriber to your paper, and am much pleased with it. I write to know something more of the Buenos Ayrean clover mentioned on page 240 of your August number. There is no such thing as clover grown in this State to my knowledge. I have seen very pretty wild clover fifty miles south of me, five years ago. I passed the place recently, and nothing could be seen of it. Your correspondent speaks of it thriving in a climate hot and dry. Our section is both, and this clover might suit our locality.

If you have any of the seed, I would like to have just enough to try it, or if you know where it is, and will put me in the way to get it, you will confer a favor on me, and probably on our State.

Our county is just east of the Trinity River, which is navigable for steamboats in the rainy season, and that occurs every year, some time, which makes it quite uncertain. It is a timber country. The prairies are west and north of us. Southwest the soil is of several kinds. A red clay loam is the best upland, which is considered drouthy, then a light gray loam, which stands the drouth well, and is injured very much by too much rain. There is much more gray land than red. Our crops are corn and cotton, a little wheat, some oats, rye, and barley, but very few sweet potatoes, some garden vegetables and potatoes, in the spring before the June drouth sets in.

This has been an unusually wet year, with some dry spells. The corn is very good. We shall make 25 bushels to the acre. Cotton, I know but little, beyond hearsay. This is my first crop. I have 30 acres in my red land and corn bottom. The same land has made a bale to the acre, about the best cotton ever does here. The wet season made a large plant, and the squares and bolls were plenty, but a drouth of three weeks in August, caused the squares to shed of. Then a severe rain of seven or eight days is just over, which planters think will cause the bolls to rot, and also give the plant a second growth, the squares and bolls of which will not mature before frost; so it is quite uncertain how the crop will be here.

Will our esteemed correspondent, "S. W.," answer the above?—EDS.

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

NEW YORK MARKET REPORT AND THE FLOUR AND GRAIN EXPORTS.

It was refreshing to read S. Edward Todd's Market Report in the October AMERICAN FARMER. It would seem that he has not yet been long enough in Gotham to become sophisticated by the trade, and his discriminating report of prices carries the truth with it. It would seem that while our export of Indian corn to the United Kingdom of Great Britian, for the fortnight, was 538,000 bushels, that of flour was only 3,180 barrels, and of wheat 13,283 bushells. The continued high price of flour in the United States, has made an unprecedented home demand for corn for bread and hoe cake, which has kept up the prices, in spite of collapse in distilling produced by the strangling excise. Wheat will probably be cheaper next season, but corn will at least hold its present price, as the export demand is now fast increasing, since the English, Scotch, and Irish farmers have found out its superior value to English grain for putting on animal fat. It may not be as good as oats for a working or a racing horse, but what it lacks in nitrogen is made up in oil. England, now well cured of corn law protection, admits our corn free of duty.

A VISIT TO THE FARM AND VINEYARD OF F. C. BREHM.

Mr. Brehm took the following premiums at the last State Fair: The large silver medal for the best wine and brandy. First premium for the best field variety of Delaware grapes. Second premium for the best native grapes. The wine was two years old, and made from the pure juice of the Diana grape, without the aid of either sugar or alcohol, while the Catawba grape contains 1.41 per cent. of acids, the Diana has not a trace. Brehm's little farm of twelve and a half acres, is one mile west of Waterloo post office, bounded on the Seneca Outlet on the south, and the old Western turnpike on the north; the soil is a sandy loam with one field of hard calcareous clay which also forms the deep subsoil generally; the land rises gradually from the narrow morass next the outlet, and is well drained by an open ditch, tile underdrains, and Black Brook which here debouches into the outlet. The morass is only a few rods wide along the towing path of the outlet, and it now proves to be a mine of manure to the farm, as it is composed of vegetable remains mixed with lumps of blackened pulverulent clay, forming a mass of soil amendment much richer in nitrogen than farm yard manure? Brehm has taken out of this pen during the late hot dry weather, two large piles of muck, one of which measured sixty paces in circumference. All of this is to be spread on his plowed sand this winter and thoroughly worked in, in the spring. His clay field has already been ameliorated by a heavy dressing of muck until it is as friable and pulverulent as the fine sand loam of the fertile Sciota bottoms. Here his young Delaware vines are growing, with a row of the largest cabbages between the long trellises that I ever saw. I looked in vain for a medium size or imperfect head; his mother, a German frauen, attends to this department, growing her cabbage seed from the strong middle stalk. He says Delaware grapes are much better flavored on a clay loam, but the Diana must have sand. He has thousands of Iona and other vines growing thick in rows to be ready to set in trellis or for market when ordered.

I found him busy in his grape room, over the wine cellar, packing Delawares into five-pound boxes, to send to New York, by express. Among his great variety of grapes, I was quite taken with Rogers

Hybrid No. 19, as an eating grape; it is very large, high, pleasant flavored, but too pulpy for a wine grape; it is earlier than the Concord, and does not drop off the bunch when ripe like the latter. On that part of the farm next the morass is a field of two acres top-dressed with muck; it cut six tons of timothy and clover this summer; his vineyard begins next to this meadow, then comes his house, barn, fruit house, wine cellar and distillery, on the west rise from Black Brook; this brook he has cleaned out and straightened into a beautiful canal the whole breadth of his farm; a field of corn now in shock, is on the northwest, and a large pasture (but not yet well subdued) is on both sides of the brook, north and east. Mr. B. has lately paid $200 an acre for three acres, half a mile north, on which to grow the Diana grape exclusively for wine, with true German homogeneousness he does not believe in imitating foreign wines like the Yankee Californians, who make imitations of all the European wines from barely three varieties of native grapes. He even believes that he can make as good wine from the Iona grapes as the famed Langworth has made from the Catawba, which is too late for this climate. Be that as it may, his wine will never be made to simulate the wines of volcanic formations of Southern Europe. He will rely on the fact that the best American wine, when the taste is educated to it, is not inferior to the wines of Europe.

THE ENORMOUS EXCISE ON AMERICAN GRAPE BRANDY

Both F. C. Brehm and Joseph Wright, who has a seven acre vineyard, made grape brandy of their refuse grapes last year under the excise of twenty-five cents a gallon; but just as they commenced enlarging their operations, Congress like a killing frost, has increased the duty to two dollars a gallon. As the two dollar tax on whisky has already put an end to all legitimate grain distilling, and saved the corn to the world for food, it might be hoped that the refuse grapes of our vineyards might not be thus tabooed and suffered to go to waste, when alcohol is so much needed in medicine and the arts. It is "devoutly to be wished" that the next Congress will exhibit more legislative wisdom and economy than the last, which by an excessive tax on cotton has done much towards killing the now sickly goose that once layed the golden eggs.

A FEW WORDS ABOUT WEEDS.

In Wisconsin they have a law making it fineable for any man to suffer certain kinds of weeds to go to seed on his premises; pity such a law was not in force, and *enforced* in every State in the country. Not long ago in Springport, Cayuga county, I saw a farmer just after a heavy shower, pulling up docks, rag weed, &c., in the road all along the front of his masterly kept farm. Another farmer whom I complimented for the clean surface of white clover that made a beautiful lawn in his front on the road, said when he bought the farm he paid sixty dollars the first year for killing the weeds, and the next year he cleaned the road. It is not as much of a job to clean the ground of coarse weeds as many imagine, and the labor is less and less as you progress in the extermination; but without a law to compel the slovenly farmer from filling the neighborhood with the winged seeds of his mischievous crop, the neat farmer must suffer. They manage better in France, there a farmer can sue and collect damages from another, the seeds of whose weeds are blown on his land.

ALWAYS BUY FAT BEEF AND PORK.

There is nearly twenty per cent. less water in the carcass of a well fatted animal than in a lean one. Did you ever notice, as I have, how much more the lean of poor beef will dry up in hanging, than the lean of a fat animal; and according to Professor Voelker, a lean hog contains eighteen per cent. more water than a fat one.

THE COUNTY FAIR, THE WEATHER AND THE CROPS.

The first killing frost occurred here on the morning of the 23d of September; the fog from the Seneca outlet saved all vegetation within one hundred or more rods of its banks. Brehm and Joseph Wright's grape leaves were untouched, but Isabella's ripen slowly owing to cool, shady weather. North and south, both the corn leaves and potato vines are killed, and there will be soft corn; yet a fair crop has ripened. Wright's large dent corn is ripe, cut up, and in large stooks; so much for the best farming. I never saw a corn crop fail here on a well drained, highly manured soil, if hoed often in a drouth, and not planted too late; my late June planted sweet corn is now in eating order, but the yield is at least one-third less than that planted early in May. Cool, long nights are fatal to the growth of corn, even without a frost.

This is the last day of our county fair held at Wright's Race Course; there has been a great attendance of spectators, but as the French say, the *exposition* was *re-importe*; this is the day of the races, the most exciting of all, and the village overflows with fine carriages filled with well dressed males and females, drawn by the finest specimens of equine stock. Verily, horse pride is better and more respectable than much other pride; because horses are made by unerring nature, and man is sometimes made by the tailor.

UPWARDS of ten million dollars worth of guano were imported into England last year.

HOW WE FARM IT IN THE CENESEE COUNTRY.

WRITTEN FOR THE AMERICAN FARMER, BY P. O. REYNOLDS.

NUMBER NINE.

THRESHING.

When harvest is fairly over, and the grain securely sheltered, the farmer feels a great relief from the anxiety that oppresses him while the fruits of his labors are exposed to injury from the elements.

But there is one job yet to be done, which the farmer generally dreads more than any other work of the year—namely, threshing. Not because the labor is the severest of all the labors of the farm, but because of the many aggravations attending it. In ancient times, oxen trod out the grain upon the threshing floors, and within the memory of middle-aged men, all the grain was either trodden out by horses, or oxen, or beaten out with flails.

The first threshing machine I recollect seeing in operation, some thirty-two or thirty-three years ago, was run by a two-horse power. That machine could scarcely thresh one hundred bushels of wheat in a day, and left the straw and chaff to be separated from the grain, by rakes, and fanning-mill. But few farmers own machines, but hire their threshing done by those who follow the business during the fall and early winter.

The modern threshing machine is driven by a power, operated by eight to ten horses, which works machinery that threshes the grain, separates it from the straw, cleans it for market, and carries the straw upon the straw stack. The owner of the machine furnishes three or four hands, and four to six horses, and usually, charges about $2.50 per hundred for oats, $4.00 for barley, and $6.00 for wheat. The farmer boards the hands and horses, and furnishes the compliment of both. The novice would suppose that a machine that does so much of the work would not require many hands to run it. Let us see, one man drives the horses—two forward the bundles from the mow to the platform—one places them upon the table. One cuts the band—one feeds the thresher—two are required to take care of the grain as it comes from the fanning mill, (three if put in bags, and drawn to the granary,)—and two or three are needed upon the stack to stack the straw. So we see that it requires ten at the least—frequently twelve men—to properly run a modern threshing machine.

Well, if all goes off right, it will not take long for such a machine to thresh all the grain that grows on an ordinary farm; for it can thresh 400 bushels of wheat—500 to 600 of barley—and all the oats that one man can feed in—but the trouble of it is—it does not *always* go off right. Some portions of the complicated machinery break, or get out of order, and the machine must stop for repairs. Men and horses are idle at the farmer's expense. The men having nothing to do, make a raid on the orchard, and apples, pears and peaches, are plundered. Some choice fruits, which the farmer and his family have waited for in pleasant anticipation, are gobbled up—grain is fed lavishly to the horses, and finally, when the threshing is done, and the cost is reckoned up, the farmer finds that the anticipated profits of his crops are greatly diminished by the cost of threshing, and that his patience and his temper have been subjected to severe trials.

Some farmers keep a two-horse, endless-chain power, with which they do their threshing with their ordinary farm laborers. This, although it takes longer than the larger machines, saves a great deal of waste and vexation. The same power can be used to cut feed, saw wood, grind apples, shell corn, &c.

FATTENING SWINE.

Good policy would probably dictate that we should commence fattening a pig as soon as he is born, and continue it without intermission until he is butchered; but that course is not generally followed; the animal is just kept along in passable order until autumn, when he is shut up to fatten.

Many farmers allow their hogs to glean the wheat and barley stubbles, and then shut them up and feed them wormy apples, small potatoes, and pumpkins boiled together, with some middlings or Indian meal added, which fatten them rapidly; when the process is completed, by feeding them three or four weeks on corn, or corn meal, exclusively. It is, undoubtedly, advisable to have the hogs fatted before very cold weather sets in, as it requires more food to produce a given amount of flesh in cold, than in warm weather. If necessary to keep them after cold weather sets in to await a good market, then they should have as warm a pen as it is possible to give them.

They should be kept, while fattening, in clean, warm, dry pens, and made just as happy and contented as possible. Should be fed with the strictest regularity, enough to fully satisfy their wants, without surfeiting them, and when they cease to lay on daily sufficient fat to equal in value the corn fed them—put the knife to their throats. There is a great deal of food wasted upon swine, without farmers knowing it, by continuing to feed them when they are not gaining enough to pay cost. This will continue until farmers make up their minds to do business more systematically, and less by guess. If they could have some convenient way of weighing their animals—say once a week—while fattening them; and would at the same time weigh

their food, they would then *know* whether they were gaining or losing by continuing to feed them.

May we not hope that farmers will, ere long, come to do their business on a more certain basis?

FARM TALK—No. 6.

WRITTEN FOR THE AMERICAN FARMER, BY G. J. BRACKETT, BELFAST, MAINE.

THIS has been a hard corn year through all "down east." Cold days and rainy weather have been the rule, and not the exception. But it was to be expected, for the two preceding years were the warmest and dryest on record, and consequently they were what farmers term "great corn years." Corn grew and matured, planted almost anywhere. This year it is different. We shall have a fair yield, but it is backward. Many fields were frost bitten before they were fully "glazed." An unusually wet and rainy September was a great drawback to its ripening. Notwithstanding these failings, my neighbor Johnson has raised a good crop of corn, and some specimen ears which he carried to the fair, attracted a good deal of attention.

"That's good corn for this year," said a farmer, pointing to Johnson's fine looking "trace."

"Yes," said another, "wonder how he was so lucky as to get such a good crop."

Here Johnson "happened" along, and they began questioning him:

"What kind of land did this grow on?"

"Rocky upland."

"What did you manure with?"

"Hog manure mixed with muck, and a handful of plaster and ashes to each hill, after the corn came through the ground."

"Ground plowed in the fall?"

"No, broke up in the spring, and planted on the sward."

"Like it so, better than 'old ground?'"

"Yes, the turf heating and rotting, warms the soil just as the young corn roots need it, and the ground is not so weedy, requiring less labor in cultivating."

"Dung it in the hill?"

"Yes, one large shovelful."

"What kind of seed was you'rn?"

"Well, we call it the Dutton corn, but I don't know what is the exact name of it. However, I consider the principal reason why I had such good luck this year, was because I took pains with my seed corn."

"What did you do to it?"

"Well gentlemen, I'll tell you all about it. I call this my pedigree corn, and I'll tell you why. For several years it has been my practice to select the best ears of corn to be found in my field and preserve them for next year's seed. By so doing, I think the quality and productiveness of my corn has been gradually gaining, year after year, until now, I can see that it is vastly superior to that first grown. After the corn is thoroughly ripe, I make my selection. I take only those ears which are rowed perfectly, fully ripe and golden yellow, fully tipped or covered at the end, and only those which grow on a stalk, producing two or more sound ears. These ears I carefully trace or braid by the husks left on for that purpose, and hang them in the chamber away from vermin. The next spring I have a superior article of seed and that is what I call my pedigree corn."

"Well I don't know; sometimes I've planted the best corn, and sometimes only the tip ends, and I didn't see much difference in the crop."

"Perhaps not; I do not say that the improvement will be discernible in one year, perhaps not in two, but I do say that such a practice persevered in rigidly for a term of years, will be productive of good results. It is a great law of nature that like produces like, to a great extent, and the principle is as correct in reference to seeds and plants, as in the case of the higher order of animal life."

FATTENING FOWLS.—On this subject *The Irish Farmer's Gazette* says: "Coop them in a moderately warm, dark quiet place, with good ventilation, and keep them perfectly clean, and fed on boiled or steamed potatoes, mixed with crushed oats or oatmeal, and blended with sweet milk, with a little fine sand added and given warm, but not hot. If in health, and well attended, they will be fit for use in a fortnight. They may also get other meal mixed with the potatoes.

THE days of the great elm on Boston Common are numbered. The trunk of the tree is hollow, and rot has extended to its branches.

NOTES FROM CANADA.

AFTER a period of excessively wet weather, such as "the oldest inhabitant" cannot recount in his experience of the country, we have been enjoying a fortnight of clear skies, with a warm, sunny, autumn glow, and the sowing of winter wheat is being carried to completion, although so unusually late in this season, that it is questionable if it will be possible for the young plants to obtain sufficient root-hold to enable them to resist the action of our severe winter frosts. The first hard frost occurred on the evening of the 4th of October, and the trees are now assuming the gorgeous hues of autumn tints so peculiar to our American forests. Grain of all kinds is now coming to market freely, but prices still continue to advance, especially for extra nice samples, which are scarce. MAC.

REPORT ON SCOURED FLEECES.

THE following is the report of the Committee of the New York State Sheep Breeders and Wool Growers' Association on scoured fleeces:

To the Honorable Henry S. Randall, President of the New York State Sheep Breeders and Wool Growers' Association.

The Committee on Scoured Fleeces respectfully report:—The fleeces were scoured at the Syracuse Woolen Company's Mills, under the immediate direction of one of the Committee, Wm. A. Duncan, who is the Superintendent of the Mills, and precisely in the same manner that it was done in 1865. The twine in which the fleeces were tied was, in all cases of the same kind and length, and convenience made it necessary to weigh this twine with the fleeces, both before and after scouring. Mr. Sweet, one of the Committee, attended to the weighing of every fleece at the sheering and after it was scoured. The sheep were weighed to one-quarter of a pound, and the fleeces to one-quarter of an ounce. The columns of per centages given in the tables last year, are not included this year, as the tables were thereby very much swelled, and as every person can make the figures who has a desire to do so. The column of ages is omitted, for the reason that the prizes offered did not call for the ages of the animals.

The Wilcox Prize was offered for the best Merino ram's fleece of one year's growth, or thereabouts, which on being scoured should be found to give the greatest weight of wool in proportion to its time of growth and the live weight of the animal. There were three competitors and the lightest animal won the prize. He gave of wool, as may be determined by dividing the weight of his cleansed fleece by the weight of his shorn body, six and forty-two hundredths per cent. This ram was entered for the scoured wool prize last year, but owing to the competition of ewes in the same class, was as low as No. 11 in the order of merit, though a comparison of the tables will show that he did better then, than now.

The Baker Prize was offered for the best Merino ewe's fleece, with the same conditions as the Wilcox prize. There were eight competitors, and it was won by a ewe that weighed a little more than the average of the class. She gave of wool seven and eighty-eight hundredth per cent. to her shorn body. This is the same ewe that won the Moore Prize in 1865; and she came to the show a few days after dropping her lamb. By comparing the table for the rams and ewes it will be seen that five different ewes would have beaten the best ram had they competed, as they did last year, in the same class.

The Pottle Prize was offered for the best Merino ram's fleece of one year's growth, or thereabouts, which on being cleansed should be found to give the greatest weight and *value* of wool in proportion to its time of growth, without reference to the weight of the animal. There were eleven competitors, and the prize was won by a ram, whose body weighed 124.75 pounds, and whose fleece, as shorn, weighed only 16.34 pounds—there being five of his competitors that gave more gross weight of fleece, and five that were over him in the quantity of cleansed wool; but there was but one that would have produced more wool in a year, (Martin Slussar's,) and he was beaten in quality. In determining the value of the wool the committee placed the cleansed fleeces of each class side by side, on a table, so that the comparison by eye and touch was easy and satisfactory. The relative value was the point aimed at, and the committee took $1 as the standard for the best fleeces, and rated the others accordingly, not intending to say what the wool may sell for.

The Cossit Prize was offered for the best Merino ewe's fleece, with conditions the same as for the Pottle Prize. There were only three competitors for this prize, which was won by a three-year old ewe, that competed last year, and then stood No. 4 in the order of merit. It will be seen by comparing the tables that she has now produced more wool per day than in 1865. The lowest of the three was an animal *nine* years old, and her age placed her at a decided disadvantage in the contest. The other animal in this class was one year and forty-three days old, and if she had weighed only *three-fourths* of a pound *less* and competed for the Baker prize, she would have won it.

The Randall Prize was offered for the best fleece of English Long Wool, the conditions the same as for the Pottle Prize. There were but three entries, and the prize was won by a Cotswold ram two years old. The most remarkable thing brought out in this class, is the fact that a sheep which weighed only 100.25 pounds gave of cleansed wool 9.03 pounds, and one of his competitors, a Leicester ram, three years old, weighed 209 pounds, and only gave 8.13 pounds.

The Moore Prize was offered for the best fleece of English Middle Wool, the conditions the same as for the Pottle Prize. There was but one sheep shorn in this class. This ram weighed 161.75 pounds, and produced only 4.75 pounds of cleansed wool. Comparing this Southdown with the Cotswold prize ram, we have sixty per cent. more of animal, and forty-seven per cent. less in value of wool.

The weights of the sheep after they were shorn, are given in the first column of figures in the tables, although they were not required in most of the offers for prizes, but because they are important, as

OWNERS' NAMES.	Condition of the Animal.	Weight of Carcase.	Weight of Fleece Unwashed.	Weight of Fleece Scoured.	Age of Fleece in Days.	Quantity Grown in one Year.	PETTE COLLIS. Quantity produced by one lb. of animal in one year.	Value per pound of Scoured Wool.	PRIZE FOLIOS. Value per year.
WILCOX PRIZE.									
Theron Steele	Mid.	73 25	14 515	5 03	364	5 04	.06424	....	....
Baker & Champlin	Mid.	92 25	12 06	4 03	366	4 00	.04345	....	....
L. J. Bovee	Good	88 50	13 99	3 95	380	3 79	.04292	....	....
BAKER PRIZE.									
A. H. Clapp	Fair	57 75	10 295	4 546	364	4 63	.08030	....	....
G. J. Hollenbeck	Mid	51 25	9 50	3 87	360	3 909	.07628	....	....
H. M. Boardman	Mid	46 25	11 50	3 325	375	3 515	.07502	....	....
Lorenzo Babcock	Good	44 75	9 385	3 28	377	3 163	.07081	....	....
John Maltman	Mid	50 50	9 03	3 54	360	3 576	.06672	....	....
L. J. Bovee	Good	62 50	11 005	4 09	364	4 087	.06287	....	....
J. C. & S. T. Short	Good	60 25	12 885	4 65	485	3 462	.05780	....	....
Baker & Champlin	Mid.	50 50	7 795	2 945	404	2 617	.05483	....	....
POTTLE PRIZE.									
William H. Pugsley	Good.	124 75	16 34	5 12	328	5 2261	.....	$1 00	$5 76
L. J. Bovee	Good	123 50	17 96	5 28	335	5 4275	.....	1 00	5 42
Martin Shuster	Fair	152	22 37	6 635	364	6 6359	.....	80	5 32
T. Terrill	Fair	110	16 695	5 24	344	5 0261	.....	96	4 94
L. E. Heaton	Fair	116 25	12 87	5 03	345	5 2158	.....	1 00	5 21
C. H. Warner	Good	93	12 765	5 636	405	5 0771	.....	98	4 97
U. C. Rogers	Good	127	19 71	5 265	360	5 1538	.....	96	4 94
U. C. Rogers	Good	115	15 87	5 105	394	4 7267	.....	96	4 58
M. C. Remedy	Good	105 75	17 21	5 03	407	4 4201	.....	1 00	4 42
J. Bailey & Son	Good	87 50	13 135	4 84	410	4 2194	.....	96	3 94
J. & P. Martin	Good	115 25	15 00	3 65	345	3 8580	.....	96	3 78
COSSIT PRIZE.									
D. W. Perry	Fair	77	14 06	5 295	364	5 3071	.....	98	5 20
H. M. Boardman	Good	65 75	17 43	5 885	403	5 2603	.....	96	5 05
William R. Pitts	Good	103 50	16 635	4 695	375	4 5693	.....	1 00	4 56
RANDALL PRIZE.									
E. Gazley	Fat	109 25	10 795	2 03	255	2 2819	.....	75	7 99
Samuel H. Barone	Fair	209	18 575	8 135	385	8 5612	.....	80	7 08
E. Gazley	Fat	125	11 65	3 03	355	3 2063	.....	75	6 19
MOORE PRIZE.									
J. Lynch	Good	161 75	8 195	4 75	3 49	5 9845	.....	70	8 49

indicating the cost of supporting the animal. An inspection of the weights of the animals and their productions of cleansed wool, will be instructive; and the committee invite a careful consideration of this feature of the tables. Without knowing the weights of the animals, some of the prizes offered would have been of little or no value towards instructing the wool growers; with the weights given, much may be learned.

