SPECIFICATIONS

FOR THE

WORK TO BE DONE, AND MATERIALS REQUIRED,

FOR THE ERECTION AND COMPLETION OF THE

Rochester Female Reformatory

FOR THE

BOARD OF MANAGERS,

OF THE

WESTERN HOUSE OF REFUGE.

DRAWN AND TO BE DRAWN BY

CHARLES COOTS,

ARCHITECT,

ROCHESTER, N. Y.

ROCHESTER, N. Y.:

UNION AND ADVERTISER COMPANY'S STEAM BOOK AND JOB PRINT,

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SPECIFICATIONS

OF THE

CARPENTERS' WORK

And materials required for the erection and completion of a brick building three stories high above the basement, to be known as the Rochester Female Reformatory, to be erected on Backus Avenue, in the city of Rochester, for the Board of Managers of the Western House of Refuge, according to the accompanying plans, elevations and sections, drawn and to be drawn by

CHARLES COOTS, Architect,
Rochester, N. Y.

Dimensions and style of building to be made as shown on the several plans drawn to a scale of eight feet per inch. All heights and dimensions are to be made as per figures on each drawing, in place of following the scale.

HEIGHTS.

Basement under the entire building to be 9½ feet high in the clear when finished.

First story, 13 feet high between joist.
Second " 12 " " "
Third " 12 " " "
Fourth " 15 " " " in the hall and tower, and 12 feet high for the remaining rooms and halls.

The height of story for the boiler house, and the heights of attics and roofs, are to be made as shown on the elevations and sections.

TIMBERS.

The floor joist for the four floors and roof joist for the center building are to be 2x12 inches, placed 16 inches from centers.

Joist for the three floors for the kitchen addition are to be 2x14 inches, placed 16 inches from the centers.

Joist for each wing from the center building to the school house wings, on each of the three floors, are to be 2x12 inches, placed 16 inches from centers, and to be a joist on each side of the iron beams that support inside brick partitions. Joist for the halls in school room additions are to be 2x12 inches, placed 16 inches from centers, in each of the three floors.

Joist for the three floors in the school room additions to wings (except halls) in the three floors, are to be 2 x 14 inches, placed 16 inches from centers.

Ceiling joist for the center building are to be 2x10 inches, placed 16 inches from centers, resting on walls at one end and firmly spiked to the roof rafters at the other end, and there is to be a 1¼x2 inch ribbon piece notched into steep roof rafters to receive the ends of ceiling joist. Ceiling joist for kitchen are to be 2 x 8 inches, placed 16 inches from centers and joined on to the beams, and to be a 1¼x2 inch piece spiked on to sides of the beams, and the joist notched out and to rest on same and firmly spiked together.

Ceiling joist for each wing from the center building to the school house wings are to be 2x10 inches, placed 16 inches from centers, and to be a joist on each side of the brick partitions that form dormitories.

Ceiling joist for the school room additions are to be 2x10 inches, placed 16 inches from centers and gained onto tie beams, and to be a 1¼x2 inch piece spiked on each side of tie beam to receive the ceiling joist, and the joist to be notched onto same and thoroughly spiked.

Roof joist for boiler house all to be 2x14 inches, placed 16 inches from centers, and are to run north and south.

There is to be a floor of joist in upper story of tower, resting on wall plate, 2 x 8 inches, placed 16 inches from centers.

All joist are to rest on the walls 6 inches, and to be sawed oft beveling to 2 inches on the top.

Trimmer and header joist for all stairs and smoke flues are to be double and framed with double tenons, and the ends of the joist where they come in a ventilating flue are to be sawed off to the line of the inside of flue.

All joist are to be gauged to a width and sawed straight. Joist under all partitions that run parallel with partitions are to be double and spiked together.

BEAMS.

There is to be a beam to support the first floor joist in each of the school house wings, made in three lengths to each wing, of 12x10 inch pine, and the joist to rest on the same.

Beam in ceiling of laundry to support the third floor joist is to be of pine, 10x12 inches, in three lengths, and strapped together over each column with wrought iron straps, ½x2 inches, firmly spiked to beams on each side, and the ends of beams to be anchored to wall with wrought irons 2½ feet long, turned up in wall six inches and firmly spiked to beam. Each side and the underside of beam is to be cased with ⅞ inch clear pine, beaded on the edge. There is to be a beam over the front entrance to main building 12x12 inches, of seasoned pine, to carry the wall over front entrance.

Beams that support the ends of joists across the right angle halls from main hall are to be 10x12 inches, of pine, and the joist are to be framed into same. Lintels over all openings in cellar walls are to be 6x8 and 6x6 inches, made of pine and the full width of walls.

The lintels over all openings in brick walls above the basement are to be 6x8, doubled where necessary to make the lintel the full thickness of walls, and each to be made crowning to turn arches on.

To be wooden blocks, lintels and centers furnished the mason where required and of such size as to suit the openings.

ROOF TIMBERS.

Wall plates for the entire building, including the boiler house, are to be 4x12 inches, and anchored to walls at each corner, and every 8 feet in length with $\frac{3}{4}$ inch wrought irons 3 feet long extending down into walls, and to have a T at bottom 10 inches long, and heavy cast iron washer 5 inches in diameter and wrought iron nut at top.

Wall plates for oven roof are to be 4x8 inches.

Roof rafters on the center building and the two wings (except the two school house and kitchen wings) all to be 2x12 inches and placed 20 inches from centers and firmly footed to plates and spiked at bottom, and notched onto plates at top and spiked to same.

Rafters for the two school house wings and kitchen wing all to be 2x8 inches, placed 20 inches from centers, footed onto plates and purlines,and firmly spiked. Purlines on each side of each truss to support said rafters are to be 6x8 inches, and firmly spiked to each truss.

Hip and valley rafters to all roofs are to be double and spiked together.

Ridge pieces all to be the full depth of the cut of rafters and 2 inches thick.

Roof ratters for the two wings, one on each side of center building and between school room wings over the halls, all to be 2x10 inches, placed 20 inches apart and cut on an incline to form pitch for flat roof.

The flat roof on the center building and the roof of boiler house are to be furred up with 2x4 inch scantlings, to form pitch of roof, as shown on the roof plan.

Ratters for roof over oven are to be of 2x4 inch scantlings.

TRUSSES.

There are to be ten (10) self supporting trusses to support the roofs of each school room wing, and kitchen wing, to be four trusses to each school room wings, and two (2) for the kitchen wing. The fourth floor joist and the rafters and roof joists are to be supported by the roof truss over the kitchen wing.

