



ILLUSTRATIONS.

PORTRAIT OF THE LATE W. G. STORM, R. C. A.

BANK OF MONTREAL, WEST END BRANCH, MONTREAL—TAYLOR & GORDON, ARCHITECTS, MONTREAL.

PROPOSED HOUSE, VANCOUVER, B. C., FOR MR. O. G. EVAN THOMAS, ESQ.—FRIPP AND WILLS, ARCHITECTS, VANCOUVER.

This picturesque country house is to be a frame-built structure, covered with shingles, and to have leaded light windows in large square. The roof timbers will be stained dark to match teak; the mantelpieces, and internal finish generally, to be made of teak, imported from the east and made there. The cost will be about six thousand dollars; but as houses are usually finished in Vancouver, the cost would, perhaps, be only some five thousand dollars, which seems very cheap for a house of this size.

This is one of the cases in which the plan arrangement is very much due to the client, the particular arrangement here shown having been laid out by Mr. Thomas's own suggestion in every particular. The large gallery hall, with its encircling gallery and lookout recess over the porch, will be a very pleasant feature if in bad weather it is kept warm and free from draught.

The description and illustration are reproduced from a recent number of the *British Architect*.

PRESBYTERIAN CHURCH COMPETITION—DESIGN BY "JOHN NOX" (MR. A. E. WELLS), TORONTO, AWARDED FIRST POSITION.

The instructions to competitors for the class in which this design was submitted called for a country church to seat from 150 to 200 persons, with one room to be used as vestry and library; and the building to be heated with stoves.

This is a design for a wooden building with a stone base to the height of the window sills. Externally the walls and roof are intended to be covered with shingles and left to be stained by rain and weather. Internally it is purposed to treat the roof entirely in wood and the walls to the height of the window sills with a mottled wood dado; the remainder of the wall space to be plastered, the brown plaster to be straightened and the walls finished without the usual white coat. All internal woodwork not exposed to handling is intended to be oiled merely, and left to turn richer in color with age. It is estimated that this design would cost in execution from \$2,500 to \$3,000.

TORONTO BUILDERS' EXCHANGE.

On July 27th, the members of the Exchange, together with their friends, about 325 in all, took a trip to Olcott, N. Y., on the "Carmona," leaving Geddes' wharf at 8 a. m., and returning at 9:30 p. m. The weather was all that could be wished for. The excursionists, for the most part, appeared to better appreciate quiet discussion in the shady park, than amusement requiring much exertion, as the temperature was "away up." The return passage was made very pleasant by the cool breezes of the lake and by a musical entertainment under the able direction of Mr. J. Lester Nicholls.

The excursion is the first venture of the kind since the Exchange was organized, and the success of the experiment will probably induce the members to make it an annual "institution."

PERSONAL.

F. M. Rattenbury, architect, has opened an office in Vancouver.

Mr. Copping, Building Inspector, Toronto, recently received serious injury by falling from a street car.

Mr. Louis Coste has received the appointment of Chief Engineer of the Public Works Department of Canada.

The Toronto Plate Glass Importing Co., their employees and friends, enjoyed their annual excursion and picnic on the 6th inst. Their objective point this year was Galt, Ont.

Mr. Arthur E. Wells, Secretary of the Toronto Architectural Sketch Club, a young man of marked ability, is about to leave Toronto to take up his residence and pursue the study of his profession in New York. The best wishes of many friends for a prosperous future will accompany him.

A PLEA FOR PERFECTION IN BRICKWORK.

The perfect in building construction may be said to be reached when there is obtained a maximum of strength and durability at a minimum cost. To design a roof, a floor or a wall that shall be strong enough to carry the load to be placed upon it, and strong enough to resist the thrusts that may be put upon it, is simple enough; the problem is to design in such a way that the portion of the structure is exactly strong enough and no stronger than is required; in other words, that there is no waste.

Having these facts in mind, it is easy to understand why there is so great a difference between carpentry in the United States and in England, and some parts of Europe. In this country timber is cheap and labor comparatively dear, while in England the reverse is true, and labor is cheap and timber comparatively dear. Adding the expense of freight to American timber used there, the cost will be somewhat more, while labor costs in round figures only about one half of what it does here. These facts affect and regulate construction to a very great extent, and what would at first appear to an English carpenter faulty and wasteful construction is simply the result of a desire to save time; in other words, material is sacrificed for saving of labor.

These facts are equally true as far as brick construction is concerned, and it is doubtless due simply and only to the desire to save time that the imperfect, faulty, and altogether wasteful method of laying bricks in "running" or "American bond" has come into general practice. It has been suggested, in these columns that the fact of face bricks being of a different size to those on the interior of the wall is responsible for the use of the bond, but the writer thinks that this does not by any means explain it all, although it may to some extent. There is no reason in the world why the back of a wall, whatever the sizes of faces and back may be, should be laid in running bond.

Now, in the construction of buildings as in other things, it is often profitable to closely and critically examine the methods followed elsewhere to ascertain whether they may not be adopted with advantage here. It is certain that no part of a building deserves perfection in construction, so to speak, so well as does brickwork, and this for the simple reason that no portion is less liable to decay. The best bricks, and this literally means bricks of the highest quality, are exceeded in durability by no known material used in the construction of buildings. Iron rusts; timber decays; stone perishes, and if it be limestone is destroyed quicker than timber; but good brick resists the action of atmosphere, fire and water, and lasts for ages. The very strength and durability of brick have been the cause of poor brickwork, paradoxical though it may seem.

To construct a brick wall that shall be as strong as possible from the material at hand would appear to be eminently desirable, but a wall erected in running bond falls short of this.

This is not difficult to understand. The system of construction violates the most important principle of bonding which is, that no two vertical joints shall come over one another. Suppose that there were no consideration of appearance, why not pile the bricks up one upon the other irrespective of bonding? "Oh," the bricklayers will tell you, "we must get bond,"—"he must interlap the bricks to get bond,—to get strength on the face of the wall. Why not get bond through the breadth of the wall as well? That there is a necessity for it will not be denied, for the whole weight of the building rests on the inside portion of the wall, and it is of the utmost importance to distribute this weight through the thickness.

That which comes nearest to a perfect wall is that system of construction known as "English bond," in which the bricks are all laid headers, excepting at the face, in alternate courses, when they are laid stretchers. This system of construction produces a wall in which the fundamental principle of bond is closely adhered to, and it will be found that, when it is faithfully carried out, no two mortar joints, in any part, come over one another. Flemish bond, although less perfect from a constructional point of view, is very considerably stronger than running or American bond, while its appearance is generally acknowledged to be very much superior.

Now, while the strength of a wall erected in English bond is very considerably stronger than one built in running bond, it is a fact to which due regard must be paid that the latter effects a saving of time. But while it is true that running bond can be built somewhat quicker than English, the writer