

the election of officers took place, the result being as follows:—President, Mr. S. G. Curry; Vice-President, Mr. A. H. Gregg; Secretary, Mr. C. H. Acton-Bond; Treasurer, Mr. A. Clarence Barrett; Directors—Messrs. H. W. Mathews, Henry Simpson, and W. R. Mead.

The President elect made a few remarks in which he pointed out the desirability of forming classes in construction and mathematics, especially in view of the approaching examinations for registration.

The Club is to be congratulated on its new president, who is everywhere known as a "pusher." The next meeting of the club will be held on Tuesday, the 28th inst., when the drawings of the competition for a cottage by the sea, for which prizes have been offered by Miss M. Radford, will be on exhibition, and a lecture will be given by Mr. Sam. M. Jones on "Stained Glass as a Decorative Art."

An invitation is extended to all who are in any way interested in architecture to attend this meeting if possible.

### DISHONORABLE PRACTICE.

Editor CANADIAN ARCHITECT AND BUILDER.

SIR,—If an architect to obtain business pay a commission to any party who provides clients for his office, or, if an architect give his services to his clients *far* below the regular commission of 5%, calculating to make up the difference, or even more than the difference, by receiving commissions (or blackmail) from the contractors, or those furnishing material, or receiving from his client the full rate of 5% for his services, then the architect, in addition to his full commission as paid to him by the proprietor, accepts 5, 10, or even as high as 20 and 25%, as the case may be, from the contractors, or those furnishing material upon the contracts, in what esteem should he be held? And should an architect carrying on his profession in any such disreputable manner be unfortunately found within the ranks of the Ontario Association of Architects, how long do you suppose the Association would tolerate him within that body? Who, in the end, is the real sufferer from such dishonorable practices; the contractor, or the proprietor? I think I hear you say, the proprietor, every time.

I have no doubt your answers to and comments upon the above queries will be very interesting to the members of the Association, and to architects generally throughout the country, and furthermore they should produce a very beneficial effect, at least I hope so, for the general welfare and honor of the profession.

Yours truly,

FIVE PER CENT.

### SCHOOL ARCHITECTURE.

THE issue of *Architecture and Building* for October 4 is specially devoted to school-house architecture, and contains some 21 designs, many of which are by well known names. The letter press also is almost entirely devoted to articles relating to school architecture, and is replete with practical hints and details.

The leading article occupying the first page is a good, yet brief, *resume* of the best practice and ideas that are now embodied in school-house construction. The five important points touched upon are first, lighting; second, amount of floor space to each pupil; third, ratio of cubic feet of space to each pupil; fourth, methods of heating and ventilation; fifth, architectural design.

Among the other interesting articles are, "The Growth of School Architecture"; "The New York Trade Schools"; "Sanitation in New York Schools"; and "Heating and Ventilation of School Houses."

The designs are, on the whole, disappointing, and the planning in a large number defective in some one important point. It is perhaps almost impossible to obtain the ideal school house with a great aggregation of rooms economically disposed in regard to construction, heating and administration. Probably the limit is reached in a school-house having not more than three or four rooms on each floor.

An attempt has been made in several instances to introduce the unilateral system of lighting without reference to aspect. No room with its longer side having a sunny aspect is suitable for lighting on one side only. The rays of the sun for some hours of the day will necessitate the shutting off of a large amount of light by means of blinds, making the farther side of the room dark, and straining the eyes of the pupils.

Some of the plans show unilateral lighting from the long end of the room, one especially erring conspicuously in this respect, indicating to what bad uses an otherwise good idea may be put by a thoughtless follower. Others of the designs have windows facing the scholars, apparently for the simple purpose of fenestration and regardless of the comfort and eyesight of the children.

Some architects seem to regard a blank wall with abhorrence—perhaps because "nature abhors a vacuum," and from a desire to be "near to nature's heart." It is a poor school design which cannot stand a few square yards of plain wall surface.