Tie beams for each truss are to be 10 x 12 inches; main braces and collar beams 10 x 10 inches, each framed together as shown on the section, and supported with three round wrought iron one inch rods, with heavy cast iron washers at each end, and wrought iron nuts, and bolted at foot of main brace with $\frac{3}{4}$ inch wrought iron bolts with nuts and washers, and strapped with $\frac{1}{2}$ x 2 inch wrought iron straps 3 feet long, with eyes formed at each end, and keyed up with wrought iron keys. Intermediate braces are to be 6 x 8 inches, and framed together as shown.

The roof timbers for each wing and center building, (except school room and kitchen wings and boiler house), are to be supported on the brick walls.

QUALITY OF TIMBER.

Timber for all beams, lintels, roof, trusses, and the 2 x 14 inch joist for roof and floors, are to be of sound and seasoned pine, free from open knots, shakes or wane; and, the balance of the timber required for the entire building to be sound and seasoned hemlock, free from open black or unsound knots, shakes or wane.

BRIDGING.

Each floor and roof joist are to be bridged with 2 x 3 inch hemlock or pine lumber, and nailed at each end with two 12d nails. The joists that are eight feet in length or less, are to have one tier of bridging; joist over 12 feet, and less than 16 feet long, are to have two tier of bridging, and the joist over 16 feet long to have three tier of bridging.

ANCHORS.

The ends of every third joist where they rest in a brick wall, are to be anchored to walls by nailing a $1\frac{1}{2}$ x 2 inch beveled piece on each side at each end, and where the joist run parallel with the brick walls they are to be anchored to walls with wrought irons 2 feet long, $\frac{1}{2}$ x 2 inches, turned up in walls 6 inches, and spiked to a 2 x 4 inch pine scantling, which is to be let down into joist diagonally and firmly spiked with wrought iron spikes.

PARTITIONS.

All inside partitions colored yellow on the several floor plans, are to be setwith 2 x 6 inch studs, placed 16 inches from centers, and blocked in between twice in height with 2 x 3 inch pieces, firmly nailed to each stud; door studs are all to be double and blocked in between three times in height. All studs are to be of sound and seasoned hemlock and sawed to a width and jointed straight. Plates and sills for partitions where necessary, are to be 4 x 6 inches, and the studs firmly spiked to same.

ROOFS.

All roofs are to be covered on the rafters with one inch planed and matched hemlock boards, free from open, loose, black or unsound knots, and firmly nailed in each ratter.

SLATING.

The roof of the entire building, (except the flat roofs on center building, and the flat roof on each wing and boiler house), are to be covered on the ratters with one thickness of x x x tarred paper, laid to lap 3 inches, and firmly nailed in each rafter, and slated over same with the first quality of Leigh slate, 9 x 18 inches in size, laid with three laps, and nailed on with two galvanized iron nails to each slate, the butts to each slate are to be cut straight except for tower roof.

The slate on a portion of the tower and dormer windows are to be laid with the unfading green Vermont slate, of the same size as before specified, and cut with either octagonal or diamond formed butts, in such pattern as the architect may direct.

GALVANIZED IRON WORK.

The ridges and angles to all roofs are to be protected with galvanized iron 14 inches wide, made of No. 24 iron, formed thus: (see original), and put on before slating is laid, and firmly nailed on with galvanized iron nails.

Gutters on all horizontal eaves of the entire building, (except boiler house), are to be formed of galvanized iron, No. 24, and about 4 feet wide, formed to suit the shape of box gutter, turned up under slate and soldered water-tight.

Vallies on all roofs are to be made 20 inches wide of No. 24 galvanized iron soldered together, and formed water-tight to suit the several angles of roof.

Joinings and flashings around each dormer, and chimney tops, are to be of galvanized iron, No. 24, in thickness, and from 14 inches to 30 inches wide, turned up against brick work, worked into same, and wedged and soldered water-tight.

Where the flat roof on main building joins on to slate roof, the joining shall be protected with tin 14 inches wide, worked up under moulding and under slate.

TIN WORK.

The roof of flat section on wings to center building, and the flat roof on center building, and the roof of boiler house, oven, and finish over front entrance to center building, are each to be covered with x bright tin, joints locked and soldered water-tight. Where the tin joins on to brick work, the same shall be turned up 6 inches and worked into joints of brick work and wedged. The roofs on wings and center building are to pitch so as to turn the water on to slate roofs. The roof of boiler house is to be inclined towards the center, and one side as indicated on the plans.

The contractor is to warrant all tin, iron and slate work to remain water-tight for one year from the time the building is completed and accepted.

CONDUCTOR PIPES.

The water from the tower roof is to be carried to flat roof on main building, through a 4 inch galvanized iron pipe, with elbow at bottom.

The water from the gutter over front entrance to center building, is to be carried down the roof of entrance finish

through a 3 inch galvanized iron pipe, with elbow at bottom; and the water from finish over front entrance to be taken to drain in basement, through the same size and kind of pipe.

The water from the three wings to be taken from gutters at the eaves, and carried to drain in the basement through 5 inch, No. 20 galvanized iron pipe, riveted and soldered water-tight, and to run down in a recess on the inside of walls as shown on the plans, and the recess for each pipe to be cased up with clear pine, put up with screws. Each conductor pipe is to be securely ironed up every 4 feet in height, with galvanized iron hooks.

The water from boiler house roof is to be taken to drain on the inside of building, in the same manner and through the same size pipe as above specified.

IRON.

Cresting on roof of lower and ridge of gable on center building, and the final ornaments on the apex of each gable on projections, dormer windows and hips to all roofs, are to be made wrought iron standards and cast iron ornaments of the pattern shown on the elevations, securely fastened to roof.

The ornament on tower roof in front is to have a vane with four arms, and letters on same designating the points of compass, and to be gilded with gold leaf.

OUTSIDE WOOD WORK.

At the top of the brick cornice around the entire building, and up each gable, there is to be a wood crown moulding of the section shown, securely fastened to wood brackets, which are to be built into brick walls, said brackets to be cut in form to suit the box gutter, and the bottom and sides of gutter are to be cased with one inch boards made in the form shown, to be furred up so as to incline towards conductor pipes, and at the mouth of each conductor pipe there is to be a wood box, formed 12 inches square, lined with galvanized iron, and soldered water-tight.

The moulding on the edge of flat roof on wings and main building and ridge of tower roof, are to be formed as shown on the plans of wood,,and covered on top with tin.

