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The History of Public Health in Rochester, New York

BY BLAKE McKELVEY

The untimely death of Dr. Albert D. Kaiser and the numerous tributes recognizing his ten years of unstinted service to the community have stirred a new interest in the history of public health in Rochester. Dr. Kaiser and his predecessors, notably Dr. George W. Goler (first as an assistant in 1892 and as Chief Health Officer from 1896 to 1932), developed an outstanding health department, one that has on these earnest men, and in many instances public lethargy or vested interests effectively blocked the way and left the city at the mercy of known and unknown maladies. Over the years Rochester was not unlike many growing towns in this and other respects, and the awakening of its residents to the need for community-wide precautions, as well as for scientific treatment, comprised an illuminating phase of its history, as the present vigorous programs continue to demonstrate.

Recurrent Plagues and Impulsive Makeshifts

The first half century of Rochester's growth, like the early decades in most other cities, saw few if any contributions to public health. Some of the traditional provisions of older towns were gradually adopted, and the recurrent attacks of cholera, smallpox and other dread maladies inspired frantic efforts on the part of hastily appointed health officers, but the chief hero of the early period was Ashbel Riley who almost alone braved the danger of burying cholera victims. The paralyzing waves of fear, which swept through the city during successive

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epidemics, alternated with periods of indifference. Yet public health precautions became more necessary with each stage in the community's growth.

When the swamps that originally covered much of the village site failed to dry up after the removal of the forest trees, numerous drains had to be dug. The reputation of the Genesee Country for fever and ague spurred the drainage program, which became still more urgent as the better houses required cellars or basement kitchens. A regulation of 1823 directed that these must be kept dry. When a case of smallpox appeared that year, the trustees paid for the patient's care in an isolated house east of the river, ambitiously designated as a "hospital" in the village records. Rigid regulations about the disposal of refuse and the building of "necessaries" helped in a measure to keep disease under control, except for the usual epidemics of whooping cough and measles among the children. But the popular demand for the construction of a sewer down Buffalo (West Main) Street had to await a grant of larger tax powers.

A closely related problem was that of supplying fresh water. An old Indian spring proved sufficient until the summer of 1820, when several private wells were dug. The demand for public wells, put off by an increased flow at the spring that fall, soon reappeared, and with it came an abortive attempt to form a Rochester Aqueduct Association. Meanwhile, encouragement to those who extended the use of private wells to their neighbors failed to relieve the village of dependence on enterprising water carriers.

Among the requirements of the expanding community was a new burial ground. The rise in land value about the original plot, donated by Rochester, Fitzhugh and Carroll, on Falls (Spring) Street, prompted the sale of that area and the purchase of a larger tract some distance out Buffalo Street. Removal of the existing graves, financed out of the surplus, left a sufficient balance for the purchase of a public hearse to carry the dead to their last resting place in proper state. The upkeep of the cemetery seemed assured from the sale of grave lots.

The town's rapid growth spurred the trustees in 1826 to subsidize the digging of half a dozen private wells, making them available for public use, and to open two others at central points on public property. Complaints from numerous renters prompted an ordinance directing the construction of stone vaults under the necessities required on all

occupied properties; the trustees further stipulated that a peck of lime must be dumped into each vault once a month. Among those fined for maintaining pig sties was Russel Ensworth, whose hog pen back of his tavern at the Four Corners was declared a public nuisance.

Seventeen doctors already served the lower Genesee settlements in 1821, when the Monroe County Medical Society was formed with authority under state law to appoint officers charged with supervising the local practice of medicine. By 1827 the number of licensed doctors in the village had increased to twenty-five, a high ratio of one doctor to three hundred and twenty inhabitants. Numerous herbs and roots were in favor, as well as various patent cures, but "drastic emetics" proved the chief reliance of fever sufferers seeking to throw off their periodic fits. Fever and consumption, as loosely defined, accounted for most deaths among adult persons, though bowel complaints and accidents were becoming more frequent.

While several of the doctors boasted some training, usually under an older physician back East, many diseases proved baffling. Dr. Anson Colman, seeking further light, traveled east late in 1824 to attend a course of lectures and demonstrations at the Boston Medical School and Hospital. Leaving his patients in care of an associate, Dr. Colman nevertheless took pains to write his young wife that winter, advising her to be sure to have the children and her "Pa" and "Ma" (Colonel and Mrs. Rochester) bled if attacked during his absence, for, he reminded her, "bleeding is the grand remedy in almost all of our winter complaints."¹ As that remedy, however, did not give full satisfaction, a medical association was formed to assure its members a "mutual improvement in medical knowledge."² The appearance of several small medical treatises written or at least published in Rochester during these years further indicated its concern over health problems.

The practice of sending for the minister by the same lad who brought the doctor was justified by experience. Fatalities were high among children, and few of those who survived died of old age. The burial records of St. Luke's Church during this period reveal twice as many deaths in the prime of life, 20 to 40 years, as among all over 40. Vital statistics for the month of September, 1828, show that fifteen of the twenty-nine deaths occurred among children under 10, and twelve between 20 and 40 years. Again, eighty-six of the one hundred and seventy burials for 1829 were children under 10 and only twelve had reached 60 years.

Although earlier health needs had occasionally required small expenditures and prompted the naming of a Board of Health in 1828, the first serious crisis that confronted Rochester in this or any other field was the cholera epidemic of 1832. Concern began to mount in June when news arrived that the plague had reached Montreal. The trustees, reluctant to interfere in ecclesiastical matters, rejected an appeal by local clergymen for a day of public fasting to ward off divine wrath; instead, the defunct Board of Health was reorganized, and Dr. Colman, one of the new members, left for Montreal to study the character and treatment of the disease. While there, he conferred with Canadian physicians and joined a New York City delegation in case observation, but Dr. Colman's report that the contagious character of the malady was overemphasized failed to dispel fears in Rochester. Numerous sanitary precautions were hastily taken, and incoming lake vessels inspected. It was over the canal from the East, however, that Rochester's first cholera victim arrived early that July.

Soon the ravages of the dread plague spread terror and death through the community, sorely trying the spirits of the most courageous. Approximately one thousand (or one out of every ten residents) fled the town, and many who had no place to go kept within doors, so that normal village functions were neglected. Some papers suspended publication, while the editor of the *Advertiser*, who had bravely carried on, was sorrowfully compelled to bury his own wife, an early victim of the scourge. Neighboring bath resorts seized the occasion to advertise the healthful character of their establishments. In the general exodus, two members of the Board of Health tendered their resignations. During the first months following the outbreak, fifty-seven deaths were ascribed to cholera, and by the middle of July the toll reached eleven in one day.

