Portland Ceme

HIGH GRADE GERMAN BRANDS FOR GRANOLITHIC AND ARTIFICIAL STONE SIDEWALKS.

Sewer Pipes, Best English Cements. Best Belgian Cements

Culvert Pipes, &c.

W. McNALLY & CO., Montreal

Blue Lake Cement

MADE BY

THE ONTARIO PORTLAND CEMENT CO. LIMITED HEAD OFFICE : BRANTFORD, ONT.

Crushed Stone, Limited

STONE of any Size and in any Quantity on hand for Sidewalks, Roadwork or Concrete Work

KIRKFIELD, ONT.

Head Office 1 47 Yonge St. Arcade. TORONTO G. W. Essery, Manager.

THE NORTH WESTERN EMPLOYMENT AGENCY

We supply men of all nationalities on short notice. Laborers, Railway Men, Mechanics, Bushmen, Teamsters, etc., furnished on demand.

378 Craig Street West, MONTREAL MAIN 468 We undertake all kinds of Contracts by letter or telegram

To Contractors:

You cannot decline to go on your friend's note if he has already gone on your Contract Bond. Why not be absolutely independent and ask us to act as surety on your Contract Bond?

United States Fidelity and Guaranty Co. of Baltimore, Md.

Head Office for Canada: 6 Colborne St., Toronto. A. E. KIRKPATRICK, Manager. Cash Resources, over \$3,500,000.00. Capital \$1,700,000.00.



CONCRETE PIERS FLOATED INTO POSITION.

A concrete block, weighing from seven to fourteen tons, for which it is claimed that it will float in water for a sufficient length of time to tow it to any place desired before it is lowered into position, is a new feature in connection with government breakwater and harbor work, that is at present in its experimental stages in Milwaukee, says "The Improvement Bulletin."

A "trial trip" of one of these blocks being floated to position, was made in Milwaukee harbor recently, under the personal direction of Major W. V. Judson, chief government engineer there and designer of the new style block.

The new block is a reinforced concrete caisson, or box. It may be built to almost any size, to meet the requirements of any particular work. The proposed standard size, however, will weigh about fourteen tons. In the experimental work now being carried on in Milwaukee, the blocks used are half that weight.

They consist of walls of concrete, enclosing a large hollow space. This is made watertight, so that the block floats and ean be taken direct to a point over the position in the pier for which it is designed. It is then uncorked, like a barrel, and the water is allowed to rush in, sinking it to position. The hollow space is then filled in with sand and gravel, and when the space is thus filled the block is sealed up.

In floating out to the pier at the breakwater the first of two of these blocks was allowed to remain in the water for twenty-four hours, in order to determine its floating qualities and how long it might be possible to keep a block afloat if necessary before the water caused it to sink. As a rule, a few hours are sufficient time for handling one of these blocks from its starting place to the point where it is desired to lower it.

Sp

Inquiry is said to have already been made as to the possibility of securing the application of the patent for construction work in the east and south. It is said that the government alone is authorized to use them, as they are fully protected by letters patent.