



GARGOYLE, CORHAMPTON CHURCH.

PROPOSED TECHNICAL INSTITUTE FOR MONTREAL.

The Committee representing the educational institutions and various public bodies in Montreal appointed to enquire into the question of the establishment of a Technical Institute in that city has presented the following report:—

"Your Committee is of opinion that the time is ripe for the establishment in this city of a technical institute suitable to the needs of the people. Should the citizens be in earnest in the desire, which has been so frequently and widely expressed, for such provision as will enable the boys and girls, the young men and women, to have better facilities for securing an education along the lines indicated in the report submitted by the delegation which visited the States, your Committee has no hesitation in saying that such an institute could be erected, equipped and placed in working order, in a satisfactory manner without delay.

Such an institute should be built in sections, commencing with the departments for which there seems to be the most pressing need. In every case these sections should be built with a view of future extension. The work could then proceed so as to allow of expansion as funds become available.

Sec. 1. It is further recommended: That courses of instruction in mathematics, English, French, science, the elementary principles of mechanical and electrical engineering, and in mechanical drawing, etc., be commenced in September next.

Sec. 2. That as soon as practicable, steps be taken for the erection of a section devoted especially to technology, and of the general dimensions and character indicated in the accompanying rough sketches.

On the ground floor is located offices and a machine shop.

On the second floor is placed the wood-working shop, together with a suitable lecture room and other offices.

The third floor is sub-divided into laboratories for wood-carving, art metal work, etc.

The whole of the fourth floor is set aside for descriptive geometry and mechanical drawing.

In recommending a building of this type, for immediate erection your Committee is influenced by the fact that there is evidently a very wide demand for such courses of instruction as would then be possible. As a proof of this it may be stated that considerably more than \$100,000 per annum is being paid to correspondence schools in the United States by mechanics in this city desirous of obtaining instruction in the elements of mechanical engineering, etc.

Sec. 3. The second main section of the institute, which your Committee considers of great importance, should be devoted to applied art and design and to domestic science. These branches could be provided for in a building of the same general dimensions as that devoted to technology.

The fourth floor of such building might be devoted to the domestic science department, including biology, the study of foods, cooking, dressmaking, millinery, needlework, art needlework and embroidery, together with the necessary lecture rooms.

On the third floor provision may be made for the freehand drawing, drawing from the model, modelling in clay, and drawing from life.

On the second floor provision may be made for applied art and design in its various branches, including drawing from the life, painting in water colors and in oils, the design and painting of fabrics, wall papers, book engravings, posters, etc., and all different kinds of art work.

On the ground floor are placed the administrative offices of the whole building, also a museum, library, etc.

Your Committee is of opinion that there is an increasing demand for instruction in art and design, and also in domestic science. This is proven by the fact that large numbers of young people of Montreal are obliged to leave the city to obtain the instruction in question, while the demand for classes in domestic science is far greater than can be met by present arrangements.

Again, as has been already pointed out, the great success of the Philadelphia Textile school has been largely due to the fact that it has been worked in connection with a school of art and applied design. Your Committee, therefore, considers that it is of the highest importance to all interested in textile industries, to note that in the proposed department of applied design they will have the fundamental provision which is so necessary to the complete success of textile work. Your Committee would suggest that the textile department be erected, with a school of art and applied design, as shown on sketch. The general equipment and arrangement of these must be decided upon by authorities on textile work, of whom we have many able expositors on our Committees.

TRADE DEPARTMENTS.

Sec. 4. Next in order, and, in the opinion of your Committee, of great importance, is the proper establishment of suitable departments for the various trades, carpentry, plumbing, brick-laying, stone cutting, galvanized iron work, blacksmithing, fresco work, house painting, wiring, etc. There is undoubtedly a very large demand for courses of instruction in these departments, and this work should be commenced as soon as possible.

Your Committee is of opinion that steps should be immediately taken to provide, by correspondence, such courses of instruction as may meet the demand of those in this country who are too far from the city to take advantage of the special courses to be provided in the proposed technical institute.

Your Committee recommends that other departments be added from time to time as the demand may justify.

Your Committee would conclude this report by expressing the opinion that all students of the Institute should be required to pay fees. It is recommended that the fees for the evening classes be much less than for the day classes, and that the charges for the former be moderate. All the investigations of the Committee go to show that the best results have been obtained in those Institutes where fees are levied, as the students themselves prefer the feeling of independence which they naturally possess with the knowledge that they are paying for the instruction they obtain."

FOLDING.

We have the folding bed,
The folding bath-tub, too,
And folding chairs, its said,
Are nothing very new.

Some hat-racks shut up tight
In most ingenious way;
A couch for use by night,
A Sofa by day.

The folding table's found
Wherever man may roam,
And folding doors abound
In every modern home.

But one thing now we need,
And soon we will have that,
For in brief time, indeed,
There'll be a folding flat.

The Department of Buildings at New York has been conducting a series of tests to discover leakage of illuminating gas in many of the prominent theatres and hotels and Dr. Lloyd, of that city, has been making similar tests in dwelling-houses. The latter experiments had reference to the condition of certain patients who exhibited symptoms bearing close resemblance to those noted in typhoid or malaria, without manifesting the usual stigma of those diseases. As a result Dr. Lloyd found present in the rooms of these patients sufficient quantities of carbon monoxide, one of the constituents of illuminating gas and of sewer gas, to account for the symptoms noted. The device used to ascertain the presence of gas when it could not be detected by the sense of smell was one which brought the air supposed to be contaminated with gas into contact with a strip of paper sensitized. When the gas is present this becomes discoloured, and the depth of discolouration, ranging from rose pink to black, indicates approximately the percentage of gas in the air.