In the class for the Pottle Prize are eight fleeces of five pounds and less than six pounds with only sixty three hundredths variation, while these same fleeces, uncleansed, vary *six pounds*. This shows how valueless are the published weights of uncleansed fleeces that abound in the newspapers. The business of the wool grower, is to raise wool, and he may well inquire whether the *cost* to him of these excessively heavy, uncleansed fleeces, is not more than a prudent manufacturer can afford to pay.

The Moore Prize of last year called the attention to the shrinkage of wool, and has doubtless led to some changes in the opinions of both producers and consumers of wool, and we cannot doubt that much good will grow out of the tests now submitted to the public.

GEO. GEDDES, JAMES M. ELLIS, CHAS. TALLMAN, WM. A. DUNCAN, H. D. L. SWEET.

Syracuse, Aug. 17, 1866.

THE GREAT CORN FIELD OF THE WEST.

A WRITER in the Cincinnati *Gazette* gives the statistics of the production of corn in the United States for the last twenty-five years as follows:

In 1840, total crop	377,531,875
In 1850, total crop	592,071,104
In 1860, total crop	839,451,767
In 1866, total crop, (estimated)	1,039,000,000

The increase being at the rate of four per cent per annum, the aggregate crop of 1866 will be over one thousand millions of bushels. The following are the portions of the United States where Indian corn is the staple, in comparison with other grains:

New England, New York, and New Jersey, 38,948,890 bushels.

Pennsylvania, Maryland, Delaware, Virginia, North and South Carolina 128,998,249 bushels.

Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, and Texas, 147,425,726 bushels.

Ohio, Indiana, Illinois, Kentucky, Tennessee, Missouri, Michigan, Wisconsin, Minnesota, Iowa, and Kansas, 550,627,943 bushels.

This shows that half the immense crop of Indian corn grown in the United States is produced in the valley of Ohio and Missouri. He estimates the crop of this year in Ohio at 91,000,000 bushels.

OUR PRIZE ESSAYS.

DIFFERENT BREEDS OF SHEEP.

THE sheep of this country known as "natives" are mainly of English origin, mingled to some extent with continental blood, and are called "natives," to distinguish them from Merinos and other imported and improved breeds. Those originally introduced into New York were from Holland. Twelve pounds per quarter was a fair average. The yield of wool was two to three and a half pounds.

SPANISH MERINOS.

This superior breed of sheep is divided into several classes—the Escurial, with wool of excelling fineness; the Guadaloupe, noted for symmetry of form, fine quality, and good quality of wool; the Negrettis, the largest and strongest of the migratory sheep; the Infantados, Aqueirres, Paulars, Montarcos, and others. The Merinos vary greatly, not only in Spain, but in the different countries they have been introduced into. Still they retain the peculiarities of the breed—fineness of wool, small size, short legs, a fine eye, a bold step, hardiness, and longevity.

THE FRENCH MERINOS

Were established from the Spanish. They are larger than the Spanish, with good, but not the best wool, a loose skin, and a very heavy fleece, very yolky, with little external gum. In 1786, the average weight of fleece was six and a half pounds.

THE SAXON MERINOS

Were originally introduced by the Elector of Saxony from Spain. They are remarkable for the exceeding fineness of their wool. Their fleeces average little more than two pounds.

THE SILESIAN MERINOS

Originated some fifty years ago, from a flock of Infantado ewes and Negretti bucks imported into Silesia. They are as large as the American Merinos, the wool of an exquisite fineness, yolky, and dark colored, but destitute of gum.

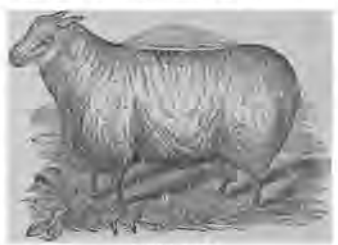
THE AMERICAN MERINOS

Are classified into three prominent families, the Jarvis, the American Infantado, (Atwood's,) and the Paular sheep.*

The Jarvis are the result of the mixture of the several Leonese varieties. They are characterized as having a loose, thick skin, little external gum, a fine, even fleece, with a brilliancy and style almost equalling the Saxon.

The American Infantados were bred from Humphrey's importation, by Stephen Atwood, of Connecticut. They are of large size, short necked, short in the hips, broad shouldered, round, and symmetrical. Their skins are loose and mellow, and of a deep rose color. The wool is short, very yolky, with a black, external gum.

The Paulars are a heavy, thick-fleeced, very hardy variety, with less fineness and evenness of fleece than the Infantados, and less of yolk and external gum, yet much more than the Jarvis.



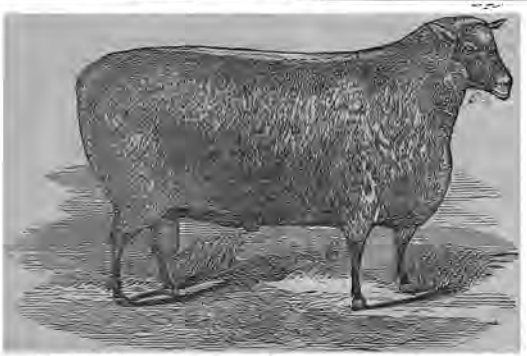
LEICESTERS.

This variety was formed by the persevering efforts in breeding for a special purpose, by Robert Bakewell, of Dishley, Leicestershire, England. They are thus described by Youatt: "The head should be hornless, long, and small, tapering towards the muzzle. The eyes prominent, the ears thin and long, the neck full and broad at its base, the breast broad and full; the bones of the leg small, standing wide apart, the legs of moderate length; the pelt also moderately thin, but soft and elastic, covered with a good quantity of white wool."

THE COTSWOLDS

Are superior to the Leicesters in weight of wool, size, hardiness, and vitality, and are much more prolific. The wool is of moderate fineness, long, white, and strong. They have a long, thin head, broad chest, and straight back.

*The Merinos and their grades yield the best and most valuable wool for manufacturing purposes, and are probably the most desirable for those who make wool growing a speciality, but for those who live near markets where mutton is in great demand, the English breeds are the most profitable—EDS.



SOUTHDOWN.

The Southdown has a small head without horns, a gray or brown face, thin lips, a full bright eye, neck thin near the head, widening as it joins the shoulders; a deep, wide breast, the back flat from shoulder to tail; the hips wide, the legs medium length; the wool short, curled, and fine. They are prolific breeders, and very hardy. Their mutton is regarded as the ideal of perfection. See cut above.

THE HAMPSHIRE DOWN

Is a cross from the white-faced Wiltshire sheep with Southdown rams with the darkest faces, till the white faces were changed to dark. They are not so symmetrical as the Southdown, but compensate by their greater weight of carcass and wool, and somewhat earlier maturity.

THE SHROPSHIRE DOWN

Of the present day is a finely formed sheep with the head of the original "Forrest" and Southdown, deep chests, broad hips, and straight back, with a thick fleece of medium wool, weighing from five to seven pounds. They are remarkably free from liability to disease, and are favorably regarded for their early maturity, weight of carcass and wool, and facility of fattening upon comparatively small quantity of food.

THE OXFORD DOWNS

Were produced by coupling Cotswold rams with Hampshire ewes, occasionally using the Southdown to perfect the cross. They are of uniform character, very hardy, good size, heavy fleece, which averages seven pounds. They are easy to fatten, and make excellent mutton.

Granville Corners, Mass. W. B.

RECREATION AND AMUSEMENT OF FARMERS AND THEIR FAMILIES IN WINTER.

FARMERS, as a general thing, labor more, with less relaxation, than is for their own comfort. Many of them toil early and late, summer and winter, and by a proper arrangement of their work, have as much to do on a rainy day as any other. As a bow always bent, loses its elasticity, so a laborer whose system is always exerted to its utmost capacity, will become prematurely old, and will be worn out with toil when he should be in his prime. If a man is dependent for his living on the work of each particular day, if he is compelled to work one day to procure food for the next, he *must* labor more unremittingly than he who has enough of property to be comfortable, and labors more to increase it than to enjoy it.

But what recreation shall the farmer take? In the summer, when his fields require his attention, little time can be spared for amusement, although a day's relaxation occasionally is refreshing. But in the winter, when his crops are gathered, and comparatively but little to do, he should relax his exertions, and recruit for the next season's work. A change of employment is oftentimes a relief, and so the farmer will find after a few days hard work, to take a few tools and make a feeding trough, or a cattle rack, or other useful or ornamental articles, will afford as much pleasure as to spend the day in total

idleness. Let him keep a record of his operations during the summer, of his crops, and the labor bestowed on them, and study it over during the winter evenings, and arrange it in a form convenient for preservation and future reference. Let him write his experience to his agricultural paper, and meet and discuss his views with his neigbors. A farmer's club should be established in every neighborhood, and should have meetings at least weekly during the winter evenings. Let each one prepare a paper to read at the meeting, on any particular subject. It will afford both pleasure and profit. Let the relative profits of the different productions of the farm, the best modes of culture, the best manner of keeping fodder, fencing, draining, and a dozen other topics be discussed.

The writer derived much satisfaction from attending the meetings of a debating society, the past winter. Such a one might be established almost anywhere. It gives those who are unaccustomed to speak in public, a chance to overcome a natural diffidence, and to all an opportunity to improve in oratory. Let plain questions be selected, such as any farmer can advance something for or against; and every one connected with it, do the best he can, and some benefit will accrue.

The family of the farmer should also have some provision made for their pleasure. If the horses are put to the sleigh, and a ride taken occasionally, they will be none the worse for it. Let them visit their neighbors, and spend an evening in cheerful conversation, or a few amusing games, or other amusements; have their neighbors visit them, and thus by friendly intercourse keep up a spirit of mutual friendship throughout the neighborhood. Take a load of the young folks to the singing school at the neighboring church or schoolhouse, it does one good to hear and take part in such exercises.

The lot of the farmer, if he chooses so to make it, is the most delightful of all pursuits, while on the other hand it may be made the most tiresome, and almost disgusting to the unfortunate agriculturist. By a proper use of the faculties with which nature has endowed us, we may make ourselves and others comfortable, and farming a pleasing occupation, while many a youth has turned his back to the farm to seek his fortune in the crowded city, at the expense of his health and his morals, when he would gladly have staid at home, had he had proper relaxation, and home had been more than merely a place to eat and sleep. And how many citizens retire to spend their evening of life upon a farm! They have found out the value of occasional relaxation from toil, and hence we find them envying the farmer's lot, not knowing how often the farmer makes his lot burdensome by unceasing toil. G. F.

Readington, N. J.

FARMING IN CONNECTICUT.

THE soil of Connecticut is so various that crops adapted to one vicinity, might be entirely unsuitable for another. The surface is undulating, rising in some instances to moderate mountains. The valleys along the numerous streams are usually sandy or clay loams; the balance of the soil varies from a sand to a stoney, hard soil to till, and better adapted to wood, grass, and grazing. Our soil being so diversified, we are naturally obliged to pursue a mixed or diversified husbandry, every farmer endeavoring to be self-sustaining as far as possible in relation to the products of our climate and soil. Corn, rye, oats, buckwheat, and potatoes, are raised in all sections. Other crops are raised in special soils and localities. The stock consists of the usual variety raised in the New England States—horses, cows, oxen, sheep and hogs: these are mostly native or grades. There are, however, in all sections of the State some pure bloods raised, such as Durham, Devon, Alderney, &c., for horned cattle. In sheep, we have Cotswolds, Merino, native, and grades; but no large flocks; many farmers keep a few—so of other stock. In hogs, we have every breed almost, but principally mixed: every one fats for his own use, and some a few for market; the main profit with many in keeping hogs being the manure they make. Horses, we have all kinds, for the farm, carriage, road, and the *track*. Considerable attention has been paid for a few years past in improving the breed, and to this end many fine horses have been brought from other parts. The several "horse associations" in the State, having created an interest in this branch which is likely to introduce a superior race of horses.

For a few years past, more attention has been paid to growing fruit of all the better qualities. Many orchards of the various kinds have been set and come into bearing. Pears are also raised in greater variety, and more generally than in former days. All the small fruits are planted, so that many who formerly were destitute, have now a family supply, and some for market. Raising garden truck and fruit for market, is a speciality with some where conveniences are enjoyed for a market.

Being more intimately acquainted with the agriculture of the Connecticut River Valley, I can give more particularly the mode of practice pursued there. The soil is generally the best in the State or in New England; and for the production of some crops is equal to, if not superior to any in the country. In this section is produced the justly celebrated "Connecticut Seed Leaf Tobacco" in greater perfection than in any other section. This crop is more generally grown for sale than any other, many preferring to purchase their corn, and put out their

manure for this crop. For the last few years it has been the most paying sure crop that could be raised, producing as high as $1,000 or $1,200 per acre under skillful culture. There are no very extensive growers, the largest not exceeding eight to ten acres.

The farms are generally small, ranging in extent from five or six acres up; very few exceeding one hundred acres. All the various kinds of farm products are grown to a greater or less extent, but the crop principally cultivated is tobacco.

There are excellent meadows from which a supply of hay is produced for home consumption, and some for neighboring markets. Stock, &c., are kept for farm and dairy use. No very large dairies are to be found, the largest hardly exceeding eighteen or twenty cows, and those kept for supplying milk to the neighboring city. The system, if we may call it system—of culture generally prevalent, is to break up the sod and plant to potatoes with tobacco stalks, or ashes and plaster in the hill the first year; second year plant to corn, manured in the hill; third and fourth years, manure heavily broadcast, plow under, and apply commercial fertilizers in the drill and set tobacco, after which the ground is sowed with rye or wheat, and stocked to remain as long as paying crops of hay may be cut from it. This is our upland course. The interval is generally unsuitable for tobacco, where it is left out, and two crops of corn are made, and the following spring sown to oats and stocked. A great improvement in our mode of culture, &c., has come into practice within the last decade, and as a result our farmers have made money faster, bettered their condition, and improved their farm buildings and surroundings; their farms produce larger crops, enabling them to keep better stock, and with the corn brought from abroad, they are fast enriching their farms, enabling them to live more in accordance with the times. W. H. W.

Hartford Co., Conn.

WINTER WORK ON THE FARM.

We often hear farmers say, "It soon will be winter, and then we shall have nothing to do." This is a great mistake. It has become a trite and true saying, that there is always something to be done on a farm. It is so. A true farmer never need be unemployed unnecessarily. To be sure, the more confined and heavy manual labor must be performed during the other three seasons, but winter brings its duties, which will require constant attendance from the farmer whose motto is progression.

The winter days being short, the proper care of his stock will occupy a goodly portion of it, and here let me remark that nothing pays better than good care of animals during the months they are confined to the yard and stables. Another item of winter work which should always be performed, is the cutting, hauling and piling of the year's fuel. The workshop will take a large share of the time, for we assume that every farmer is, or ought to be mechanic enough to repair his tools, carriages, &c., and make the more common kind. There will be much of this sort of work to attend to in preparing everything for the more active duties of the coming season. Here let me remark that farmers should always have seasoned lumber on hand suitable for repairs, and the construction of such articles as they would be likely to need. Another and great branch of labor which must be attended to at this season, is planning—brain labor. Every farmer should have a rough draft of his farm on paper—he has it in his head—to which he can refer, and on which he can make such alterations and additions as he sees fit, to be carried into operation in due season. In this planning business he will find ample work for the long evenings and unoccupied hours. And lastly, the winter season is his time for reading, study and replenishing and refreshing his mind for more active duties. He must be a "book farmer," to some extent, else he will fall behind the times. In all of these labors and duties, and the cultivation of those neighborly, social qualities, for which the season is peculiarly appropriate, no farmer need lack of finding enough to do, and to profit by. G. E. B.

Gapes in Chickens.—*Messrs. Eds.:* The statement made in the September number, page 278, that gapes are not caused by worms, is incorrect, for I have removed worms from the throat of many a chicken, which was troubled with the gapes, and cured them effectually.—*Poulterer.*

This is the experience of most fancy breeders.—Eds.

At the annual meeting of the Provincial Agricultural Society of Canada, held on the last day of the Fair, Mr. J. P. Wheeler, of Scarboro, was elected President for the ensuing year. Kingston was designated as the place for holding the exhibition of 1867.

Somebody writes to *The Country Gentleman* that it appears a little doubtful thus far—

> "Putting all the reports together,
> Relating to barley, wheat and hops,
> Whether the crops will weather the weather,
> Or the weather will crop the crops."

Paint applied in winter will last twice as long as that applied during hot weather.

Bone meal is highly recommended for cows by those who have tried it.

PENNSYLVANIA AND ELSEWHERE.

END OF OCTOBER.

MESSRS EDS:—This past summer and so much of tall as has passed, has definitely settled the question that no particular kind of weather lasting long at a time, is a necessity to make good crops of everything that grows in the ground, on it, or off of it. We have had in these Pennsylvania and adjacent regions, the wettest, hottest, dryest, coldest, rainiest season all crowded into four months, coming consecutively and occasionally all jumbled up together, that any country ever had in any year of this world, or any other. But for all that, we have had premium crops of small grains; corn capital, and potatoes positively good; while grazing never was better than it is now, and stock of all kinds is in as prime condition as ever grazing stock were.

Wheat has been put in, in all the region over which I cruise, in considerable wider breadth than last year, and certainly I have never seen wheat promising better in October. Almost all kinds of vegetables are over-abundant and unusually fine. Sweet potatoes are plentier and better than we have had them this way these five years at least. Cabbages—I have never seen so many fine large, hard, white heads, growing and going to market, and in market, in October, in my life.

Of the fruits, apples are reasonably plenty, such as they are, and would be plentier, only those that have them say that fifty cents a gallon, or $14 a barrel for cider, (and snapped by buyers in a wink at that,) pays better than apples at any possible price. So all the spare apples in all these regions are "going to press," and we shall have to look abroad for our winter supplies, or go without. Pears have not come in nearly so well as they promised in the summer—hard, knotty, wormy things, selling in market at fifty, to ninety cents the half peck. It is not the scarcity, or excellence, or demand, that makes such prices. People have taken an insane fancy for high figures for every thing, both sellers and buyers.

Three days ago, I saw a lady and gentleman come into one of our fashionable fruit stores on Chestnut street, and the lady just as innocent as a three-weeks-old baby, bought six tolerable good looking pears, and pocketed them in her satchel without inquiring the price—

"How much are they?" inquired the—husband, I suppose he was.

"One dollar and a quarter a piece, sir," answered the polite clerk.

"Thunder! Dollar and a quarter apiece, for pears! I—see here—I—Helen—my dear—"

The lady turned into a rose pink; half a dozen impertinent misses and brainless mop-heads te-he'd and ha-ha'd. The gentleman pulled out, and paid, $7.50, for six pears, and went out, (if looks indicate anything,) saying to himself, "You don't catch me buying pears in this shop again, I know."

To go back into the country, there are to be more pigs made into pork, bovines into beef, and all sorts of feathered bipeds into prime poultry, than we have had these many years. By the by, mentioning poultry, reminds me that if any of your readers have now, or will have for sale at anything like reasonably rates, any such birds as *Bronze* Turkeys, Bremen geese, Golden Hamburgh fowls, or white Aylesbury ducks, it will be well for them to advertise in THE FARMER, so "Cosmo" can get their address, for the benefit of inquiring friends.

While in many other sections of the country all around us, farmers have been made to look sad over fall crops killed by frosts, or drowned dead by drenching rains, in all the Alleghany, Atlantic, Chesapeak and down Delaware territories, our farmers as a rule, have escaped unscathed. Corn generally was out of the way of the mid-September frosts, and harvested before the late September rains, while late potatoes, turnips, cabbages and almost all sorts of late vegetables, have been made better by the deluge.

If we go on lengthening out the season, we are likely in a year or two more to have some of our vine fruits in market all winter. To-day, I saw in Market street, as many as two hundred in a pile—as fine and large Jersey water melons as I ever saw at any season anywhere; and with these, let us leave off till next month.

COSMO.

MAINE ITEMS.

WE have finished harvesting the grain crops, and never had a better yield. We raise principally barley and oats. But little wheat was sown, but what was cultivated gave good returns, free from insects.

Potatoes are a heavy crop, but many fields rotted badly, so the number of bushels for export will not exceed that of last year.

Apples are only a fair crop, with prospect of remunerative prices for winter varieties.

Stock is high, and in good demand, cows sell from 45 to 75 dollars; working oxen from $1.25 to 2.50; three-year-old steers, $100 to 150; spring calves, $8 to $15 apiece.

Butter is in good demand at 40 and 45 cents. The fine fall feed is a great advantage to the dairy interests, and saves much fodder. Hay is now selling at $15 per ton, loose.

The weather has been very bad for the farmers holidays, otherwise county fairs. We have had a great amount of rain, and the ground is now soaked full and overflowed, making it unpleasant for performing various kinds of farm labor.

We have just experienced an unusually cold term for the season. On the morning of the 4th of October, the mercury sank to 29°, the ground froze, and water congealed to the thickness of half an inch. It was the same on the morning of the 5th, and considerable losses were sustained by freezing of pumpkins, potatoes, grapes, &c.

B.

Belfast, Me.

Horticultural.

THE GARDEN.

NOVEMBER is the month in which to close up the garden operations for the season. Those vegetables which are injured by slight freezing, should be gathered first. Others, which like turnips, are rather improved by one or two light freeze ups, should be left in the ground until the latter part of the month. Others again, like parsneps and salsify, keep the best in the ground, and should not be pulled until spring, except what is needed while the ground is frozen solid.

Asparagus—Should have the old stalks cut and raked off, and the bed should have a liberal dressing of manure. This is quite important, if we would keep our asparagus bed in condition to yield its annual supply of tender, succulent stalks.

Beets—and all other roots, to be used through the winter, are preserved in better condition if put in bins or boxes, and a little dirt intermixed with them.

Many vegetables, decaying in the cellar during the winter, are undoubtedly deleterious to the family, and it would be well if they could be stored in a convenient *out-door* cellar.

Cabbages.—If pulled up by their roots, and stood up in a corner of the cellar, and dirt strewn over their roots, will keep in pretty good condition. Those to be used in the spring will keep better buried in trenches, inverted.

Celery—Can be kept the same as roots, or a trench can be dug about eight inches wide, and as deep as the stalks are long, into which they can be stood, upright, and covered to quite a depth with straw. They can be obtained from such a trench at any time during the winter.

Spinach—Should be left uncovered until the ground stiffens a little, and then, lightly covered with straw.

SMALL FRUITS.

Strawberries—One year with another, undoubtedly do better in this latitude, with a light covering. Straw, corn stalks, or clean, coarse stable manure may be used.