The returns to all gable cornices, are to be formed of wood, and the roofs of same protected with tin.

Dormer windows on roof of tower and center building, are to be made of wood in the form shown on elevations, finished with moulded cornices and bases, sash for same to be 1⅜ inches thick, glazied with American glass, and trimmed with sash springs. The frame for the window over front entrance is to be made a box frame, and the sash to be double, hung with iron weights, axle pullies, cotton sash cord, and trimmed with bronze sash locks.

Finish over front entrance door-way, is to be made of wood, as shown on the front elevation; columns are to be cased up, paneled and chamfered, and finished with moulded bases and caps; soffiets of arch to be moulded, and the spandral panels to be moulded; cornice to be moulded and finished with brackets; railing on roof to be formed of wood in the form shown, securely fastened to brick walls at each end.

SCUTTLE,

On main roof over the attic stairs is to be made 3 x 5 feet, buttoned on the inside, and fastened with iron hooks and staples; to be a sash in said scuttle with three lights of 9 x 20 inch glass in same; frame for scuttle to raise above roof 6 inches, and the top of scuttle and sides of frame to be tinned over.

OUTSIDE STEPS.

The steps to the front entrance are to be made of cast iron of the size shown on plans, and in design of pattern to be the same as the front entrance steps to the Western House of Refuge, and put up in the most secure manner.

The outside steps to the five rear entrances are to be made with 3 inch bent angle irons, to form strings, and an angle iron under same of the same size to support same, formed as shown in the margin, (see original), made of

wrought iron, and firmly bolted together; to be three such strings to each flight of steps and platforms.

Platforms and steps are to be of 2 inch oak, bolted to strings with carriage bolts. Railing on each side to be of wrought iron, bottom and top rail $\frac{1}{2}$x1$\frac{1}{2}$ inch wrought iron; balusters 7-8 inches square, placed about 5 inches from centers, and riveted to rails at both ends; top rail to be covered with a $\frac{1}{2}$ round wrought iron 1 inch in diameter; bottom rail to be secured to iron strings with iron knees; newel post on each side to be of cast iron 6 inches in diameter. To be a 3 inch angle iron to form riser for each tread, and three for each platform, and each to be bolted to strings. The platforms are to be of 2 inch planed and matched oak, and placed on the proper incline from building. Said iron work is to be put up in the most secure manner, let into wall at top and the stone foundation at foot.

WINDOWS.

Window frames for the entire building, including boiler house and basement, are to be made box frames from clear seasoned pine of the section shown on working drawings and furnished with axle pullies.

SASH

For all windows are to be 1$\frac{3}{4}$ inches thick ovolo moulded counter checked, hung with round cast iron weights and trimmed with bronzed sash locks. Sash cord to be of cotton and woven with the double twist. All of the above sash are to be made of clear seasoned white pine, and painted one coat before glass is set.

GLASS

For all windows is to be of the first quality of American glass, extra thick, set in putty, tacked in and back puttied. The number and size of glass to each opening is to be made as shown on the elevations. Glass for the front windows in center building is to be of the first quality of double thick American. The glass for the doors and headlights to the rear entrances is to be double thick American. Glass for the headlights, sidelights and doors to the front entrance is to be of plate polished glass.

FLOORS.

The floor for the first story is to be $1\frac{1}{8}$ inches thick, and for the second and third stories and fourth story of center building $\frac{7}{8}$ inches thick; all of planed and matched stuff, free from open, black, large or unsound knots, and firmly blind nailed in each joist. Boards are not to exceed 6 inches wide. All of the above flooring is to be of the first quality of seasoned maple, and the kitchen, pantries, halls, school rooms and laundry is to be of clear stuff.

There is to be a $\frac{7}{8}$ inch floor laid over the attic in each of the three wings, and in upper story of tower, of pine lumber, free from open knots, and planed and matched, and free from open knots.

There is not to be any floor in the basement of main building or boiler house.

All joints and joining in the floors in main buildings are to be planed off after the plastering is completed.

FURRING.

The outside brick walls in the entire building and fourth story of center building are to be furred out with $1\frac{1}{4}$ x 2 inch pine strips, placed 16 inches from centers, put up, plumb and true and doubled at each angle, and firmly spiked to plugs which are to be driven into wall every two feet in height to nail to.

CROSS FURRING.

The ceilings of the chapel and the two school house wings on third floor are to be cross furred with $1\frac{1}{4}$ x 2 inch strips, placed 16 inches from centers, and firmly nailed to each joist.

DOORS.

The front entrance and inside vestibule doors are each to be made the style shown on elevation; the outside doors to be paneled and the inside doors to have glass in the upper panels; each made in two thicknesses of $1\frac{1}{8}$ inches, glued and screwed together, and moulded with raised and sunk mouldings on both sides; each to be hinged with cast

iron imitation bronze, achom pattern, loose joint butts, and trimmed with first quality of mortice, lock and latch with three tumblers and steel keys; to be two knobs to each door 2½ inches in diameter, and the necessary trimmings; all of bronze metal. The outside door to have a night latch of Sargent & Co.'s make, with ½ dozen keys and silver plated trimmings. There is to be a bronze chain bolt on the inside of outside doors, and bottom and top bolts on the inside of each pair of doors, with wrought iron face and bronze knobs to each.

The side-lights, head-lights, frames and casings to each opening are to be made as shown on the working drawings of clear pine.

The four outside doors to wings are each to be made 2 inches thick, four paneled and moulded, and the upper panels to be glaized with glass. The outside kitchen door to be the same thickness without glass in the upper panels, and each door to be hinged with three loose joint butts and trimmed with first quality of three tumbler lo ks and latches, with silver plated trimmings, white knobs and steel keys, and inside mortice bolts.

Each of the above doors are to have head-lights and transoms, and the frame made the same height as windows; frames to be of 2 inch pine plank, moulded; head-lights to be hinged at top and trimmed with bronzed rod fastener to hold them open or closed.

INSIDE DOORS.

Frames for all inside doors are to be made 1⅝ inches thick and the same height as windows in each story, and to have moulded transoms, and each rebatted for doors and head-light, made of clear pine, and to be wood blocks furnished and built into walls to receive the screws from hinges, made square heads for all single doors, and segment heads for the four double doors on each floor.

