

COLLINGWOOD GENERAL AND MARINE HOSPITAL.

By the munificence of Mrs. Lett, the Trustees have been enabled to erect a large addition to the Collingwood General and Marine Hospital. The new wing will contain upwards of twenty rooms, including wards, corridors, operating room, mortuary chamber, lavatories and offices, and will be fitted with a fair supply of modern hospital appliances.

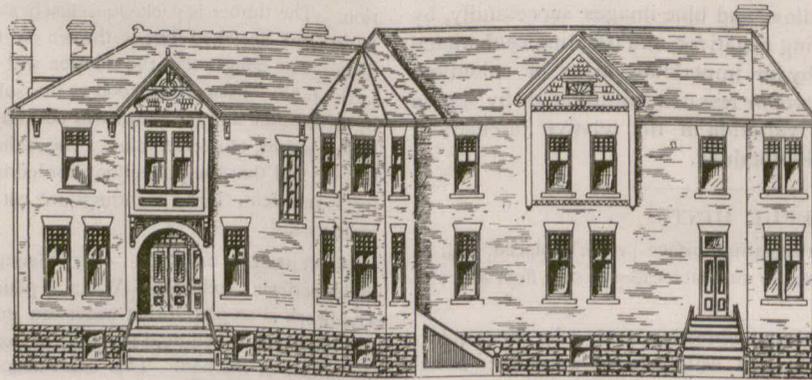
The building has a frontage of eighty, and an average depth of forty feet; it is constructed of cream colored bricks on a rubble stone foundation, and is three stories high, including basement.

The whole building throughout is to be heated by steam and is to be fitted up for electric light, bells, etc. The kitchen, dining room, laundry, furnace room, buttry, vegetable cellar, and fuel rooms are in the basement, which is well lighted, airy and dry. All the wards, operating room and convalescents' parlors, are well ventilated.

The illustration shown herewith presents a front view of the building with the new wing added. When completed, this hospital will be one of the best equipped in the Dominion, outside the large cities, and in its own way will do an immense service to suffering humanity in this part of the country. The management of the institution is in the hands of a number of charitably disposed ladies of the town, to whom much credit is due for the efficient manner in which the hospital work in the past has been pursued. The generous gift of several thousands of dollars by Mrs. Lett, one of the most assiduous workers in behalf of the hospital, will extend the sphere of usefulness of the institution, and enable the management to still further diffuse its blessings.

The new building will be ready to receive patients sometime this month (August), when an efficient staff of trained and experienced nurses will be retained for service if required.

The contractor for the building is Mr. John Peterman; the designs for the new work were prepared by Fred. T. Hodgson, architect, who is also supervising the work.



GENERAL AND MARINE HOSPITAL, COLLINGWOOD, ONT.

MOVING A STONE DWELLING.

A RATHER interesting piece of work in the way of moving a dwelling house was recently completed in the city of Brooklyn, N. Y., where an old stone mansion covering an area of 58 x 68 feet in size, and weighing about 1,300 tons, was carried a distance of about 50 feet and placed upon new foundations. The work was of such a nature, says Carpentry and Building, that many were skeptical as to its successful performance, but such progress has been made in late years in the methods of moving buildings that the structure was transferred without the development of any visible cracks in its walls. One of the difficulties encountered in the execution of this piece of work was the lack of solid side walls to the house, these being composed of rock faced ashlar with a backing of broken stone. There were also window openings on all four sides which had to be taken into consideration in the moving.

The first step was the cutting of a large number of openings in the stone foundation walls so as to admit the timbers which were to support the building and carry it to its destination. The blocking used was of spruce and yellow pine measuring 10 x 10 and 12 x 12 in cross section and cut in lengths of four feet each. This was arranged in position under the building, and by means of hydraulic jacks and screws the structure was lifted from its foundations. Immediately under the first tier of floor beams were placed 12 x 12 inch timbers, the ends of which pierced the front and rear walls. Under this tier of timber and at right angles to it was another tier of 14 x 14 inch pieces which pierced the two side walls, these two tiers of timber being the ones having an immediate bearing on the walls of the house. Under these was placed a tier of 14 x 14 inch timber to

serve as sliding ways, these moving on 14 x 14 inch pieces placed upon the ground and extending in the direction of the new site of the building. These were known as "ground ways" or skids, and between them and the sliding ways lubricants were placed for the purpose of reducing friction to a minimum. When this had been done 10 screws were placed in position along the side of the house, one end of each screw abutting against a piece of heavy timber secured to the ground ways by means of heavy chains, while the opposite end of the screw worked in a hollow log called a "pump," which pressed against the timbers upon which the building rested. In moving the structure two men took position at each screw and upon a given signal by the foreman the screws were given a quarter turn. This was continued until the screws had been run out practically to the full length, when the chained pieces were moved forward and again made fast, the operation being continued until the building had been forced forward 20 feet. The bearings were then changed and the structure moved in a direction at right angles to the first for a distance of 30 feet. Such care was taken in the moving that one day was required for the 20 feet and nearly two days for the 30 feet. When the building had reached its destination 100 screws and 10 hydraulic jacks were placed under the timbers and the house raised to an elevation to correspond with its new foundations. The latter were left with openings to correspond with the position of the projecting timbers under the building, so that when it was lowered in place the blocking could be removed and the timbers easily withdrawn.

The work was done by B. C. Miller & Son, of Brooklyn, N. Y., who, our readers will recall, successfully moved the brick railroad station at Mott Haven, a description of which appeared in these columns some months ago. The scheme there employed was followed in all its essential features in the moving of the Brooklyn house.

Not far from this stone house was a frame building which was moved by the same concern in nearly a half circle, so as to change the front

around and make it face on another street, running parallel with its original position. The work was done by laying the "ground ways" in such a way as to describe a semi-circle and employing capstans operated by horses instead of jack screws. The method of timbering was practically the same as in connection with the stone house, except that less material was required.

PRESERVATION OF WOOD FROM DECAY.

A SPECIAL committee of the American Society of Civil Engineers, detailed to investigate the subject of the preservation of wood from decay, has spent four years in practical experiment and observation, besides inquiry into the experiments and conclusions of others extending over a period of more than thirty years. Their investigations included all the established methods of preservation, such as treatment with creosote, zinc salts, etc., and also with the products of petroleum. The latter have been claimed by many to be strong in preserving properties; and as they are very cheap, the substantiation of these claims was of special importance. Below are given some extracts from the report of this special committee, showing the conclusions deduced of the comparative value of petroleum products, and the best of the established methods:—

"Experiment proved that oil of tar, or creosote, was perhaps the most powerful coagulator of the albumen (of wood), while it, at the same time, furnished a waterproof covering for the fibre, and its anti-septic properties prevented putrefaction."

"There seems to be no question that when creosoting is well done it is effective."

"It thus appears that there is no process of wood preserving the efficacy of which, when well done, is better established than creosoting."

"The conclusion drawn was that crude petroleum, by excluding moisture, would prove a preservative as long as it continually saturated the wood; but that if merely injected once for all, its volatile nature would result in its evaporating and leaving the timber unprotected."