Fortunately, several heroic leaders emerged, causing the spirits of the town to rally. Colonel Ashbel W. Riley, appointed to fill a vacancy on the board, assumed personal responsibility for hunting out new victims. When efforts to save them failed, the fearless Colonel placed the dead in coffins and buried the majority himself. Constable Simmons accepted charge of an improvised hospital in an old cooper shop where homeless patients received shelter and the scant treatment available. The Rochester Board of Health courageously took charge of a boatload of immigrants which had lost five out of fifty-six passengers before

reaching the village, but when fourteen more died at the hospital, indignation burst out against the health authorities of eastern towns who had refused to permit the boat to stop within their territories. The practice of New York and Albany philanthropists, who provided immigrants free but crowded passage on canal boats bound for the West, was roundly condemned as contributing to the spread of the disease.

Repeated efforts were made to dispel the fear and consternation which cast a blight over the community. The pious assumption that only the dissipated would suffer soon proved false as victims appeared among the most respectable. Small consolation was afforded by reports of the plague's ravages in other cities, though news that the situation was improving in Montreal came as a good omen for the early relief of Rochester. Indeed, after the peak of eleven deaths on August 15, the number of new cases gradually declined, and the townsfolk began to breathe more easily early in September when the last fatality occurred. A total of 118 victims and approximately 400 cases had been recorded in the village, but the Board of Health took the optimistic view that only one out of thirty had been attacked while less than a fourth of these had died, many of them transients, so that the community could be justly thankful that most of its 10,000 citizens remained in good health.

The town rallied quickly from its affliction, determined to meet future hazards with greater confidence. When an epidemic of smallpox threatened late that year, the Board of Health took prompt measures to provide free vaccinations. And the next spring, when a general state of good health was reported, the villagers paused to honor those who had rendered faithful service during the emergency.

The adoption of the first city charter in 1834 brought stronger provisions for public health, yet only in times of crisis were they applied. A threatened cholera epidemic that year inspired precautionary outlays, but with its passing the board soon became inactive. A campaign to see that all cellars and outhouses were properly limed started under its authority in 1839, and several years later the board's advice was sought on the regulations to be applied to slaughterhouses.

Again in 1848 news of the spread of cholera through Europe awakened the authorities in Rochester. A revitalized Board of Health directed hotels and lodging houses to report all sick travelers and hastily made plans for a city hospital. Warnings were sounded against the

numerous grog shops; a drive started that fall was renewed the next spring to clean up the gutters, drains, and canal basins, as well as private cellars, wells, and cesspools. Despite an epidemic of dysentery the board rejoiced the next May to report a year of exceptionally good health, but June brought the first attack of the dread scourge.

As in 1832, Rochester was woefully unprepared to cope with a serious epidemic. When the protests of neighbors against the location of a city "hospital" in the Fifth Ward prompted its removal to the Eighth Ward in the Spring of 1849, residents in the latter area responded by applying the torch. Though an award of \$500 sought the identity of the incendiary, repeated efforts to find another suitable building failed, and the community was fortunate at the last moment to secure a temporary shelter for its first cholera victims some distance north of the town overlooking the gorge. There, many hoped, the lake breezes would dilute the dangerous cholera vapors.

For some reason the first onslaught of the plague, early in June 1849, slackened toward the close of the month. Renewed confidence stimulated protests against the official cancellation of the customary celebration of the Fourth. But when the fatalities multiplied in July and August, popular indifference disappeared, causing many to flee the city. The sale of fresh fruit and vegetables was prohibited, and frantic complaints indicted the several disreputable shanties and rookeries where the inhabitants appeared to die like flies. The torch was put to Brown's Block on Main Street soon after five died there in six days, while the Board of Health found the tenements of the Shamrock House on Market Street "so foul in every part as to be unfit for the habitation of human beings. . . . The wonder is that any of the wretched group escaped." *

The total number of deaths attributed to the plague (including twenty-four transients) was 161, the great majority of them Irish and German immigrants crowded together in unsanitary hovels. Yet one of the victims, Dr. Wilson D. Fish, fell in the course of professional duty, and a sufficient number of fatalities occurred throughout the city to make the epidemic a terrifying ordeal to the 35,000 inhabitants.

Even in normal years, a high rate of mortality, especially among infants, checked the earlier propensity for large families. When the mortality rate for 1000 mounted from 19.8 in 1845 to 26.6 in 1847, blame was placed on the abnormal prevalence of diseases throughout the country, a condition indicated by the advance of Boston's rate from

22.6 to 31.3 during the same period. Other populous towns showed a similar increase, but few observers as yet recognized the part urban deficiencies played in this tragic drama. Of the 737 deaths recorded by the City Sexton in 1847, out of a population of 28,000, those of three years or less numbered 333. The next year one editor observed "nine funerals in the city one day last week, all of children under eight years of age." 4

Levi A. Ward, one of old Dr. Levi Ward's thirteen children, eleven of whom reached maturity, saved only six of his own twelve children, while Edwin Scrantom saved five out of ten. Little wonder the community took such sentimental interest in its lovely Mount Hope Cemetery, acquired in 1836 to replace the inadequate one on Buffalo Street.

The city was less alert in supplying some of its other growing needs. But again in 1852 a cholera-epidemic swung a searchlight over Rochester's shortcomings. Previous experience prompted the authorities to spring into action with the first rumor of the plague's approach. In former years the campaign to clean up the city, open sewers clogged during the winter, and drain stagnant backyard pools had been delayed until June, but the task was now begun in April, though several heavy rains interrupted the work. By June most of the principal streets appeared in fair condition, while much refuse had been removed from the canal basins and feeders, so that the sanitary conditions were declared to compare favorably with those of any city west of the Hudson. Nevertheless, many open drains on some of the back streets as well as numerous cesspools and cellars were green with slime; great heaps of unburied manure were noted in back alleys; and several tenements were described as public nuisances. Unfortunately the limited authority of the Board of Health and the uncertainty as to whether its bills would be approved obstructed forthright action.

Before further progress could be made, the first case of cholera appeared on June 8, and nine had developed by the end of the month. The seemingly mild character of the epidemic delayed efforts to secure an emergency hospital until the middle of July, when the cholera victims increased rapidly. No house could then be found for several additional weeks until, in desperation, the board requisitioned a building in the Negro quarter on High Street. In all, 68 patients were admitted to this shelter, and much satisfaction was felt when only 24 of them died. Unfortunately, the number of deaths in the community

proved sufficiently appalling, mounting rapidly to 180 in August and reaching a total variously reported as 420 and 469 by November when the epidemic subsided.