All inside doors are to be made of clear seasoned white pine, framed together and glued and pinned, 1⅜ inches thick, four paneled; to be 8 feet 4 inches high on the first story, and 7 feet 6 inches on the second and third and

fourth floors of center building; each door is to be hinged with three loose joint cast iron butts and trimmed with bronze knobs and Japan trimmings, (except for center building and chapel, which are to be white knobs and silver plated trimmings) and first quality of three-tumbler mortice locks and steel keys. The four double doors on each of the three floors are to have plain ground glass in the upper panels, and hinged and trimmed complete same as single doors, and to have bottom and top bolts with bronze knobs.

The doors for the two principal rooms and hall on first floor and hall doors are to be raised moulded on both sides, and the balance of the doors for the entire building are to have ogee moulding stuck on the stiles and rails, thus: (see original); panel piece to be $\frac{5}{8}$ inch thick, glued to stiles.

Sash for each head-light to be $1\frac{3}{4}$ inches thick, ovolo moulded, hinged with butts and trimmed with the bronzed rod fastener to hold the same open or closed.

The outside door to the boiler house is to be made double, $1\frac{3}{4}$ inches thick, paneled beveled edge, and boarded on the inside with $\frac{7}{8}$ inch planed and matched beaded stuff, setewed on, and hinged and trimmed the same as specified for balance of outside doors in main building.

Cellar doors, twenty-three in number, are each to be made $1\frac{3}{4}$ inches thick, four paneled, with glass in the upper panels, and beveled edge, hinged with loose joint butts, and trimmed with bronze knobs, with Japan trimmings, mortice locks with steel keys, and the outside doors to have heavy cast iron bolts. Frame for said doors all to be 2 inches thick, planed and rebatted.

CASINGS.

The casings for all doors and windows above the basement, and except the boiler house and the two main rooms and hall in first story of center building and the chapel; are to be 6 inches wide, with a $1\frac{1}{8} \times 2$ inch band on face, casing moulded with a quarter round, thus: (see original.)

Windows are all to have moulded stools and aprons.

Base for all rooms and halls, except as excepted above, is to be 8 inches wide, moulded, thus : (see original.) and to be grounds put up throughout to receive the same. The boiler room is not to be finished with casings or base.

The casings for the two rooms and main hall in center building and chapel are to be 8 inches wide, moulded thus: (see original.) Base for same to be 11 inches wide, 1⅛ in. thick, moulded thus : (see original) and put up to grounds.

All of the wood work for casings, base, and the balance of the inside finish is to be of clear, seasoned white pine.

WAINSCOTING.

The following rooms are to be wainscoted with narrow, clear, seasoned, planed, matched and beaded pine, not to exceed 5 inches wide, put up vertical and capped with a moulding. The kitchen, laundry, work rooms and school rooms, to be wainscoted 4 feet high, and the bath rooms, wash rooms and water closets 5 feet high. To be a chalk shelf for each school room.

PANTRIES.

Pantries and Store-rooms are each to be shelved on three sides, with 6 shelves in height, of the required width, with standards 1⅛ inches thick, and cleats nailed on each side to support shelves. To be a wide shelf on the three sides of each room, 20 inches wide, placed 3 feet from floor, and enclosed below same to floor with 1⅛ inch paneled doors, each hinged and trimmed with spring bolts. To be a case of eight drawers formed under wide shelf in each pantry and store-room, and trimmed with flush handles of galvanized iron. In each pantry, and above the wide shelf, one section of the shelving is to be enclosed with a pair of 1⅛ inch paneled doors, hinged and trimmed with spring bolts and locks.

CLOSETS.

Closets on each floor are to be shelved with three shelves each, and cleats put up all around, beaded on the edge and furnished with galvanized iron double clothes hooks, placed 8 inches from centers, and screwed on.

ROSTRUMS

For each school room and chapel are to be made the size and height shown, floored over and finished on the edge with nosing and cove, and the face of the rostrum in chapel to be finished with matched and beaded stuff and base board.

BATH ROOMS, &c.

The partitions that enclose the bath rooms and water closets on each floor are to be made of clear, seasoned white pine, planed, matched and beaded, not to exceed 4 inches wide, put up vertical and capped with a moulding, (see original), and to have have a quarter round moulding on each side of partition to the floor, said partitions are to be 6 feet high to top of cap.

To be $1\frac{1}{8}$ inch paneled doors to each apartment, made the same height as partition, and kept up 5 inches from floor, each hinged and trimmed with brown knob latches and bolt on the inside.

Bath Tubs are each to be finished on the top with black walnut rim, moulded on the edge and enclosed below same with pine, planed, matched and beaded, clear stuff.

Water Closets are each to be enclosed same as bath tubs from seat to floor. Seats for each closet are to be made of black walnut, without covers, and each seat to be hinged.

The square wash basins in first story bath room is to be ceiled up from floor to underside of marble slab with matched and beaded clear pine, and a battened door formed in same, hinged and trimmed complete. Water Closet in said bath room to have a black walnut seat and cover.

The contractor is to do the necessary wood work connected with the plumbers' work, such as cutting ways for all pipes, running boards for the same, and casing up soil and water pipes when required, and to do the necessary cutting in floors and partitions where directed for the steam pipes.

Wash Basins, where indicated on the plans, are to have a wood shelf formed to suit the slab, and sawed out to fit

the bowls, and supported on cast iron brackets which are to be firmly screwed to wall and wood shelf.

Slop Sinks are not to be included in this specification, but are to be supported on wood shelf and iron brackets same as wash basins.

Sinks for the Kitchen are to be supported on wood shelves and brackets same as above specified for wash basins.

The encasing of all water pipes, the enclosing of all of each water closet, and the floor boards over each water pipe, are to be put up with screws.

DEAFENING.

The second and third floors and the fourth floor of center building are to be prepared for deafening by cutting in between the joist a rough 1 inch pine floor free from open knots, laid close joints and placed below the top of joist $1\frac{1}{2}$ inches to top of same to receive the mortar. To be a $1\frac{1}{2}$x2 inch strip nailed on each side of joist down $2\frac{1}{4}$ inches below the top of joist to receive the rough boards.

STAIRS.

There are to be five flights of inside cellar stairs each, made the width shown; strings to be of 2 inch pine planed; treads of $1\frac{1}{2}$ inch oak, finished with nosing and cove and returns, risers 7-8 inches thick; all to be blocked, glued, wedged and screwed together in a strong manner; to be a pine planed protection slat railing and square post on side of each flight of stairs.

