

were assured that they would receive decent treatment. In the past, and also at the last exhibition, the architectural drawings have always been put in some out of the way place where no one could see them to advantage. There are some architects capable of making exceedingly good drawings of buildings erected according to their designs. These drawings, while in many respects not as attractive to the public as paintings, are far superior to many of the works hung in prominent positions. When an architect sees a very good drawing of a building placed in a dark and out of the way corner, and at the same time a very indifferent water color placed in a good position, simply because it is a water color, he is inclined to pity the author of the drawing and mentally resolve never to send a drawing of his to be treated in like manner. The architectural drawings at the last exhibition were few, and not representative of the best work of Canadian architects. While it might be said that there were one or two good drawings, it could equally be said that there were one or two which were very indifferent. We hope that the Architectural Guild of Toronto will make an effort to have an exhibition of architectural drawings during the coming winter.

THE foul language used by some workmen whose duties call them inside the dwellings of their employers' customers, has long been a source of very great annoyance. We are pleased to see attention called to the subject by an American contemporary, the *Plumber's Trade Journal*, which shows how the employer of such men is likely to lose much trade on account of their offensive conduct. "For instance," say our contemporary, "a well known plumber on one of the principal thoroughfares and most respectable neighborhoods in the city has a job of overhauling to do; he sends a journeyman and helper to do the work. The journeyman is not at all backward in using the most profane language at every trivial thing, and in fact has become so addicted to the habit that he swears without knowing it. The lady of the house overhears the journeyman unconsciously swearing, and says to herself, 'Well, so that is the style of workman that Mr. Blank sends to do my work.' She pays her plumber bill as usual and Mr. Blank wonders why he gets no more of her work." The above hint is one which employers as well as employers will do well to carry in mind. The swearing habit is a most offensive one to most people. Any workman who has contracted it should seek to get rid of it as speedily as possible. Employers should endeavor to find out what is the conduct of their workmen in this respect. If they find them to be addicted to profanity, or foul language of any kind, they should be warned to discard the habit, and should they not do so, the employer will be consulting his own interests by dismissing them from his service.

IT is very gratifying to learn that the Minister of Education for Ontario has been impressed with the value of technical instruction by his recent visit to the technological schools of the United States, and that he has decided to commence work along that line in Ontario. It is his intention we understand to establish at once a Department of Mechanical Engineering in connection with the School of Practical Science in this city. In an interview published in a daily paper the Minister is reported to have said: "A lecturer will immediately be appointed whose duties shall be to give instruction on the theory of all matters relating to mechanical skill and designs, and to afford the students that practical knowledge obtained from dealing with the subjects in the workshops themselves. At present it is not the intention to establish workshops in connection with the school, but the students will have the *entree* to the leading public works of the city, where they will have an opportunity of observing how crude material is shaped into its various useful designs, and take part in the work if they are so disposed." We are pleased to learn that instruction in architecture is also to form part of the curriculum of the School of Practical Science at an early day. The architectural course will be similar to that at Cornell University, which covers four years and embraces the ancient and modern history of architecture, practical instruction in designing, acoustics, lighting, heat and ventilating. We are pleased to see that the Minister recognizes that the time has fully arrived when technical instruction should form a part of our public educational system. The young men of the United States owe much to such institutions as Cornell, and we congratulate young Canadians upon the fact that they are to be given the opportunity to acquire in their own country special knowledge which in the past could only be obtained by a visit to foreign schools.