The fact that "no merchant, nor member of the bar, nor any minister of the gospel fell in the contest" afforded some comfort, though Eugene Sintzenich, long active as a teacher of landscape painting, whose panorama of the Holy Land had been completed the previous fall, died of cholera "in the midst of the most distressing poverty and abject want."

The health authorities, who spent a total of \$8,098 during the emergency, early became alarmed at the frightful living conditions in several of the worst tenements. Whatever they lacked in knowledge of the disease and its proper treatment, the health officers made up in courage and candor, as three fatalities among the physicians and the graphic character of their report demonstrated:

The house [of the first victim, the board reported] was an old rookery—without a cellar, and presented inside the usual appearances of the residences of the poorer classes of laborers with the usual smell—but nothing very remarkable—the father still lying sick in a small ill-ventilated room adjoining the kitchen, which also answered the purpose of a dining room, and probably of a dormitory also at night. The yard in the rear of the house presented nothing objectionable—it was in a good condition—but at the west end of the house a small pile of rubbish was discovered, and almost adjoining the house, a small pen containing two small pigs. . . . In front and near the door was a opening into the main sewer—into which the slops were thrown—but the water was running clear with a free current.

The next five deaths occurred in the "Old Factory Block" which stood next to the above-mentioned house, with the same sewer running through and flooding its cellar. The tenants in that "old and decayed" building numbered fifty-six persons, including twenty-five children, who lived "in close, ill-ventilated rooms." Taylor's Block stood close by, "overflowing with a class of persons of the poorest description, filthy in their habits, and not a few of them intemperate—eating, drinking, smoking, and sleeping, in the same apartment," so that the board was not surprised at its numerous cholera fatalities.

Let us now look into Lester's Block [the Report continued], rendered notorious by the deaths of 25 individuals who were swept away in the course of a single week. [A] well-built brick building, about 100 feet in length by 40 feet in breadth—three stories high . . . [it

stands] in a clean and healthy part of the city; but not very far from the Factory Block. . . . A drain or sewer for slops [enters] the cellar through which it runs nearly its entire length . . . so that any noxious gases generated in it readily find their way . . . into every part of the building. . . . Upstairs . . . each front room has a bedroom and a closet in its rear, and the same arrangement is made for the rooms in the rear of the building. Between the front and rear rooms [flats] there is no communication by doors, windows or ventilators. . . . There is no provision made for the admission of light or fresh air into the bedrooms . . . and the air . . . must necessarily become exceedingly foul and offensive.

The class of tenants who occupied this block were comparatively respectable—many of them were clean and tidy, and there is no evidence that their habits were bad. But occupying, as they did, a position immediately over the poisoned air imprisoned in the cellar beneath, and immured during the hottest days of July in the midst of the foul and foetid air in their own confined apartments, is it wonderful that so flagrant a violation of the laws of hygiene . . . should be visited with its appropriate penalty? The singular fatality among the occupants of this block, by which they were reduced to nearly one-half their original number, furnished a severe but well-merited rebuke to the ignorance and cupidity of landlords . . . and furnishes a potent argument in favor of a law requiring all persons proposing to erect buildings, to submit their plans to some competent tribunal for its approval, with special reference to light and ventilation.'

Many similar nuisances were described, and the board found Sherman's Block on Ford Street, Robb's Block and "Chicken Row," both on Buffalo Street, though condemned in 1849, again overcrowded and in a worse state than the Old Factory Block. Action by the board closed a few of these structures; in one case the inmates were ordered to move out within twenty-four hours; but the problem of finding accommodations proved so great that the procedure was seldom applied.

The community felt impatient for relief, and when the number of new cases decreased in September one editor noted with pleasure that "the decline of the epidemic has brought out the Swiss girls with their tambourines and lively songs." Yet Rochester did not return immediately to its old complacent ways, for the board submitted recommendations as well as statistics, and the newly elected mayor the next spring took occasion to indorse their demand for a better sewer system. Nevertheless, much criticism greeted the mayor's action supplying carts to haul away the refuse cleaned out of the canal and other waste places. Complaints observed that the leaky carts dripped their filth along the

streets leading to the dumping platform on the river bank, with the result that "The whole central portion of the city is filled with a stench." Possibly the grievance cloaked another issue, since economy dictated that the job be left to the scavengers licensed by the city to collect garbage at private expense, but as the health authorities had no power to compel the canal board to act, the mayor determined to proceed with the job.

An era of moderate growth, verging on stagnation, curbed Rochester's civic developments during the fifties and sixties. A Water Works Company, organized in 1852, failed to attract investors and turned its charter over to a new group in 1855, but several leading taxpayers obstructed its effort to persuade the city to take a large block of stock in order to launch the project. The council did, however, create the post of city surveyor, at a salary of \$1700, with the object of securing expert advice on the water problem. His able report favored the use of Hemlock Lake water over that from Ontario and upheld the feasibility of the company's plans, comparing the proposed system favorably with water works in other cities; yet neither the city nor the company raised the necessary funds.

The city surveyor was kept busy during these years rerouting neighborhood sewers to suitable outlets and otherwise improving their drainage. Several had to be rebuilt, thus permitting the introduction of the new glazed pipe or Ohio tile; but many of the old-fashioned stone-block sewers continued in service, a constant threat of pollution to nearby wells. Property owners near the river complained of the sewer outlets in that stream, especially those above the falls, while farmers remonstrated against the pollution of shallow streams on the city's eastern and northern border. Rochester was served by a tangled mesh of sewers whose total length, as nearly as the surveyor could determine in 1859, exceeded eighteen miles. The lack of an accurate sewer map and the dissimilar construction of the sewers made his recommendation that a comprehensive plan be formulated seem hopeless, yet the surveyor warned that the longer this reform was deferred the more costly would it become.

The poorly supported health officers, frequently appealed to about sewer gasses, were likewise besieged by protests against improperly kept outhouses, barns, or hog pens. Hotels had to be watched to see that their garbage was removed frequently; indeed the proper disposal

of garbage and night soil presented a constant concern. The right to keep cows, pigs, and horses within the city was unchallenged as yet, but the practice of driving cows along the streets to pasture roused frequent protests, and the city had to maintain two pounds, one on each side of the river, for the confinement of stray cattle and hogs. The inspection of meat markets was occasionally urged, but the Board of Health had sufficient difficulty in securing payment of its existing bills and could not undertake new responsibilities on a budget of less than \$5000 annually.

Although the Civil War years saw few local improvements in public health, the wide activities of the United States Sanitary Commission stimulated a new concern for such matters. Not only did local aid societies wrap bandages, prepare kits, and assemble blankets and other items for the soldiers' use, but other societies renewed their efforts to open both St. Mary's Hospital and the so-called City Hospital. The Catholic Sisters in charge of the former and the Protestant members of the Female Charitable Society who took the lead in equipping the City Hospital acquired a new sense of civic responsibility and persuaded the city to shoulder the cost of housing its relief patients in these institutions.

