

The water supply is taken from the Welland Canal to a settling basin located about one mile from the pump house and is conducted through a 12-inch pipe line to the pump house, where an 8-inch N.R.S. gate valve controls the suction end.

The 8-inch discharge line from the pump is provided with an 8-inch N.R.S. gate valve and an 8-inch horizontal swing check valve connecting through an increaser to the 10-inch city main.

The stem for the discharge valve has been extended up through the floor adjacent to the pump so that the unit may be conveniently operated from the main floor.

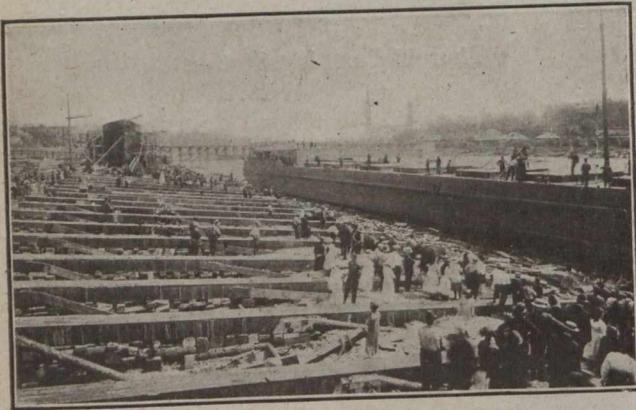
## SHIPBUILDING AT THREE RIVERS

By Romeo Morrisette

Dept. of Public Works, Three Rivers, P.Q.

**T**HE Tidewater Shipbuilding Company, Limited, launched their first steel vessel on Saturday, July 27th. The launching took place in the eastern branch of the St. Maurice River, at Cap de la Madeleine. The company is a subsidiary of the Canada Steamship Lines, Limited.

John J. Collins, B.A.Sc., of Three Rivers, has been retained by the company to supervise the construction of



"T. P. Phelan," Launched at Three Rivers, P.Q.

wharves. The company is now building a 300-ft. quay, composed of twelve rows of 40-ft. piles, driven at 3-ft. centres longitudinally and at 4-ft. centres transversely. The cribwork between the piles will be filled with dredged material. From the wharf to the C.P.R. bridge a sea-wall will be built, extending the full length of the property. At the bridge, 12-in. x 30-ft. spruce piles will be driven and a B.C. fir cribwork built.

Contract has been awarded to the Laurin & Leitch Construction and Engineering Company, Limited, of Montreal, for the dredging of 182,000 cu. yds. of clay and sand, in order to open a 15-ft. channel from the company's property to the St. Lawrence River. The company will dredge the material needed for fill with their own suction dredge.

The manufacture of tin-plates in Germany has recently increased to such an extent that Germany hopes to be able to export that product on the conclusion of peace. Before the war the greater bulk of Germany's supply was imported from England. In view of the scarcity of tin, new processes have been brought out to recover this metal from old tin-plates, and the tin deposits of Germany that were formerly considered as too poor to work are now being exploited so far as possible.

## OTTAWA'S MAYOR LIKES SASKATOON'S FILTER PLANT AND METERS

**"S**ASKATOON has taught a lesson to Ottawa, or at least to the mayor of the latter city," says the last issue of Engineering News-Record, of New York, "and has thus shown once more that the smaller and more progressive cities of the western part of the continent can teach the larger and more conservative cities of the East, if the latter are only willing to learn.

"As many of our readers know, Ottawa has been backing and filling with its very pressing water-supply questions for many years. It has turned down projects for slow-sand filters, for mechanical filters and also for gravity supplies from sources which were supposed not to require filtration. Journeying westward, Mayor Fisher of Ottawa on approaching Saskatoon noted the very muddy character of the water of the Saskatchewan River. On reaching his hotel he was apprehensive of the quality of water he would find, but was pleased with its tasteless and colorless condition, and found on investigation that a 'small, inexpensive filtration plant' worked the transformation. Promptly he wrote back to his home city urging that 'we forget that there ever was a water question in Ottawa,' and saying that a filtration plant would be a good investment even if it were scrapped after ten years on account of the introduction of one of the proposed gravity supplies.

"A further contrast in water supply matters was found by Mayor Fisher at Saskatoon. His letter home states: 'For a long time last winter, Ottawa pumped daily from 250 to 300 gallons for every man, woman and child in the place. The maximum pumped in Saskatoon during the same period was 72 gallons per capita. This is all the more remarkable in view of the fact that for weeks at a time the thermometer stands at  $-20^{\circ}$  F. in Saskatoon.' Every service in Saskatoon is metered, Mayor Fisher reports. The lesson is obvious. Unfortunately, Ottawa is not the only city that prefers to pump and waste an immense quantity of muddy or otherwise unsatisfactory water, rather than curtail consumption, by the use of meters and thus make filtration a comparatively inexpensive proposition."

The development of this country is indicated by the annual report of the Postmaster-General, which shows that last year over 700,000,000 letters were posted in Canada, or three times the number handled in 1907.

Amongst the novelties produced by the war is a machine invented by Thomas Marshall, of Stanningley, England, for collecting barbed wire scrap in war-destroyed areas. The machine, which has a remote resemblance to a straw and hay elevator, is carried on caterpillar chain tracks. The wire scrap is picked up and cut into lengths, and then dumped into cars or pressed into bales.

In shipbuilding, says "The Engineer," of London, Eng., one of the effects of wood shortage is the increased use of substitutes for sheathing on steel decks. The chief drawback of some of these compositions, particularly those in which sawdust is bound together in a stone-like mass, is that they retain a quantity of chloride of magnesium which, in solution, is powerfully corrosive to steel, and may accumulate between the composition and the steel deck.

"Many users of the Patent-office Library," says "The Engineer," of London, Eng., "will hear, with the highest satisfaction, that the Library is at last to possess a complete photostat apparatus, the offer of one from Sir Robert Hadfield, as a mark of his 'appreciation of the unfailing courtesy and kindness he has received from the department, having been accepted. The laborious copying of drawings and texts will now be obviated, and it may be hoped that for a slight expense photo-copies of pages from books will be available at a few hours' notice."