

**TEST OF CONCRETE.**

A large warehouse for a hardware concern in the city of St. Paul, Minn., is being erected of reinforced concrete, and with a view to determining the merits of the work a test on a floor section about 6½ feet wide by 16 feet long was recently made. The initial test was of 43 tons of pig iron after the section had been in about 90 days, says Construction News. Four days later the load was increased to 78 tons, amounting to a dead weight of 1,500 pounds pressure to the square foot. The building is to carry a stock of hardware, and is designed to carry a weight of 500 pounds per square foot on the lower floors and 300 pounds on the upper floors. This test is on one of the lower floors and is therefore a load of three times the weight which it is designed to carry.

The deflection under the heaviest weight was practically imperceptible. Two stakes, nailed securely and set firmly in the centre of the loaded section, were marked squarely across with a pencil. The deflection was not the width of a black pencil mark.

**ARCHITECTS' COMPETITION.**

All Canadian architects, according to the decision of the government, will be permitted to compete with plans for the new departmental block to be erected on Sussex street and Mackenzie avenue, Ottawa. Fifteen thousand dollars will be given in four prizes of eight, four, two and one thousand dollars. The competition will close on February 15, 1907, when the plans must be in the hands of the Minister of Public Works.

The board of assessors to decide upon the merits of the various sets of plans will be composed of Edmund Burke, president of the Architects' Association of Ontario; Mr. Chausse, president of the Quebec Architects' Association, and David Ewart, chief architect of the Department of Public Works.

The arrangements are that each competitor submits his name and design to the minister in a sealed envelope, the department providing him with a copy of the conditions and details as to the site. The board of assessors will know the competitors only by numbers, which are to be placed upon the designs before they leave the custody of the minister.

It is intended to have two buildings of five stories each, to be fire-proof, with an interior construction of steel and cement. One of these buildings will house the Department of Justice, Railway Commission, Supreme and Exchequer Courts, and will be provided with a free library. It has not been decided as to who will occupy the other building.

The plans must contain details in relation to the position of the buildings upon the sites, the laying out of the roads and avenues and the

connecting of Parliament Hill with Major's Hill Park by an ornamental bridge over the Rideau canal. The buildings are to have a floor space of 225,000 feet, which is 12,000 feet more than is contained in the eastern, western and Langevin blocks. The space provided at present in buildings rented by the government is 186,131 superficial feet.

The new structures are to be fire-proof in character, the materials composing the interior to be of steel and cement. The competitive designs will be limited to sketches in ink, and no brush work will be allowed except for finishing the windows in sections. The number of square feet in each room, the lineal dimensions and other particulars must be shown. The drawings are to be without shade or

color and contain plans of separate floors and elevations.

**CONCRETE MACHINERY.**

The Ideal Concrete Machinery Company, of South Bend, Ind., are now manufacturing their "Ideal" cement block machines in Canada, the factory and office being situated at 124 York street, London, Ont. This company had an exhibit at the recent Toronto Exhibition, as a result of which a large number of orders were booked. The Canadian office is in charge of Mr. F. M. Leach.

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