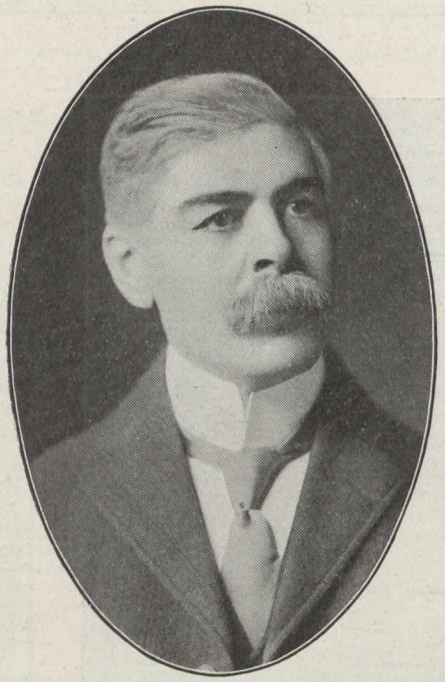
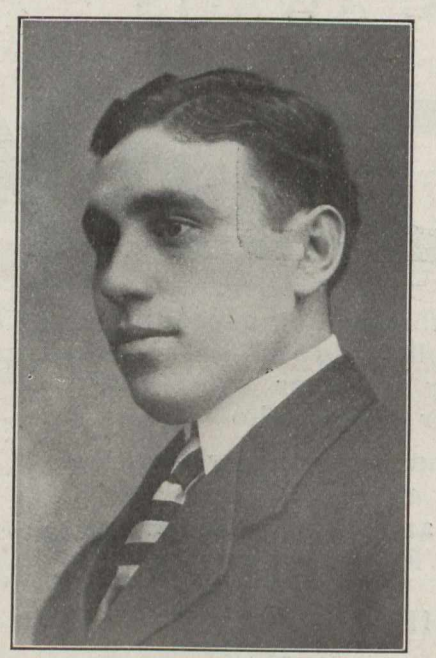


Mr. C. M. Canniff, late chief engineer of the Expanded Metal and Fire-proofing Co., Toronto, and Mr. John, S. Fielding, consulting engineer, have opened offices under the name of Fielding & Canniff, Civil Engineers, 15 Toronto Street, Toronto. This firm will specialize in steel and reinforced concrete, in both buildings and bridge design, dam construction, hydro-electric power plants and power transmission. Mr. Fielding and Mr. Canniff have been for many years connected with engineering work in every section of Canada.



Mr. D. Chene, the new city engineer of Huil, Que., was born in Hull in 1885. After following a course of studies at the local schools he secured a position as draughtsman with a well-known architects firm of Ottawa, Band, Burnett and Meredith, where a good, practical knowledge in architecture was secured. Mr. Chene passed the matriculation examination for Laval in 1905, and was admitted in same year at Polytechnique School, of Montreal, from which he graduated in civil engineering and chemistry, with distinction, in 1909, taking honors in his last three years of study. Mr. Chene carried out some important works for the City of Hull and for the Dominion Government before taking the position of city engineer.

Capt. W. J. Press has been appointed to N. Y. Ry. engineering staff as engineer in charge of erection and installation of machinery and equipment for shops six miles east of St. Boniface. He is now engaged at Ottawa in going over tenders for the equipment of shops. Later he will make his headquarters at St. Boniface, Man.

DOUBLE-ENDED PADDLE STEAMER

Launched on Saturday at the Polson Iron Works, Toronto. Will be in commission by July 1st.

The "Trillium," the latest addition to the Toronto Ferry Company's fleet, was successfully launched on Saturday, June 18th, at the shipyards of the Polson Iron Works. It is a double-ended paddle steamer on the lines of the "Bluebell," but with increased accommodation and improved conveniences. The contract price is in the neighborhood of $75,000. The vessel has a length of 150 feet, and a beam of 45 feet. Her engines are of the inclined compound type, with 17-inch and 34-inch cylinders, and a 48-inch stroke, capable of driving her at ten miles an hour. The electric light plant will generate power enough to handle 350 sixteen-candlepower lamps. The contractors, the Polson Iron Works, Limited, have undertaken to have the boat ready for commission within two weeks, quite a feat in rapid outfitting. The engines were installed in the boat before launching, and the boiler, which was slung on a crane in readiness, went into her a couple of hours after the launching. The cabins are all ready to be lifted on and fixed, and the builders are confident that the "Trillium" will be on the service by July 1.

TESTING CEMENT FOR LOUISVILLE, KY.

(Continued from page 655).

There is necessarily a variation in the results of the tests for tensile strength, both of neat cement and mortar, although with care and skill in manipulation the variations may be materially reduced. After making a large number of tests it was decided that, for the ordinary routine work of the laboratory, the difference in strength between the highest and lowest tests of mortar briquettes, either seven or twenty-eight days' old, should not exceed sixty pounds. If this amount was exceeded, a new test was immediately started. In cases of special experiments or shipments of cement, the quality of which was particularly doubtful, and other cases requiring great accuracy, judgment was based upon tests in which the limit of variation was materially less than that adopted for the ordinary routine of the laboratory.

Whenever tests of neat cement at the end of seven days showed a tensile strength exceeding 800 pounds, a new test was at once started, experience having proved that in most cases, if the manipulation and conditions had been good, cement-testing above 800 pounds in seven days will show a retrogression in twenty-eight days. In all cases at least forty briquettes were made up from each carload tested, eight for each period of time in case of both neat and mortar tests, and, where the tests were made for the purpose of passing upon the quality of the cement, all results were booked and judgment passed upon the average. In experimental work eight briquettes were made up for each test of tensile strength, but only those breaking within five per cent. of the mean were used in the tabulations.

Storage for Twenty-eight Day Test and Lumpy Cement.—The specifications required that the contractors should hold cement in storage long enough to allow for tests of twenty-eight days' duration. It was found, however, during the winter of 1908 and 1909, that in several of the warehouses the dampness of the atmosphere had penetrated so as to cause the cement to become somewhat lumpy. In some cases this was due largely to the fact that doors and windows had been left open, allowing the damp air to enter freely; but it was also found that in other warehouses in which cement seemed to be well protected there was also some deterioration in