One design shows how windows may be "grouped" without

interfering with the best requirements in regard to lighting. Another design is seriously defective in the location of two rooms on each of its six stories, in that these rooms derive their light and air solely from a well about 12 feet wide, and the nearest window being removed at least 22 feet horizontally from unobstructed light. While the rooms in the two upper stories at most might receive a fair quantity of light, one may imagine the state of gloom resting upon the children assembled say in the ground floor class-rooms—such rooms would be simply nurseries for the propagation of defective vision.

With regard to exterior design, as we said before, the illustrations are as a rule disappointing, but at the same time a decided advance upon the type in vogue a few years ago.

The most satisfactory and the most simple withal are, we think, those by Stevens & Cott and J. A. Schweinforth, and one or two of the prize designs for low-cost school buildings.

### QUERIES AND ANSWERS.

CHARLOTTETOWN, P. E. I., Sept. 26, 1890.

Editor CANADIAN ARCHITECT AND BUILDER.

DEAR SIR,—Would you kindly tell me in the next number of your journal the load a juniper post or pile 10" diameter and sunk 3'6" in hard ground will sustain before sinking into the earth or otherwise failing. The post is set in an ordinary post hole, and filled in around with earth well rammed in the usual manner.

Yours truly,

C. B. CHAPPELL.

[We are not familiar with juniper wood in this region, but presume the writer refers to "juniperus Virginiana," a species of red cedar.

The writer does not give the height of the post above ground or the character of the soil. If the post is chiefly in the ground, the question of the amount of load it will sustain of itself is immaterial, as its strength is enormously greater than the bearing capacity of the soil on which it rests.

If the soil is coarse gravel or sand, the safe load would be 2,500 to 3,500 lbs. to the square foot, and if of clay, 4,000 lbs. A 10" post would therefore carry about 2,200 lbs. in the former and 3,000 lbs. in the latter soil.

The post itself would safely carry about 25,000 lbs., and to reach a like carrying capacity on the part of the soil, it would be necessary to form a bearing surface two and a half feet square, which could be accomplished by means of a large flat stone which would require to be 10 to 12 inches in thickness in order to avoid a tendency to break off at the point of bearing of post.

A white-wood post 12 feet long 9½ inches in diameter tested at the U. S. Arsenal, Watertown, Mass., required a crushing load of 180,000 lbs. before signs of failure became manifest, while in the case of a pine column of similar size the crushing load was 265,000 lbs.—Ed. C. A. B.]

ST. THOMAS, ONT., Oct. 5th, 1890.

Editor CANADIAN ARCHITECT AND BUILDER.

DEAR SIR,—Can you oblige me with a receipt for red brick coloring? I want to stain white brick to red.

Yours truly,

ALFRED HORTON.

[We are not familiar with any receipt for staining white brick. The Collegiate Institute on Jarvis St. Toronto, was treated with a stain manufactured by Cabot, of Boston, and which is fairly satisfactory. We understand the cost was not greater than the cost of a single coat of oil paint, while the effect is equal to two coats. Reference to our advertising columns will give the address of the Toronto agents of this stain.—Ed. C. A. & B.]

### APARTMENT HOUSES.

WHY should not cities such as Toronto, London, Ottawa, Hamilton or Kingston, have apartment houses? The old time citizen accustomed to his "bit of garden" is apt to hold up his hands in holy horror at the suggestion, forgetting that times have changed, and that these places have got beyond the village conditions.

It is contended that there is no privacy in these great piles, that there is no place for children, and that many other things are lacking to the man who considers his home his castle. But what are the conditions and surroundings of the average citizen in Toronto, for instance, who pays from \$15 to \$30 per month rent? He is squeezed into a narrow slice of building say 12 to 16 feet wide—one of perhaps a dozen domiciles in one long uninteresting block. If the house faces east or west he gets some sunshine in the morning and a glint in the evening for a few moments between the long rear extensions which have a space of from 3 to 5 feet between each. If the house faces south he gets no sun whatever in the rear, and *vice versa*, except perhaps for a few moments of a summer evening. He cannot stroll in his 12 x 20 back yard without feeling that he is exposed to the gaze of