Raspberries—Tender varieties may be bent over, and have a fork full of coarse manure, or a shovelful of dirt thrown upon the ends.

Blackberries—Should have a shovelful of manure thrown around each hill, to keep up the fertility of the plantation, and protect the roots against the sudden changes in the weather.

Grapes—Should be trimmed this month if the cuttings are to be preserved. They generally do rather better, if cut down from the trellis, and covered lightly with earth.

IN *The Cottage Gardener* is an account of an enormous grape vine on the coast between Tyre and Sidon. It branches into two stems, one of which was 50 3-4 inches in circumference, and the other 49 inches.

TRENCH your garden, if not already done.

MONROE COUNTY FAIR.

The Horticultural Department.

THE impression has become quite general, that the fruit crop in the State of New York is poor this year. If any further evidence was necessary to convince us of the fact, we could have found it by visiting our agricultural fairs. We should, generally, have seen the portion allotted to the display of fruits, but partially filled with poor specimens. While looking through the Monroe County exhibition, we made a few notes for *our* paper.

FRUITS.

The display of apples was small, and specimens generally inferior, but there were a few noteworthy exceptions. These were monster Twenty-Ounce apples—large and very handsome Alexanders; large, round, dull-looking Gloria Mundi, and Pumpkin Sweets; large and fair Fall Genetius, Holland Pippins, York Pippins, Black Detroits, and Hubbardston's Nonsuch.

GRAPES.

Mr. Edmonds, of Brighton, and Mr. Cline, of Rochester, exhibited pretty fair collections of grapes, a portion of which were unripe, however. Hartford, Creveling, Delaware, Concord, Rogers' 15, and Rogers' 19, appeared fully ripe. Isabella, Catawba, Diana, Rebecca, Union Village or Ontario, Clinton and Tokalon, were not ripe, and will not be this year.

There were some fine bunches of Creveling—*very compact*—in Mr. Cline's collection. That variety usually grows very loose bunches, which is the chief objection against it. If it would always produce such fine specimens as those alluded to, it would probably rank as our best early grape. The publisher of THE FARMER noticed some compact specimens of the Creveling at a recent fair, which the exhibitor informed him were grown between two Delaware vines, while other vines growing isolated, produced loose bunches. The imperfect bunches of the Creveling, and some other varieties, may be owing to a failure of the stamens to produce a full supply of *pollen*, and it is *possible* that the difficulty may be remedied by planting in proximity to the Delaware or Concord. The subject is certainly worthy of further experiment.

PEARS.

The show of pears was quite meager. There were a few, just respectable specimens of Beurre d' Anjou, Beurre Bosc, Duchess d' Angouleme, White Doyenne, Sheldon, Seckel, and Flemish Beauty, while the other varieties would hardly pass with an ordinary fruit dealer.

No class of producers show more patience and perseverance under discouragements, than the fruit grower. If actuated by no other motive, than the love of gain, he must have succumbed to the repeated failures which he has encountered. But there is an enthusiasm—a devotion to his profession, from the love of it, that leads him to hold on, in spite of insects, blight, winter's rigors, or spring and autumn frosts.

VEGETABLES.

The show of vegetables, although not large in num-

bers, was creditable in specimens. The season has been much more favorable to the growth of ordinary vegetables, (a few varieties that require hot weather for their highest development excepted) than of fruit or grain. There were monster turnips; smooth, compact, medium-sized tomatoes, not overgrown specimens; large, long, clean carrots and parsneps; very large Black Spanish radishes, for winter; fine Hubbard squash—not so large and handsome as the Boston Marrow, or Valparaiso, but more palatable; cabbage heads that would refuse to be compressed into a half bushel; quite fair, snowy, compact heads of cauliflower, about as near perfection as we ever grow that estimable vegetable in Western New York. Then there were beets of different varieties, as large as ought to be desired, and potatoes that showed no sign of the rot so extensively prevailing. We made a list of twenty-two varieties of that esculent, namely: Blue Pinkeye, English Fluke, Peachblow, White Peachblow, Mexican, Red, Early Goodrich, Buckeye, Garnet Chili, Fancy Red, California, Seedling Mercer, Dykeman, Michigan White Sprouts, Ash-leaved Kidney, Mountain June, Prince Albert, Pinkeye, Seedling Pinkeye, Multiplier, Manly, Ohio Mercer, and Dutch Pinkeye. Certainly this is a large enough list to find substitutes for those long popular varieties which seem to be failing, namely, Seedling Mercer, Peachblow, and Flukes. The Flukes were the handsomest specimens on exhibition, and probably if we give it extra rich land we may continue to raise it with profit.

In addition to the above, there were very fine specimens of celery, onions—red, white, and yellow—salsify, summer squash, lima beans, water melons, musk melons, and "*some* pumpkins." Among the vegetable *curiosities* were three enormous puff balls, the largest of which would measure over a foot in diameter. The vegetables, as a rule, could not well have been better, but in such a gardening section as that around Rochester, there ought to have been ten times the *amount* displayed on an occasion designed to represent the vegetable productions of one of the most fertile counties in the State. P. C. R.

TENNESSEE.—Our correspondent, A. H. Van Zandt, under date of September 21st, writes us from Warren county, Tennessee: "This season with us has been a peculiar one. From the 1st of April, until June 27th, it rained almost incessantly. From the 27th of June to the 27th of August was very dry. As a consequence the cotton, corn, and sweet potato crops will be light. Oats and Irish potatoes heavy. Wheat almost an entire failure."

OHIO.—E. P. Thompson writes us from Cuyahoga county, that "the crops in this locality are not looking first rate. Potatoes are almost a total failure, and with the exception of apples, our fruit crop also. The heavy rains that we had in June, together with the rose bug, almost ruined our grapes in this vicinity."

MR. JOHN S. RAREBY, the great horse tamer, died at Cleveland, Ohio, on the 4th of October, aged 38 years.

THE ANEMONE.

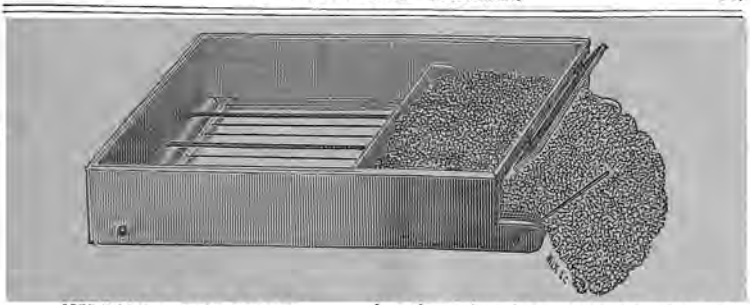
ALL will admit, who have ever seen the Anemone in bloom, that it is a most beautiful flower. The colors are exceedingly brilliant, and the markings, stripes and belts charming. Double and single are both desirable—the single the most brilliant in color. The Anemone has not been grown generally, because it has been thought too tender to bear our winters; but we have seldom failed of a good show when roots were

put out in the autumn in a dry place, and covered with leaves. Although we can not recommend the Anemone with the same confidence we do the more hardy things, they are well worthy of trial, and those who succeed will be delighted. The roots look like dried ginger, and planters must not think they are worthless because "dry as sticks."

Plant the roots five or six inches apart, and cover about three inches deep. They flower after the Hyacinth, and continue a long time in bloom. As soon as the leaves begin to turn yellow, the roots may be taken up, dried in the shade, and packed away until the next autumn.

The engraving shows the appearance of a single flower. It is less than medium size, and was drawn from a scarlet flower with a white inner belt.—*Vick's Illustrated Catalogue.*

COLORED FRUIT PLATES.—Any person sending us *sixty* subscribers at 75 cents each, will get 50 plates of these colored fruits and flowers, beautifully bound in one volume. This fine prize should be taken by many of our horticultural friends.



IMPROVED HOP DRYER.

The above cut represents an improved method of drying hops, invented by Edward France, of Cobbleskill, Schoharie County, N., Y. Wires or thin slats brought to an edge are used for the hop cloth or carpet to rest upon. The cloth (which may be very open) is movable. It is moved by means of a lever applied at the end of the shaft, to which the cloth is attached and around which it rolls. Cords run from the fore shaft around another situated in the back side of the drying floor. It may be readily seen from the above cut that by means of the lever the hops upon the carpet may be carefully deposited on the floor below, and by reversing the lever the carpet returns to its original position, ready for a new charge, without the usual loss of that valuable flour or lupulin of the hop which takes place in the common kiln. A plank or elevated walk extends over the drying floor, and is just high enough to avoid all interference with the moving of the hops below. From this walk the green hops are placed upon the (carpet) drying floor. When done, the plank may be turned on edge so as to avoid all obstruction to the draft.

MY EXPERIENCE WITH GRAPES.

WRITTEN FOR THE AMERICAN FARMER, BY "W. C."

In looking over the past ten years' experience with grapes, as an amateur, I embody a time full of excitement almost amounting to mania, with no present signs of abatement, and which if nothing else has accrued therefrom, has given such an impetus to experiment in vine culture, that thousands have eagerly imbibed the passion either to fail or succeed, and the cry for new varieties is still ringing in the ears of all interested. Amid all this excitement, hundreds upon hundreds of varieties have been disseminated as something desirable, and not a few as the *ne plus ultra* of their kind, but only too often to disappoint and discourage those whose fond anticipations were usually at fever heat by the panoramic view constantly brought to bear upon the sensitive by the originators, and even now, after so long a lapse of time, how is it that so many growers of experience continue to propagate for mere variety sake, such a large number of varieties, of no value whatever, is a puzzle too abstruse for me to meddle with.

In jotting down my observations, I may premise by stating that in purchasing any variety, I did not proceed before weighing well the evidence *pro* and *con* generally afloat with those who professed to be teachers of the uneducated, and if ever my judgment led me astray in the selection, it was through the too sanguine expectations of those who planted before me. The varieties under test with me have been the

Black King.—This grape made its debut in Rochester, and was highly lauded for the high price it brought in market, it usually ripening here the last week in August. It is very foxy, and hardly ever exceeds half a dozen berries to a bunch. In my opinion it is worthless, and should never again appear in a catalogue.

Hartford Prolific.—This grape is now pretty thoroughly known through the States, and is gradually, but surely gaining favor with all unbiassed vine growers. With a bunch and berry equal in size to the Isabella, three weeks earlier in ripening, and in quality about equal to Concord, it makes a very desirable grape. Have usually sent them to market the first week in September, when there is quite a demand for them, and continues so until something better arrives. It is without exception the most profitable grape I have handled, and always netting me from 15c. to 18c. per pound to dealers.

North America.—This grape was introduced to the public as being better and earlier than the Hartford Prolific, &c. The originator claimed so much for it, that he first called it "his little Black Hamburgh," &c. The stratagem used to introduce this variety to grape "gulls." It generally has wood enough, and which all will remember. After three years fruiting with me, I must condemn it most heartily. It is no better in quality than Black King, and usually bearing *four* berries to a bunch. Not another vine of this variety should be sold to any one.

Logan.—After five years fruiting, I consider this variety of no real value to any one. It generally sets from six to twelve berries to a bunch, is a slow grower, with foliage of doubtful durability. It ripens with Delaware. The fruit is about equal to Isabella in quality and size.

White King, or Golden Clinton.—This grape had a very fine name attached to its second christening, and is a

mere flourish of fine language. It deserved no such fancy touch at the hands of the artist. The bunches are usually small and imperfect. Fruit of a light green or yellowish tint, and quality of a low standard. I have seen vines of this variety where every leaf was marked by rough protuberances—the work of a very mischievous insect, in each of which a minute larvæ was found. Not worth cultivating.

Delaware.—This grape is, I presume, the most popular under cultivation for quality, beauty, &c., and the standard now generally adopted to judge the value of other varieties. I think highly of it, but experience leads me to doubt whether it will fill up the "aching void" so long looked for in grape culture. I would, however, advise all grape growers to give it a fair trial, but never plant it by the side of thrifty and rampant growers. It should have a well prepared soil to luxuriate in.

Creveling.—This variety I am inclined to think will become popular for gardens, as it ripens soon after Delaware, and is of good quality. The bunches are mostly open,* and sometimes not uniform.

Alvey.—This is a grape with berries similar to Clinton, bunch full medium, and of handsome shape. It is to my taste, one of the most pleasant table grapes in my collection, and is a great favorite with me. Ripens with Creveling or before.

Rogers' Hybrid, No. 15.—This is a red grape, with large berries, and bunches of good size, and which the originator thinks the best of 43 seedlings. It certainly takes finely with every one in my locality, and I have sold them freely to dealers this season at 15c. and 20c. per pound. In a pecuniary sense, this variety has proved next in value to Hartford Prolific. "Who shall decide when doctors disagree" about the merits of these hybrids? I for one must still look forward with great interest for future developments.

Rogers' Hybrid, No. 4—Is a large, black grape, bunch medium to large, and of rich flavor when ripe. Ripens with Concord, and with No. 15, is very attractive and generally liked.

Perkins.—This is a grape with a salmon tint, rather foxy, and not worthy the trouble of cultivating in these days of improvement.

Concord.—This is one of the most popular grapes on trial, but more perhaps from hardiness of vine, and the enduring qualities of foliage, than the high flavor of the fruit. It has its defects, however, and in my opinion does not approach the Hartford Prolific as a profitable market fruit. I nevertheless think enough of it to say it should be in every collection.

Diana.—This variety is perhaps without exception, the best keeping grape yet tried. When fully ripened many prefer it to Delaware, and it is a deservedly popular grape, but ordinary growers must not expect more than one-third to one-half of the crop ripening on an average. It requires different treatment to most other vines.

Miller's Louisa.—After five year's experience with this grape, the evidence is overwhelming to satisfy me that it is simply a slight modification of Isabella, and should neither be sold nor disseminated under any other name. My vines came direct from the originator.

Isabella.—This old variety cannot and quite likely will not be abandoned, as a market fruit, for many years to come.

I have Iona, Israella, Adirondack, Miles, and other very promising varieties under trial, from some of which we anticipate very satisfactory results.

* An experienced vine grower says "that this may be avoided by planting this grape alternately with Delaware, or some other good grape."—Eds.

PREPARING TREES TO ENDURE THE WINTER.

As animals endure exposure to storm and cold, the better when well fed and clothed, so do trees. If their shoots and buds are full and plump, and well supplied with healthful material contributed from clean, healthy leaves, the chemical movements which attend growth, assist greatly in maintaining the tree against cold by heat which is developed. In a thin, weekly tree, this force is wanting. A great aid to the preservation of the tree is a mulch or covering of the surface during winter, with some vegetable material in a state of decomposition. This shelters the roots, and imparts warmth, evolved by its slow combustion, and the more, if nitrogenous matter is included, as in stable manure, the better for the purpose. This application is of vastly more usefulness when applied in the autumn than if left till spring, not only on account of the shelter it affords, but because of its advancing a strong growth early in the spring, which becomes well ripened before winter; whereas manure applied in the spring, especially if raw, often does not become effective until late in the season, when the wood should be ripening instead of growing. For a ripe, ruddy, well varnished and finished coat of *bark*, is to the tree what the coat is to the animal, and something more, and the effect of a very small break or rent in it shows how very important its perfect condition is, especially that of its outer skin or epiderm. It must be remembered that the bark only ripens well in full light. Trees, therefore, must have their wood both well ripened and well fed.—"*W.*," *in Country Gentleman.*

THE NEWER PEARS.

The editor of the Hartford *Post*, in a recent notice of the exhibition of the Massachusetts Horticultural Society, mentions the following varieties of the newer pears among those which upon further acquaintance, have confirmed their former high reputation: such as Andrews, Sheldon, Doyenne Boussock, Pater Noster, Beurre Langelier, B. Hardy, Emile d' Heyst, and Meriam. Clapp's Favorite is also mentioned as one of the finest new sorts. Dana's Hovey sustains its character for vigor and productiveness, and excellent quality, but still "remains" below medium in size. The following are mentioned as among the best of the old standard sorts:—Bartlett, Flemish Beauty, Louise Bonne de Jersey, Seckel, Buffum, Beurre d' Anjou, Vicar of Winkfield, Diel, and Duchess d' Angouleme.

Ladies' Department.

Thance happy days! in rural business past;
Blest winter nights! when as the genial fire
Cheers the wide hall, his cordial family
With soft, domestic arts the hours beguile,
And pleasing talk.

Farmers' wives and daughters can do much towards making the toilsome life of a farmer a pleasanter and a happier one. When returning from the field, the barn, or the dreary winter's ride from the city, cold, hungry, and perhaps discouraged, (as who is not at times,) the cheerful greeting of a smiling, neatly dressed woman, and more than all, the blazing fire, and a well laden supper table waiting only for father, will do much to lighten any burden, and to inspire him with renewed activity for business and life.

No good housekeeper, or duty-loving wife will delay the preparation of the meals of the day till after or just before the coming in of the men from the field. How tedious it must be for them to be obliged to wait for the food which should have been previously prepared! How unpleasant to them to move from this side to that, and from that to this, that you may get nearer to the stove or the oven, thus reminding them that they are in the way, when the fault is really your own!

Then, if you have had trouble with your servants, or the children have been unusually cross, do not weary your husband with your fretting and complaints, and unless you are sick enough to need his active attendance, or the advice of a physician, do not tell him of it; nothing weakens the strings of affection sooner than a constant fault finding disposition. Do not excuse yourself from the duty of making home pleasant, because your husband is cross and morose. May not your deleteriousness in household matters have something to do with this. At any rate try the better way, make home cheerful and pleasant to your husband and children, and at the same time you will find that life and home will have new charms, and new comforts unfelt before for you.

FASHIONS.

Dresses.—There is not any decided change as yet, in the materials or manner of making up dresses. The skirts still continue to be gored; the tightly gored are the more fashionable. The dresses are still looped up (an excellent fashion) around the bottom. A most elegant style of toilet is where the petticoat, dress and basque, are composed of the same material. The coat sleeves still continue in vogue for ordinary wear, the large flowing sleeve for evening and dress occasions. A large variety of woolen plaids are introduced, and we notice hooded cloaks made of this material. In trimmings, large buttons, larger than ever, varying from the size of a pea, to a large dahlia. Beaded fringe is a great favorite, and cluny lace has taken a new lease of public favor.

Bonnets—are smaller than ever, and are made more like a saucer in shape, pointed all round, and bound with velvet ribbon or feathers, and each point trimmed. Of course, the waterfall continues to increase as the bonnets decrease, as the hair must meet the bonnet or the trimmings. The waterfall should be made without tying the hair, turning the hair upwards over the cushion, and secured at the top by tucking under. A convenient finish to the waterfall is made of a band of stiff paper covered with velvet and lined. This is passed around the waterfall after the net is adjusted and pinned at the top or bottom.

We have seen some very handsome but quite gay Balmorals. Scarlet and grey is quite stylish. They are cut goring. Hoop skirts are as large as ever, if not larger around the bottom, but quite close fitting at the top.

DOMESTIC RECEIPTS.

An English lady sends us the following method of roasting a small pig. Many of our readers may not fancy eating so young an animal as one at five weeks old; but we believe the dish is considered a rarity in the old country.—Ed.

Messrs. Eds.:—I send you my method of cooking a little pig. I do not recollect ever having seen a receipt for this much relished dish. To have it in prime order it should be from four to five weeks old, not older, and should be killed and dressed the day before roasting. I make a stuffing of bread crumbs, dry, and two or three good sized onions chopped fine, and about two tablespoonsful of finely powdered sage, well seasoned with salt and pepper. Allow no water in the pan, bake whole in a good oven, and rub often with a little bag of butter. When done, the fat should all be poured from the pan, a little water added to the brown gravy, boiled up and either poured over the pig or served in a tureen. It should be served with hot plates, apple sauce, hot, and very nice onion sauce. The onion sauce is made in the following way and is excellent with roast leg of mutton, boiled mutton, or roast pork.

Onion Sauce.—Peel six or seven good-sized onions, and boil in water. When tender, drain, and chop fine. Set to boil a little over a pint of milk, water will do if you have no milk, but it will require more butter. Take a tablespoonful of flour, blend with a small piece of butter, and stir into the milk. When boiling, put in the onions and serve hot. A Subscriber.

To Prepare Small Onions For Pickling.—Make a strong lye of wood ashes, and pour it boiling hot over them. Allow them to stand for ten minutes or so, or till the skin will slip off perfectly. Peaches and quinces may be peeled to this way also; but require to remain but a minute or two in the lye.

Floating Island.—Set to boil one quart of milk; beat the whites of three eggs to a stiff foam, and place this foam on the top of the milk. Beat thoroughly two whole eggs with the remaining yelks, and when the milk boils remove the froth, stir in the yelks, and take from the stove. When cool season with lemon, pour into a sauce dish, and place the foam gently upon the top. This is a very pretty dish for tea.

Editor's Table.

THIRTY-FIVE THOUSAND SUBSCRIBERS.

If our agents and friends only continue to increase our circulation as they have during the last two months, we shall reach the above number of subscribers for 1867. This is more than we expected, and we have only space at this time, to call the particular attention of our readers to the marvelously low price of The Farmer, which is only *seventy-five cents a year*, in clubs, and ask all our agents to form clubs, and take some of our *liberal premiums*. Let all try, and do what they can to add to the circulation of "The Practical Farmer's Own Paper." Send on the names as fast as obtained, and we shall keep a correct list of the numbers, and will forward the premium as soon as the list is complete. All new subscribers received during this month, whether single or in clubs, will receive the November and December numbers extra, together with the whole of 1867. The readers of The Farmer should feel personally interested in making the paper known among their friends and neighbors, and send in clubs for the year 1867.

The American Farmer in Canada.

As long as the premium on gold continues, we shall send The American Farmer to our Canadian subscribers at 60 cents each, in clubs of five or more, or single subscriptions at seventy-five cents.

If American money is sent, our terms will be one dollar a year, or seventy-five cents in clubs. We prepay the American postage on all papers sent to Canada or any of the British Provinces.

PRIZE ESSAYS.

We will give a book or books, of the value of $1.50, for the best Essay on each of the following subjects, which we have received from many of our readers. The essays should be short, as our space is limited and must be received on or before the 1st of February, 1867, so that we may commence to publish them in the March number. They will be submitted to a competent committee, and those accepted published, and the books sent as soon as we are informed what work is desired. We want plain, practical statements of facts, and hope our readers will let us hear from them on all of these subjects:

1. On the cultivation of the Raspberry, with description of each variety.
2. On the cultivation of the Blackberry, with description of each variety.
3. On the cultivation of the Strawberry, with description of each variety.
4. On the cultivation of the Currant, with description of each variety.
5. On the cultivation of the Gooseberry, with description of each variety.
6. On the cultivation of the Cranberry on high and low lands.
7. On the cultivation of Sweet Potatoes.
8. On the raising of Tobacco.
9. On raising Cotton.
10. On raising Roots for Stock.
11. On raising Flax.
12. On the cultivation and management of a Hop Yard.
13. On the management of Spring Lambs.
14. On the different Breeds of Horses.
15. On Bee culture.
16. On the Abuse of Animals, morally and religiously considered, or otherwise.
17. On the best Pastures for Dairy Cows.
18. On Buildings suitable for a Large or Small Farm, with Plans.
19. On the best Wagon for Carting Manure, both solid and liquid, with Plan.
20. On the management and application of Barn Yard Manure.
21. On the best method of Improving Exhausted Land.
22. How to keep up the Fertility of the Soil.
23. On the management of permanent Grass Land.
24. On the advantages of Cutting Hay and Grain by Machinery.
25. On Deep and Shallow Plowing.
26. On Reclaiming and Management of Boggy or Swamp Land.
27. On the Different Breeds of Poultry.
28. On the cultivation and management of the Orange in the United States.
29. On the desirability of cultivating the Apricot, as a standard fruit.
30. On the best selection, habits, and treatment, of flower plants for parlor flower stands.
31. On the cause of "winter-kill" in Peach trees, and best remedy.
32. On the best plan for a Rustic Cottage, with plan and estimate—cost not to exceed $1,000.
33. On the cultivation and comparative profit of White, Amber, and Red Wheat.
34. On the relative advantages or disadvantages of budding the Peach on Plum Stock.
35. On the most desirable Breed of Cattle suited to the extreme cold of Northern Winters, the consumption of the least amount and coarsest food, and the best producer of beef, being the principal requirements.
36. On the Modes, System, and Local Characteristics of Farming in each of the Different States—an essay from each State.
37. On the same in Canada.
38. On farming in the West.

