

has done good work in helping to frame this proposed building by-law. Both the above named by-laws treat so directly with construction, it will be a simple matter to consolidate their working under one official head, and it will be a necessity to do so before long, as architects and others engaged in the building trades will find it a great inconvenience and loss of time to wait on two departments for acceptance of plans and issue of building permits. The work to be done under these by-laws will be considerable at the outset, and will certainly increase rapidly. The head of such a department ought not to be long in office, before he would be called upon to examine and report upon many buildings the city could well do without.

The formation of a building bureau, department, commission, or what ever name you please, with a trained and experienced professional man at its head—not one of your "practical" men, but one who could examine into the points of construction in plans placed before him, and give decisions on technical points of construction, and architectural design—will be of incalculable benefit to the city."

#### ENGINEERING SOCIETY.

THE Engineering Society held its annual meeting in the School of Practical Science on Saturday evening, the 30th March, President H. E. T. Haultain in the chair. The minutes of last meeting were read by the secretary and approved. The report of the general committee for the session 1888-9 read by the president, showed that the Society was in a flourishing condition, and since last session had made several improvements, notably amongst which were the commencement of a library and the placing of Engineering periodicals on file. The secretary-treasurer's report showed an increase of 26 in the membership, and that the Society was in a prosperous state financially. The corresponding secretary reported that twelve papers had been read before the Society during the current session, two of which were from graduates of the school. The various papers read and discussions held were interesting and instructive to the members, as manifested by the large attendance at the ordinary meetings. The Librarian's report showed that the newly founded library contained some one hundred and fifty books of reference, five weekly engineering papers on file, besides numerous plans and specifications. The Librarian also reported that the members were making good use of the library. After the different reports had been read and adopted, the following gentlemen were elected officers for next year's general committee: President, J. A. Duff, B.A. (by acclamation); Vice-President, E. B. Merrill; Secretary-Treasurer, J. R. Deacon; Corresponding-Secretary, F. M. Bowman; Librarian, F. S. Russell; III year Councillor, J. R. Pedder; II year, M. Dunbar. A vote of thanks was passed to the retiring general committee for their services to the Society. Speeches were then made by different members on various questions affecting the well-being of the Society and the School. Among the speakers were, Messrs. L. M. Bowman and R. McDowell, (graduates) who expressed their pleasure at seeing the Society in such a flourishing condition. The meeting then adjourned until next October.

#### BRICK VS. PIPE SEWERS.

THE following letter from the City Engineer of Glasgow, Scotland, fully bears out the contention of this journal that the City Council of Toronto took a retrograde step in deciding that in future all sewers of 12 inches and upwards shall be constructed of brick:

Office of Public Works,  
GLASGOW, 13th March, 1889.

"In reply to enquiries, I beg to say, the sewers in Glasgow which are built of brick are not less in diameter than 2 feet 6 inches. We use salt-glazed fire clay pipes for all sewers of smaller diameter, I would not think of using bricks for smaller sewers than the above, when fire clay pipes can be obtained, because, in the first place, the bricks would be very much more expensive, taking the material and labour also into consideration, and in the second place, they would not be nearly so satisfactory. The comparative roughness of the brick with their numerous jointings obstruct the sewage to a considerable extent, and cause a deposit which may become a fruitful source of disease. The smooth surface of the pipe allows the sewage to flow away, and a free flow of the sewage is of vital importance. Liquid sewage and sewage gas to a greater or less degree come through brick drains, if not specially well built, whereas the vitrified pipes are impervious to these. There is no doubt as to the durability of fire-clay pipes and they are not nearly so easily affected by the action of water and acids as brick sewers.

I may add that, so far as I know fire clay pipes are recommended by all engineers in this country for sewers up to 18 inches diameter in preference to bricks.

JOHN CARRICK, M. I. C. E.,  
City Architect and Master of Works, Glasgow."

To color bricks black, *La Semaine des Constructeurs* says, immerse them in a warm bath of linseed oil and asphalt.

The School of Practical Science, Toronto, shows a total attendance of 58 who are taking the civil engineering course.

Messrs. J. Stewart, A. Wright and others have purchased the plant of the Portland Cement Co., Winnipeg, and purpose engaging extensively in the manufacture of pottery and building material.



#### SANITATION IN SCHOOLS.

NOWHERE is there greater need for compliance with sanitary laws than in our public school buildings. Until quite recently, however, little attention was paid to the matter. In some communities, however, the value of sanitation in schools is being recognized. In the Hygienic Institute in Berlin a course of instructions is given to the school officers, covering the most important and practical principles in school hygiene. These instructions relate to the construction of school buildings, light, heat, ventilation, care of the school-room, construction of desks, disposal of waste, drinking water, infectious diseases, and kindred matters. These lectures are illustrated by the use of material collected in the Museum of Hygiene and by visits to the model schoolhouses of Berlin. Results have justified this course.

In the city of Boston the Committee on School Hygiene, observing the lack of proper sanitation and knowing its value, have, for the purpose of placing school buildings in the best possible sanitary condition, resolved the following: "That the Committee on Accounts be requested to instruct the janitor in each school that he shall keep all the windows and doors in his school open for five hours each day of the week just preceding the opening of the school year (in September), in order that the building may be thoroughly aired for the purpose of disinfection; also, that on one of the days mentioned (the last day preferred) the building shall be heated sufficiently to remove all dampness which may be present; also, that on the first of the days named the water shall be turned on in all the faucets on the premises which empty into receptacles communicating with drains or cess-pools, and allowed to flow long enough to insure the perfect working of the traps attached, from which the water may have evaporated during vacation time; also, that during the week mentioned the whole inside of each room shall be thoroughly brushed or rubbed down; that all the painted surfaces in the school shall be cleansed with a solution of corrosive sublimate (1 part to 500); that all the floors shall be mopped or wiped with a cloth moistened with the same solution; and that all the desks, furniture, and apparatus shall be cleaned, and, where possible, washed or rubbed with a disinfectant solution."

#### PUBLICATIONS.

WE are indebted to Prof. Ware, of Columbia College, N. Y., for a copy, in pamphlet form, of an instructive paper, of which he is the author, entitled "The Instruction in Architecture at the School of Mines." This paper was read recently before the Alumni Association of Columbia College.

We have received a pamphlet entitled "Rust on Construction of Sewers," containing the able paper on "Construction of Toronto Sewers," read before the Canadian Society of Civil Engineers, by Mr. C. H. Rust, of this city, together with the instructive discussion thereon by members of the Society.

The Toronto public library contains 20,000 works of reference. For the convenience of the users of this valuable collection, a handsomely printed and bound reference catalogue has just been published, for a copy of which we are indebted to Mr. Bain, the Librarian. This catalogue has been carefully arranged in the manner which will make it of the greatest service to seekers after special information, to whose thanks the librarian and assistant librarian are justly entitled.

We appreciate the kindness which prompted the publication of the following in a recent number of the *California Architect*: "Our friends across the line are determined not to be outdone, and so present a journal as well edited and illustrated as many of those in the United States. We heartily congratulate the editor on the greatly improved appearance of his journal." We desire further to express our pleasure at the signs of improvement and prosperity which mark the pages of our Western contemporary.