Civilians, gradually crowded out of the hospitals during the latter war years, complained of inadequate health services generally. A "Complaint Book" kept by the Board of Health recorded protests against hogs and cattle in the streets, chickens and pigs and noisome backhouses in neighbor's yards. The lax confinement of smallpox cases, the careless loading of privately operated garbage carts, and the overflow of sewers were other troublesome nuisances about which little was done.

Water and Sewers and Garbage

Fortunately the time for action was arriving. Renewed growth in the late sixties brought a revival of the city's spirit, and its critical needs overrode the hesitancy inspired by the depression of the mid-seventies. Certainly no city could overlook the warning given by the great fires in Chicago and Boston. Rochester, among other towns, hastened to push aside its impotent water company and gave the task to a new Water Works Commission. The necessary haste permitted a scheming politician to acquire the contract, but fortunately the scandal

did not break into the open until the able engineer in charge had made sufficient progress to assure the conduit's completion and the arrival of fresh water from Hemlock Lake in 1876.

Meanwhile a survey by the health authorities during the previous year had found only sixty-one miles of sewers (compared with one hundred and thirty miles of improved streets), most of them unsuited to the new sanitary function soon to be acquired with the installation of water closets in many homes. Unfortunately, the cost of an adequate sewer system appeared insurmountable even to the more optimistic leaders of the late seventies.

The Board of Health faced other demands as well. The need for a pest house to shelter contagious cases prompted the erection of Hope Hospital, as it was called, on the river flats back of the cemetery. The city physicians reported numerous emergency visits annually, and a vigorous campaign, in which 4332 vaccinations were made at the city's expense, helped to check a smallpox epidemic in 1872, when twenty-eight deaths nevertheless occurred. Although the funds allotted to the Board of Health scarcely sustained these traditional activities, the aldermen who comprised the board displayed an active interest in several new functions. Questions arose for the first time concerning the proper care of milk brought into the city on hot days; an inspection of slaughterhouses was suggested; and the lack of a public bath house and a urinal in the center of the city was deplored. On at least one occasion the board ordered the demolition of a building that had become a public nuisance.

The most significant new function assumed by the Board of Health was the collection of garbage. The city was outgrowing the old system of licensed scavengers, whose activities frequently tapered off during the very months when their services were most necessary. Fear of an epidemic in 1873 prompted the board to organize a public system of garbage collection that summer; it quickly engaged six teamsters and equipped them with watertight wagons especially built for the purpose. When the full council ordered the board to terminate its program in October, a heated controversy developed, as a result of which the board was authorized to continue the work and to add an official "garbage major" to its staff.

Rapid urban growth in the late seventies and eighties brought several of these issues to a head. An ordinance providing for public inspection of food dealers, introduced in 1876, failed to pass until 1881

when Mayor Parsons cited the experience of other cities in support of the measure. No funds were appropriated, but an association of milk dealers, which formed at this time, enrolled two hundred members, each of whom paid a fee of five dollars to support the inspection of his competitors. The discovery that such inspection might pay its costs prompted the council to adopt a new ordinance the next year, prescribing new standards and license fees, and to name the inspector itself.

When a revised ordinance, which extended the inspector's authority over dealers in meats and vegetables, made the task so onerous that the inspector resigned, the Board of Health hastened, under authority of a state law, to assume the function. By the end of the decade two men were busily making periodic visits to 162 meat markets, 6 fish and sausage markets, and testing the supplies of 150 milk dealers. A device known as a lacometer enabled the inspectors to tell when a can of milk had been watered, though of course few of the 12,000 quarts peddled daily—half of it already brought in by rail—could be examined. The more serious hazards from tuberculosis or other diseases were undreamed of, and the inspectors received scant support when they endeavored to confiscate and destroy tainted products. Not until the appointment of young Dr. George W. Goler in 1892 did Rochester get an efficient guardian over this vital matter.

Earlier Board of Health functions were becoming increasingly complex. The investigation of complaints against outhouses continued, and in 1884-85 the public officers had to clean out 2660 privies. The vaccination of all factory workers as well as school children sufficed a year later to head off a threatened epidemic of smallpox. Protests against a phosphate storehouse, a stockyard and slaughter house, and a garbage reduction plant, prompted the board to order their removal beyond the city limits. Frequent investigations of crowded tenements, usually stimulated by a threatened epidemic, spurred the improvement of their sanitary facilities, but the board's request for additional authority to restrict the number of persons per room was denied. The overcrowding of poor immigrants in dilapidated and unsanitary blocks could be checked only when a contagion or fire hazard appeared. Though success finally crowned the long campaign for the appointment of women physicians, the establishment of a public bath house was again deferred.

The collection of garbage remained under the board's supervision until 1880. But its contractors, who made their profits by selling the

garbage to nearby piggeries, had great difficulty in finding an adequate market—partly because of the growing city's more abundant output of garbage, and partly because western meat packers were capturing the trade of local slaughter houses. When the city was forced to hire garbage carts during the hot months, the prospect of new jobs induced the politically dominant Executive Board to take over the task and order the excess garbage dumped into the river. Protests multiplied during warm months, or whenever low water failed to keep the river swept clean. As it did not prove an easy responsibility, the unpleasant task was soon turned back to the health board. A new plan, to bury the garbage in long ditches dug in the nurseries bordering the city, left the full charge for garbage carts and employees up to the board, which could not always persuade the council to supply the necessary funds. Fortunately, no serious epidemic occurred during repeated breaks in the service.

Perhaps the city's greatest improvement in living standards sprang from the arrival of an abundant supply of Hemlock water. Rochester had 7325 domestic outlets by 1880 and three times as many a decade later, or four to every five dwelling units. A survey that year revealed that 15 percent of all local homes had water closets, though few of the sewers were adequately built to serve them, yet all efforts to correct the situation were blocked by tax conscious elements until the escaping odors from improperly trapped sewers brought so many protests that the city engineer's plan for a trunk sewer and for the construction of sanitary sewers in all neighborhoods finally won approval. While these improvements did not reach a majority of the residences until the nineties, other public health measures, such as the faltering programs of milk and meat inspection, helped to reduce Rochester's death rate to 17.32 per 1000 by 1890, lower than that of all but five of the twenty-eight major cities and well below the local rates of previous decades.