SPECIAL PRIZES.

Five Dollars in Cash,

For the best Plan of Hog Pen, illustrated with full description.

Ten Dollars in Cash,

For the best essay on Cooked food for Animals.

Notes on the Weather, from September 15th to October 15th.

As the month was cold, so the last half gave the mean heat, 53.7°, or 3.30° below the general average. But it is not the coldest for this half, as in 1842 it was half a degree colder. The hottest noon was 70°, on the 25th, and the coldest noon, 50° The coldest day was 45.3°, and the hottest day was 79.7°. The coldest morning was 30°, on the 23d, when the frost was palpable in the city, but out of the city at the south and west, the frost did much injury to maize, buckwheat, tomatoes, and some others. The leaves of grapes were hardly affected in the city. On the 24th was a less frost. The shrubby Althæa still shows its flowers, single and double.

Rain in the second half, 1.80 inches, and of the month was 4.11.

The maturing of corn, and the like has been slow, and much of it will not be ripened. Though cool, the month has been pleasant, giving us much clear weather, and during the full moon, the nights were splendid.

OCTOBER began rather warmer, but soon we found the autumnal weather was upon us in earnest. After all, the mean heat of this half month, 52.64°, has exceeded the general average one degree. The range of the mean of these days has been from 38.5°, on the 5th, to 65.3°, on the 2d. The coldest at 7 A. M., was 29°, on the 5th, when we had the great frost that killed our grapes, and many other things; and this was the coldest day, 38.3° The day before was 40.7°. Next to the hottest day, above, was 66,°, on the 8th, and 61.7°, on the 9th. This has been a fine half month, much clear, or nearly clear days and nights. Wind from the West chiefly; only few local and surface from unpleasant quarters.

Frost hard on the 5th; grapes ruined, leaves all dead; so hard frosts occur every few years in the first half of October. People wonder sometimes to hear that frost appeared when the morning was said to be 35°, 38°, or even 40°. The reason is obvious, when known. Water freezes at 32°, and ice is formed at 32°. But the thermometer is used especially to show the temperature of the atmosphere at a few feet from the earth. At the surface the temperature would be too high or too low, for obvious reasons; and at much distance from the earth it would be too cool, because the temperature falls as you rise in the atmosphere. It is common to suspend the thermometer six or seven feet from the earth, out of the direct or reflected rays of the sun from buildings, ground, or anything; facing to the north. From radiation (sending off the heat to the air above,) the surface of the earth, planks, stone, or wood walks, grass, &c., lower their temperature, the vapor of the atmosphere settles on them; if the radiation is enough, the vapor (now water) is near 32°; a moment more the ice or frost is formed, and the thermometer is at 32°; but the one six feet from the ground may be now 34° only, at other times 38° or 40°, as I have seen it as the frost was forming. On the 5th, the air thermometer was 29°, while the water was frozen, and the ice was several degrees colder. The reason of slight or heavy frosts is obvious, whatever is the heat on the thermometer, six or seven feet from the ground.

Monroe County Fair.

THE Monroe County Fair held in this city, October 3-5, proved very successful. Notwithstanding the weather during the time was remarkably cold, the number of visitors was very large, and the show of stock and articles on exhibition was quite good. The number of entries amounted to 1,128, and the receipts for admittance to nearly $1,800.

Of sheep, there was a good show, Merinos predominating. A few pens only of long wools on the grounds.

There was a large number of fine cattle on exhibition, among which we notice two pair of fine steers, by B. Fellows, of Chili.

Of pigs there was a poor show. Of poultry, there was a middling show, most of the birds being crosses of the principal breeds.

Among the implements were a large number of mowers. Seymour, Morgan & Allen, of Brockport, Dodge & Pomeroy, of Auburn, exhibited machines. The Buckeye, exhibited by Hiram Curtis, of Albion, and several other patents were on the grounds.

Edward Heath, of Fowlerville, N. Y., exhibited a new ditching machine which worked well. It is said to cut from 40 to 50 rods a day, and is worked by two horses, and runs on wooden rails, having a small bridge in the rear for the horse to pass over the ditch. Cuts a ditch about ten inches wide by three feet deep, and drew a large number to see it operate.

Of plows, M. and G. Wiard, of East Avon, had several on exhibition for one and two horses. Also cultivator by the same exhibitors. Schank's potato digger, and also one by A. Marcellus, manufactured by Whiteside, Barnett & Co., were shown. The merits of these machines can only be tested by a fair trial on a potato field, and which we regretted was not done. Many patent gates were on the ground, and the premium was awarded to J. H. Graves, of this city, whose gate is of simple construction, and the favorite. It runs very easily on a side roller, and is suitable for a yard gate, barn, or stable door.

Illinois State Fair.

From *The Prairie Farmer*, we learn that the exhibition of cattle was unusually small, say 150 head. Horses and mares are better represented, and the show was very creditable. Sheep are rather better than last year, Canadian exhibitors being largely represented. There were entries only of French Merinos. The report on the scouring of wools astonished many, and Illinois breeders are talking of the propriety of growing more wool and less oil. In swine the display was good, but confined mainly to breeders. Poultry was almost ignored—two entries only. The display of implements was large, and in most respects superior. We observed a model of a steam plow, with traction engine, but no one will go into extacies over it. A potato planter

was among the new inventions, but attracted no attention. Farmers are done wondering at new things, and pay them little respect until they have been thoroughly tested. Prove all things, and hold fast that which is good, has become the order of the day. Farm produce was better than last year. Fruit was as usual. On the whole the fair was nearly equal to last year.

Indiana State Fair.

THE Fourteenth Annual Exhibition of this Society, was held this year at Indianapolis, October 1–6, and proved highly creditable to the State, and very successful. The weather during the time was favorable, and the receipts amounted to nearly $16,000. There was a large show of stock. D. McMillan, of Zenia, O., was the principal exhibitor, and took nearly all the prizes in the Shorthorn class. Fletcher & Churchman showed some fine Devons. H. G. Hannamon and others, Alderneys. Of sheep, the show was not as large as might have been expected. Merinos, Leicester and Cotswolds were shown. Thomas Aston, of Loraine county, taking all the prizes for his Cotswolds. Some pens of Cashmere goats were exhibited, which drew an admiring crowd. The display of horses was large and fine, among which were several thoroughbred animals.

Michigan State Fair.

THE Michigan State Fair was held this year at Adrian, September 18–22. The weather during the fair was very bad, raining all the time for the first three days. We learn that the number of entries amounted to 1,796, while last year they were 1,797. On account of the bad state of the weather the attendance was very light, and the receipts during the five days amounted to only $4,000, against $12,500 last year. The exhibition was very creditable to the State, most of the departments being well represented.

The show of horses was very fine, and large in numbers. Michigan being noted for its breeds of horses, made a good show in this department. Of cattle, Herefords, Shorthorns, and Devons, were the only breeds represented, but some superior animals were on the ground, which had been introduced into the State during the last year. Of sheep, the show of Merinos was large, while long wools were represented by some fine specimens from Canada, and from the flocks of the State. Of swine, the show was small. The White Chesters were the principal breed on exhibition; but Essex, Suffolk, and Yorkshires were represented. Of fruits, the show was highly creditable, and considered superior in quantity and quality to any previous exhibition of the Society.

At the annual meeting held on the fourth day, the President, W. G. Beckwith, of Cassopolis, Secretary R. F. Johnstone, of Detroit, and E. O. Humphrey, of Kalamazoo, Treasurer, were re-elected for the ensuing year.

GET up a club for THE FARMER, in your neighborhood. All who subscribe by Dec. 1st, receive the last two numbers of this year free.

New York State Fair and the Hop Crop.

MESSRS. EDS.:—I found the State Fair a very difficult place to reach, especially for goods. I shipped sixteen of my Cheddar cheese for the Fair from Otsego county, and after waiting until the 3d day of the Fair, and they did not arrive, and as I could learn nothing by telegraph, I had to give them up. The dairy hall was nearly empty, and in some other departments there was but a slim show. There was much complaint on the part of exhibitors that their goods did not arrive by railroad. On the fourth day of the Fair, I went to Albany, and there found that a car load of stuff for the Fair, started from Albany in season to be on the Fair grounds on Tuesday, but was switched off at Mechanicsville, and left until Friday, and on that car were my sixteen Cheddar cheese, and many others had goods for exhibition that never got to their destination. There must be some neglect somewhere, and I hope the officers of the State Fair will avoid such places in future. There was but one sample of hops on the grounds. It was too early to exhibit hops, but the harvest is nearly gathered now, and of fair quality.

The vermin commenced to increase rapidly by the last days of August, and the first four days of September they increased most marvelously. The sultry, moist weather was the cause of the great increase, which seems to result in a much lighter crop than was anticipated two weeks since. The cold weather which followed, stopped the increase of the louse, and caused them to crawl into the hop between the leaves of the bur. The yield will be light, but the quality is generally satisfactory to the dealers. I have seen but few gardens that have turned black, and those were on low ground and protected places where the wind is kept off by timber, orchards, or hills. We must have our hop gardens on high, airy places, *we must avoid bleeding them at picking.* In every case where they did not bleed last year, the vine is strong and healthy this season. This cannot be too strongly impressed on the hop planter. If we had had a severe thunder storm the last week of August, I think we should have escaped the great increase of vermin.

F. W. COLLINS.

Canada Provincial Fair.

THE Twenty-First Exhibition of the Provincial Agricultural Association commenced on the 24th of September, at Toronto, lasting till the 28th, and promised to be well patronized; unfortunately, however, rain commenced on the evening of the 24th, and poured down without intermission, till the morning of the 26th, so that although the entries were large, a great many articles failed to reach the grounds, and some departments were but poorly filled. 33,000 tickets were sold, which is some 12,000 less than last year at London.

The grounds comprised some seventeen acres, of a triangular shape, lying between the high brick walls of the Lunatic Asylum grounds, and the track of the Northern Railway, and situated some two miles west of the centre of the city. A more undesirable spot

could scarcely have been selected; the ground being a plaster clay, lying low and undrained, the rain made a quagmire of it. The principal building was the Crystal Palace, of wood and glass, in the form of a cross, 171 feet by 85. In it were shown the entries of the Arts and Manufactures departments, and an addition at the rear was put up to accommodate the Grain, Dairy, and Horticultural departments. Stables, cattle and sheep sheds, pig and fowl pens, were scattered about the grounds, and surrounded by almost impassable pools of water, which as the weather after the third day proved fine and dry, gradually turned into the stickiest of mud.

The first and second days were occupied in getting things into their places, and the third day, the Hon. T. D. McGee delivered the inaugural address, which was purely of a political character. Owing to the rain, the judges did not get through with their awards till the fourth day, and were much hampered by the crowding.

The last day was to have brought out all the prize animals together in the ring, but owing to the mud very few came out, and that part of the programme was a failure.

First on the list stood the horses, of which there were 374 entries divided into several classes. Owing to their being kept in close boxes, jealously locked up, we found it next to impossible to get a look at them all. We noticed, however, that the heavy Clydesdales predominated, and showed more development of fat than muscle. In fact, many of them were of elephantine proportions. A very nice animal, of a dark dapple bay color, with flowing mane and tail, and with less weight and more action than the generality of our agricultural stallions, took the first prize, and also the Prince of Wales prize as the best horse on the ground. He is owned by J. J. Fisher, of Goderich, Huron county. The show of horses was unquestionably the largest yet seen, as might be expected since most of our large breeders of horse stock reside near Toronto.

Of cattle, the entries were not numerous, being 485, but the animals as a whole, were of more uniform excellence than we have seen at any former exhibition. In Shorthorns there were 90 entries, of which Hon. D. Christie, of Brantford, showed six head, imported in 1864, besides several younger animals bred by himself since. His imported bull, Oxford Lad, was not shown, and there being little competition in the class of aged bulls, the first prize went to Baron Solway, owned by John Snell, Edmonton, an animal we do not admire, although he is said to boast a high pedigree. Mr. Christie takes first prizes on nearly all his stock, his three-year old cow having been placed second, where the first went to a much inferior animal. His yearling bull calf, Oxford, of Athelstane, by OxfordLad, takes the first prize, and also gets a diploma as best animal on the ground, of any age or class, and seems to be a decided acquisition to the improved stock of the country, if not also the best animal now on the continent. F. W. Stone, of Guelph, shows many head of Shorthorns, but his *forte* appears to be in Herefords, in which class his fine herd of 30 animals of all ages, takes all the prizes except two. They seem a remarkably handsome breed, of good size, and coming early to maturity.

Of Devons, there were the largest number, namely, 106 entries, and the animals of so equal a degree of excellence, that the judges had some difficulty in giving their awards. Mr. John Pincombe, of London, showed the largest herd, and took the most prizes, while W. J. Peters, of the same place, and Messrs. Courtice, of Darlington, also take several prizes.

In Ayrshires, the entries were 90, and many fine animals were shown. They are small, but good milkers, hardy and easily kept. George Crawford, Brockville, and W. Wheeler, Scarboro, take the principal prizes in this breed of cattle.

Of black polled cattle, there were 71 entries, namely, 59 Galloway and 12 Angus. They are much alike, though classed as distinct breeds. The Angus cattle, of which James Nimmo, of Camden, is the only exhibitor, are a recent importation, and seem to be handsome cattle, being finer bred than the Galloway, with a soft skin and smooth hair. The Galloways are now very generally distributed through the Province, and are *the* breed for a small farmer; they are perfectly hardy, of large size, with rough, curly hair, easily kept, and fatten readily. The cows are average good milkers—in that respect superior to the Shorthorns.

Of grades and fat cattle there was a large show, mainly animals resulting from crosses of Shorthorn bulls on native cows. Many of them are equal in size and other good points, to their sires, while as a dairy stock they are the best the country affords. Few can afford to keep Shorthorns in their purity, they require so much care and attention in feeding, &c., but every farmer has it in his power and within his means to raise grade stock, and no other breed improves our natives so rapidly and well by crosses, as the Shorthorns do.

Of sheep there was a very large show, but owing to the regulation adopted last year, requiring long wooled sheep to be shorn after a certain time, four inspectors were appointed to see that the regulation had been conformed to, and they then ruled out all the animals in the Leicester and Cotswold classes, with the exception of the lambs and a few shearlings; consequently few prizes were awarded. Exhibitors complained loudly, but it was only just that they should be made to show their sheep with an ordinary season's growth of wool upon them, and the lesson taught will have a good effect another year. There were 763 entries in the sheep classes, the great majority being Leicesters. F. W. Stone, of Guelph, George Miller, of Markham, J. Snell, Edmonton, were the principal exhibitors in Leicesters and Cotswolds, and showed some magnificent animals that would be hard to beat anywhere. Some fine Shropshire Downs were shown by H. Spencer, Whitby, and George Miller, of Markham, while F. W. Stone, of Guelph, takes most of the prizes for Southdowns. Of fine wools there was a poor show; in fact they are at a discount in Canada.

Of pigs the show was good, though smaller than usual. There were 53 entries of large breeds, mostly Yorkshires. 135 of small breeds, comprising 56 improved Berkshires, 45 White Suffolks, and 34 Essex.

The show of poultry was tolerably good, and would have been better, but for the fact that W. and J. Peters,

of London, our largest fowl breeders, had a large number of their choicest birds poisoned by some scoundrel a few days before the exhibition. Colonel Hazzard, of Toronto, showed a coop of remarkably handsome and pure bred Cochin Chinas, probably the only genuine birds of the kind in the country.

Of grain, especially wheat, our great staple, the show was very much behind former years, both in quantity and quality. Only 6 entries were shown for the Canada Company's prize of $100, for the best 25 bushels of winter wheat, which was taken by F. Barclay, of Oro, near Lake Simcoe, while J. Mitchell, of Mona, takes the Association prize of $40, for the second best 26 bushels. We fancy much better samples could have been shown in this department had the weather been favorable for threshing operations.

Of dairy produce, the show was extra good, and the large number of factory made cheese was quite a new feature to us. Harris & Raney, of Ingersoll, had one on exhibition weighing 7,000 pounds. It took three milkings of 800 cows to make it, and is intended to be shown at the Paris Exhibition of 1867.

Of vegetables, there was a fair but small show. We noticed a great many samples of the Garnet Chili potato, and the fruit department well filled. Grapes and peaches being much better than we anticipated, while apples and pears were plenty, though rather green, and unrecognizable, except for the labels attached.

MAC.

THE MARKETS.

ROCHESTER, October 25, 1866.

FLOUR—White wheat, $16@$16.50. Red, $14.00@14.50.
GRAIN—White wheat, 300@310c. Red, 275@280c. Corn, 106c. Barley, 105c. Oats, 58c@59c. Rye, 112c.
HOPS—40@55c.
WOOL—45@50cts.
PROVISIONS—Lard, 21½@22c. Butter, 35@38c. Eggs, 33c. Cheese, 14@19c. Potatoes, 50c.

New York Markets.

REPORTED FOR THE AMERICAN FARMER, BY S. EDWARDS TODD, OF THE NEW YORK TIMES.

NEW YORK, October 22.

BEEVES—The prices for the different grades of beef cattle during the past month, have been very steady, with but little fluctuation. During most of the month, prices have also been quite firm at high figures, although for a week or ten days past there has been a downward tendency, in prices. The arrivals have been unusually large, so that it was difficult to dispose of the weekly supply on the principal market days. The number of beef cattle received at all the yards, during the four weeks past, amounts to 27,958. About 3,000 per week are sold at the National Yards, 100th Street; from 50 to 100 are sold on 6th Street; 75 to 100 at Chamberlain's on Robinson Street; about 3,000 at the Hudson City Yards, just across the river in New Jersey; and a few hundred, the week past, at the new yards just open at Communipaw, on the Jersey shore, of New York Bay, about two miles from Jersey City. I go to all those places in person, and see most of the cattle, and talk with the drovers, brokers, and butchers, every week, about the prices. The prices given in the October number of THE FARMER will represent the prices at the present time, to a cent, with the exception of the highest price, which is now only 17½@18c per lb. for the four quarters of dressed meat, the hides and rough tallow not computed to the purchaser. For two weeks past, a large proportion of the cattle has been of second and third quality of beef, more suitable for packing than for retailing to families.

MILCH COWS—The number received during the past month is 385—nearly 100 per week. The market has been steady, but comparatively dull. The figures in the October number of THE FARMER are right for the prices of to-day.

CALVES—There has been an active demand for good calves during the entire month, and sales have been quick, and prices firm at 13c@14c per lb. live, gross weight; and I have met with a few choice calves that sold for 14½c per lb., live weight. The number received at all the yards is 6,789 for the month. A large proportion of the calves is what go by the common appellation of "grass calves," hundreds of which are poor, emaciated, and poverty-stricken as the the "loan kine" mentioned by Moses in ancient Egypt, which sell for $2@$4@6, up to $18 per head, according to size and quality. Large numbers are purchased here and transported again into the country to be reared for cows or beeves.

SHEEP AND LAMBS—The sheep market is literally glutted. Prices have been declining slowly, during the past month, until there seems to be very little demand for the surplus supply. There has been a desperate effort to keep the prices of mutton up; but the heavy arrivals have compelled drovers and brokers to sell for what butchers would pay. I overheard a butcher and drover parleying for a long time about a lot of good Southdown lambs, which were sold at 6c per lb., live, gross weight. Very few lots sold for more. Other reporters will quote these very lambs at 8c. per lb. Had it been known that I was a reporter, I would not have heard the price. A few choice lots were sold for 7c per lb. Sheep are now selling slowly at 5c@5½c@6c. Some of the best lots brought 6¾c per lb., gross, live weight. Thousands of poor sheep and lambs are brought here and sold for less than they are actually worth in the country. When will farmers learn to fatten their animals before they send them to market! Every week I see hundreds of animals sent here which are in just good store condition, when they would be profitable to fatten. The number of sheep and lambs received at all the markets for four weeks past, amounts to 99,640, or nearly 25,000 per week.

SWINE—The swine market has been confined to Fortieth St., on the North River, till the past week, when the great new market was opened at Communipaw, where swine will be slaughtered. On the 17th, the formal opening of this new market, yards, and slaughter house occurred. The buildings and conveniences for slaughtering animals cannot be excelled by any other abattoir in America. A lot of swine is driven up an inclined plane into an apartment in the second story, where a man knocks them all down in a minute. They are then struck, and tumbled down an inclined table into a large wooden vat, filled with scalding water. The conveniences are so perfect that they did actually dress a hog in seven minutes while I was there. This great abattoir, or slaughter house at Communipaw, is owned by the New Jersey Stock Yard Company; and they propose to save and fertilize everything, from the end of a hog's snout, to the tip of his tail, except the *squeal*, which they would utilize, were it not for the United States stamp required on such commodities. The number received during the past month is 60,100, besides about 1,200 at Communipaw. Prices for fat hogs have been declining slowly for a few weeks, so that to-day, prime, corn-fed hogs sell for only 10c@10¾c per lb., live, gross weight. No swine from distilleries have been offered. The heavy receipts have dragged the prices down a little, and nothing but lighter arrivals will bring the prices to a higher figure. As I close my report, the best quality of hogs are selling slowly at 10¾c@10¾c per lb., gross, live weight.

APPLES—Are offered freely, and large quantities in barrels are sold exceedingly cheap, because they are in a bad condition. The prices vary from $1.50@$6 per bbl. If a man has a lot of fair, smooth, and round apples, they will sell readily for $5@$6 per bbl. If half of them have been shaken from the trees, and are small, not fair and bruised, and many having rotten specks, they must be offered cheap, or no one will purchase them. The better way is to put none but the best in one barrel, and all the inferior ones in other barrels. Apples thus assorted will sell for more than when the good and poor are all together.

POTATOES—Have been declining in price for two months past. They are usually sold by the bbl. I have seen them retailed all about the city for 63c per bushel. Different varieties sell at various prices. The Mercers sell about as high as any at the present time. Mercers, $2@2.50 per bbl. Most other kinds at about $1.38@$2 per bbl. The price depends wholly on the quality offered. Thousands of bushels of poor, miserable potatoes are offered, which are unfit for eating.

POULTRY—There is an active demand for good poultry of all kinds. Turkeys, 30c@35c per lb. retail. About 25c@28c at wholesale. Chickens 25c@30c per lb., not drawn. Ducks, 32c@36c per lb. for the best. Geese, 24c@26c per lb., for the best. Poor lots sell for one-third less than these prices.

EGGS—Are now in active demand, retailing at 25 cents for 7 eggs, or 30@40c per dozen, by the bbl.

BUTTER—Now retails at all prices from 20c to 65c per lb. Choice lots will sell for about 40c@43c per lb. It is difficult to get over 35c@38c for common butter. Dealers in butter will dissemble and jockey so provokingly, that an honest man does not know whether he is getting a fair price for his butter, unless he is posted as to the market prices. If a man has a tip-top article of butter, he can sell it for 40c, or perhaps 45c per lb. If he sends it to a broker, they will sell it for 50c, and make returns at about 40c, deducting his commission. Butter which is collected at country stores and village groceries, which appears as if a few pounds of soap grease, a few of white butter, and a few pounds of fair yellow butter, have been mingled together, will sell very low, usually for not more than 20c@26c per lb. according to the quality. There is a vast deal of such streaked butter in the market, which no respectable families will accept as a gift for their tables. The market is now fair, and there is no prospect that butter will be any higher.