There are to be eight (8) flights of stairs from first story to third story, and one flight from third story to fourth floor, each made open stairs; the first mentioned to be with level platform stairs, and the last mentioned to have windows at top; carriages for the above stairs are to be 2x12 inches pine, three to each flight, securely anchored to walls and braced with brackets, and furred on the underside for plastering on; strings to be $1\frac{3}{8}$ inches rebatted and beaded, risers $1\frac{1}{8}$ inches, treads $1\frac{3}{8}$ inches, finished with nosings, cove and returns; treads ploughed for risers and

cover; all to be housed, blocked, wedged, glued and screwed together in a secure manner. Rails, newels and balusters are all to be made of white oak, thoroughly seasoned and of straight grain. Rails $4\frac{1}{4}$x$3\frac{1}{4}$ inches moulded, thus, (see original); newel posts 8 inches in diameter, with turned base and cap and octagon shaft; balusters 1 7-8 inches in diameter, with square base and turned base and necking, each dovetailed in treads and around landing.

There is to be a flight of plain pine enclosed stairs from fourth story of center building to scuttle on roof, made in a plain strong manner, and to be a floor around the landing of same on ceiling of fourth story, and a plain pine step ladder made to give access to roof.

PAINTING.

All of the inside and outside visible wood, iron and tin work (except floors) is to be painted with three coats of the first quality of lead and oil paint, made of such shades as directed hereafter. All wood work shall be well puttied up and sand-papered before the last coat is put on. The wood moulding at the top of brick cornice on exterior of the entire building, is to be painted three coats. All hard wood steps, stair railings, newels and balusters, hard wood finish on bath tubs and water closets, and the floors of kitchen, laundry and school rooms are to be oiled three coats. And the stair railings and finish to bath rooms are to be rubbed smooth.

There is to be a wood moulding $1\frac{1}{8}$ inches thick around each black board, moulded same form as band moulding for window and door casings.

At the completion of the building the contractor is to remove all old material and rubbish from the building and premises, and to leave the same in a clean condition, ready for occupancy.

FINALLY.

The contractor is to find and furnish all materials and labor of the first quality of their several kinds specified, and is to make a complete finish of the entire building in a thorough workmanlike manner, according to the true meaning and intent of these specifications and accompanying plans, and all things incident thereto, and to the satisfaction of the building committee and architect.

SPECIFICATIONS

Of the the work and materials required for heating by steam a three story brick building, to be built for the Board of managers of the Western House of Refuge, and to be known as the Rochester Female Reformatory; all to be done according to the following specifications and accompanying plans drawn by

CHAS. COOTS.

BOILERS.

The contractor is to furnish one wrought iron high pressure Boiler of Woodbury, Booth & Co.'s make, with 40 flues 12 feet long, 2½ inches in diameter, with cast iron head and wrought iron smoke flue to the smoke stack, with all the necessary appurtenances, and constructed on the same plan as the boiler now on the premises. The boiler now on the premises is to be fitted up complete with all the necessary cast iron head and wrought iron smoke pipe and the necessary appurtenances.

The new and old boilers are each to be set in brick on the most approved plan, in the position located on plan, and the contractor is to furnish materials and do all the labor for the same.

STEAM PIPES.

The iron pipes to conduct the steam through the entire building are to be of such size as the contractor may direct, to warrant the building to be heated as hereinafter described. Each pipe is to be run on the proper incline to boiler.

The pipes are to be so arranged that each boiler can be used separately or jointly.

There are to be shut off globe valves in each wing in each story and center building, so that each wing and centre building in each story can be heated independent of each other.

RADIATORS.

The following radiators are to be of the returnable vertical wrought iron flues finished with moulded cast iron bases and caps, of such number of flues as required to thoroughly heat the several departments.

The radiators in the two stories of center building, offices, dining-room and the chapel on third floor are to be finished with bronze, and the balance of radiators are to be finished black in color, trimmed with bronze.

FIRST FLOOR.

Four radiators on first floor, center building, one in each room and two in halls.

Four radiators in connecting wings, (two in each wing.)

One radiator in the officer's dining-room.

Two radiators, (one in each) wash room.

One radiator in bath room connected with office in center building.

SECOND STORY.

Four radiators on second floor of center building, one in each room and two in halls.

Ten radiators in halls of connecting wings; five in each hall.

Two radiators, one in each bath room.

THIRD FLOOR.

One	radiator	in	halls.
Two	"	"	Bed rooms.
Three	"	"	Chapel.
Two	"	"	Water closets.
Ten	"	"	Connecting halls.
Four	"	"	Hospitals.
Two	"	"	East and west halls.

FOURTH FLOOR.

One radiator in hall.

Four radiators, one in each bed room.

The above radiators are to be of such size as to warrant the heating of each apartment as specified hereafter.

COILS.

Four coils in dining rooms, (two in each room.)
Four coils in school rooms, (two in each room.)
Eight coils in work rooms, (four in each room.)

The above coils are to be of such size as to warrant the heating of each apartment as specified hereafter. Each coil is to be colored black with such quality of material as will best withstand the heat.

FINAL

The contractor is to run all iron steam pipes, of such size as required for the intent of this specification. Also to nominate the size and locate each radiator and coil to fulfill the requirement as hereinafter specified.

CONDITIONS.

The new and old boilers are to be considered as adequate for heating the entire building, and the contractor is to warrant all pipes to be of sufficient size; that radiators shall be of sufficient size; and the coils as before specified, to heat the entire building, in the rooms and halls where there are coils and radiators to 72° in zero weather.

The contractor is to find and furnish all labor and materials of the first quality of their several kinds specified, and is to complete the entire work to the satisfaction of the building committee and architect.

GAS PIPES.

The contractor is to furnish and run the necessary size gas pipes as required by the Rochester Gas Light Co., to supply the following rooms, halls, &c.

BASEMENT.

To be 8 (eight) side bracket lights in basement.

There are to be three bracket lights in the boiler house.

In each of the rooms and halls on first floor there are to be drop and side lights as located on the plan. And in the second and third stories, and the fourth story of center building; there are to be drop and side lights to all the principal rooms and halls as indicated on the plans.

SPECIFICATIONS

Of the work and materials required for the Plumbing to be done in a three story brick building, to be known as the "Rochester Female Reformatory," to be erected on Backus Avenue, for the Board of Managers of the Western House of Refuge, according to the accompanying plans drawn by CHARLES COOTS, Architect.

WATER CLOSETS.