A determined effort to collect vital statistics in urban centers was first made in the eighties, but the results were not thoroughly reliable. Some doctors neglected to register births, and some ministers refused to record marriages lest, as it was explained, neighboring busybodies check the dates against the birth of the first child. From the data compiled, it appears that Rochester had more deaths than births, though the unregistered births may have tipped the balance slightly in the other direction. The low death rate, in comparison with other cities, may have resulted in part from its low birth rate, for here Rochester

likewise stood below the urban average. But again, the unregistered births distorted the picture, since the city had a slightly higher than average rate of deaths of children under one year, which, in view of the low over-all death rate, is hard to explain.

The death rate of children under five was frightfully high everywhere, and in Rochester it represented 36.8 per cent of all deaths in 1889. No wonder the cemeteries continued to play prominent roles in the city's life. Thus the provision of a crematorium at Mount Hope cemetery in 1885 started a heated controversy as many folk condemned this novel method of disposing of one's loved ones. Mount Hope's 200 acres contained 43,776 graves by 1890, when the Catholics' more recent (1872) Holy Sepulchre cemetery had 13,132; moreover, four small cemeteries were still in active use.

The Board of Health again attracted public interest and more generous support in 1892 because of a threatened cholera epidemic. Its clean-up campaign during September and October that year eliminated many unsanitary conditions. It removed the last outhouses from some residential districts, cleaned up barns, carted away piles of manure and garbage, and closed several tenements for sanitary repairs. Yet the board's search for a new site for its hospital for contagious diseases met resistance at every turn.

The recently popularized knowledge about disease germs proved both an aid and a hindrance to the health officials. Their sanitary measures received better support, but nobody wished to have the hospital located in his neighborhood. While the board's plea for a more faithful report of contagious diseases by all physicians failed to overcome a mixture of apathy and fear, fear strengthened the demand that the chief health officer be given larger powers, with full control over his staff and no political interference. The board's request for an increased force of inspectors, when granted, boosted the outlays for 1892 to nearly double those of previous years.

Dr. Wallace Sibley, the health officer, and Dr. George Goler, his newly appointed chief assistant, had their hands full in 1892 and 1893. Although no cases of cholera appeared, the prevalence of typhoid, diphtheria, scarlet fever and several unknown contagions caused numerous deaths and kept the excitement over germs at fever heat. The outbreak of many cases of cholera infantum the next summer, which took the lives of sixty children in one month, strained all facilities for the care of the sick. The popular confusion of this disease with Asiatic

cholera caused fearful, almost hostile, neighbors to shun the afflicted Aid in the care of the sick or the burial of the dead proved difficult to find. And when, on one occasion, a hearse was pressed into service to carry a typhoid patient to the hospital, the driver drove so rapidly, in order to keep a jump ahead of the germs behind, that the patient died from the jolts.

The health authorities no longer had charge of garbage removal, but their vigilance during the cholera scare did assure more efficient collections by the contractor employed by the Executive Board. The practice of hauling ice in the garbage trucks during off hours was stopped; and, as a result of persistent demands, the nine collectors of the early nineties were doubled in number by May 1, 1893. Other new sanitary regulations stipulated that plumbers secure licenses attesting their knowledge of the proper standards, that ice dealers handle ice only from approved sources, that the city sewers be flushed more regularly

One of the most important functions of the health officers was the inspection of milk. The one inspector assigned to this task in the late seventies, had sought only to check adulteration and insure cleanliness. The appointment of young Dr. Goler as medical inspector in 1892 brought new testing standards to the fore at a propitious moment. A group of wholesalers organized the Producers Milk Company with a capital stock of \$50,000, while the small dealers and neighborhood dairies formed an Independent Milk Dealers Association. Earlier hostility to milk inspection disappeared as each side sought a clean bill of health, though the attitude changed again after the first reports came in.

Fortunately the medical profession was ready to back up the health officers. The wide acceptance of the germ theory assured support, and keen interest surrounded other new discoveries. Great excitement greeted the news in 1891 that a vial of the newly produced tuberculin injection, known as Dr. Koch's lymph, had been brought from Germany to Rochester. The fact that this injection did not fulfill the expectations of its promoters that it would provide a cure, failed to lessen the zeal of many doctors for new and startling remedies.

An Era of Scientific Advance

The last five or six decades have witnessed many promising advances in the field of public as well as private medicine. An increased knowledge of the causes of various diseases has speeded the development of more effective treatments and has practically doubled the life

expectancy of new-born babies whose prospect for 34 years in 1890 jumped to 67 years by 1950, according to Metropolitan Life Insurance statisticians. Rochester not only shared in this nation-wide improvement but, because of the alert vigilance of its public health authorities, also made significant contributions to the movement. We need not launch upon a detailed account of this development, for the Health Bureau's graphically illustrated booklet, *Fifty Years of Health in Rochester, New York, 1900-1950*, has reviewed the period with much expert knowledge. We will only attempt to place the city's advance in public health programs in historical perspective.

The independence of action granted the health officer in 1893 began to pay dividends after Dr. Goler became Chief Health Officer in 1896. The reorganization under the White Charter in 1900 abolished the health board and made the chief health officer a bureau head within the department of public safety, but again Dr. Goler's vigorous leadership not only assured an alert scientific approach to the problems but generally won the compliance, if not always the full support, of the political authorities. Few of his forty years of service passed without an explosion of a sort or failed to achieve at least some improvement in the public health program.

Dr. Goler's most critical year came in 1902 when a smallpox epidemic struck the city. He detected the first case early in June and appealed immediately for forthright action. Hope Hospital, the old pest house, should, he declared, be replaced by a new institution on a more suitable site at a cost of not less than \$50,000. He requested an equal sum to provide free and compulsory vaccination to all citizens. In the debate that followed, Dr. Goler was branded an alarmist and censored for having reported the epidemic to the papers. The council reluctantly voted funds for free vaccinations, but cut the hospital appropriation in half. When the contagion slackened after the first dozen deaths and before a new hospital site was found, interest dropped until the epidemic flared up again in October. A blackout of news in all but the *Post Express*, encouraged complacency, and three more weeks slipped by before the construction of a new hospital on Waring Road commenced.

Meanwhile, Hope Hospital, equipped to shelter eighteen patients, overflowed with smallpox victims. Dr. William M. Barron, the assistant health officer in charge, and his nurses erected tents and sheds, using materials dropped in the snow a hundred yards distant by cart-

men afraid to drive any closer. Shortly before the patients reached a peak of 143 early in December, Father E. A. Rawlinson requested and received an appointment as chaplain at the hospital, where he proved himself a source of faith and comfort to all. Protests over the poor treatment began to mount as discharged cases trickled back to the city. Alderman William Baker launched an investigation that uncovered many sad details and gave vent to some angry charges. Father Rawlinson, however, praised the heroic efforts of the doctors and nurses and deplored the inadequate facilities and the difficulty in finding workers. The Baker committee, which refused an invitation to inspect the premises, nevertheless recommended and the council adopted a resolution that Drs. Goler and Barron be dismissed from their health offices.