CHEESE—The demand for cheese is tolerably fair, for a good article. The best lots have retailed all summer and fall, thus far, at 20c@24c. per lb. Dealers now pay for the best 14c.@18c. per lb. Poor lots and even some very fair lots have sold for 6c. @10c. per lb. I have seen fair cheese offered in numerous places in the city, for 10c. per lb., at retail stands.

GRAIN—The demand for wheat is becoming more active and prices more firm. Wheat has been quoted 56c@4c. per bush., higher, on a sparingly supplied market. The demand has been fair. Sales since on the 20th, 93,000 bush., including White Michigan at $2.27; Milwaukee Club at $2.26@$2.25; Chicago Spring at $1.98@$2.26; and Amber State at $2 per bush. There has been a very heavy business transacted in Corn, chiefly in mixed Western, in store, on account of Western speculative buyers, resulting in a further material rise in prices, though the market closes less buoyantly. Sales on the 20th, 308,000 bush., at $1.02½@$1.04 for inferior; $1.05@$1.08 (the latter, a fancy price for a single load of nearly pure yellow;) chiefly at $1.06@$1.07 afloat, and $1.02½@$1.06, chiefly at $1.06@$1.06 in store, for sound Mixed Western; $1.07@$1.09 for Yellow Western, and $1.10@$1.15 for White do. per bush. Oats continue in light supply and demand, including Chicago at 59c.@63c.; Milwaukee at 61c.@63c.; State at 64c@65c., per bush. Sales 137,000 bush. Rye is advancing. Sales 27,000, including old Western at $1.18 and new do. at $1.21@$1.22, per bush. Barley has been in lively request, and decidedly firmer. Sales 98,000 bush., at $1.05 for poor Chicago, and $1.30@$1.35 for Canada West; and $1.10c. for Canada East (in bond) per bush. Barley Malt is quiet at $1.40 per bush.

Considering the present prospect, our advice to farmers is to sell their barley now, but to hold on a little longer to their other grain. There is little or no danger that the price will decline very soon, at least until we obtain more favorable reports of the crops at the West. The prospect now is that there will be a short supply until the next harvest. Reports reach us from all parts of the country, concerning the poor crops of cereal grains; and most farmers complain that the early frost injured their Indian corn seriously. All these things tend to maintain a firm price, until heavy arrivals are offered in the market. At Milwaukee for the past week the stock of Wheat in store is reported at 324,000 bush. The receipts of Wheat for the past week sum up 634,657 bush, against 760,974 bush., for the same time last year. Shipments for the week, 9,803 bush., by rail and 541,849 bush., by lake, as follows: 305,687 bush., to Buffalo, 66,901 bush., to Oswego, 50,700 bush., to Ogdensburgh, 91,581 bush., to Cleveland, 11,450 bush., to Sandusk r, 10,000 bush., to St. Catherines and 2,500 bush., to other parts. We quote No. 1 Spring Wheat, in store, subject to 2c, per bush., storage, at $2.04; No. 2, $1.73; No. 3, $1.60; Rejected, $1.41. Oats are firm and in good demand at 57c. for No. 1 and 55c. for No. 2. Receipts for the week, 10,166 bush. Shipments for the week, 30,044 bushs. Rye is firm, but quiet at 80c. for No. 1 and 75c. for No. 2. Receipts for the week, 12,909 bush. Corn is selling at 64c. for No. 1.

FLOUR—State and Western Flour has been in decidedly more active demand at a further improvement of 10c@15c. per bbl., the market closing buoyantly, especially for the inferior and lower grades, the available supply of which has been very materially reduced within a few days, partly by purchasers for export. Sales October 20th, 19,600 bbl., including very poor to choice Superfine State and Western at $8.25@$10.75; very poor to good old Extra State at $8.60@$10.75; ordinary to strictly choice do. do., fresh inspection, at $10.85@$12.50; round-hoop Extra Ohio, poor to good shipping brands, at $11@$12.35, per bbl. We now quote:

Superfine State and Western	$8.25@$10.75
Extra State	8.60@ 12.50
Extra Illinois, Indiana, Michigan, &c	9.00@ 14.50
Extra Ohio, round-hoop, shipping brands	10.85@ 12.50
Extra Ohio, trade and family brands	12.50@ 14.75
Extra Geneseo	12.50@ 14.50
Common to choice extra Missouri	13.25@ 18.00

Southern Flour continues in demand at buoyant prices. The supply is light, and holders are very firm. Sales since our last, 400 bbls., in lots, at $12.10@$18.50 for poor to good, and $18.50@16.75 for good to very choice extra brands, per bbl. Canadian Flour continues scarce and wanted. Rye Flour continues in good demand, including the Superfine at $6.00@$7.90 per bbl. Sales 1,500 bbls. Corn Meal has been in fair request at $4.20@$5 for Western, $5@5.10 for Jersey, $5.20 for City, $5.40 for Marsh's Caloric, and $5.40@5.50 for Brandywine, per bbl. Sales 960 bbls., October 20th.

Should any of the readers of THE FARMER desire other articles added to this list, if they will drop me a line, I will hereafter give the wholesale or retail prices of such commodities.

THE annual meeting of the National Wool Growers Association has been called to meet at Cleveland, O., on Wednesday, Nov. 14.

WE learn just as we go to press, that the Greeley prize for the best grape for general cultivation, was awarded to the Concord. Particulars next month.

Special Notices.

ADVERTISEMENTS.

CONTENTS OF THIS NUMBER.

STEREOTYPED BY JAMES LENNOX, 62 BUFFALO ST., ROCHESTER, N. Y.

THE
American Farmer.

ENTERED according to Act of Congress, in the year 1866, by JOHN TURNER, in the Clerk's Office of the District Court of the United States, for the Northern District of New York.

VOLUME I. ROCHESTER, N, Y., DECEMBER, 1866. No. 12.

The year grows old, and wanes to its close,
Like weary mortal greyed and bent with age,
Who, tired of cares and life's unfruitful wage,
Impatient waits the hour that brings repose.

II

The days are short, and seem to wane apace;
The noonday sun shines slantwise down the hill,
The air is sharp—the latest tinkling rill
Is firmly closed in winter's stern embrace.

III.

The streams are bridged, and ponds are all agiare
With polished fields that tempt the skater's skill,
From distant woods and forest covered hill,
The woodman's ax sounds sharply on the air.

IV.

The rumbling wheels grate harshly on the ear;
While cutting winds from farthest Northland blow,
Or noiseless runner cleaves the yielding snow
With which December shrouds the dying year.

Belfast, Me. G. E. S.

WORK FOR THE MONTH.

WITH December the winter months set in, and the work on the farm, is reduced to the homestead. The ground gets frozen hard, to gather vigor for the coming year, and we must retire ourselves to store our minds with a fresh supply of knowledge, which we can only obtain by careful reading and study.

The farmers of this country generally allow themselves to believe, that with the coming in of the winter months, the chief business and duties of the year to them, at least, are done, and with self-congratulation, the successful husbandman looks back upon the spring's busy plowing and seeding, summer's noon-day heat, and evening balm, the persevering hoeing, and cultivating, giving place to the autumn sickle, and the triumphal gathering into the garner of the fruits of his labors, and complacently assures himself, that the season of rest has come, and on the whole, he is right. What person, society, or community, has earned a better right than the farmer, to a little recreation from toil and care, but the truth is, it is not that we have acquired a right to a little relaxation and pleasure, but that the stern grasp of necessity, the cold, dreary, bitter, stormy winter, warns us to discontinue our outdoor labors, and betake ourselves to our comfortable homes and firesides, where we can take rest for our bodies, and find time for thought.

THOUGHT—That is it. How many farmers ever imagine, that it is our duty to think, that the evening of the year, is the time that God gives us for restrospection or reviewing of the past, and laying plans for the future, not that we would infer that American farmers do not think, or that they are less intelligent than farmers of other countries, for we believe otherewise, but we do affirm that the winter months should witness to the agricultural manufacturer, a more earnest thoughtfulness and systematic improvement, in all that is true, and good and noble, and as we said, in the January number: "It is well we have these land marks—these way-stations on the track of time, where we can stop for a moment to take a note of the extent of our travels, and whither they are tending. They afford a good opportunity to take a new start for the future. Wise is he who learns by the past how to act in the present."

From these preliminary remarks, it will be readily perceived that our idea of the work for the month partakes of a more intellectual bias, than have our notes, from month to month, of the departing year. The proper work for the month, is first and most important, *attention to the wants and comforts of our domestic animals.* See that their every want is well supplied, let the food and water be regularly furnished, and we would here suggest that a variety

of food would be relished by them, and add greatly to their permanent improvement. Too much attention cannot be paid to ventilation and the cleanliness of animals in the winter season, and for this reason, the farmer should be well supplied with a good stock of sweet, well kept, wholesome straw, and the stables and sheds constantly cleansed and well littered with fresh straw at regular intervals. Nothing like

SYSTEM—in all farm work, especially in wintering animals, as then the temptation is resisted of taking our own ease at the warm fire side, to the neglect of their comfort.

HOUSEHOLD DUTIES—We have no sympathy with those occasionally found husbands and farmers sons, who think it is beneath their manliness to wait upon the *women folks*. It is their duty certainly to bring in all the wood and water needed, to do all the milking even to the stripping of the udder, which no good milker will neglect, and in fact to do all in their power to relieve the ever arduous duties of the faithful farmer's wife. There will be time, during the long months of winter, many hours, which when every physical duty being properly performed, would hang wearily on our hands, if not turned to good account by thought, laying plans for the future, and careful reading of reliable agricultural books and papers. Every farmer's household should have a room, where those who have the leisure can retire for reading, writing or study, and this should be called the

LIBRARY—Nothing adds more to the comfort, and happiness, and general appearance, of a farmer's house, or speaks more for the intelligence of its inmates, than a book case or a few shelves well supplied with good agricultural, horticultural and other books, and *here* we would suggest that the farmers write, for

OUR OWN PAPER—It cannot be possible that the year has flown, and left nothing peculiar or interesting to mark its passage. If anything has occurred in your agricultural experience of interest to you, if any new idea has been tried, and has proved a failure or a success, why not take pen, ink and paper and jot it down, for the benefit of THE AMERICAN FARMER's family. Give us plain, simple statements of facts, as they have occurred, and thereby benefit others with the knowledge you have gained by practical observation. Many hours, too, can be profitably spent in

THE WORKSHOP OR TOOLHOUSE—which should be on every farm. When the stormy blasts are blowing, attend to the repairs that have been postponed from time to time. If the seed drill wants good time to attend to it, and you will soon find, that it will be one of the pleasantest rooms on the farm.

AND ere the close of this month, we trust you will do one thing more, for yourself and us, and that is, that you will speak a good word to your neighbors, about THE FARMER, renew your own subscription, and send the names of your friends along, so that we may have the pleasure of wishing you all, "A Happy New Year," in the January number of THE AMERICAN FARMER, for 1867.

WESTERN MICHIGAN.

MESSRS. EDS.—This Eastern shore of Lake Michigan, is to me a very interesting part of the world, especially this particular point. When I came here seven years since, there was not 100 acres, under even the widest cultivation, within a circuit of 10 miles diameter; but we had fourteen sawmills, and the necessary stores and shops, with 1,700 inhabitants. These mills have since been enlarged and improved, and seven new ones added, all now in full operation, three more in building, and several sites purchased for that purpose. We shall ship this season, near if not quite, 200,000,000 feet of lumber, besides large quantities of hewed timber, lath, shingles and railroad ties. We have now, 5,000 inhabitants, two large propellers, making each triweekly trips to Chicago, carrying freight and passengers, one large side-wheel steamer, ditto, a semi-daily tug to Grand Haven, an hourly steam ferry across Lake Muskegon, besides scores of sail vessels constantly coming and going, and making in all, sixty arrivals into our harbor, in one day last month. And though agriculture has not kept pace with this general improvement, the fact is preculiarly interesting to me, that the whole world seemingly, are now adopting my ideas advanced timidly and generally scouted, seven years since, that this whole region from St. Joseph to Grand Traverse, was designed by Nature for a fruit garden. And I have the further and more gustatory satisfaction this season to partake abundantly of strawberries, peaches, grapes, and all the small fruits from plantings, made with my own hands as well as of the finest of field and garden vegetables all grown on land which I took, not from the hand of Nature, but covered with grubs, brush, logs and stumps, as the all-desolating lumbermen left it, thinking there was no further use for it, except to help hold the world together.

Muskegon, Mich. S. B. P.

BONES.—The simplest way to prepare bones for manure is to break them into small pieces with a hammer, and mix with an equal quantity of earth

THE HONEY BEE.

WRITTEN FOR THE AMERICAN FARMER, BY "C. D."

THE "Mystery of the Honey Bee," was treated of in the numbers for April, May and July. In the first article, the "Mystery" was held to be solved, though the two other writers thought it untouched, as did also many readers. Yet its author stated that the solution is the result of long observation, is founded on known facts, and exhibits the Creator's law of operation in the case. The *facts* are not stated; indeed, the *experiments* made are not reported, and the "laws of nature that govern Honey Bees," are not seen to be derived from any facts and experiments. The reference of the author to Dalton's Human Physiology of 1864, gives no support to his solution. This is palpable to every reader of Dalton, in the edition of 1864, (to which he referred,) or of the two preceding editions.

It has long been known that there are three sorts or forms of bees in a hive, the *queen*, the *drone*, and the *worker*. It is the received opinion of naturalists, and stated in the July number, that the queen is a perfect female, the drone is only male, and the worker is a female with an ovary not developed, so that she is only fitted for the maternal care of the family, and to accomplish the work. The queen and the worker have each a sting; the drone has no sting. The workers are very numerous, build the cells, and collect the honey. The queen deposits the impregnated eggs in cells made for them; larvæ of the workers having the smallest cells, for they are the least in size; the drones having larger cells, and the queen a longer cell, for she is longer than a drone. The drones do no work, and live on the honey collected by the workers, till after the swarming, when the workers unite in speedily killing every one, stinging them to death. When the queen is taken away or is killed, the workers tear down a cell of the larva of a worker and build a larger cell around that larva, give it abundant food, of a gelatinous and stimulating quality, and that larva grows into a queen, possessing the true form and characters. Here is no mystery to be solved.

The bees act according to the nature and instincts the Creator has given them. How the workers distinguish a drone larva from the worker, is not known; and so of many other particulars. The instinctive powers of animals are wonderful, always effecting the designed end, but they are a mystery only in the sense of our ignorance. Why do the *workers* build their cells of the hexagonal form, terminated by a pyramid whose sides have the angle which mathematicians prove to give the greatest strength? Why does the dog, not a grass-eating animal, eat and swallow a certain grass for medicine? Instinct, is the cause; and this, without instruction or experience, leads infallibly to beneficial results.

It is considered as an established fact, that the queen is *simply and only a female*. She lays eggs fecundated by the drone for queens and workers. The queen is a perfect female, and workers are undeveloped females; and the workers' larvæ are capable of full developement into queens by the operation of the workers as already stated. Hermaphroditism is found, not in bees, but in some snails, the barnacles, some spiders, and more of the inferior classes.

It is also maintained by high authority, that the queen, before impregnation by the male, lays drone eggs, or eggs whose larvæ are invariably changed into drones; *a most remarkable fact* when the provisions in nature to secure fecundation are so abundant, and the statement will doubtless hereafter be shown by facts not to be precisely true. To use up this statement, the author in the April number gave a solution more mysterious than the mystery itself. There is no evidence of his assertion being true, that the queen, as hermaphrodite, could produce and lay *only drone eggs*; or that the drone eggs or their larvæ, are *changed to workers* by any operation of the queen or drone, or both of them.

The prevalent opinion of distinguished naturalists is here briefly presented and will, I hope, be more appreciated by your readers, as it has taken some time in several months to come at the facts and principles. I should refer to some writers out of THE AMERICAN FARMER, if I had the liberty.

HOW WE FARM IT IN THE GENESEE COUNTRY.

WRITTEN FOR THE AMERICAN FARMER, BY P. O. REYNOLDS.

NUMBER TEN.

MISCELLANOUS CROPS.

There are other branches of husbandry to which the Genesee farmer, occasionally turns his attention, but which can hardly be considered a part of our regular agriculture.

TOBACCO.

There have been two or three seasons when farmers were considerably excited on the subject of tobacco culture. The high prices which prevailed, and the brilliant anticipations of some enthusiasts, who figured a yield of a ton per acre, and a ready sale at twenty-five to thirty cents per pound, induced a number of farmers to embark in the culture of tobacco. A few, by heavy manuring, and high culture, reached a ton per acre, but the majority fell far short of that figure. Then, instead of a ready sale, at high prices, most of them had to keep their crop over, and the same the next season, and the next, until they began to be anxious to sell at any

price, and finally were glad to let buyers select out the better portions of their tobacco at ten to fifteen cents per pound. Thus exploded the great tobacco bubble. I noticed but one small tobacco patch in the vicinity of Rochester, the past season. The great mistake was—farmers failed to grow the quality of tobacco produced in the Connecticut Valley. I am not prepared to say, that it is to be regretted, that tobacco culture proved unprofitable in the Genesee country. I believe that it is more elevating, more conducive to the moral improvement of the farmer, to grow such crops, only, as are a blessing to mankind, rather than those of doubtful utility.

BROOM CORN.

Broom corn is raised to a considerable extent, and with fair profit, since the price of brooms has ruled so high. Many farmers make up their brush into brooms, during the winter, thus realizing greater profit from their crop. The plants are slow in getting started, and require more labor in the first hoeing, after which the culture is as easy as that of Indian corn.

THE MILK BUSINESS.

Quite a number of farmers, in the vicinity of Rochester, find profitable employment in producing milk for the supply of the city. At the present prices of milk—six to seven cents per quart—a milkman, who understands his business, can make every cow average 60 to 75 cents per day—gross—the year round. To increase the quantity of milk, brewer's grains, and distillers slops are carted from the city and fed to the cows, both summer and winter—milkmen asserting that the best of pasture will not produce as much milk as the above feed. Coarse bran, mangel wurzel, and other watery roots, are also fed to them.

One would suppose that milkmen would be satisfied with diluting the milk thus, before it comes from the cow, but it is asserted that in *some parts of the country* they add water, freely, after it is in their cans, and use a *patent compound* to give it color and consistency. I hope, for the honor of the Genesee country, that *our* milkmen are not guilty of such dishonest practices.

Here I close my series of articles with the title, "How we farm it in the Genesee country." In these articles I have aimed to relate in a plain, simple manner, without exaggeration or literary pretension, our routine of farm labor, and in some instances, have suggested improvements.

I presume that there are localities, where they farm it better—raise larger crops—and realize greater profits. Again, there are sections where the soil is more sterile—the markets poorer, or more difficult of access—farming in a lower state, and the labors of the husbandman less adequately rewarded. But still, I think that farmers of all sections may gain wisdom from a free interchange of experience through this great mouthpiece of the agriculturist —THE AMERICAN FARMER.

ROCKINGHAM COUNTY, N. H., FAIR.

MESSRS. EDS.:—The first Annual Exhibition of the Exeter Agricultural and Horticultural Society, was held in the town hall in Exeter, on the 9th and 10th of October. It being a new society, and the first exhibition, every member, and even those who were not members, were very much interested, sparing no pains to render the hall as attractive as possible. The morning of the 9th opened cloudy, dampening the prospects for a good time. But clouds and wind, or even rain, will not retard the progress of a good cause. At an early hour the products of mother earth, and the handiwork of the ladies began to pour in, and in such quantities that the committees were almost at a loss to find room for it all, and long before noon the spacious hall was full to overflowing.

The show of apples was splendid, far exceeding the expectations of all. There was a fine display of pears, grapes, &c. Potatoes of endless variety. Corn large and small, yellow and white, big cabbage; beets that "cant be beat"; turnips of different kinds, some thirty-six inches in circumference; Pumpkins that "were some pumpkins." A large display of squashes, marrows, hubbard, turban crookneck, mammoth, &c., some weighing nearly one hundred pounds. The show of poultry was good, comprising Brahmas, Leghorns, Black Spanish, Bolton Greys, Natives, &c. Year old Brahmas, weighing from six to eight pounds, chickens five months old, laying eggs every day. Turkeys and ducks looked well. There was also a fine display of eggs. Then the bread and butter and cheese was enough to do one good to look at, much more to eat. So of the wines and jellies. Then the fancy department; all I can say of that is, it was splendid; showing a vast deal of interest on the ladies part, they sparing no pains or time to make the new society a success.

There were many other things of which I cannot speak at this time, for I am taking up too much room in your or rather "our" paper already. But let me urge the people in every town to form agricultural and horticultural societies for the purpose of increasing the interest in these departments. It is a noble cause, and it should be sustained and encouraged, not only by farmers themselves, but by every man and woman in the land. L.

Brentwood, N. H.

IT is said that twenty-five tons of carrots can be raised on one acre of land, and that this amount is

SORGHUM GROWING.

WRITTEN FOR THE AMERICAN FARMER BY "G. F.," READINGTON, N. J.

MESSRS. EDS.:—A few remarks on the subject of the production of sirup and sugar, by a practical producer, may not be without interest to the readers of THE AMERICAN FARMER. I have raised sorghum, and assisted in the manufacture of it for five years, and find that there is nearly as much to be learned now as there ever was. In the year 1862, sorghum had scarcely been seen in Central New Jersey; and molasses made from it was as rare, almost, as sheetings from Northern cotton. But in that year a few mills were introduced, and since then the cane enterprise has grown, until now almost every farmer raises enough cane to produce molasses for his own family use. It is certainly more pleasant to have a barrel of good, home-grown molasses in one's cellar, than to run to the store every week or two, and get molasses of inferior quality and superior price.

Cane requires a warm and rather dry soil, shelly or gravely is best; clay or wet places should be avoided, as they produce rank cane, making very inferior sirup. The seed, which should be of the best kind, without any mixture with broom corn or similar plants, may be planted in drills, or in hills like corn.

As the season for planting is past, I will dwell more upon the gathering and manufacturing.

Stripping is the chief part of harvesting. A great many men have contrived and patented a great many strippers, costing from a few shillings to as many dollars. Some are arranged to cut the top from the stalk, strip off the leaves, and cut the stalk from the ground, all by one blow. Others will only cut off the top and leaves; but all claim to be the most perfect instrument of the kind in the world. But I would advise any one having a piece of cane to strip, to let the patent strippers alone, and make himself a light wooden sword with a *straight* blade, with which to do his work. The patent concerns are all made to strip both sides of the stalk at once, and therefore requires considerable care and time to strike the stalk right every time. With a wooden blade one side may be stripped at each blow, and the whole done in the most expeditious manner. After stripping, take a large knife and cut the heads off, below the top joint; then cut the stalks and bind them in medium sized bundles, with two bands. Thus by doing one thing at a time, you will get your crop harvested sooner, and with more satisfaction, than if you undertake to top, strip, and cut, all at once.

With regard to manufacturing. Here it is done by one man, who owns mill and pan and charges a share of the product, or a certain cash price per gallon. The rate this season is two-fifths of the product, or thirty-five cents per gallon. It requires considerable experience to produce the best results in all cases. The machinery used in this section is the Victor Mill and the Cook Evaporator, both made in Ohio. The syrup is, or should be boiled to a density of thirty-eight or forty degrees by Baume's saccharometer. At this density there is little to fear of its fermenting or souring through the warm weather of the summer season.

NOTES FOR THE MONTH, BY "S. W."

WRITTEN FOR THE AMERICAN FARMER.