WHEN we remember how much of England's industrial greatness is due to the systematic instruction imparted to her people through schools of art and design, we find cause for congratulation in the fact that the Department of Education for Ontario has undertaken to encourage and develop Canadian talent in this direction. In this number of the *CANADIAN ARCHITECT AND BUILDER* we have the pleasure of presenting to the public some samples of industrial drawing and design exhibited at the recent Art School examinations held at the Education Department in this city. Since 1876 the Government of Ontario has given grants of money for art instruction, but only since 1886 has it assumed full control of this important branch of education, under the new act and regulations submitted to the legislation this year by the Hon. Mr. Ross, Minister of Education. Art schools under the inspection of the Department are now in operation in Brockville, Hamilton, Kingston, London, Ottawa, Toronto, and the following institutions are in affiliation with the Department for examination purposes: Wykeham Hall, Toronto; Alma College, St. Thomas; Ontario Ladies College, Whitby; Albert College, Belleville; Hellmuth Ladies' College, London; Academy of Painting and Drawing, London.

In addition to the above, many of the Mechanics' Institutes throughout the Province are giving courses of instruction in mechanical drawing and industrial design, and are sending pupils up for certificates to the regular Art School examinations. We understand that an Art School can be established in any town or village in the province, and each Art School is entitled to receive from the Government a grant of \$400 per annum, whenever fifty persons shall have expressed their desire and willingness to take the course of instruction prescribed by the Department for Art School pupils. We do not know whether or not this fact is as generally known as it should be. If the value of such a course of instruction were generally understood we imagine that few, if any, towns or villages would find it impossible to secure the necessary number of pupils. Persons undertaking to impart this course of instruction must furnish the Department of Education with satisfactory evidence that they possess the necessary qualifications. The holder of an art certificate is legally qualified to teach the subjects named therein in any Art School, High School, Model School or Mechanics Institute. As there are already a large number of persons throughout the province holding certificates, it ought not to be difficult for any Mechanics' Institute desiring to establish an art class, to obtain the services of a duly qualified teacher. In the front rank at the recent Art School examinations was the work of pupils of the Mechanics' Institute at Penetanguishene, Ont., a village of small population, and this fact should encourage many more of these institutions to avail themselves of their privileges in the same direction.

A comparison of the many creditable drawings displayed at the recent Art School Exhibition with the poorly executed and meagre list sent in to the Department some years ago, when a selection was to be made for the Centennial Exhibition, strikingly illustrates the gratifying improvement which has taken place and is going on in this direction. A list of the industries in Canada, in which a knowledge of the various branches of art education is necessary, together with the number of hands employed in those industries, shows that not less than 150,000 persons are employed in the Dominion to whom a knowledge of industrial drawing, modelling, etc., would be valuable. This alone is sufficient to show the value of the work which has been undertaken and carried on thus far with such gratifying results. The work of the pupils of the various Art Schools and Mechanics' Institutes recently on exhibition in this city was inspected by thousands of visitors, to many of whom the talent and skill displayed was a pleasing revelation, and will serve no doubt to vastly increase public interest in and appreciation of this important part of our educational system. The names of the examiners at the recent examinations are: R. Dickson Patterson, artist; E. B. Shuttleworth, Vice-President Ontario Society of Artists; Chas. Fuller, of Messrs. Copp, Clark & Co.; D. B. Dick, architect; Arthur Reading, superintendent of drawing, city schools; Dr. S. P. May, Officer of Academy, Paris, chairman.

For a cherry stain mix together, by stirring one quart of spirits of turpentine, one pint of Japan, one pound of Venetian red ground in oil, and two ounces of dry burnt umber. Apply this with a brush and wipe off with a cloth. Then finish off with one coat of shellac and two coats of varnish.



CONDITIONS OF THE TORONTO BOARD OF TRADE BUILDING COMPETITION.