Widespread indignation greeted this report. The mayor and the council were responsible, the *Herald* declared, because of their failure to supply the necessary funds when requested in June. Responsibility should be shared, the editor held, by those citizens in three sections of the city who had resisted the selection of a site for the new hospital in their neighborhoods, and by hackmen who had refused calls to pick up patients pronounced cured. Meanwhile, work on the Waring Road structure had been completed, at a cost of \$72,000, which brought an outburst from Comptroller Johnston, who could find authorization for only \$25,000! A new investigation started, but first an order was dispatched to Dr. Barron to set a torch to old Hope Hospital.

Dr. Goler engaged in a less dramatic but in the long run more fundamental struggle for the establishment of sanitary controls over the milk supply. His efforts, as we have seen, began in the early nineties, but it was in 1897, when as chief health officer he opened the first public supported free milk stations in the country, that his campaign really commenced. The milk stations, patterned after charitable efforts introduced at New York a year or two before, supplied carefully tested milk in sanitary bottles to the mothers of infant children in poor and congested districts of the city. The improved health they enjoyed as a result of this summer program stimulated other citizens to demand and pay for certified milk produced and distributed under sanitary conditions. But when in 1905 Dr. Goler endeavored to enforce stricter standards of sanitation on all the 700 producers and 225 distributors of the city's daily supply of 75,000 quarts of milk, difficulties arose. Two inspectors could not adequately perform the task, for most dealers

simply boosted their prices in response to each new regulation and then frequently neglected to put it into effect. Dr. Goler's repeated request for an ordinance prescribing a 50-degree temperature for all milk delivered to Rochester met determined resistance. What was the merit, many asked, of sanitary regulations which forced the price of milk up beyond the reach of average citizens! Dr. Goler, not unmindful of the difficulty, proposed paper containers at one time, government distribution at another. He was tenacious and exacting at all times and won more admirers outside than friends at home.

The health bureau's responsibility over garbage collection proved equally troublesome. Disregarding politics, the bureau shifted the contract annually, or more frequently, in search of a responsible collector. When that stratagem failed, and the imposition of a dollar fine for every complaint approved by a "garbage court" (which ran as high as 796 in one month) produced no better results, the bureau gave a five-year contract to the Philadelphia firm which collected and reduced the garbage of the Quaker metropolis. Yet when neither Gates, Greece nor Irondequoit would permit a location of the reduction plant in its area and the company chose a site on the river flats, many in Rochester protested loudly against the defilement of the picturesque Genesee gorge.

Two of the city's major housekeeping problems—the provision of an adequate supply of pure water and the maintenance of a sanitary and efficient sewage system—frequently required attention as Rochester's continued expansion outgrew the provisions achieved in previous decades. City Engineer Fisher supplied leadership here, and although the construction of the second (1894) and third (1918) Hemlock conduits and the removal of the trunk sewer outlet from the river to a point some distance out under the lake in 1917, was deferred in each case until an emergency threatened the town, fortunately the crises passed and the community continued to enjoy high quality water and sewers that were far above the average maintained by comparable cities.

As in so many civic fields, though much good work was undertaken in public health, the problems seemed ever to increase. Dr. Goler boasted in 1909 of Rochester's low incidence of typhoid cases and of a remarkable decrease in the number of deaths among young children—which he attributed to the milk stations and other precautions—but the next year opened with a serious epidemic of scarlet fever, followed a

few months later by epidemics of typhoid and diphtheria, each of which took a score or more of lives.

The Public Health Association, formed in 1896 by supporters of Dr. Goler, waged its most vigorous campaign against the "White Plague." It held its first anti-tuberculosis exhibit at Convention Hall in 1908 and persuaded the city to provide special open-air porches for the care of tubercular victims at the Waring Road Hospital. The association also established a day camp in a tent colony for such cases that year as a part of its campaign for a separate hospital. Soon, both the city and the county were preparing to fill the need. Fortunately, after some debate, the two efforts merged in the founding of the first locally-maintained sanitarium, opened in 1910 under the beautiful Indian name "Iola," meaning "never discouraged."

The Public Health Association took the lead in efforts to educate the public, more especially the recent immigrants, in sanitary and other health matters. Its numerous reforms included an ordinance prohibiting spitting on the pavement or in street cars, a campaign for the installation of door and window screens and a more vigorous use of fly swatters, another against public drinking cups and for drinking fountains, agitation for additional public baths and for the establishment of a bacteriological laboratory. The Public Health Association, acting in collaboration with the Rochester Dental Society, opened the city's first dental clinic at its headquarters in 1905; five years later the council responded to its request by launching the nation's second free dental dispensary at No. 14 School.

The manner in which immigrant needs inspired special services, which in turn promoted wide civic improvements, was perhaps best illustrated by the milk stations. First launched in 1897 to supply pure milk to immigrant mothers with young children, this program led to progressive improvements in the regulations governing the inspection and delivery of milk for the entire community. And as the quality of milk improved, the services of these summer-time stations branched out to include the free instruction of young mothers by nurses trained in child care. The Woman's Educational and Industrial Union sent other nurses into the schools of the poorer districts in 1907, and two years later the city assumed full responsibility for this added service. The next year saw the milk stations converted into child welfare clinics.

The relation of public health to vital statistics was becoming increasingly evident. Dr. Goler lost many of his battles—for a more

efficient inspection of milk and meat, for more adequate garbage collection and more diligent sewer repairs, for the licensing of pets and the extermination of rats—but his dogged determination won advances here and there and gradually earned Rochester an enviable rating in state health surveys. The deaths of babies under one year showed a fairly steady decline after 1896, and the total number of deaths held remarkably constant, representing, as the population increased, a decided drop in the mortality rate. The fact that the birth rate was mounting, particularly after the turn of the century, gave Rochester an increased margin between births and deaths—enough to account for a fifth of the city's population increment during this period.

Dr. Goler repeatedly emphasized the fact that good health was related to and dependent on a decent standard of living. He helped in 1913 to prepare a welfare exhibit analyzing wages and family expenses as factors in community health—an exhibit which stirred great interest and considerable controversy. He was ever investigating baby farms, comfort stations, bath houses, schools and of course tenements, and this last field of inspection made him the city's first housing reformer.