FARMERS AND THEIR CROPS.

A letter from Cayuga county says that the corn crop in the old town of Scipio, except near the lake, "owing to the cold August and September, is not worth one-third of a sound crop." The wheat crop is fair, but little more than enough for home supply is now grown there; other crops are fair, but potatoes are rotting badly. Seneca county is a wheat growing soil proper. Yet we hear of but one farmer who had grown 1,500 bushels of wheat, and another who will have nearly 1,000 bushels, and this is in Fayette, the crack wheat growing town in the county. The majority of farmers there will not have 100 bushels of wheat to sell, and some none at all; barley is now more extensively grown, than wheat, even there; farther south in Romulus, I hear of but one farmer who has over 100 bushels to sell, and he is near the lake shore. In the north towns, much barley, oats, and corn is grown, but very little wheat. I asked a Pennsylvania German farmer the other day, why they did not grow more wheat now in Fayette, since they were no longer invaded by the insect. He replied, the farmers have got rich and lazy, all the smartest of their sons have gone west, and the lazy ones carry on the old farms. This I suppose accounts for the great enterprise of the farmers of the far west, who now make the great wheat and corn crops. And it would seem that the farther west, the greater is the industry and enterprise; California, but a few years ago, imported her breadstuffs from Chili, now she exports millions of bushels of wheat to England, all the way round the Horn; while here on the Atlantic slope, wheat and flour are at famine prices for home consumption; and but for California we could not claim to be a wheat exporting nation at this time.

Although there is much soft corn in this county, even the Dent variety has well ripened, that was planted early, on a well manured, well drained soil. I asked a farmer two years ago, how he had the patience to grow corn on a wet field without first underdraining it; he depended on the season, and was well satisfied with a small crop, as a reward for

is labor. This season he had hardly a bushel of ound corn. Oats will grow on almost any soil with ven slovenly culture; hence we have a great many ats-selling farmers; when a man brings in oats to ell to villages, it is *prima facie* evidence that he s a poor farmer; John Johnson has often bought oth oats and corn to feed to fatting cattle and heep, but he never sold a bushel.

Wheat was once as easily grown as oats are now, ut we have no longer a virgin soil, and the finest llage with the aid of well prepared nitrogenous anures are indispensable to the success of a wheat rop; hence it is that so many farmers have quit rowing large fields of wheat. Potatoes which do o much to lessen the consumption of wheat flour, ave yielded well this season, but the rot is upon iem, and they will be scarce and dear in the spring. iven the early Yorks, dug before the rains, are erishing with dry rot, while the later varieties, arnet Chili's often excepted, are rotting fast, specially when grown on clay soil.

There can be no doubt that the farmers in the iiry regions will make the most money this eason; being impressed with the fact that Indian orn is not indigenous with them, they plant only ie small early varieties, and but little of that; alays manuring it highly and planting it only on arm, well drained soil; hence farmers there, genally have corn enough to fat their dairy fed hogs ven this untoward season.

THE PROHIBITORY EXCISE ON GRAPE BRANDY.

A California correspondent of the New York *'orld* writes from San Francisco, that a great meetg of the grape growers of four of the grape growg counties was held at Napa City, to set forth and monstrate against the grievousness of the burden hich has been laid upon the grape interest by the st Congress. Under the new law the tax imposed on brandy distilled from native grapes, is raised om 40 cents to $2.00 per gallon. It is impossible ider that tax to continue the manufacture of grape andy, as it amounts to an absolute prohibition. ereafter if this tax is continued, the grape growers ast lose all that portion of their crop which can- t be used for wine. Their pumice, piguet, sedient, and refuse grapes which forms a large portion their material, cannot be used for wine, and must entirely lost, as long as the present tax on distilion is in force. There are now thirty stills in the th collection district, and no public warehouse conient where the brandy can be held in bond; and stored by the distiller, the duty must be paid forthth, or it is liable to seizure. Under the present w the loss to the vine growers will amount to e-fourth their gross products. The correspondent ys, "as the vine interest, now in its infancy, has abundantly shown that it is destined with anything like careful nurture, to become one, if not the greatest interest on the coast, the onerous injustice of strangling it while in its growth, and struggling into favor, is manifest." Such a tax is not only the death of a great branch of rural industry, but also a legislative premium held out to illicit distillation and smuggling? When Congress placed a prohibitory excise on the distillation of whisky from grain under the farcical plea of increasing the revenue, temperance men were pleased with the pretence, and it undoubtedly saved millions of bushels of corn, to feed the country at a time when it most needed it; but as refuse grapes and the pumice from wine vats, cannot supply the place of grain in the animal economy, why should the distillation be thus tabooed; many other branches of domestic industry instead of being burdened by taxation, are protected by high tariffs, which increases the price to the cost of the consumer. Is it either right or financially wise, that American brandy an article so necessary in medicine and in the arts, should be thus taxed to prohibition, while so many other industrial interests are encouraged?

THE NATIONAL WOOL GROWERS AT CLEVELAND.

This meeting on the 14th November, of the wool growing magnates of the land, brings to mind the recollection of the days, auld lang sine, from 1821 to 1833, when year after year the cotton and woolen manufactures kept Congress in a state of perpetual siege, clamoring for increased duties for protection. In 1816, Mr. Calhoun the Mephistophiles of the South, generously voted for the first protective tariff on cotton fabrics, but he refused in 1821 to vote any farther increase, and afterwards became a pestilent nullifier. But the effect of increased protection was very much like that of brandy on the sailor; when half seas over, Jack was asked what he wanted most, he replied more brandy; it was just so with manufacturers before Congress, the more protection they got the more they needed; the result was the more they got, the more they spent and lost by reckless expenditure, and the less they worked; and it was not until the tariff was annually reduced under the provisions of the compromise act, that the cotton manufactures began to recover from their debauch; industry, economy and great improvements in machinery, now became their true legitimate protection, and cotton manufacturers only grew richer, as they made goods cheaper, and so far from needing protection from without, they soon became exporters of cotton goods to South America, China, and other parts of the world, successfully competing with the English manufacturers in foreign markets.

Protection to American industry is a very seductive phrase to the neophite in political economy;

but it has always proved that those trades which were protected least have succeeded, until since the inflated prices induced by the late war and the depreciation of the currency, not only American cottons, but manufactured wares, and machinery of all kinds, were exported from these United States to all parts of the world; 'tis true, and pity 'tis 'tis true, that owing to the present inflated state of things, our country has become "the poorest to buy in, and the best to sell in," of any other country in the civilized world; but I would ask how is restriction on foreign trade going to help us? How can Buenos Ayres buy our wares, if we refuse to take her wool in payment, and if we prohibit foreign wool, to raise the price to benefit our wool growers, we also increase the price of cloth on the whole community, and even the farmer must pay it, for he has now got bravely over spinning his own wool, and making his own cloth.

But the Cleveland Convention has this in its favor, the Government needs revenue, and must have it, hence a duty on foreign wool will be levied to the extent that it can be made productive; and the duty for revenue will be incidental for protection, and this is as much protection as the patriotic wool growers will ask, but the Morrill tariff is a prohibitory tariff, as Mr. Morrill himself confesses, that its provisions impose a duty on foreign wool equal to seventy-five per cent on its cost. The effect of such a tariff will be to give the trade in foreign wool to England, and to shut out the manufactures and the staples of the United States from those countries, for the benefit of English trade and manufactures.

AN INCREDIBLE HAY CROP.

The New England Farmer is responsible for the report that an acre and a half of poor land in St. Johnsbury, Vt., produced thirteen and a half tons of fine timothy hay this season. The land was plowed in August, 1865, top-dressed with forty-five loads of yard manure, well harrowed and sown with three pecks of timothy seed, and fifteen pounds of clover seed, and again harrowed and rolled, it yielded eight tons of timothy the last week in June, and five and a half tons more the first week in September. As much Italian rye grass has been grown to the acre in England by the aid of weekly libations of sewage or liquid manure. But any thing like such a crop of timothy has never before been reported by the agricultural press.

PEA straw is richer in oil, albuminous or flesh-forming matter, than the straw of the cereals. The woody fibre is also more digestible. This fully accounts for the repute in which it is held as fodder for sheep and cattle.

THE HOP CROP OF 1866.

WRITTEN FOR THE AMERICAN FARMER.

As the year is drawing to its close, a review of the past season, relative to its bearing upon the hop crop, will better enable us to see where we stand and to profit, in future, by the lessons which it teaches concerning the culture of this plant. Farmers were so discouraged last spring by the damages which, from different causes, their yards had sustained for the three preceeding years, that many gardens were left without cultivation. In many instances hop gardens had been partially or wholly destroyed, the effect of early cutting the vines a picking; though these gardens are generally pronounced "winter-killed," yet it is a well established fact, that hops are never "winter-killed," unless they are previously enfeebled from loss of sap, (their life blood,) by cutting the vines near at the root, when the crop is harvested. This evil can be entirely prevented, and cannot therefore be classed among those with which the farmer is obliged to contend, when engaged in the culture of hops. The ravages of the aphis, during the past three years, have been grievously felt. However, each year their depredations have been later in making their appearance and at the same time, remedies that are pretty effectual, when thoroughly applied, have been discovered here, and others, long used in foreign countries, introduced; so that with a little labor at the right moment, farmers can protect their hop gardens from this plague while it remains with us and we may hope for its final departure at no distant day.

It seems now, in view of the high prices which hops are bringing, and are likely to bring, that farmers will resume their hop planting with vigor, and prepare to contend with enemies as they appear.

The present crop has been mostly sold to speculators at from 45 cents to 55 cents per pound. The brewers have bought few, as yet. The yield proves to be lighter than was generally anticipated. A very few gardens have yielded 1,500 lbs. per acre. A large majority have fallen far short of an average crop; not more than 500 lbs. per acre. Some have produced one or two hundred weight, and some have not borne. The average yield this year may be set at 500 lbs. The quality is considered fair and this small yield, at fifty cents per pound averages $250,00 per acre for the whole of the land devoted to hop culture in this country. In 1864 12,000,000 lbs., of hops were grown in the State of New York. This year there will be less than 10,000,000. Now there are no old hops in the country and no possibility of importations, as the crop is short, both in England and on the continent—in England, less than one half of last year's crop

From these indications, and from the fact that the consumption of hops is rapidly increasing in this country, the future prospects of the hop-planter are favorable. In fact, for some time to come, this must be the most paying crop raised. The great improvements in other branches of agriculture have been gradually introduced into general use, during the last twenty-five years, and the best of them were stoutly resisted by the ignorant and bigoted for a long time after their adoption by the more enlightened part of the community. It took ten years of the most persevering industry to induce a general use of the horse rake, and so with all the best machines we have. This is an age of progress, and the improvements in raising, drying, and baling hops will sooner go into general use than the horse rake or threshing machine, which paved the way for the introduction of other improvements.

The question is frequently asked, "Will not the high price of hops, and the great profits, stimulate an over-production that will run the business into the ground?" We answer, "Not while there is a foreign demand." Our hops are admitted free of duty, into the English market. The freight, to be sure, is against us, but the price of land here, is only a tenth of that of the English planter, while this land of ours *produces more pounds per acre, of hops* that are in England acknowledged to be *thirty per cent stronger* than theirs. Thus the advantages more than counterbalance the disadvantages. The kiln, illustrated in the November number, of THE AMERICAN FARMER, invented by Edward France, is such an improvement over the usual methods of building kilns, that it should be used whenever a new kiln is erected. It wastes none of the lupulin, or resinous flour, which constitutes the strength of the hops, making a saving of from one to three pounds to every kiln dried and saves the worst part of the labor. With these improvements hops can be produced of fine quality at 10 cents per pound, and pay as well as a grain crop. When the planter has his yard and kiln properly arranged the labor and expense is about the same per acre as growing a crop of corn.

F. W. COLLINS.

OUR EASTERN LETTER--No. 6.

WRITTEN FOR THE AMERICAN FARMER, BY G. M. BRACKETT, BELFAST, MAINE.

THE season of active farm operations has closed with these late autumn months, and in a few days winter in all its severity will be upon us. The crops are all gathered in, and he who had faith in the prophecy that "seed time and harvest shall not fail," and proved his faith by works, has no cause for discontent. His harvests have been good, and his barns and storehouses are filled with the wherewith to keep his family and those of the lower orders dependent upon him, until another return can be obtained from the bosom of mother earth. With the advent of winter, his physical energies are not so often and severely called into requisition, and time can be spared for mental culture and general improvement. The farmer should bear in mind, that his body is not a mere machine, from which the greatest amount of labor is to be obtained, but that he is worthy of noble impulses and a better fate. True, his vocation calls for hard continued labor, during a season, but there is also a season which is his for recuperation, and the cultivation of those mental powers which will make him the equal of his brothers, in the other and various professions of life.

Fairs.—The agricultural fairs throughout the Eastern States, were well attended and were almost without an exception entirely successful. There is a general improvement manifest among farmers, not only in the kind of stock, but in their methods of cultivation; much of this is due to the fairs and agricultural societies, and more to the general circulation of agricultural papers and publications. Farmers read and think more than ten years ago, and with thinking and reading, comes a better knowledge of their condition and requirements, and of the best method of conducting their business. One thing in connection with the annual holidays for farmers, which we notice with pleasure, is a gradual weeding out of extraneous matter, such as side-shows, exhibitions of various kinds, and the many clap-trap devices for getting money, and drawing custom with which many of our exhibitions have been attended. We hope this will go on until in ten years from now, we may not even be dependent upon horse racing to draw a crowd.

Agricultural Colleges.—Not much is heard from our colleges, that are to be, in New England. Their officers are generally working quietly, and we hope effectively. Owing to a disagreement with the Trustees, the President of the Massachusetts College, Hon. H. F. French, has resigned his position. The Trustees of the Maine College, hope to have the buildings, &c., in readiness to commence receiving scholars next Spring.

MISSING NUMBERS.—Any of our subscribers who have lost any number or numbers of THE FARMER, can have them supplied by informing us of the fact. As we stereotype every issue of the paper, we can at all times supply back numbers.

The Prairie Farmer says the hog cholera is raging in nearly every county of the State (Illinois) with great fatality.

SPIRIT OF THE AGRICULTURAL PRESS.

High Cultivation.

The Maine Farmer, alluding to the subject of "high cultivation," so much talked of and written about, says that there is much more talk than improvement. A man looks over his farm, of many acres, and finds the whole needs aid, but not being able, at once, to render it to all portions, makes no particular effort to improve any part. The right way—right because alone practicable—is to commence with a few acres at a time. Get these in good heart the first year, and the increased product from them will aid in experimenting on another section the succeeding year. In this way the farm will soon become renovated, and properly cared for, will not run down again as "long as grass grows and water runs."

Gypsum in Stables.

The Germantown Telegraph says—"Gypsum should be sprinkled daily over the floors and tie-ups, to absorb the ammonia of the urine. The strong odor observable on entering the stable on a morning, arises from the presence of ammonia, one of the most valuable products of stable manure, when properly economized. Gypsum or lime, either slacked or caustic, should also be sprinkled over the bottoms of cellars in the spring. This will tend to purify the atmosphere and prevent many deleterious effects resulting from the presence of miasma. After a few days it should be removed, and a fresh supply substituted in its place."

Protection to Winter Wheat.

It is suggested by a Western farmer, says *The Maryland Farmer*, that wheat fields may be protected from the severe weather of winter by sowing oats with the wheat, or rather sowing oats first and covering them, and then follow in a day or two with wheat. It is thought the oats will help protect the wheat during the winter, disappearing, of course, in the spring. Another plan is to mulch the wheat, late in the fall, with fine manure, or lacking this, with a coating of straw. What effect either of these plans may have in protecting the wheat from the severity of the winter, we do not know. One or all of them might be tried on small lots of ground, and their comparative merits be tested at a trifling expense. As the country becomes divested of the forest trees the wheat fields are exposed to increasingly severe trials from wind and frost. Less snow falls now than formerly, and what does come is borne from the wheat fields by the winter blasts which career over them since divested of the protection of surrounding forests.

Care of Long-Wooled Sheep.

The Rural World says, that experienced breeders of Cotswold and Leicester sheep say that these sheep should not be kept in the same pastures or yards with Merino sheep. They say that the odor from the bodies of the Merinos is not only offensive but hurtful to the English breeds. The long-wooled sheep are little disposed to roam over the pastures; they eat what they want and then lie down. The Merinos, on the other hand, are much disposed to ramble all over the pasture, picking a little here and there. The consequent trampling of the grass and scattering of the droppings of the sheep seems to unfavorably affect the Cotswolds and Leicesters; so much so that it is advised, even where they are kept alone, that at least three pasture lots be kept so that the sheep may have fresh pasture frequently.

A Vine near the Door.

The Massachusetts Ploughman well says that a traveler over a country road would instinctively have his eye caught and his thoughts somewhat tangled up by a fine vine growing vigorously near the door of a home. It does not matter how small or humble that home may be, it is raised in the esteem of any observing passer-by holding up the suggestive shelter of a vine. It expresses love in the house, thoughtfulness for what is at once graceful and appropriate, pure and healthy domestic sentiment; and a spirit of contented happiness which many a one goes the world over to find, and looks for in vain. Such a simple home ornament as this is a token for all men to see, that the dwellers beneath the roof it adds expression to, are persons of feeling for what is true and lovely, for native refinement and quiet happiness. There should not be a farm-house in the land without a vine somewhere contiguous.

Dutch Cows.

The editor of *The New England Farmer* recently visited the farm of Mr. Chenery, near Boston, where he saw some of the Dutch cattle imported by Mr. C. He gives the following account of what he saw in the stables:

"Entering the stalls we found a man milking one of the Dutch cows. She had been milked twice before during the day, and while we stood by he filled a common water pail and commenced upon another, the milk still flowing as freely as it did into the first pail! A cow stood near that had dropped a calf a few days before, which weighed at birth 113 pounds. And another brought twins which weighed at birth 153 pounds! A three or four-year old heifer stood by, for which Mr. C. had been offered $1,300, and declined it. All were as splendid specimens of cows as we ever saw. Two noble bulls of the same breed, large and of most exact symmetry, were also present. Their weight must be some 1,700 pounds each."

Salting Butter.

A. Raymond, a N. H., correspondent of *The Rural New Yorker*, gives the following recipe for salting butter: Take two quarts of good salt, one ounce of sugar, one ounce of saltpetre. Use one ounce of the composition for one pound of butter. It should be stamped and left to cool before putting in jars. Butter prepared in this way should not be used for two or three weeks. You will find that your butter will be very fine, as it will have no brittle or salty look or taste. By following this course your butter will keep the year through, in warm as well as cold weather.

Potatoes.

A correspondent of *The Rural American* reports a yield of 361 pounds of potatoes from four pounds of seed, of the Early Goodrich variety.

Horticultural.

HORTICULTURAL RETROSPECT.

In a retrospect of the past season, we find that it has been remarkable for great extremes of heat and cold, rain and drouth. April was seasonably warm, and up to the 23d, quite dry, when a heavy rain followed by snow, saturated the earth. Leaf buds, and fruit buds swelled rapidly during the prevalence of warm, dry weather, and appearances encouraged hopes of an old-fashioned, early spring. Cherries, peaches, and pears, nearly unfolded their petals, and were as forward by the 20th of April, as they usually are by the first of May. After the rain and snow came frost, and for nearly two weeks vegetation appeared to stand still. Cherries escaped with least injury. A large proportion of the pear blossoms were frozen, and undoubtedly a large share of peach buds were killed, although less apparent at the time, than with the pears. Grape vines started, and were frozen back, and many of the incipient fruit-buds destroyed.

May was a cold, cloudy, rainy month, with quite sharp frosts on the nights of the 7th, 14th, 17th and 24th, all through the season when about all our fruits were in blossom. When this fact is considered, is there any reason for doubt as to the cause of the failure of the fruit crop? Apples blossomed unusually full all over the country, but when we looked for the young fruit, it did not appear. Is not this conclusive that the germs were killed while in bloom? The stamens which secrete the pollen, in the anthers, at their extremities, are very tender, and we have often observed that they were killed by frost, when the fruit-germs appeared unaffected. Of course, without fructification by the pollen, the germ must cease to expand, and eventually fall to the ground.

Vegetables grew slowly through the month of May, but June opened warm and showery, and vegetation leaped forward. Never did vegetation grow more rapidly than during the first half of June. Lima beans are, usually slow to germinate, but some that we planted the first day of June, were up in five days, and nearly every bean grew. But it was too late to gain what was lost in May, and early vegetables were not early this year. We usually have peas on the table, by the 13th of June, but we had none this year, until a week later. Strawberries commenced ripening the later part of June, instead of the early part, and cherries were not ripe until the very last of the month. Strawberries were a light crop, but pretty good in quality. The vines suffered much from winter-killing, and many of the berries were probably killed by the frost while in blossom. Cherries were a pretty fair crop, and had favorable weather for ripening, without rotting, as constant winds evaporated the dew and rain before they had time to affect the fruit.

Then came July, with dry, scorching winds—very hot, and with the driest atmosphere known in twenty years. Vegetation was less able to withstand the effects of the dry atmosphere from its rapid growth in June, and consequently suffered more than might have been expected, from the brief duration of the drouth. Such weather was well calculated to hasten the ripening of those fruits and vegetables due in July. Raspberries followed close upon the heels of strawberries, and under such favorable circumstances developed their highest flavor.

August brought another change—a repetition of the weather of May. Cold, cloudy, drizzling weather, such as we seldom experience in that month, unfavorable for corn, tomatoes, Lima-beans, sweet potatoes, melons, and all those semi-tropical fruits and vegetables that delight in hot weather. Plums ripened this month, and were the best crop of that insect-infested fruit that we have grown in this section in many a year. We are really encouraged to hope that the curculio, that ineradicable pest which has destroyed the plum—the apricot, and the nectarine for many years, is gradually leaving us, so that we may again enjoy those delicious fruits. Peaches as a general thing, were a light crop, but here and there a locality produced them in abundance. They were quite plentiful in the Rochester market, and good ones could be purchased at $2.50 to $3.50 per bushel.

Potatoes were much damaged by the almost constant rains of August and September, which developed the rot, to an extent, unequaled in many years. As usual the Mercer suffered the most, and perhaps the Fluke next. Along about the 7th of September, it was noticed that the vines were blighting, and in a few days the appearance of thousands of acres was changed. On the sandy soil of Irondequoit, where potatoes have been considered peculiarly exempt from disease, the rot has been very extensive. From a field of eight acres, we were able to save only about sixty bushels of sound tubers, of marketable size. The Peachblow, which was considered the most profitable of our potatoes, escaped the rot, but has suffered, for two or three seasons, from a blight peculiar to that variety. When the tubers are about the size of large walnuts, the vine shrivels up, and ceases to grow. The vine remains green, as long as the sound ones, but the leaves appear thickened and curled, and the tubers cease to grow. We remember that a similar disease affected the Peachblow that was grown here twenty to twenty-five years since, and that its culture was consequently abandoned. We are not certain that was the parent of the present Peachblow—but presume it was. Cannot some of those gentlemen, who were "*specially educated*," to enlighten farmers upon scientific agriculture, suggest some practical remedy for some of the numerous diseases which are annually inflicting such heavy losses on agriculturists and horticulturists?

On the 23d of September, we had a light frost. Within five or six miles of Lake Ontario, its effects were scarcely visible; but a little farther back it did some damage to tender vegetables.

September was the counterpart of August, but October brought a change. The sun became a daily visitor, and under his genial influence the atmosphere rose to an almost summer temperature. Glorious weather to dig potatoes, and gather winter apples, but alas! few

had any of the latter to gather. We gathered about fifty bushels in an orchard of seven hundred trees, not a bushel of which was fair enough to ship. Many farmers had none for their own use. Such a complete failure of the apple crop, we do not remember. Still, shippers were cautious about paying high prices. Last year's experience taught them that when apples get above $5.00 a barrel, in the New York market, a large class of consumers do without—and the supply, though quite limited, is equal to the demand, at such high prices. Four dollars per barrel was the ruling price in Rochester this year.

