

A CONCRETE ROAD has been laid providing a permanent highway to the plant of the Canada Cement Company of Montreal. The construction consists of several types and the specifications similar to those adopted by the Association of American Portland Cement Manufacturers. The actual work was done under the supervision of the Canada Cement Co. and consisted of fifteen sections, in some of which eight pounds of high calcium hydrated lime were added to each bag of cement and the two thoroughly mixed before placing in the concrete mixer. In the one-course sections containing lime, the lime was used throughout the entire thickness, but in two-course sections the lime was used in the top course only. All sections of the road are twenty feet wide—concrete fourteen feet and shoulders three feet. A four-inch tile drain was placed under the north shoulder. The proportions used for one-course concrete were 1:1½:3. For two-course concrete the proportions for the base were only 1:2½:5, and for the wearing course 1:1:1½. The subgrade was rolled the entire width of twenty feet. The concrete is six inches thick at the sides and eight inches thick at the centre for all sections.

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THE MARKED increase in disastrous fires is directing more attention every day to the need of fireproof building materials that can be relied upon. The failure of many so-called fireproof materials when subjected to the intense heat of large conflagrations suggests the need of more careful judgment in the choice of these materials as well as a more stringent interpretation of fireproof building regulations. The demand for building materials that would not be affected by fire has encouraged manufacturers to experiment with all kinds of materials, and one that has thus far successfully withstood all tests is a peculiar rock known as asbestos. Deposits of asbestos, in one or more of its allied species, are found to a limited extent in Russia, Italy, Egypt, India, South Africa, and, in fact, in all parts of the world. But that which is mined in Canada is about all that is of much commercial value, as other varieties are either too brittle to utilize or too hard to mine. By far the largest of these Canadian mines is owned by the H. W. Johns-Manville Co., of New York.

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A NEW DREDGE is being built by M. Beatty & Sons for the Randolph Macdonald Co., Limited, of Toronto, of the boom and A frame type, with a three and a-half cubic yard dipper to work in thirty feet of water. The steel hull is one hundred and seven feet long, with thirty-six feet beam; nine feet three inches deep at the bow and eight feet three inches at the stern. The boiler, of the Scotch marine type, is ample in

size to furnish steam for the entire plant when working under heavy load. The bow anchors, instead of wood, are made of steel plating, twenty-eight by thirty inches by fifty-five feet long, with a circular reinforcement on the inside, forced into place and firmly riveted. All the sheaves and bearings, as well as the anchor points, are of open hearth steel castings.

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THE NEW galvanizing plant recently completed by the A. M. Byers Company at their mills in Pittsburgh contains the most modern and efficient equipment for manipulating the galvanizing process known to-day. Specifications call for hot metal process, a coating of highest grade prime western spelter, and a deposit one hundred per cent. heavier than that required in Government galvanizing specifications. A careful weighing and inspection before galvanizing; the device for turning the pipe in the baths; the extra long cleansing period; the pyrometer regulated kettles; the superior quality and absolute purity of the spelter, and the final weighing that assures the proper coating—each of these steps are specialized and handled by experts. Into its porous, uniform texture the spelter bites down deeply, coating thickly and evenly, minimizing possibility of flaking and assuring greatest life.

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“WAR found us ready. In our stock-room in Toronto we have at the present time 965 chain-blocks in stock. Your orders by 'phone, telegram or letter will be shipped at once. The Herbert Morris Crane & Hoist Company, Limited.” In musing over the above circular this thought presented itself; how many of the large business concerns will be able to say at the end of the war, “Peace found us ready”? It might be well for each company to consider the desirability of having an over-head stock when peace comes and in the meantime by so doing keep our country from becoming panic-stricken and our people from experiencing the embarrassment of extreme poverty.

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“CERTAINTY”

is what is sought for by everyone. With the Architect and Engineer this is particularly true

The Dietzgen Instruments and Materials are manufactured in our own Factories under the discipline of establishing Accuracy and Dependability; always with the idea of the exacting purpose for which they are intended, and not simply as merchandise to sell—to co-operate and verify with exactness the thought behind their use.

EUGENE DIETZGEN CO., LTD.,
116 Adelaide St. W., Toronto.