Rochester had undertaken so much in this field that many citizens were greatly chagrined in 1911 when Mrs. Caroline B. Crane, invited to make a sanitary survey of the city, found a disturbing number of deficiencies. Few if any of her complaints were original, however, for most of them were or could have been lifted from Dr. Goler's annual reports. Outside criticism was hard to take, but two years later Rochester was ready for another visitor—Dr. Anna Louise Strong whose child welfare exhibits at a few other cities had stirred local interest. Her exhibit, set up in Convention Hall early in 1913, proved a great education force. The summertime milk depots previously transformed into child welfare stations became year-round services. A more scientific approach to the problems of venereal diseases gave rise a year later to one of the first public clinics of this sort in the country.

Thus Rochester kept pace with medical advances throughout the world during the early years of the century. Under Dr. Goler's impatient leadership it made use of new vaccines, anti-toxins, and fresh air, to check smallpox, diphtheria, and consumption. It had pioneered as we have seen in the public distribution of pure milk to babies, in the maintenance of public health nurses, and the provision of dental care to school children. Its child-care and family-aid programs rivalled the

best in the country by the outbreak of the First World War, and its health provisions for the men who responded to the call to arms were outstanding. Yet the city was as unprepared as communities elsewhere for the influenza epidemic which ravaged the country in 1918.

The new malady hit first in several training camps that summer and reached Rochester by October, prostrating a thousand residents within the first week and ten thousand before the end of a month. The city's one municipal and four private hospitals were quickly inundated with patients, and emergency wards had to be opened at the armory, in three church halls and a settlement house. The Red Cross organized a volunteer nursing service, a motor corps, and a food corps to help meet the shortages in personnel and supplies that accentuated the crisis. As a result, Rochester kept its death toll down to 679, which was lower than that of other stricken cities of its class, though the total was higher than the number of casualties among Rochester men at the battle front.

Rochester was no longer inclined to settle back after such a crisis into its earlier lethargy. The discovery of a need for improved nursing services had prompted the organization, during the emergency, of the Public Health Nursing Association, which opened four headquarters and reported a total of 1585 home visits during the first six months. The association, by consolidating the energies of earlier charity societies engaged in this field, greatly improved the service and attracted increased support. A similar readiness to cooperate developed among the several private or voluntary hospitals, which had also discovered an urgent need for improvements. A united hospital drive was organized and the goal was set at \$1,300,000, but the popular response, in January 1922, overtopped that figure by \$200,000 and gave additional momentum to the move for coordinated advance. Dr. Goler persuaded the city to integrate its plans for a new municipal hospital with the university's plans for a new medical school and a memorial hospital. When most of these developments approached realization in 1925, Rochester acquired hospital facilities exceptional for the day. Moreover, the need to coordinate the health services of these and other institutions helped to expedite the organization of the Council of Social Agencies in 1924.

The new spirit quickened the response to an educational program first launched in 1917 through the cooperation of several local organizations. The American Public Health Association held its annual

convention at Rochester in 1915, and a popular lecture delivered there, with the striking title "How to Live a Little Longer," sparked a movement for health education which prompted the Board of Education to include a course with that title in its evening program a year later. By the mid twenties the popular enrollment in this course was sufficient each term for ten or twelve classes, and when an announcement appeared that a need for economy would curtail the program, indignant protests from the public prompted city officials to reexamine their budgets and find the necessary funds.

Most of the old sanitary problems have continued, prompting repeated efforts to bring earlier provisions up to date. The water works, the sewer system, and the garbage service have each required an extensive and costly overhauling. Thus the plant of the Genesee Reduction Company, taken over by the city in 1917, was replaced by a new reduction plant four years later which, after a service of three decades, has recently been superseded by two modern incinerators, one on the eastern and one on the western outskirts of the city. In like fashion the sewage reduction plant, constructed in Irondequoit in 1917 to treat the city's sewage before it was discharged into the lake has been overhauled on two occasions, and three additional treatment plants have been installed to handle discharges at other points. The water works, too, have repeatedly demanded attention to safeguard the supply at Hemlock and Canadice Lakes, to maintain and improve the conduit and distribution services, and, finally, to tap and purify a new source from Lake Ontario. Only the city's slow growth in the thirties and early forties saved it from a desperate water shortage during two decades of indecision, but at last in 1949 the City Council voted to develop an Ontario water plant independent of either the Eastman Kodak Company's supply or the Lake Ontario Water Company. The city can today pump up to 36,000,000 gallons a day from Eastman Kodak intake pipes, and its pumps, precipitation tanks, and filter beds at the foot of Dewey Avenue insure an ample flow of purified water to supplement the Hemlock supply for many years to come.

Many of Dr. Goler's periodic campaigns were revived when the occasion arose by his successors, Dr. Arthur M. Johnson and Dr. Albert D. Kaiser. Dr. Goler's first war on rats in 1915, pressed with the aid of a map showing the points of their infestation, breeding and migration, was repeated in 1920 when a new plague threatened, and again on two occasions during the forties when the problem became acute.

In similar fashion, Dr. Goler's early efforts to survey the dental needs of school children not only inspired the establishment of the Eastman Dental Dispensary but also led to the development of a regular program of inspection and treatment of school children at its clinics after 1916. Five years later the city's pioneer tonsil-adenoid clinic, with young Dr. Kaiser in charge, examined and treated a total of 7369 cases at Convention Hall in an experiment which Dr. Goler described as "the greatest piece of public health work that has ever been attempted in Rochester." It demonstrated the value of a continuing program of health care for children. Arrangements for the sale of milk at cost in many schools that year launched an effort to improve the noon-time lunches of growing children.

New fields of public health have been explored in recent decades. The care of the blind is not of course new, but the Rochester Cooperative Association for the Blind, which dates from 1911, opened its workshop two years later and received Community Chest support on the latter's establishment in 1919. In addition to this welfare program, the city had made vigorous efforts through its health authorities to eradicate the diseases and eliminate the accidents that cause blindness, and through its school physicians to detect defects in the eyesight of children when they can be corrected or checked by proper care.

Another workshop, established in 1919 by the Tuberculosis and Health Association, offers manual therapy to those afflicted by psychosis, dementia praecox, paralysis, epilepsy, and certain orthopedic cases. Those who promoted this workshop soon had to open a second one in order to meet the demand for its services, and the Community Chest promptly recognized a responsibility here, though the program was later curtailed for a time because of the difficulty these handicapped workers encountered in finding and holding jobs during the depression of the thirties. Yet the rehabilitation of many persons handicapped by a disease or an accident has achieved real humanitarian advances in Rochester as elsewhere.

Special groups have backed numerous public health measures when the authorities needed popular support. The Tuberculosis and Health Association pressed its campaigns with vigor, and the disease gradually lost its hold on the community, particularly after the mobil X-ray unit and other detection methods enabled the authorities to reach a wider

percentage of the population. The construction of a new wing at Iola gave it a capacity of 350 patients, and its beds have served a useful function with such success that in recent years the pressure of occupancy has diminished with the decline of the once dread White Plague.