This has not been a good grape season in Western New York. The late spring frosts destroyed a portion of the fruit—the cold summer was not favorable to their highest development, or early maturity, and a killing frost on the 5th of October, finished the Isabella, Catawba, and other late grapes, excepting within the influence of the lake, where they suffered but little from the frost, and completely matured afterward. Two poor grape seasons in succession, must serve to somewhat allay the grape mania, and check the *too* rapid increase of grape planting. All new branches of horticulture should have a steady, healthful growth, so that the increase in demand shall keep pace with the increased supply, otherwise there is an over-production, a glut, disappointment, discouragement, and a reaction.

"CREELEY PRIZE" FOR GRAPES.

THE Committee appointed by the Horticultural Association of the American Institute to award the prize of $100, offered by the Hon. Horace Greeley, President of the Institute, for the best grape for general cultivation, reports, as follows:

First—That it is a matter of regret that the offer has not called out more competition from among the thousands of persons now usefully and profitably engaged in the production of this delicious fruit, of which there were but five varieties presented for our examination at the late session.

Second—One of the conditions of the offer was, that samples of the fruit be presented for examination by the committee, and therefore we were restricted to the consideration of such varieties as were brought before us.

Third—At a meeting of the Committee, held last year, a scale of points were adopted for our guidance in the decision on the grape. One of these points was the necessity of healthiness and hardiness of the vine and foliage, by which is meant its ability to withstand frost and mildew.

Excellence of the fruit itself is in our opinion a point of great merit, but of infinitely less consequence for the general planting community than healthfulness and vigor, hardiness and productiveness of the vine.

Fruit growers are generally convinced of the importance of selecting such varieties as will prove profitable, and everybody understands what is meant by a "good market fruit," although it often happens that such are quite inferior to other varieties in their respective classes.

We believe this to have been the object in offering the premium, and that we were to select, from among those kinds that might be brought before us, such a variety that could safely be recommended to the millions to plant, with a tolerable certainty of being rewarded by satisfactory crops.

With regard to some of the new and choice varieties brought to our notice, as competitors, it will be recollected that at the meeting of the Committee held in September, 1865, we declared ourselves unprepared to make any expression, because we had not then a sufficiently extended opportunity for seeing the vines tested under varying circumstances throughout the country. Another year has brought us into further acquaintance with the candidates, and better enables us to come to a conclusion which, however, may yet prove premature.

On these grounds we have awarded the premium to the Concord—to Exhibitor No. 33, W. H. Goldsmith, Newark, N. J.—because we believe that, though of less excellence as a fruit than some of its competitors, in this trial it is found, under the most extensive culture in every part of the country, to be both hardy, productive, and satisfactory in regard to its character as a vine; while the showy appearance of its fruit makes it most welcome to the million, with whom it is very acceptable. For ourselves, however, we must be permitted to say that we wish the fruit were of a more refined character, in addition to the admirable qualities of this noble vine.

JOHN A. WARDER, WM. CARPENTER,
P. T. QUINN, E. WADE SYLVESTER.
New York, Oct. 20, 1866.

GRAPES.—We are indebted to W. H. Adams, of the Gates vineyard, three miles west of Rochester, for some choice specimens of the Isabella grape. They are very large and compact bunches, and the berries are among the largest we have ever seen. Great care and thorough culture must have produced these results. Mr. A. has our thanks.

COLORED FRUIT PLATES.—Any person sending us 60 subscribers, at 75 cents each, will get 50 plates of these colored fruits and flowers, beautifully bound in one volume. This fine prize should be taken by many of our horticultural friends.

BULBS that are yearly moved and flowered in the open ground rarely seed; but if left in the same place three or more years, without having been taken up, the main or centre flower stalk will generally produce seed. Plants, however, that are grown in pots in the house nearly always produce seed; hence such plants are advised for operating on.—*Horticulturist.*

The largest seed garden in the world is said to be situated on the Delaware river, at Bloomsdale, Pa., occupying six hundred acres, and belongs to David Landreth & Son, of Philadelphia, and is under the personal supervision of the senior member of the firm.

CROWN IMPERIAL.

THE Crown Imperial is far less esteemed than it deserves to be. It flowers in April, the bulb throwing up a vigorous stem three feet in hight, producing near the top a crown of beautiful, drooping, bell-shaped flowers. The stem terminates above the crown of flowers in a tuft of glossy green leaves. There are several varieties, differing mainly in the color of the flowers, as yellow, scarlet, red, orange, &c. The flowers are curious, as at the base of each petal is a cell containing a large drop, which looks like a fine pearl. The fragrance is *not* delightful. The bulb is large, with a cavity entirely through the center, from which the flower stem is produced. The bulbs should be planted four or five inches deep, and about a foot apart. They will not always flower the first year after planting. Every four or five years they should be taken up and replanted.

LIMING FRUIT TREES.

F. K. PHŒNIX, Bloomington, Ill., writes to *The Horticulturist* as follows:—"A neighbor amateur has this year grown about a bushel of most delicious Imperial Gage Plums on one tree, passed to him some three years since by a brother, who said, 'No use for him to try to grow plums!' After it was planted out one year the family wood-pile was corded up under and about it, and after the fruit had set, and so long as any fears of curculio were entertained, a plentiful supply of air-slacked lime dust was scattered over the top every week, or twice a week. Last year it had a peck, and this year a bushel or so—and here you have the whole story."

The writer says he is a profound believer in the efficacy of a similar course of treatment, so far as dusting with lime, &c., not merely for curculio, but for the whole herd of insects, mildew, and fungi generally.

TRENCHING GRAPE VINES.

DR. WARDER, in a late address, says that the pioneer planter of grapes in the Lake Erie region declared that those vineyards which were prepared in the most thorough manner by trenching, always heretofore recommended, are the most unsatisfactory in their results, and the best and most productive are heavy soils that were merely well plowed, and the roots placed in holes dug into the hard and previously undisturbed clay, and then firmly trodden in at planting.

FRITILLARIA.

FRITILLARIA MELEAGRIS, or Chequered Lily, is sometimes called the Guinea Hen Flower, on account of its chequered or spotted flowers. There are many varieties, differing in color, having various shades of brown, purple, yellow, &c., singularly mottled, each variety having two colors, curiously mottled in squares. The flowers are bell-shaped, on stems about eight inches in hight, and bloom in April or May. They look best when a dozen or so are planted in a group. Plant the bulbs about two inches deep and four or or five inches apart. They sometimes prove a little tender, and the bulb is small and delicate, easily injured by drying.

We are indebted to *Vick's Illustrated Bulb Catalogue* for the above beautiful illustrations and description.

GRAFTING GRAPE VINES.—Cut your grafts in the fall, put them in a cellar or any place they will keep fresh until wanted. If one has a grape house, the eyes of the vines begin to swell in the first week in April; by the last of May or the first week in June the vines will be in full leaf; then is the time to engraft, as they will not bleed. Then head down the vine you want to engraft and perform the operation the same as on the apple or pear. This is the whole secret.—*Correspondent Gardener's Monthly.*

Miscellaneous.

STREET SONGS IN SCOTLAND.

THE manners and customs of the lower classes are not altogether disagreeable. It is, indeed, a considerable compensation for much discomfort, that one finds every evening, male and female minstrels—generally a violinist and a woman's voice—singing sweetly all the Scottish ballads. These are the only concerts the people have here, and they gather around these minstrels in large crowds, nearly all giving a penny or half-penny. There is a woman who sings every evening under our window, who has such a beautiful voice that I am sure it would have made her fortune had she been born in Italy. She sings, without ever getting out of voice, the dear old ballads of her country, and with an indescribable pathos. She is seemingly the daughter of a gray-haired old man who goes about with her, and accompanies her voice tenderly with his violin. She is about twenty years of age, and has a sweet homely Scotch lassie's face, and an unpretending garb. No orator ever moved a crowd more than she did when last night she sang "Highland Mary." A fashionably dressed woman, passing with her husband on the street, had paused to listen to the singing. She then came forward through the hundreds who had collected, slipped a coin into the singer's hand, and even whispered something in her ear. It was probably a request that she should sing "Highland Mary." At any rate the minstrel broke forth with that old hymn of human love just blooming into love divine, and poured her whole soul into it. Each note seemed to float up winged into the moonlight; every noise was hushed all along the street, and the very surges of the Firth seemed to pause. As she went on many a tear must have been borne in silence and many a heart thrilled. When it was over nearly every one came forward with his or her tribute—even the children with their half-pence. Throughout the country the old ballad tunes and the music of Burns are still sung with accuracy and feeling by the working people. The fishing people particularly, sing them all day long. I have often had occasion, roaming about Scotland, to remember the best thing that George Gilfillan ever said—that Robert Burns had set the pulses of the human heart to music.

DON'T DRIVE THE BOYS FROM HOME.

MOTHERS who are disturbed by the noise and untidiness of boys at home, must be careful, least by their reproaches they drive their children from home in search of pleasure. We give a case in point:

"There are those balusters all finger marks again," said Mrs. Cary, as she made haste with a soft linen cloth to polish down the shining oak again. "George," she said, with a flushed face, as she gave the cloth a decided wrench out of the basin of suds, "if you go up these stairs again before bed time you shall be punished."

"I should like to know where I am to go?" said George angrily. "I can't stay in the kitchen, I am so in the way; and I can't go in the parlor for fear I shall muss that up; and now you say I can't go up to my own room. I know a grand place where I can go," he added to himself; "boys are never told they are in the way there, and we can have lots of fun. I'll go down to Nile's corner. I can smoke a cigar now as well as any body, if it did make me awful sick the first time. They shall not laugh at me again about it."

And so on the careful housekeeper virtually drove her son from the door, to hang about the steps and sit under the broad inviting portico of the village grog-shop. Do you think she gained or lost?

A SCORE OF CONUNDRUMS.

WHEN may a loaf of bread be said to be inhabited? When it has a little Indian in it.

Why is Buckingham Palace the cheapest ever erected? Because it was built for one sovereign and finished for another.

What is the difference between a summer dress in winter and an extracted tooth? One is too thin and the other is tooth-out.

What is the difference between a tunnel and a speaking trumpet? One is hollowed out and the other hollowed in.

Why is furling a ship's canvass like a mock auction? Because it's a taking in sal (sail.)

Why are the arrows of Cupid like a man in an ague fit? Because they are all in a quiver.

What is the difference between the desert of Sahara and an ancient shoe? One is all sand, and the other sand-al.

What kind of leather would a naked Moor remind you of? Undressed morocco.

Why is a Hebrew in perfect health like a diamond? Because he is a Jew-well.

What celebrated convention, would you be reminded of on hearing a young lady giving advice to her uncle? Council of Nice.

What is it that by losing an eye has nothing left but a nose? A noise.

What thing is it that the more we cut it the longer it becomes? A ditch.

Why is the French franc of no value compared with the American dollar? Because it is worth-less.

What are the features of a cannon? Cannon's mouth, cannon-ize, and cannoneers.

What is that which is always invisible and never out of sight? The letter I.

What is the only pain that we make light of? A window-pane.

What workman never turns to the left? A wheel right.

What sort of a throat is the best for a singer to reach high notes with? A soar throat.

Why are balloons in the air like vagrants? Because they have no visible means of support.

To be able to govern your children, learn to govern yourself.

Ladies' Department.

HOUSEHOLD CARES---No. 1.

"Now, Tom," I said to my husband, "do you want me to stay at home with you to-night?"

"What's to-night?"

"Why it is Wednesday, and you know I never like to miss the doctor's lecture; but of course, if you would like me to stay, I will. It is only an hour, you know!"

"Oh! go, of course; don't stay on my account. I don't need anything."

"Oh, dear me, how forgetful I am," I said. "I have not made that toast-water you wanted. Well, there is not time now; but I will tell Fanny to make it."

"She can't make it."

"Oh, yes, she can. What! not make toast water, the simplest thing in the world! a baby could make it! but I'll tell her how, of course." So saying, I put on my things, and entering the kitchen, I said, "Fanny, your 'master' has a bad headache this evening, and, as I am going out, I want you to make him some toast-water. You know how, don't you?"

"Indade ma'm an' I does'nt, but its meself that can do it, if ye's tell me how it's done."

"Take a pitcher of filtered water, toast a nice piece of bread brown on all sides, and put it while hot into the pitcher, place a napkin over it to keep the steam in."

"Yes, ma'm, I understands intirely—is the 'master' very sick?"

"Oh, no! he will be better in the morning; take in the water as soon as you have made it."

Having arranged everything satisfactorily, as I supposed, I wished my husband good bye, and after having heard and enjoyed the lecture, I hastened home, feeling somewhat guilty, it is true; but consoled myself with the thought that Tom. had drank the toast-water, and that having taken a nap, his head would be better.

"Well, Tom," I said, on entering our pleasant little sitting room, and taking off my bonnet as I spoke,—"Do you feel better?"

Noticing that he did not answer, and that there was neither glass nor pitcher on the table, I said, "Did'nt Fanny make the toast-water for you?"

Raising his eyes, which had been persistently closed since I entered, and giving me an extremely contemptuous glance, and again closing them, he said, "Toast-water!" I saw, of course, that something was the matter, so I ran into the kitchen to see, and there found an immense fire in the range, and the pitcher in such close proximity to the fire, that the neatly folded napkin stood in great danger of burning. I said: "Why Fanny, what do you want with so large a fire?"

"To make the toast-water, ma'm."

"But Fanny, you do not need so large a fire to make a little toast."

"True for ye's ma'm; but how was I to kape the thing warm without a fire?"

"Why, Fanny, you did not make it of boiling water, did you?" I said, comprehending the whole thing at once.

"Indade, and I did, ma'm. Did'nt ye's tell me to kape the steam in."

"Oh, Fanny, I did'nt mean that," and bursting into laughter, I returned to my husband, who after all, quite enjoyed the fun, though poor Fanny does not see it, "at all at all," for did'nt I tell her to "kape the stame in?"

AUNT ROSA.

DOMESTIC RECEIPTS.

THE USE OF BORAX IN WASHING.—In Belgium and Holland linen is prepared beautifully, because the washerwomen use refined borax, instead of soda, as a washing powder. One large handful of borax is used to every ten gallons of boiling water, and the saving in soap is said to be one-half. For laces and cambrics an extra quantity is used. Borax does not injure the linen, and it softens the hardest water. A teaspoonful of borax added to an ordinary sized kettle of hard water, in which it is allowed to boil, will effectually soften the water.—*Exchange.*

GOOD LINIMENT.—Mix the ingredients in the following order: The whites of two eggs beaten to a froth, a wineglass of vinegar, and one wineglass of spirits of turpentine, also one of alcohol, beating all the time of mixing. Excellent for sprains or bruises for man or animals.

MAKING COFFEE WITHOUT EGGS.—Take the required quantity of coffee, and placing in the pot, pour boiling water over it. Place it on the fire, let it come to a boil, but do not allow it to continue boiling, not even a minute. Place on the back of the stove to settle for a few minutes. Pour out a teacupful, and return it to the pot; then pour in a very little cold water, and place again on the back of the stove where it will keep hot, (but not boil) till needed.

EXCELLENT CAKE.—This cake should be mixed in the following order: One cup of butter beaten to a froth, two cups of sugar, also beaten well, the yelks of four eggs, and one teaspoonful of lemon or almond essence; dissolve in a little hot water, one teaspoonful of soda, and add it to one teacupful of sweet milk, and add to the rest, with three cups of flour sifted, beating it well. Lastly, add two teacups of flour, to which has been added two heaping teaspoonsful of cream of tartar.

BREAD AND BUTTER PUDDING.—Spread butter on slices of bread, lay them in a pudding dish in layers, with some kind of nice preserves, or fresh fruit, if in season. Pour over a nice custard, and eat with a sauce.

FRUIT CAKE.—One-half pound of butter, and two teacups of brown sugar beaten to a froth. The yelks of four or five eggs beaten, and added with a teacup of molasses, and one of sweet milk. One pound of raisins stoned, one pound of well worked currants, quarter pound candid peel, a little ginger, or any spice preferred. Stir all well together, adding nearly the required quantity of flour; then add the well beaten whites of the eggs, or two spoonsful of soda dissolved in a little water. To the remainder of flour needed, add four teaspoons of cream of tartar, sift into the cake, stir well, and bake immediately. It will take between one and two hours to bake well, and perhaps more.

Editor's Table.

To Our Patrons.

THE friends of THE AMERICAN FARMER will be glad to learn that the prospects for a very large circulation of our paper were never so bright as at the present time. We are receiving daily letters from all sections of the country informing us that our subscribers are well pleased with the paper, and that they will *all* renew in a body for the coming volume, and bring their friends along with them, and swell THE AMERICAN FARMER'S circle of readers until it reaches fifty thousand names. To the thousands of new subscribers we have already received, we have only to ask that they will make the paper known, and act as agents for us. Let all try and do what they can to make THE FARMER known in their several localities.

A Liberal Offer.

WE will send THE AMERICAN FARMER, and *The Annual Register of Rural Affairs*, in clubs, at the rate of *ninety* cents for the two; or in other words, a club of *ten* subscribers at *ninety* cents each, will get THE FARMER for 1867, and also a copy of this beautiful work of 144 pages, illustrated with 120 engravings. An extra copy of each will be sent to the getter up of the Club.

Renew Your Subscription Early.

THIS number of THE FARMER terminates our engagement with many thousand readers, and as we do not wish to loose a single name now on our books, we hope our friends will renew promptly. The January number will be out early, and will be found full of interesting articles, and several first-class engravings. Our new head for 1867, we think will give great satisfaction, as all who have seen it are highly pleased with this improvement. We have endeavored during the past year to publish a useful, practical agricultural journal, but propose to excel our former efforts the coming year, and trust that our readers will show that they appreciate these efforts by renewing early and bringing their friends along with them.

Our Market Report.

Is one of the leading features of THE FARMER, and commends itself to every reader of the paper. To get perfectly reliable news of the prices of produce, is of incalculable value to every farmer, and we are pleased to hear, as we have from a large number of subscribers, that it is giving very great satisfaction. We hope our friends will not forget to mention this fact about the markets when asking neighbors to subscribe. Tell them they will save more than the price of subscription by having regularly a correct report of the markets, which will keep them well posted in the price of every farm commodity.

TUCKER'S Annual Register of Rural Affairs, for 1867, price 30 cents, for sale at this office.

How to Get a Sewing Machine, or Knitting Machine for Nothing.

WE have been asked by several, How they can get up a Club large enough to take one of these prizes? Now is the time to do this easily. If you can get only fifty or sixty subscribers in your neighborhood yourself, ask your relatives or friends who reside at a distance to help you. Let them get up a Club among their acquaintances, and send the names to you or send them on to us with the request that they be added to *your* list. In this way you can divide up the number required into four or more parts, and with little trouble get the requisite number. All we desire to know is that they are obtained through your influence, and that they are to be added to your Club, so that you may get the prize desired.

Speak to Your Neighbors.

TELL them that you are taking THE AMERICAN FARMER, and ask them to join your Club for the year 1867. Tell them its remarkably low price, and that they will gain more than its cost by getting a market report which is prepared specially for its columns, which they will find perfectly reliable. Send on the names, and try and take some of our liberal premiums offered on the last page of this number.

Clubs! Clubs! Form Clubs!

DECEMBER is the month to obtain good success in forming *large* clubs for THE AMERICAN FARMER, and by reference to our Premium List, on the last page, our friends can see that we offer very liberal prizes to all who are willing to work for THE FARMER, and do good and get pay for it. Any of our readers can obtain a first-class prize with a very little exertion, at this time.

Commence at Once.

THE great secret of getting subscribers, is to commence early. As soon as this number reaches our readers, let all agents and friends who are disposed to get up Clubs, commence at once among their neighbors to induce them to subscribe for "the practical farmer's own paper," for the year 1867. THE FARMER is so cheap that every farmer can afford to take it, and none ought to refuse when asked.

Remember.

THAT with this number your subscription for 1866 expires, and that now is the time to renew, and also a good time to form a Club among friends and neighbors Show them a copy of *your* paper, tell them its marvelous low price, take down their names, and forward to us. The larger our subscription list gets, the more we can spend in engravings, and in improving the paper. Let every reader of THE FARMER send on a list of subscribers for the year 1867. See Premium List on last page.

Prize Essays.

We hope our friends will look over the list of Prize Essays published in the last number, page 350, and let us hear from them on all of those subjects. We have received two essays on the agriculture of Ohio, and we trust our friends in the other States not yet written upon, will let us hear from them soon, as we wish to publish them altogether. Give us plain, simple facts, of the regular practice of farming, and local characteristics of each State.

Wanted.

Fifty thousand practical farmers to take The American Farmer for 1867. Let every one of our readers try and send in a Club for the coming year. The Farmer is so cheap that *everybody* can afford to take it, and the larger our circulation is, the better we can afford to make the paper. Form Clubs EARLY for 1867.

To Our New Subscribers.

We will send to any of our new subscribers who have received the last three months of 1866 free, all of the back numbers from January, 1866, for *sixty cents.* All should avail themselves of the full volume, so as to have a complete set from the commencement.

Bound Volume for 1866.

Will be sent to any person, postage paid, on the receipt of $1.25, or to any of our agents, who will get up a Club of Twelve Subscribers for the year 1867. To those who have ordered in advance, it will be sent as soon as possible after this number is printed.

The American Farmer in Canada.

As long as the premium on gold continues, we shall send The American Farmer to our Canadian subscribers at 60 cents each, in clubs of five or more, or single subscriptions at seventy-five cents.

If American money is sent, our terms will be one dollar a year, or seventy-five cents in clubs. We prepay the American postage on all papers sent to Canada or any of the British Provinces.

Inquiries and Answers.

Messrs. Eds.:—I solicit an answer to the following through the columns of The Farmer:

1. Can there be sugar or sirup made from sugar beets, and if so by what process.

2. Is there a white and red sugar beet, from which sugar is made.

I have learned that in some sections West, they manufacture sirup and sugar, from beets, which caused me to purchase some seed last spring, which I sowed. The beets are looking well, but I find a mixture of white, yellow, and red roots. I have not raised beets before, and do not know whether I have got the sugar beet or not. I purchased my seed in Albany, in a reliable seed store; they told me it was the genuine sugar beet seed, from which sugar was made.—*P., Middleburgh, N. Y.*

Messrs. Eds.:—I would like to have you, or some of your subscribers, enlighten me on the culture of the Blackberry, from preparing the ground, to gathering the berry, also the best varieties.—*W. W., Bristol, Ohio.*

Eds. Farmer.:—You wish to know more about those apple trees. Well, I'm no *fruitologist*, hence I can't particularize minutely. They are here styled Paradise, and Peck's Pleasant. It is a honey-sweet winter apple, very healthy, pale straw color; two inches is about the average diameter. The trees are healthy; limbs grow more up than out, they blossom every other year, when they have a practical appearance of their name—Paradise. My brother grafted three trees of the same variety this spring, and now the residue limbs bear excellently and fascinatingly.

If I get no better advice, I'll prune them badly, and give them a smart coat of good manure.—*G. B., Pennsylvania.*

Literary Notices.

WOODWARD'S ARCHITECTURE, Landscape Gardening, and Rural Art.—No. 1, 1867. By G. E. & F. W. Woodward, New York. Price, $1.00.

This is the first number of a work which is to be published annually by Messrs. Woodward. It is got up in their best style, contains 120 pages, and is beautifully illustrated with fine engravings of cottages, and designs for ornamental and landscape gardening. Every person who intends to build, should send and get a copy of this valuable work.