There are to be twenty-two water closets for the entire building, each located where shown on the several plans; each closet to be of the cast iron hopper pattern, enameled on the inside and furnished with double action spring brass valves; supply pipes to be of galvanized iron $\frac{3}{4}$ inches in diameter; soil pipes are to be of cast iron 6 inches in diameter from each wash room, running down to the drains in the basement, and securely ironed up every 4 feet in height, and each joint to be thoroughly leaded air tight. Traps for each water closet are to be of cast iron 5 inches in diameter, and to have trap screws to each trap placed at the top of each trap.

There is to be one pan water closet on first floor, with wedgewood ware bowl, with silver plated plate and pull, supplied through $\frac{1}{2}$ inch galvanized iron pipes; soil pipe and trap for same to be in each particular the same as specified for hopper water closets.

BATH TUBS.

To furnish and fit up twelve (12) copper planished 5 foot bath tubs with overflow pipes, each supplied with cold water through $\frac{3}{4}$ inch galvanized iron pipes, and $\frac{5}{8}$ inch finished brass bibb cocks, and brass plugs and chain and

chain stays. Waste pipe to be of galvanized iron 1¼ inch, with lead trap, and where possible to connect with soil pipes from water closets.

SLOP SINKS.

There are to be 6 cast iron slop sinks, each about 20x36 inches, supplied through ¾ inch galvanized iron pipe and ⅝ inch brass finished bibb cocks. Waste pipe 1¼ inch galvanized iron, with lead trap and trap screw, and to enter soil pipes of water closet where possible, or drain in cellar; to be a strainer over the mouth of each waste pipe.

BOILER IN KITCHEN.

To furnish and put up one round top copper 40 gallon boiler of the Brooklyn pressure with cast iron standard and sediment cock, connected to range through a wrought iron water back and brass couplings. Circulating pipes to be ¾ inch galvanized iron, and to extend to third story and return to boiler, and to have a branch with ⅝ inch finished brass bibb cock on each floor, located in center hall, and to have an iron sink under cock with waste pipe to basement. To line a tank 3x4 feet with 4 lb. sheet lead, and to supply said tank with water through ¾ inch galvanized iron pipe, and to have copper ball cock, and the boiler to be supplied from ¾ inch galvanized iron pipe. The boiler is to have a ¾ inch galvanized iron steam pipe to tank.

WASH BASINS.

To furnish and fit up one hundred and nineteen (119) wash basins, each of the size and form shown; the single bowls are to be 12 inches, and those for wash rooms and bath rooms to be 14 inches in diameter, of wedgewood ware with patent overflow. Slabs and backs are to be of marble ⅞ inches thick for the single basins, and 1⅛ inches for the large bowls in wash and bath rooms, each basin to be supplied through ½ inch galvanized iron pipe, and No. 3 brass finished compression cocks. Waste pipe of galvanized iron 1¼ inches in diameter, with lead traps and trap screws, and to enter drains in cellar.

KITCHEN SINK.

The wood kitchen sink is to be supplied with hot and cold water through $\frac{3}{4}$ inch galvanized iron pipe and $\frac{5}{8}$ inch brass finished bibb cocks. Waste pipe to be $2\frac{1}{2}$ inch galvanized iron pipe and lead trap with brass trap, screw and strainer, and to enter drain in cellar. To furnish and connect with drain two large cast iron slop sinks and traps, one for kitchen and one for boiler house.

SUPPLY PIPES.

The supply pipe from the water mains to the inside of the basement wall will be brought in by the committee, and the inside main supply pipes to be of galvanized iron $1\frac{1}{2}$ inches in diameter, with shut off cocks in same for each story. Supply pipe for tank is to be a separate pipe.

The Contractor is to furnish all material of the first quality of their several kinds specified, and to perform all labor in a workmanlike manner, and to warrant the work to be done in the best manner, and to remain in good working order for one year from the time the building is finished and occupied, breakage by frost excepted.

SPECIFICATIONS

of the masons work and materials required for the erection and completion of a brick building three stories high above the basement, to be known as the Rochester Female Reformatory, to be erected on Backus avenue, in the city of Rochester, for the Board of Managers of the Western House of Refuge, according to the accompanying plans, elevations and sections drawn and to be drawn by

CHAS. COOTS,
Architect, Rochester, N. Y.

Dimension and style of building to be made as shown on the several plans drawn to a scale of 8 feet per inch. All heights and dimensions are to be made as per figures on each drawing in place of following the scale.

HEIGHTS.

Basement under the entire building to be 9½ feet high in the clear when finished.

First story, 13 feet high between joist.

Second story, 12 feet high between joist.

Third story, 12 feet high between joist.

Fourth story, 15 feet high between joist in the hall and tower, and 12 feet high for the remaining rooms and halls.

The height of story for the boiler house and the height of walls is to be as shown on the elevation and section.

EXCAVATION.

To excavate in the earth under the entire building, except engine and boiler house, for a basement, to finish 9½ feet high in the clear; said excavation will be about 3 feet deep below the grade line, and 4 feet deep below grade line for all walls and their footings, and to be in width one

foot wider then the width of stone walls above. Excavation for all outside steps and their foundations are to go 4 feet below grade line.

Excavation for boiler and engine house to go 6 feet below grade line, and the excavation for the large chimney to go 8 feet deep below grade line.

All excavations for walls shall be made sufficient in width so that the walls can be laid to lines on both sides.

The earth from said excavations is to be equally distributed on the premises and about the building, as directed by the Building Committee, and the balance of the earth not required shall be carted away.

The bottom of all trenches for stone walls shall be pounded down solid before the footing course is laid.

STONE WALLS.

All of the walls colored blue on the basement plan are to be built of large-size, bulls-head or river quarry stone, well bedded and bound together, and all joints and crevices to be chincked full with broken stone chips, laid to lines on both sides, solid, in fresh burnt quick lime and clean, sharp sand martar, and thoroughly slushed up; all angles and corners are to be carried up plumb and true; each wall is to be carried up to the top of floor joist.

The jambs to all windows are to be splayed and the inside of all walls in basement are to be flush pointed.

To be brick arches the full thickness of stone wall turned over all doors in basement.

Footings under each stone wall are to be built 12 inches high and 6 inches wider on each side than the width of wall, built of large, flat quarry stone, not less then 4 inches thick, and one half to be the full width of footings, laid to lines on both sides, solid in water lime mortar, made of fresh Akron water lime and clean sharp sand.

The foundations for the boiler house, chimney, oven, and all outside steps are to be built up to grade line, and the outside step foundations, also the foundations to receive the steps from first floor, all to be coped with Medina flag stone 3 inches thick, and the full width of walls axdressed on top and both edges.