Several public clinics and laboratories have helped to bring other diseases under control. The health bureau has for many years maintained a daily clinic for the testing and treatment of venereal cases. It established a rheumatic fever diagnostic clinic in 1946, and two years later the Red Cross launched the Rochester regional blood bank program. Two bacteriological laboratories, one maintained by the city, the other by the county, greatly assist in the accurate diagnosis of diseases. Among recent aids to improved treatment, the premature birth center, opened in 1948, and the facilities provided by the new Wing R at Strong Memorial Hospital are outstanding.

Despite the vigorous efforts of some of its leaders, Rochester did not move as promptly as many other towns in several health fields. Its tardy decision in 1934 that all milk must be pasteurized was partly explained by the wide faith Dr. Goler's campaign for certified milk had engendered in that quality product. The consolidation of milk companies, as the dealers dropped from 410 in 1900, to 140 in 1920, to 80 in 1930, failed to effect all the economies urged by Dr. John R. Williams and others who sought improved milk supplies at more reasonable prices, but better health standards were achieved after an ordinance in 1921 required pasteurization of all uncertified milk.

Although Dr. Goler's opposition delayed the extension of pasteurization to all milk during his remaining eleven years of service, the city's failure to take effective action against unsanitary housing conditions was not due to his indifference. Indeed his vigorous demand for the provision of sanitary facilities in every dwelling unit and his action in forcing the condemnation of a number of wretched hovels during the decade preceeding World War One had helped to check overcrowding and other slum conditions. Unfortunately the depression, which prompted landlords to skimp maintenance costs and forced poor families to double up in order to save rent, brought renewed deterioration in many districts. These patches of blight began to spread during the Second World War when the construction of new homes as well as the repair of old houses was practically halted. By the time Dr. Kaiser became chief health officer in 1945 the need for forthright action was widely apparent, and he gave his support to the Better Housing Asso-

ciation and other organizations seeking a remedy. Several more years were required and the progressive deterioration of its most wretched areas before Rochester determined in 1949 to clear one of its worst slums for a new housing project. More recently the creation of the Rochester Housing Authority and Rehabilitation Commission has promised a more effective program somewhat along the lines long advocated by Dr. Kaiser.

While many of the programs of Dr. Kaiser, and of Dr. Johnson before him, followed precedents set by Dr. Goler during his four decades as chief health officer, the rapid advance of scientific medicine during the last quarter century has enabled the health bureau to wage an ever more effective war against disease. Rochester physicians, both public and private, have been quick to use the new sulfa drugs to check and practically to eliminate scarlet fever; they have employed anti-toxins to stop meningitis, insulin to halt diabetes, and most recently they have turned eagerly to the Salk vaccine to reduce if not as yet to eliminate the ravages of polio, particularly among young school children. The presence of the medical school with its support for research has helped to make the local medical profession receptive to new discoveries, but Dr. Kaiser repeatedly emphasized that the public use of these new techniques would be greatly enhanced by a wider pooling of health resources. One specific plan long favored by Dr. Kaiser looks to a consolidation of all local health authorities within the county, and this proposal is now under careful consideration.

Indeed Rochester's practice of inviting outside experts to make detailed surveys of difficult local problems has had frequent application in the field of public health. And although the recommendations of Dr. Ira Vaughan Hiscock in 1955, like those of several preceeding investigators, have not often brought novel ideas to the city's attention, the support they have given to earlier proposals by the local authorities has frequently speeded their adoption. Thus in this last case the need Dr. Hiscock emphasized for forthright action to eradicate unsanitary housing conditions is receiving the attention of the Rehabilitation Commission while the proposed reorganization of public health functions on a country-wide basis is winning wide approval. Other recommendations are also receiving careful study, such as the coordination of services, both public and private, the increase of staff particularly in the field of medical social service and of psychiatric social workers, and in rehabilitation.

The great advances made in public health during the last fifty or sixty years are most dramatically seen in the increased life expectancy of the average citizen. While the best estimates of this sort are national in scope, showing a climb from an expectancy of 34 years at birth in 1890, to 67 at birth in 1950, according to tables of the Metropolitan Life Insurance Company as we have seen above, Rochester's part in this advance is suggested by the decline in its death rate from 14.6 per 1000 in 1906 to 11.1 in 1955. The upward climb of its medium age from 26 to 35 during the same period is another indication, while the fact that $\frac{1}{2}$ its deaths occurred before the age of 45 in 1900, and not until the age of 71 in 1955, provides a still more graphic indication of the advancing life expectancy.

Yet this rapid progress has increased rather than diminished the problems of public health. The greater number who survive the hazards of childhood and youth, which past researches have progressively reduced, has increased the percentage who die from the maladies of later years, such as heart failure, cancer, arthritis and other chronic diseases. While any further advance in one direction will bring an inevitable increase in the death rate from other hazards of an older age group, the demand for increased knowledge of the causes and for improved facilities for the treatment of these chronic diseases of old age will increase.

Thus we have, according to the Hiscock report, reached a new turning point in the history of public health and disease, in Rochester no less than elsewhere over the state and nation. The long struggle for the control of communicable diseases by the use of sanitary measures, immunization, and prompt treatment has produced thrilling results, but it has at the same time cast a clearer light upon the unsolved individual problems of ill health—both mental and organic in character. Since methods of prevention in these cases are as yet obscure or unknown, the community faces the double task of providing facilities designed to reestablish the sick individual's capacity for self-care and social competence, and other facilities to speed the discovery and dissemination of the best practices for the prevention of these illnesses.

Fortunately the two proposals which now lie before the County Board of Supervisors—to create a county health department and a county mental health board—give promise of early action in both fields. As a recognition of the uses of science ushered in the effective work of

Dr. Goler's period in the 1890's, so an alert response on a broad community basis offers new hope today.

¹Dr. Anson Colman to his wife, Boston, Dec. 5, 1824, Colman letters, Rochester Public Library.

²Corner, "Medicine in Rochester," pp. 333-334; *Rochester in 1827* (Rochester, 1828), p. 146.

³*Advertiser*, Aug. 30, Sept. 15, 1849; Jan. 5, 1850; Raymond Scrapbook, pp. 173, 228-229.

⁴*Genesee Olio*, Sept. 9, 1848.

⁵*Advertiser*, Aug. 5, 1851; *Report on Cholera*, p. 34.

⁶*Report on Cholera*, p. 25.

⁷*Report on Cholera*, pp. 39-41.