TRIED AND TRUE; or Love and Loyalty: a Story of the Rebellion. By Mrs. Bella Z. Spencer. Springfield, Mass.: W. J. Holland. For sale by W. J. Holland & Co., of this city. Price $1.75.

This is an interesting story of the late war. The heroines of this novel are two young ladies who devoted their time to the care of the sick in the grand army of the West. It gives a very graphic account and picture of life in the hospitals, and will be read with deep interest by thousands.

THE FARMER'S RECORD AND ACCOUNT BOOK.

We have several times called the attention of the readers of The Farmer, to the importance of keeping accounts, and take pleasure in referring them now to a valuable work by W. C. Munson, and for sale by C. E. Wingate, publisher's agent, Chicago, Ill. This is one of the most valuable books we have seen in a long time, and a copy should be in the possession of every farmer in the country. In order to give our readers a clear view of its value, we give an epitome of the work.

The Farmer's Record and Account Book has appropriate headings and rulings for recording business transactions, embracing family and farm expenses, general accounts, date of bills receivable and payable, names of employees, when their services began, when finished, price agreed upon per year, month, or day, and entire amount, &c. Also the number of acres of each growing crop, the quantity raised and amount sold, price per bushel, pound, &c., and the entire amount; the whole so classified, arranged and consolidated, as to present the result of each year's business transactions in the smallest possible compass, and also so simple that the balance sheet can be easily and correctly adjusted. Together with valuable information for farmers, tables of weights and measures, rules, and the annual report of income required to be made

to the Assessor of Internal Revenue. It is designed for four years' use, or a larger size for ten years, so that any farmer can keep a correct record of every transaction on his farm for ten years, which for reference will be invaluable. For sale at this office. Price $3.75.

THE BEE-KEEPER'S TEXT-BOOK—

With alphabetical index, being a complete reference book on all practical subjects connected with the culture of the honey bee in both common and movable-comb hives, giving minute directions for the management of bees in every month of the year, and illustrating the nucleus system of swarming and Italian queen rearing. By N. H. & H. A. King, Nevada, O., authors of "Hints to Bee-Keepers."

EVERY SATURDAY.

With the number for September 1st, *Every Saturday* was enlarged from 32 to 40 pages. The great success of the journal justifies and demands this enlargement. The conductors will hereafter introduce as a feature Serial Stories, in compliance with a general desire. They will select only those of a first-class character, and of readable quality. "Silcote of Silcotes," by Henry Kingsley, has just been begun, and others will follow shortly. Published by Ticknor & Field, Boston.

HARPERS MONTHLY MAGAZINE—

Is received regularly every month. The engravings are executed in beautiful style, and the literary matter is of the highest order. Price $4:00 a year. Address, Harper & Bros., New York.

THE FOREST TREE CULTURIST: A treatise on the Cultivation of American Forest Trees, with notes on the most valuable foreign species. By Andrew S. Fuller, horticulturist, author of "The Grape Culturist," "Strawberry Culturist," &c. New York: Geo. E. & F. W. Woodward, No. 37 Park Row.

This work is executed in the best style of the printing art for which the Messrs. Woodward are noted. It is well illustrated, and will be found a useful work on the subjects of which it treats.

The Illustrated Annual of Phrenology and Physiognomy for 1867, is received. Published by Fowler & Wells, New York, and for sale in this city by Darrow & Kempshall. Price 20 cents.

The first number of *The Children's Home*, a monthly magazine for the little folks, edited by T. S. Arthur, Philadelphia, is received. It is well illustrated, and will be found highly instructive. Price $1.25. Address T. S. Arthur & Son, Philadelphia.

THE LITTLE CORPORAL.

This excellent child's paper has obtained a large circulation, and is a great favorite with the young people. It has many good illustrations, and cannot but please, interest, and instruct the young folks. Published monthly at $1 a year, by A. L. Sewell, Chicago, Ill.

PRINDLE'S STEAM BOILER.—We would call the attention of our readers to this boiler advertised in the last number of THE AMERICAN FARMER. Cooking food for stock is of great importance to farmers, and this labor-saving machine seems to be just what is wanted. Where heat and steam are required for cooking food, scalding, or boiling, this boiler will be found invaluable.

Notes on the Weather, from October 15th to November 15th, 1866.

THE temperature of the first half of October, exceeded the average 1.3° The last half gave its mean heat, 49.4°, and its general average 45.1°, which was warm. Of course, the month, 50.9°, exceeded the general average by nearly 3 degrees. The first half gave us no rain and no snow, but the last half in the last week, 37th to 30th, 1.24 inches of water. The least rain in October, was 0.56 inches in 1839, and the greatest, 6.79 inches in 1846. The weather has been fair, and very favorable for operations on the farm.

NOVEMBER has given us a very pleasant half month. Several days in succession have been like Indian Summer, but without smoke. A severe frost on the 6th, and ground slightly frozen. Rain on the 11th, and on the 15th rain from near midnight to midnight after, moderate, nearly constant, showers heavier late in evening with some wind from the south. The water measured 1.13 inches, passed as it fell, into the earth and cisterns, a great favor to this section, and at this time for earth and man.

The fall crops seem to come in better than was anticipated; more maize has ripened, and more food for man and beast is admitted over the north and northern south. Great has been the bounty of Divine Providence. Health of this section, also of New England, and this and the Northern States, excellent.

The "shower of meteors," appeared in England on the evening of the 13th, increasing to midnight, and from 1 to 2 o'clock of the 14th morning. Thousands of meteors shot out from the point in the sickle of Leo, from which they appeared to come November 13th, 1833. More accounts may be expected, and the extent of *the shower* yet be given. This show sustains the astronomers.

Maine Items.

THE WEATHER—During harvest was with us as favorable as the average, and most of the crops were housed in good season and condition. An early frost injured some vines, and late planted corn, but was not generally destructive. Heavy killing frost, ground frozen and water congealed for the first time, on the morning of the 4th of October. The ground also froze solid on the 25th. We experienced a heavy rain storm, with violent southeast gale, on the 30th October, which caused much damage to fences, buildings, bridges, and by overflowing. The destruction on the sea coast was extensive in wharves, buildings, vessels, destroyed, and many lives were lost.

THE MARKETS—Up to this writing, are good for most kinds of farm produce. Our potato crop has been very large, and Maine will beat herself in producing this esculent this year. Our exports will be very heavy, and have commenced early. We raise almost wholly the Foote variety, which is a flattish oblong white potato. They now sell in this market, for shipping at 50 cents a bushel of sixty pounds. Barley $1.00; hay, $15 to $16 for loose, $18 to $19 for pressed. Apples, Baldwins $1.25 to $1.50 per bushel. Butter 40 to 50

cents. Stock of all kinds high. Milch cows, $40 to $75; working oxen from $100 to $250, according to size and quality. Beef, $10 to $13 per hundred. Sheep rather low; horses plenty at high figures for good animals. Fowls, high and scarce.

THE MARKETS.

ROCHESTER, November 22, 1866.

FLOUR—White wheat, $16.50. Red, $14.50.
GRAIN—White wheat, 300@315c. Red, 270@280c. Corn, 120c. @125c. Barley, 100@110c. Oats, 60c. Rye, 125@130c.
HOPS—45@50c.
WOOL—40@55cts.
PROVISIONS—Dressed hogs, 8¾@10c. Mess pork, 38@34c. Hams, 18@20c. Lard, 16@17c. Butter, 30@35c. Eggs, 38c Cheese, 16@19c. Potatoes, 50@60c. Apples, per barrel, $3.50@ $4.50. Dried apples, 11c ℔ lb. Hay, $10@19.

New York Markets.

REPORTED FOR THE AMERICAN FARMER, BY S. EDWARDS TODD, OF THE NEW YORK TIMES.

NEW YORK, November 19.

BEEF CATTLE—Since my last report, there has been a regular "break down" at the markets. Cattle brokers and drovers have resorted to all sorts of stratagems, trickery, deception and fraud, to maintain high prices; and they succeeded much longer than themselves had anticipated. But they found that "war prices" cannot be maintained for a long term of years, in times of peace. There has been a gradual decline of prices, for beef cattle since my last report; and even at the present writing, the prices are tending downward, with slow sales, and prices more in favor of purchasers, than those who have stock to sell. Drovers and cattle brokers saw the crisis in the future, more than six months ago. They knew it must come, as a natural consequence, as war and high prices usually go hand in hand; but when peace prevails, and weapons of warfare are laid down, and soldiers return to the peaceful pursuits of agriculture, nothing but an unusual scarcity with an unsatisfied demand will maintain high prices for a good length of time.

During the past four weeks, the number of beef cattle received at all the yards amount to 27,359, which is almost 7,000 head for each week. A very large proportion of these animals consisted of rough bullocks, dry cows, old oxen half fattened, and a good many bulls. The supply has exceeded the demand. Only a small number of extra-fat bullocks have been offered at any of the yards. The past week, there were a few that sold at 16c per lb., net. (At the New York market, all beef cattle are sold, usually, the net weight of only four quarters. The hides and tallow are not reckoned. The purchaser receives these without expense. It is necessary to bear this in mind, in order to understand the quotations. In some cities, the fifth quarter or the hide and tallow is sold at the same price of the meat. If this practice was adopted here, the prices of beef would be still lower than it now is.) Bulls have been sold for 8c@10c per lb., gross, live weight. The poorest grades of cattle, hundreds of which were so poor that no farmer would kill them for his own use, have been sold for 8c@9c per lb., for the four quarters of dressed meat, the hides and rough tallow not reckoned.

MILCH COWS—The demand for milch cows is not as active now as it was a month ago. The number received at all the yards is just 400 during the past four weeks. Prices are working downward, except for superior milkers. Superior fresh cows sell for $70@$150 per head, according to the quality. Scores of old things, that an enterprising farmer would hardly accept, as a gratuity, have been disposed of for $30@$40 per head. The downward tendency of beef has dragged the price of milch cows down also.

CALVES—Fat calves are still in excellent request. The price has been very steady since my last report. The best milk-fattened calves sell readily for 13c@14c per lb., live, gross weight. The demand exceeds the supply. Prices are firm and sales quick, at these rates. But as most of the calves are thin, poor animals, unfit to slaughter, they have been sold at almost every price from $2 per head to $16 per head, according to quality and size. Hundreds are sold in the city, of which reporters never get the number. But the number received at all the yards and meat-stands for the past four weeks, is 4,861.

SHEEP AND LAMBS—It seems as if all the pastures in the land have opened their gates to pour forth their quota of sheep and lambs. During the past four weeks, 117,878 sheep and lambs have been received at all the yards, besides an untold number that we never hear of, which are brought in by farmers and sold where they can find a market. There has never before been so large a number of sheep received during four consecutive weeks, as since the date of my last report.

The prices have fluctuated and have been quite unsteady during most of the time, and twice they have been lower than at present. But smaller supplies have given a better tone to the market, so that to-day, the best fat sheep are selling for 5c@5¾c per lb., live, gross weight. Most of them, however, bring only 4c@5c per lb. Lambs sell for 6c@8c per lb., live gross weight. Only a few however, sell as high as 8c.

There are so many miserably poor sheep brought to market, that it often requires most of the week to dispose of the weekly arrivals. Fat sheep and fat lambs are in good request, and will be so all winter. If a farmer has a lot of sheep of medium quality, he will be a gainer to fatten them well and have them ready to sell early in the spring. Fat sheep always command a remunerating price at that season of the year. Provide comfortable sheds, an abundance of good straw, a little hay and corn stalks and one pint of grain each, daily, and it will be profitable feeding sheep for the coming winter. But the feeding should commence before the sheep begin to grow poor.

SWINE—The unusually heavy receipts of live hogs and other animals, has glutted the swine market, so that the prices have been lower than at the present writing. The number received at all the yards during the four past weeks, amounts to 82,051. To-day the prices are a trifle firmer, and trade is more active. The best Western corn-fed hogs are selling at 7¾c@8c@8¼c per lb., live, gross weight. Should the weather continue warm, the prices will not improve. If the weather becomes cold, and winter should commence in good earnest, prices may advance a trifle.

POULTRY—The market is literally glutted with all kinds of poultry; and the meat markets, all over New York and Brooklyn, groan beneath the unprecedented supply of gallinaceous fowls, turkeys, geese, ducks and wild game. The supply never seemed to be larger. I am utterly unable to settle down on any price at which a farmer could dispose of his poultry, were he to bring it to the city, as it is difficult to sell, even good lots. Fowls retail to-day at 15c@18c@20c per lb. Very little sells for 20c. If a good lot should arrive on a clear cold day, it would be taken quickly at 14c@18c per lb. But were the weather warm and rainy, the proprietor might be obliged to sell for 12c@13c per lb.

MOLASSES—The market is dull and for the moment prices are irregular, though as a general thing holders do not seem disposed to make concessions. By auction we note 30 hhds., Porto Rico at 58c., 40 hhds. New Crop New Orleans at 96c., and 100 hhds., Demerara 55c@58c. At private sale 120 hhds. Cuba Clayed, to arrive from the eastward, on private terms.

SUGARS—Raw Sugars are extremely dull, buyers refusing to operate until gold becomes more settled. We quote nominally at 10c¾@10¾c.; sales of 118 hhds., at 9c@10c for Cuba and 12¾ @13c. for Porto Rico. Refined are dull at about 15¼@16c for Hards. Messrs. R. L. & A. Stuart have to-day reduced their quotations for Refined as follows: Granulated, 15½c.; Ground 15¾c.; White A, 14¾c.; Yellow C, 15¾c.

GRAIN—The great inquiry among dealers in grain (if they are not posted), is why is the price of wheat and flour, so enormously high? I answer, these fabulous prices are maintained only by gross and speculators. At no former period, before the close of the war, has there been a more prevalent spirit of wild speculation. Speculation is rampant. Speculators run up prices by competition with each other. Speculators in New York can be supplied with any amount of money at five or six per cent., while in the large cities of the west, ten and twelve per cent., is required. Speculators dwell in their wealth; and a loss of one hundred thousand dollars to-day, is hardly felt, as they will make it up to-morrow, with compound interest. Our currency is our chief medium of exchange; and while it is ever fluctuating, speculators will use it as a means of keeping prices high, so long as they can make money by the operation. They will withhold their grain from the markets; and manage in every possible way to maintain high prices, so long as they can make the most money by their stratagems. Then, when they find that they can make the most money by putting their grain at low figures, down it goes, from $2.50 per bushel for wheat, to $1.00

We are on the verge of a tremendous crash. Many speculators are panic-stricken; and just as soon as a few of the leaders perceive that they can make more money by hurrying large quantities of grain into the market at once, down will go the prices. There is no good reason why wheat should be so high as it has been. There is no foreign call for it; and there is not likely to be very soon. The price of wheat has declined several cents per bushel during the past month; and prices for all grades of flour have been fluctuating almost every day. There is nothing to maintain the high prices of grain but wild speculation. The crash will be upon us, for it cannot be kept higher than they now are; but, before a farmer can shovel his wheat into the bags, down they go.

Our advice is, that if a farmer has wheat to sell, he will not gain anything by holding on for a better price. Every thing is tumbling down. Thousands of merchants are here, this week, to purchase goods, who will not purchase till next week, as the prices are declining, on almost every article a farmer needs.

During the past week there has been a good degree of activity, but much irregularity, in consequence of the large arrivals from the West, the sudden changes in the Western markets, and the great break in the Erie Canal. There is still a prospect of heavier arrivals, should the weather continue open, so that navigation shall not be closed till December. The present stock of wheat now on hand is about 800,000 bushels; and the prospect is that the season will close with about 2,000,000 of bushels in store.

The stock consists chiefly of No. 2 Spring, with a liberal supply of good White and Amber Winter; the latter has been in moderate demand at variable prices; White is held with much confidence, but has sold slowly, the extreme prices insisted on restricting the milling demand. We notice a limited inquiry for Unsound Spring (old) for export, at about $2 per bush. New Spring is held much above the limits of shippers' orders, and is likely to rule higher. Prices are 7@10c ₩ bush. lower as compared with this day week. To-day we have had a very unsettled market; the business has been limited, and prices are nominally 5c ₩ bushel lower. Millers hold off, owing to the decline in gold and the more liberal offerings; prices at the close have a downward tendency. The sales are 2,500 bush. at $2.40 for Straight No. 2 Chicago Spring; $3.00@$3.10 for Amber State and $3.15 for small lots of very choice do.

Barley has been in good demand both for export and for local use, and notwithstanding the liberal arrivals and decline in gold, prices have slightly improved; the exports since the 1st of September are about 875,000 bush., and hence we have already exported more than half the excess of the present crop of last year, and we are likely to close the year with a moderate stock; there are now on the canal about 950,000 bush., mostly Canadian, and the prospect is now that the major part of it will be taken for shipment, as freights are very low and are likely to continue so for some weeks to come; our present stock is about 1,200,000 bush.; this is light, our increased wants considered; closing less active and 2@3c lower; sales of 87,000 bush. at $1.08 for Western, $1.07@$1.08 for Canada West in bond, and $1.32 reported for do. free.

Oats have been in fair demand, and have fluctuated daily; the inquiry has been chiefly speculative, though fair for home use, and moderate for export; the break in the Canal, and decline and variations in gold have been the chief causes of the fluctuations. We have added slightly to our stock, and find it 1,250,000 bush., but we are likely to close the year with a limited supply. Closing 2c lower with a fair demand at the decline; sales, 70,000 bush. at 65c@67c for fair to good Chicago, and 70c@71c for State. Rye has been in limited request, and with moderate arrivals prices have improved; our stock is small, about 285 bush., closing heavy at $1.25@$1.30 for old Western, and $1.30 for State and Canadian. Indian corn has been in moderate demand at very variable rates, the favorable news from Europe, a break in the Erie Canal, and marked decline in gold have been the principal causes of the fluctuations. The disposition to purchase to hold has not been so strong as hitherto, as with a most stringent money market and larger supplies of New daily, the home trade in Old cannot prove active. The high rates now current cannot fail to induce farmers near us to sell freely and promptly. Our present stock exceeds 2,900,000 bush., and is increasing. The quantity on the canal is moderate for the season; this, with a prospect of still higher prices at Liverpool, has stimulated the market materially, but these high prices cannot fail to greatly restrict its consumption. The exports of the week are 93,000 bush, against 188,000 bush. last week. At the close the market is heavy and moderately active; the demand is for speculation chiefly; sales of 190,000 bush. at $1.26@$1.30 for Mixed Western in store; $1.29@$1.30 for do. afloat, and $1.12@$1.15 for New Jersey Yellow.

FLOUR AND MEAL.—There has been much irregularity and depression in prices of late. The market at the present writing is less active, and with a decline in gold and more liberal offerings, prices of all grades are 20@25c lower, and heavy at the close, the demand being confined entirely to the local trade; the sales are 5,700 barrels at $8.15@$10.20 for Superfine State; $8.25@$10.30 for ordinary to common Extra State; $10.40@$12 for Fancy State (Sound); $9.10@$11.20 for the low grades of Western Extra; $10.85@$11.95 for Shipping Ohio; $12@$14.10 for Trade brands, and $14.25—$18 for St. Louis Extras. Canadian flour has been only in moderate request, and with limited arrivals, has declined but slightly, (the stock is light, and we are certain to close the season with a limited supply,) closing dull, heavy, and lower; sales 100 barrels, at $14@$14.10 for Superfine and Family Extras. Southern flour has fluctuated slightly, has declined and closes heavy and lower, though the stock of all grades is limited; sales 100 barrels at $12.10@$14.15 for common to fair Extra Baltimore and Country, and $14.25@17 for Trade and Family brands. Rye flour has been more freely offered, and with only a moderate demand prices have declined, closing dull and lower; sales 300 barrels, at $6.35@$6.75. Corn Meal has been in less active demand; prices have fluctuated and closes nominal. Buckwheat flour has been in fair demand, has fluctuated and closes lower and dull at $6.25@$6.75 ₩ 100 lb.

PROVISIONS.—The pork market is dull, but comparatively steady, though buyers evinced no disposition to increase their obligations. Sales in lots, at $21@$22.50, cash and regular way for Mess, closing at $22 cash, and $22.50 for Prime ₩ bbl. Cut Meats are inactive and depressed at 12@13c for Shoulders, and 14@15¾c for Hams; sales 125 packages. Bacon continues dull and heavy at 13@13¾c for Cumberland Cut; 13¾@14c for short rib, and 18½@14c for short clear, City and Western. Sales, 50 boxes. Lard has been more active, but depressed in prices. Sales since our last, 1,400 tes. and bbls. at 12¾@13¾c, and small lots at 13½@14¾ ₩ lb. Beef is in stock demand at $12.50@$13.50 for Plain Mess, and $18.25@$23.50 for Extra do.; sales here not reported of 250 bbls. Tierce Beef is nominal. Beef Hams continue plenty and heavy at $32@$37 ₩ bbl. Sales 150 bbls. Dressed Hogs opened tamely at 9c@9¼c, and closed heavily at 8½c@9¾c for heavy to light.

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John Sibley deposed: I must declare the Wheeler & Wilson to be the most wonderful and comprehensive sewing mechanism ever put into the American market. It is the simplest as well as the most cunning in principle, and is genius and high mechanical ability in its arrangement, and therefore it is most *reliable and easy to keep in order*. There is a directness of connection between the power and the result, never found by me in the devices of any other inventor, and the mechanical results follow of the highest possible speed, quiet, and easy movement, which make it a delight to mechanicians. I think it just to demonstrate it one of the marvels of the age.

George H. Collins deposed: I have long regarded the Wheeler & Wilson machine as the most ingenious in plan, and the most remarkable in its performance. The wide range of work to which it is adapted, the great rapidity of its movement, and its almost noiseless execution, are due to its peculiar construction. I am satisfied that one of these machines will do eight or ten times as much as can be done by hand, and quite one-fifth more work than any other two-thread machine will do. *With very trifling repairs it will run ten years.* No machine of equal merit has ever been under my observation.

Charles A. Durgin deposed: I have been familiar with sewing machines for many years. The Wheeler & Wilson machines are vastly superior in their adaptation and use upon all classes of work for domestic purposes. One great consideration in the use of sewing machines is the *expense of repairs*. From the case of all its mechanical movements, the Wheeler & Wilson machine is subjected to but slight wear, and the expense of repair is very slight in comparison with other machines. I am fully convinced that *they do not cost one-fifth* of that of any other two-thread machine.

N. D. Stoops deposed: I have visited all the principal sewing machine manufactories, and have had the best facilities for finding out not only what was best, but why it was best. The Wheeler & Wilson is the simplest in parts, the most direct, quiet and rapid in action of any two-thread machine. Other machines cannot keep up with it. I now sell all kinds, and sell ten of these to one of any other. Others come back for exchanges with many murmurs and complaints; these never. Once sold, they are gone, and as an article of merchandise they are always salable.

Sewing with a machine is such an advance upon hand sewing that it should not be surprising to hear any machine commended. Those, however, are best qualified to judge of their comparative value, who have tried more than one thoroughly. A machine may, by some peculiarity, be well suited to a special work, and yet poorly adapted to the general purpose of sewing. Many of what are called *selling* points in a machine are simply frivolous, and intended to tickle the fancy of those who are *sold*. It is no great recommendation in a horse for family use, that it can walk on three legs; and so useless tricks in a sewing machine should be ignored. Substantial excellencies only can stand the test of

time and use. Are the offices it performs useful, and does it execute them well.

Other questions are important. Is the company honorable and responsible? Are its guarantees well filled? Does it furnish facilities for supplies and repairs? Usually those promise most who intend to perform least. Scores of manufacturers have disappeared and left purchasers of machines with no means of repairs or of obtaining needles and parts of machines, greatly to the detriment of the sewing machine business.

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