ALL designs must be made in conformity with the following instructions:

The land belonging to the Board of Trade is an irregularly shaped lot, bounded on the south by Front street, on the west by Yonge street, and on the north and east by party walls without right to light. The size and form of lot is given on the accompanying plan, and also the width of the streets. The sidewalk on both streets is practically level, the difference, if any, being only a few inches. Both streets are to be considered of equal importance. This property is about the centre of the wholesale business of the city, and the buildings in the neighborhood range from 50 to 80 feet in height. The prevailing winds are from the northwest. The soil is heavy clay, and the depth of available drainage is not more than 10 feet below the street line. There is every facility for carrying out the work. The mode of construction must be determined by the competitor, who must bear in mind the amount set apart for the erection of the building. The building may be six stories in height, and may have entrances from both streets. The ground floor is to be designed for offices. Provision is made for a janitor's family. The Board of Trade requires, as far as possible, large hall, about 1925 square feet; reading room, about 875 square feet; clerk's office, about 300 square feet; Council room, about 250 square feet; secretary's private office, about 100 square feet; grain inspector's room, about 300 square feet; telephone room, wash room, water closet. The accommodation for the purpose of the Board may be placed at the top of the building. The rest of the building is to consist of large and small offices ranging in size from 15 feet by 20 feet, to about 15 feet by 10, and to feet high, in suites of various sizes, and so arranged that they can be shut off or thrown together to suit tenants. There are to be two elevators placed together running from the basement to the top. The space under the sidewalk is available, and should be utilized to the best advantage. There are no conditions in regard to occupying space under the sidewalk. The building is to be heated by steam, and proper provision is to be provided for boilers, etc., besides proper provision for ventilating the halls, passages, etc. All the principal offices at least must be provided with open grates. Ample provision must be made for public and private closets, sinks, lavatories, coat room, and other closets. It is understood that tenants will furnish portable safes for daily use, and the floors and walls will be made strong enough to carry them, but, besides this, many tenants may require storage for rooms for valuable papers, and fire-proof vaults must be provided. These may be grouped in each storey, forming a continuous stack, or otherwise, as may be found most expedient. Suitable accommodation for a restaurant may also be provided.

The following drawings will be furnished by each competitor, and those only will be received and considered, but minor variations of detail and alternative arrangements may be shown on any of the drawings by means of flaps. They must be accompanied by a brief memorandum, copied with a typewriting machine, explaining any points in the design not obvious from the inspection of the drawing: Plans of the different stories and of the basement, two elevations, sections, perspective.

These will be drawn to a uniform scale of one-eighth of an inch to the foot, and finished in line with Indian ink with the drawing pen.

There is to be no brush work except in blacking the windows and the sections of the walls and floors. The lettering and figuring is to be plain and simple, and is to be confined to the names and dimensions of the rooms, written in the middle of each, without explanatory comments, which are to be put by themselves, as has been said, in a separate memorandum. The number of square feet in each room is to be given, as well as its linear dimensions. These drawings are to be made on white drawing paper, trimmed down to a uniform size of 24 inches by thirty-six inches.

If the plans of two stories are identical, one may be omitted; and if two of the stories are symmetrical in plan, half only of either may be shown.

The perspective will be drawn in line only, without shading, and without any accessories, such as sky, trees, figures, etc. The point of sight for the perspective is to be taken at a distance of 275 feet from the angle of the lot, on a line drawn from the angle of the lot through the point of sight as given on the plan already furnished.

The perspective is to be set up on an eighth-inch scale plan. The plane of the picture is to touch the corner of the building.

Each drawing, and also the accompanying memorandum, is to be distinguished by a motto or cypher, and no handwriting of any sort is to be put upon either. Any of the competitors may send in a second set of drawings, embodying a different design, if he desires to do so. In this case it must bear a different motto. No competitor is to employ any motto or device which he has ever used on any previous occasion.

A sealed envelope, bearing the same cypher or motto, is to contain the name and address of the writer. The drawings are not to be framed, glazed, or even mounted on card-board, but are to be sent flat in a portfolio, and are to be delivered to Professor Ware, at Columbia College in the City of New York, on or before the 1st October, 1888. He will employ a competent person to throw out from consideration all drawings, or sets of drawings, not made in conformity with these instructions. The remainder he will examine and will select those which he finds best among them, at least two in number, and these he will hand over to the Committee with his comments, and any recommendations he may think it well to make.