All stone walls are to be built the thickness shown on basement plan.

WALL FACING.

The face of the stone walls that show above the grade line on the front and two sides of the entire building is to be laid up in coursed-work, with red Albion or Medina stone, point pressed, with square beds and joints and flushed up with colored mortar and tuck pointed.

The stone work above the grade line is to be laid up with either Albion or Medina stone free from red or white spots.

The rear wall is to be laid up with the same kind of stone in block work and hammer-dressed, to be flushed up with colored mortar and tuck pointed.

Ventilating flues and chimneys in stone walls are to start 3 feet below first floor joist.

Steps to all outside doors in basement and to the outside door in boiler room are to be of Medina stone of the number and size shown on the bill of cut stone, and built into wall at the time walls are built and laid solid in mortar.

CUT STONE IN STONE WALLS.

There are to be cut stone caps and sills to all windows and doors in the outside basement stone walls, and a stone water table on top of all stone outside walls for main building and boiler house, with door sills formed in same for the doors in brick walls above, all of the white Medina sand stone, cut in number, size and form shown on the bill of cut stone and set in walls, level and true, solid in mortar.

BRICK PIERS.

There are to be four brick piers in the basement, each made 20 x 32 inches, built of hard weather brick, laid up solid in mortar; there are to be three Medina stone binders to each pier, made 20 x 32 inches each, and 5 inches thick, dressed on top and bottom, one placed at bottom, one in center, in height, and one at top, each pier to be carried up to the under side of beam to receive the cast iron column.

Cellar bottom is to be leveled off even and true with the natural soil, to the height required for the finish of basement.

The floor for the boiler house, (except where covered by boilers), is to be filled in to the depth of 6 inches with broken stone chips, and leveled upon same with gravel and sand, and paved with hard brick laid level and true, and the joints filled with water-lime and cement.

Stone foundation under the boilers is to be built the size shown, of large size stone, laid up solid in water-lime mortar, to start 3 feet below excavation in boiler room, and built up to the top of brick flooring.

BRICK WORK.

All walls colored red on the three floor plans of the main building, and the fourth floor plan of the center building, including all inside walls, and the division walls to form dormitories, also the outside and inside walls of boiler house, and all chimneys, are to be built of brick, of the thickness described hereafter, and marked on the plans, and of the height shown on elevations and sections, laid up plumb and true, with selected hard weather brick for the outside course, laid solid in fresh burnt quick lime, and clean sharp sand mortar, thoroughly slushed up each course and well bedded, and bound together with headers every seventh course.

The outside surface course of all walls on the front and two sides of the main building is to be laid up plumb bond and rubbed out smooth for tucking on, and the balance of outside walls to be laid up struck joints.

The thickness of the two wing walls between the antaes will be 12 inches and 20 inches through the antaes and freize. The walls for projections on wings on the first story are to be 20 ins. and the same thickness through the antaes and freize above. The tower walls on inside and outside are to be 16 inches thick and full height. The front and part of the side walls that form sitting room of centre building are to be 16 inches thick and the inside walls for the same are to be 12 inches thick the

full height to roof. Kitchen wing of centre building are to be 12 inches thick the full height and 20 inches through antaes and freize. Inside walls that form halls and divisions between the main rooms are to be 12 inches thick the full height, and to extend to top of roof joist. The walls on one side of the four side stair-case halls are to be 8 inches thick the full height to top of third floor joist. The walls between work rooms and school rooms in each wing are to be 12 inches thick and one story high, and the walls that form hall in each wing over school rooms are to be 8 inches thick for two stories in height to top of attic joist. Inside walls in centre building are to be 12 inches thick the full height.

The four brick walls in cellar—one on each side entrance stair-case hall—are to be 12 inches thick in the basement.

The cross partition walls that form dormitories in each wing are to be 4 inches thick from the top of second floor joist to the top of attic joist.

Walls for the boiler house are to be 12 inches thick the full height.

Walls for large chimney stack are to be 12 inches thick the full height and to have a flue formed on the inside, as shown with a 4 inch brick wall.

Oven walls are to be 12 inches thich with 8 inch walls to form flues, arches and fire-place, and the inside to be lined with fire brick and laid up solid in fire clay cement. The contractor is to furnish the necessary iron fire grates, cast iron doors to oven, grate and ash pit; also for the cleaning out openings, and to furnish the necessary dampers of iron of such pattern as required, and to construct the oven complete on the most approved plan as directed by the committee.

Cornices and dentals, and gables and the dormer windows on wing are each to be formed with brick laid up in the form shown on the plans and elevations. Walls back of projections to be 12 inches, 20 inches through dentals, and the cornice to project 10 inches from the face of dentals.

Chimney and Ventilating Flues.

The chimney for boiler house is to be built the size shown on plans in the manner described before, carried up above the roof of the kitchen wing 26 feet and toped out with dental cornice, as shown, and coped with Medina stone cap the size of shaft and 6 inches thick, with hole cut in same the size of smoke flue. There is to be a cast iron man-hole and frame at bottom of flue 20x36 inches inside, size of door built into wall and firmly anchored to walls.

Flues for kitchen and laundry above same are each to be built the size shown and to open into vacuum flue around boiler flue at the ceiling of second story, and the vacuum flue to enter boiler flue at the roof line of the kitchen.

The chimney flues in the outside walls of wing and the inside walls of centre building, where marked on the plans, are each to be built the size shown and carried up above roof and toped out with hard brick in the form shown on the several elevations. Chimney tops are to be laid up with hard brick laid solid in mortar and the joints to be laid plumb bond and rubbed out smooth.

There are to be stove-pipe thimbles and tin covers in each flue in each story with tin covers of such size as directed hereafter, located where directed, and a thimble and cover at the bottom of each flue in cellar.

The top of each chimney and ventilating chimney top is to be covered with a Medina stone 5 inches thick, with hole cut in same equal to the size of flue, each ax-dressed and laid solid in mortar.

The chimney in the office in centre building is to be constructed for a grate, as shown, and to have an arch turned for hearth-stone in first and second stories.

Ventilating flues for each room in each story are to be built the size shown on plans, to start on top of stone walls and carried up plumb and true the full height; those in the outside walls that do not open into chimney flues are to open into attic, and those in the inside brick walls are to be carried up above roof 3 feet and finished with a plain brick chimney top.

All smoke and ventilating flues are to be carried up plumb and true the full height and plastered smooth, and each flue is to be cleaned out as soon as walls are up.

