

## PROPOSED AMENDMENT OF THE O. A. A. ACT.

THE Ontario Association of Architects have wisely decided to renew their efforts for the amendment of the Ontario Architects' Bill, in a manner to in future restrict the use of the word "architect" to properly qualified persons. The relation which the work of the architect bears to the health of the community and the extent to which the safety of human life and the interests of property are dependent upon his knowledge and skill, demand that the public should have means of knowing who are qualified to call themselves "architects." It should be clearly understood that no attempt is being made to compel persons who desire to erect buildings to employ a qualified architect to prepare the plans and supervise the construction. If they have sufficient confidence in the ability of some person who is not entitled to call himself an "architect," to prepare plans and carry out the work, they are at liberty to entrust to him the undertaking. In view of this freedom on the part of anybody to prepare plans for buildings so long as he does not designate himself as an "architect," and of the public to employ a properly qualified architect or not, as they may choose, we fail to see any reasonable ground of objection to the desired legislation.

### A REQUIRED DISTINCTION.

EVEN great men do not hesitate on occasion to express an off-hand opinion on subjects of which they possess but a surface knowledge. Greater care should be exercised by such persons in this regard, for the position they occupy in the community by reason of their superior attainments in a particular field of learning or effort, is apt to lead the public to attach great importance to their opinion on all subjects. It does not follow because a man is a clever lawyer that, therefore, he is competent to express an opinion upon architecture, or that he is familiar with the conditions under which a large proportion of the buildings erected are designed and constructed. It was undoubtedly ignorance on this point that induced a prominent lawyer of Toronto to make an indiscriminate onslaught, before an audience he was recently addressing, upon architects for their alleged inability to put up beautiful buildings. This talented lawyer evidently was not aware of the fact that perhaps most of the buildings in the locality to which his remarks bore reference were constructed entirely without the agency of a properly qualified architect—the speculative builder having alone been responsible for their design and execution.

There is here a strong argument in favor of the effort which the Ontario Association of architects is making to induce the legislature to restrict for the future the use of the title "architect" to persons who are properly qualified for the practice of the profession. So long as everybody who may undertake to put up a building can call himself an architect, the public is unable to distinguish who are properly qualified men, and naturally enough, under these circumstances, the men of taste and skill are brought under public condemnation on account of the lack of taste displayed by those who possess no qualifications for the work which they undertake to do.

W. B. Mundy, architect, formerly of Hamilton, Ont., is erecting the new Chicago Fair building, which is to cost one million dollars.

## COMBINATION HEATING.

THE question of furnace and the best form of coil or heater adapted to it being decided, says Mr. J. W. Hughes in an article on this subject in the Metal Worker, the fitter has next to plan or lay out the mains and branches to suit different coils and radiators. As the buildings to be warmed differ in plan, so will the placing of pipes vary, and as long as the general principles controlling the circulation of water are not violated the apparatus will work. But there is no doubt but that certain plans on a given job will work better than others. The main object is to arrange the pipes to allow the greatest freedom of circulation. Undue friction must be avoided by not having the pipes too small, and by having too many sharp turns, and above all, the pipes must be arranged to allow of their being filled "solid"—that is, that there be no air pockets. As the water in the heater becomes hot it expands and becomes lighter, and by the law of gravitation ascends to the rising main or flow pipe, the colder water flowing in by the return. As long as the heat is applied this goes on continuously; but as the difference in the weight of the two columns of water—viz., that in the flow and return—is very little, it takes very little to stop it. A bubble of air in the pipes will stop circulation by separating the water.

The lesson to be learned is to avoid everything that will prevent the pipes and coils from being solidly filled with water, and that will prevent the water from flowing freely in the direction which it should go—that is, up from the heater when warmed, and back and down to it when heat has been imparted to the air of the apartment.

The combination system is of necessity restricted in a greater or less degree by the size and make of the hot-air furnace, and the possibility of fitting a given sized coil or heater in it. The fact must not be lost sight of that in a building warmed with a combination apparatus, air from the furnace is the principal factor, the heat from the hot water circulation combined with it being a useful adjunct or assistant for warming certain portions of the building to which the hot air cannot gain access, or to increase the heat where the hot air would only be partially sufficient. Valves on coils should be avoided. To shut off a coil on a general circulation makes a serious disturbance that is apt to cause the formation of steam, with the accompanying noise, and when the checking of the fire causes the condensation of the steam the pipes will no longer be solidly filled with water, and there will be a poor circulation or none at all.

The following proportions of heaters or coils in furnaces to the amount of heating coils or circulation in rooms are from actual jobs that worked well: 30 ft. of  $1\frac{1}{4}$  in. spiral coil in dome of furnace with  $1\frac{1}{4}$  in. flow and return, and 1 in. and  $\frac{3}{4}$  in. branches heated 1,300 ft. of 1 in. circulation coils; 11 ft.  $1\frac{1}{4}$  in. heater pipe did the same for 380 ft. of  $\frac{3}{4}$  in. coils; 11 ft.  $1\frac{1}{4}$  in. coils with  $1\frac{1}{4}$  in. flow and return and 1 in. branches took care of 260 ft. of 1 in. circulation coils; 9 ft. 6 in. of  $1\frac{1}{2}$  in. heater coil with  $1\frac{1}{4}$  in. flow and return mains and 1 in. branches to coils, carried 240 ft. of 1 in. circulation; 13 ft. 7 in. of 1 in. coil with 1 in. flow and return branches off to 1 in. and  $\frac{3}{4}$  in. supplied 550 ft. of 1 in. coils; 12 ft. 7 in. of same sizes to 325 ft. was a success again; 12 ft. of 1 in. to 320 ft. of coils worked well; 11 ft. 10 in. of 1 in. with same