is to prevent its setting too rapidly. When the finishing or "topping off" coat of cement is left exposed to the dry air or to the rays of a hot sun immediately after it is finished, it is apt to "creep" and show fine hair cracks which may fill with water in the fall or spring and freeze, which action in time will loosen the cement from the concrete and cause it to scale off. The longer the cement takes to thoroughly harden, the more durable the work. Some sidewalk makers cover the finished work with canvas for a day or two, then after removing the canvas, cover the walk with a layer of damp sand which is occasionally wetted until removed in a week or so.

## MR. L. R. O'BRIEN.

By the recent death of Mr. Lucius Richard O'Brien, R.C.A., a leader has been removed from the ranks of our native artists. The accompanying portrait is a reproduction from a photograph of the bust of Mr. O'Brien by Hamilton MacCarthy. Mr. O'Brien, who was in his seventieth year, was a native of the province of Ontario, having been born at Shanty Bay, near the town of Barrie. His father was the late Lieut.-Col. E. G. O'Brien, a retired naval and military officer.



BUST OF THE LATE MR. L. R. O'BRIEN, R.C.A. By Hamilton MacCarthy, R.C.A.

After having been educated at Upper Canada College, he studied for a time architecture and civil engineering, but afterward relinquished these professions to devote himself entirely to the pursuit of art. In 1873 he was elected first vice-president of the Ontario Society of Artists, which office he held for seven years. In 1880 he was elected the first president of the Royal Canadian Academy of Art, founded in that year by the Marquis of Lorne and Princess Louise. This position he occupied for ten years. In 1895 he was elected president of the Provincial Guild of Sculpture.

Mr. O'Brien was a frequent exhibitor at the London Art exhibitions. His water color sketches of Canadian scenery, particularly in the Rocky mountains, were masterpieces. His diploma picture, "Sunrise on the Saguenay," is in the Ottawa Art Gallery. He was commissioned by the Queen to paint two pictures of Quebec. The Marquis of Lorne and the Princess Louise were also his patrons and friends.

The statue of Alexander Mackenzie, designed by Hebert, the well known sculptor, has been completed at Paris, and will be exhibited at the forthcoming exhibition in that city before being shipped to Canada.



Branch Office of the Canadian Architect and Builder, New York Life Building,

MONTREAL, Jan. 18, 1900.

## THE RENAISSANCE CLUB.

The annual meeting of the Renaissance Club was held in the club rooms, Phillips Square, on the evening of Wednesday, December 20th. There were over forty members present. The secretary-treasurer's report was read and adopted. It showed a good balance on hand. The election of officers then took place with the following result: Prof. Capper, honorary president; David R. Brown, president; S. A. Findlay, vice-president; W. A. Price, secretary; D. J. Spence, treasurer. Committee—Mr. R. Dawson, Dr. Stewart Nicol, Dr. Tait McKenzie, Mr. J. MacAulay, Mr. K. Rea.

## TESTS OF EXPANDED METAL AND CONCRETE FLOORING.

Prof. Bovey of McGill College and Mr. John Kennedy, chief engineer of the harbor board, at the request of the architects, Messrs. Hutchison & Wood, conducted a series of weight tests of the expanded metal and concrete floors lately finished in the new La Presse building. While this system of fire-proof construction is well known in other countries these are the first floors yet tested in Canada.

On an 8 by 14 foot floor, 23,191 lbs. of pig iron was piled equal to a distributed load of 240 lbs. per sq. ft. or three times the required strength and the delicate gauges recorded a deflection of  $\frac{3}{8}$  inches only. On the same floor plate a centre load of 11,580 lbs. was laid, resulting in  $\frac{5}{16}$  inch deflection. A third test was on a 6 ft. 8 in. by 15 ft. floor which took a load of 38,800 lbs. before  $\frac{1}{2}$  inch deflection was registered, being over a ton more than four times what the architects have called for. In every case upon removal of the load, the deflection disappeared.

The interesting experiments were witnessed, among others, by Hon. T. Berthiaume; Mr. F. A. Peterson, chief engineer C.P.R.; Sir Adolphe Caron; Mr. Edward Maxwell; Mr. Arthur Berthiaume; Mr. F. H. Leonard; Mr. A. Dansereau, director of La Presse; T. W. Horn, president, Mr. C. S. Spencer, chief engineer, Expanded Metal Co., Toronto, by whom the work was installed; Mr. G. W. Brunette, Mr. James Paton, Mayor Desjardins of Maissoneuve; building inspector Lacroix; Mr. A. C. Hutchison; Mr. H. R. Ives; Mr. R. F. Ogilvy; Mr. John Baillie; Mr. William Hutchison; Mr. L. Bourgoine; Mr. L. Cadieux.

## MONTREAL BUILDERS' EXCHANGE.

The Second Annual Report of the directors of the above Exchange, contains the following: "The past year has been, to some extent, an eventful one in building circles, inasmuch as a notable improvement was made in regard to the letting out of contracts and the erection of some important buildings. An unfortunate feature, and one which has seriously hampered the year's progress, was the scarcity of iron, but as it is an "ill wind that blows nobody good," the large demand for iron from this country to the United States and the inadequately small supply, has been the means of influencing large capitalists in establishing extensive iron works in our own country, thus developing our national resources.

Our Charter was granted to us by the council of the legislature under date of March 10th, and under its provisions a special meeting was called for the 27th June, at which the action of the Directors was confirmed and the by-laws adopted. At this meeting a recommendation from the board to have subcommittees appointed