To furnish and put in the following number and size cast iron fan registers of the black enameled finish, one half of which are to be placed at the floor and one half near the ceiling of the ventilating flues, and those near the ceiling to be arranged for cords and tassels.

24 Ventilators 10x12 inches for work rooms.
8 " 10x12 " " school "
16 " 10x12 " " dining "
8 Ventilators 6x8 inches, for wash rooms.
2 " 6x8 " " O. dining rooms.

SECOND FLOOR.

108 Ventilators, 6x8 inches, for dormitories.
4 " 10x12 " " chambers.
2 " 14x20 " " laundry.

THIRD FLOOR.

8 Ventilators, 10x12 inches, for hospital.
92 " 6x8 " " dormitories.
4 " 10x12 " " chambers.
4 " 10x12 " " chapel.

All of the above ventilators are to be located in such flues and at such heights as directed by the committee and architect.

DRAINS.

The contractor is to furnish and lay the following sewer tiles, and their laterals, of such size as directed hereafter, each made of vitrified baked clay, together with all the necessary, bends, curves, branches and connections.

The center sewer is to be 30 inches in diameter, with collars at each intersection; to start at the south end of south wing, and extend to the outside north wall of north wing, and from thence to the west line fence of Backus Avenue; to start one foot below the cellar bottom to top

of sewer at starting point in south wing at south end, and to run on an incline of $\frac{3}{4}$ inches to each length on a true grade.

Lateral drains for all soil pipes are to be 9 inches in diameter; to start one foot below cellar bottom, and to run on a true grade to sewer, with as much fall as the sewer will admit. Lateral drains for the boiler house and kitchen are to be of 9 inch tile and laid with as much fall as the main sewer will admit.

Lateral drains for each conductor pipe to be 9 inches in diameter and laid same as above specified, and the lateral drains for each wash basin, slop sinks and cess pools are to be 6 inches in diameter, and laid on a true grade, connected with main sewer and laid as before specified for 9 inch drains.

All connections, branches, curves, traps and curve raisings necessary to bring each inlet to cellar bottom, shall be made perfect in every respect and laid as shown on the basement plan.

There is to be a stench trap in the 9 inch drain that runs to the boiler house, located inside of the building, where directed hereafter, and a 9 inch branch from said drain to the vacuum of large chimney shaft to ventilate the drains.

All joints and connections for each of the several drains and sewer, all to be cemented water tight with water lime cement.

To excavate trenches for said sewer and drains of the required depth and dimensions, and to lay the said sewer and tile on a true and even grade. Each trench is to be filled up around the sewer and drains with broken stone chips up level with the top of sewer and drain pipes, and covered over top of each sewer and drain pipe trench with earth pounded down solid and filled in even with celler bottom or grade of lot.

IRON COLUMNS, BEAMS, &C.

There are to be four (4) cast iron columns on the first floor, two in each wing to support the iron beams over school rooms, each made 7 inches in diameter at the base

and 5 ins. at the top, with round fluted shafts and moulded caps and bases, and square plinths and caps each 11 ins. square and 1½ ins. thick, each column to be 13 ft. 5 ins. long and to extend down in between first floor joist to the underside of same.

Two (2) columns on the second floor, in laundry, each made the same diameter as specified above, with square caps and bases and about 12 ft. 2 ins. long. Each of the above columns are to weigh not less than 700 lbs. each and are to be cast in a true and perfect manner, and the bottom and top plates for each column are to be turned off true in a lathe.

BEAMS.

The following beams are to be of rolled wrought iron and placed in the building in the position shown on the plans :

Four beams about 31 ft. long, 9 inch heavy weight, to be placed in pairs, to form girders, as shown on margin, (see original) bolted together at each end and twice between end bolts and furnished with separators, and anchored to walls at each end with round wrought T irons, extending each way from centre 12 ins.

12 wrought iron rolled 6 inch, heavy beams, about 21 ft. long.

30 wrought iron rolled, 6 inch, heavy beams, about 16 ft. long, and 4 wrought iron rolled, 6 inch, heavy beams, about 18 ft. long, each to form separate girder, and to be drilled at each end and furnished with round wrought iron anchor 12 ins. long, formed thus (see original) and built firmly into walls at both ends.

The end of each girder and beam is to rest on a Medina stone not less than 5 ins. thick and 12 ins. long for the small beams and 20 ins. for the large girders.

All brick used for the entire building shall be thoroughly soaked in water before being laid in the wall.

There are to be brick arches turned over all openings in brick walls 8 ins. high and the full thickness of walls.

The inside face of the walls for boiler house are to be laid up plumb and true and rubbed out smooth for painting on.

DEAFENING.

The second and the third floors are to be deafened by spreading in between the joist 1¼ inch coat of mortar, spread on even and true, flush with the top of joist. The fourth floor of centre building is to be deafened in the same manner.

LATHING.

All the outside brick walls, ceiling and wood partitions in the three stories of the entire building and the fourth story of the centre building, are to be lathed with sawed pine, clear, seasoned lath, and firmly nailed in each joist or furring, placed a proper distance apart and broke joints every seventh lath. The ceiling of boiler house is to be lathed same as above.

PLASTERING.

All of the halls, rooms, closets and stairways in the three stories of the entire building and the fourth story of the centre building are to be plastered with two-coat work, floated down smooth and all angles and corners shall be made straight and true.

The four front rooms in centre building, and the hall in two stories of same, and all ceilings for the entire building shall be plastered two coats and finished with a white hard finish, and the balance of the side walls to be finished with a lake sand finish, left smooth and true under the float. The ceiling of the boiler house is to be plastered two heavy coats of brown mortar, floated down smooth.

NICHES.

There are to be niches and recesses left in the stone and brick walls for soil pipes, steam and conductor pipes, where indicated on the plans and where directed hereafter.

The contractor is to set and build in all wooden blocks, lintels and centres where required, and furnished by the carpenter.

BLACK BOARDS.

There is to be a black board formed in each school room back of rostum and the full length of the end of the room, each made 3½ ft. wide, formed by plastering with Rockaway sand and marble dust and lamp black, and covering the surface over with liquid slate in two coats.

FINALLY.

The contractor is to find and furnish all labor and materials of the first quality of their several kinds specified and to make a complete finish of the entire building in a first-class workmanlike manner, according to the true meaning and intent of these plans and specifications, and all things incidental thereto, and to the satisfaction and approval of the Building Committee and the Architect.