

A DECIDED impetus has been given to the movement for the reduction of the hours of labor, by the signing by the President of the United States of an act recently passed by the Senate enacting that eight hours shall constitute a day's work on all public works, except in cases of extraordinary emergency. Any government agent or contractor who shall violate this law, will be liable to a fine not exceeding \$1,000, or to a fine and imprisonment, at the discretion of the court.

The Toronto Builders' Exchange, a list of whose officers may be found in this and future numbers of the ARCHITECT AND BUILDER, is still adding to its membership and in other respects proving a success. The exchange has delayed taking possession of its new and handsome suite of rooms, pending the paving of the southern portion of Victoria Street. This part of the street having now been asphalted, no time will be lost in making the change of premises, and in a short time the members of the Exchange and their friends will be asked to take part in a formal celebration of the event.

LEARNED HEUKLE, a resident of Rochester, gravely announces his purpose to erect "the largest building on earth," in the shape of a power house at Niagara Falls. The building, which is to cost about \$35,000,000 is expected to pay six per cent. on an investment of \$256,000,000. It is a fortunate thing for the management of the World's Fair that several years will be required for carrying out Mr. Heukle's plans. Otherwise visitors might be expected to give the Fair the go-by in favor of the greater exhibition at the Falls. The architectural world will anxiously wait for the publication of the plans of this structure which is to dwarf the pyramids.

YOUNG architects who have not been practicing long and whose clientele is not large, often find it profitable in more than one sense to do some work outside of architecture, for instance, designing of various kinds. Wall papers, bindings for books, title pages, photo engraving and even furniture, all offer a field for a clever designer in which to add to his income while it does not detract in the least from a proper professional dignity. Young architects whose means are small too frequently "go in" for the publication of works containing "designs for the million" to the great disadvantage of themselves and of their profession. By inquiry they might find many fields more profitable and less *infra dig.*

It would, no doubt, lead to the avoiding of defective construction, such as that referred to in our last issue, if there was an enactment in force in Ontario, similar to that which exists in Great Britain and the Province of Quebec. In Quebec, the law holds the architect and the contractor jointly responsible for the safe construction of buildings, for a period of ten years after their completion. An instance has come to our notice wherein a Montreal architect was compelled to pay between three and four thousand dollars, in consequence of the collapse of a building erected under his supervision some five years ago. Unfortunately for the architect in this case, the contractor had placed all his property in the name of his wife, and it was not possible to compel him to contribute his share of the amount.

In another column will be found an article descriptive of experiments in the use of electricity for heating purposes, which have recently been in progress at Ottawa, Ont., together with illustrations of the devices employed. So successful have these experiments been, that the new method of heating is soon to be put to a practical test on an extensive scale. The result will be watched with much interest, more especially in view of the advancing price of coal. A vast waste of money and labor is involved in our present methods of heating. It may be regarded as certain that there will be substituted for them in the near future a method not less efficient and more cleanly and economical. It is by no means unlikely that electricity will be the chief agent in the reform.

A CANADIAN gentleman who lately inspected the buildings in course of construction for the Columbian Exposition, became firmly impressed with the idea that there was great danger of their being destroyed by fire during the progress of the Fair. To the frame-work of the buildings is nailed diagonally rough

boards, which in turn are covered with a material called "staff." Our informant states that should a spark find its way inside this hollow wall of highly inflammable material, it would be almost impossible to check its progress. The vast extent of the buildings, besides increasing the probability of fire, would greatly add to the difficulty of subduing it. The extensive precautions being taken against the possibility of fire, serve to indicate that the management are not unaware of the dangerous conditions above referred to.

A CONTRIBUTOR to an English professional journal recommended the use of a solution of common salt to prevent the accumulation of the unsightly efflorescence that so frequently appears on the surface of brickwork. The usual remedy, if such it can be called, is to apply a solution of muriatic acid, but it is by no means absolutely effective. This trouble has bothered architects and builders for years, and so far no remedy has been found. An explanation of the efflorescence is simple enough. When a clay from which a brick is made contains magnesian lime, the trouble will occur. A brick being absorbent, the water soaks in, and dissolving the magnesia, effloresces on the surface of the brick. Why should not architects specify that no brick is to be used that will effloresce. The result would simply be that brickmakers would cease to use clay that contained magnesian limestone.

ARRANGEMENTS are being made for the annual meeting of the Province of Quebec Association of Architects, which will take place in Montreal on the 29th inst. We hope that every effort will be made to ensure the success of this meeting. A feature which has been absent from former meetings, has been the reading of papers on architectural subjects; such papers, when read at the meetings of the Ontario Association, have awakened profitable discussion, and have been of lasting benefit to the members. We have no doubt that similar results would follow the reading of papers at the meetings of the sister Association of Quebec, and we are pleased to see that a departure is to be made in this direction at the approaching meeting. It will be remembered that the Ontario Association, at its last convention, had the pleasure of a visit from Messrs. Hutchison and Clift of Montreal, representing the Quebec Association, and it is to be hoped that the desire for a better acquaintance thus manifested by the Quebec Association will be reciprocated by the architects of Ontario. The Ontario Association should appoint some of its members a delegation to Montreal on the 29th inst., and these delegates should go prepared to offer such advice and encouragement to the younger Association as will tend to awaken the enthusiasm of the members for the carrying out of the objects which the Association was formed to accomplish.

It is surprising that concrete is not used to a greater extent than it is. There is so much material, such as slag from the iron works, available for the purpose that the cost of concrete should be quite low. Although pebbles are employed for ballast in making concrete, with the addition of sand and cement or lime, any hard material answers equally as well; in fact concrete gives ample opportunity for the utilization of the waste products of many industries. Of course a hydraulic cement such as Portland is the proper thing to use in making concrete. It is not infrequently happens, however, that the expense is too great, and lime is used instead. It is of great importance to remember that pure lime—that is one that will not set in the presence of water—is practically useless for this purpose. Pure lime, called also rich lime because of its rich or fatty appearance when slaked and mixed, is only suitable for interior work such as plastering. The proper limes to use for concrete and mortar are those of the hydraulic class, called also "poor" limes. These have proportions of material other than lime in their composition, such as iron, silica, etc., which gives them the property of setting under water. A "pure" lime can readily be distinguished from a "poor" lime by the fact, that while the former gives out a good deal of heat and steam in slacking, the latter does not. Limes used for building purposes too frequently lack the hydraulic qualities.

THE new building ordinance which has recently gone into operation in Boston, and which is regarded as a model of its class, provides that no buildings, excepting wharf sheds and