

last summer and which was favorably reported upon by Dr. R. W. Brock, director of the geological survey of Canada.

Montreal, P.Q.—The Board of Control have at their disposal \$800,000 and will use the same for improvements that are to be included in the supplementary estimates. The major portion of this amount has come in as revenue from tax arrears and according to the civic constitution may be spent on works other than those of a permanent nature.

Port Arthur, Ont.—The Board of Education has accepted the plans of Hood and Scott, Architects, for a 12-roomed school building in Coatsworth Park. Estimated cost \$50,000.

Quebec, P.Q.—The management of the Dorchester Electric Company has purchased a large lot of land known as the Taschereau property. It is said that the company intends immediately erecting their workshops on the site.

Regina, Sask.—Builders resident in this city recently held a meeting for the purpose of forming a Builders' Exchange for the province of Saskatchewan, and later to become affiliated with the Dominion Exchange.

Sarnia, Ont.—The municipal council have negotiations on with the management of a large steel manufactory. They have offered one acre of land free.

Stratford, Ont.—The ratepayers voted in favor of constructing a new market shelter at a cost of about \$10,000. Other by-laws carried call for the granting of a free site to the Macdonald Thresher Company, the guaranteeing of an \$8,000 loan to Mr. B. M. Williams, and to grant a loan of \$5,500 to Mr. G. L. Griffith, who proposes the establishment of a saddlery and harness plant in this city. Mr. Williams requires his money for assistance in the organization of a woolen plant.

St. Lawrence River.—The Federal Government has secured by contract for another year the George Davie wrecking plant for use on the St. Lawrence River, it is also reported that in addition to this the shipping interests are taking steps to provide a thoroughly up-to-date plant, installed with wireless telegraphy and other modern equipment.

TRADE ENQUIRIES.

The following were among the inquiries relating to Canadian trade received at the office of the High Commissioner for Canada, 17 Victoria Street, London, S.W., during the week ending April 15th, 1912:—

A Glasgow firm who sell all grades, crude and manufactured, of asbestos, are prepared to act as selling agents for Canadian mine owners not already represented in Great Britain.

A Liverpool firm make inquiry for the names of Canadian manufacturers of linseed cake.

A South of England engineering firm wish to appoint Canadian agents for the sale of their centrifugal and turbine pumps.

A London firm desires to secure agencies for Canadian importers and exporters.

From the branch for city trade inquiries, 73 Basinghall Street, E.C.:—

A London firm manufacturing a new patented tobacco pipe, and also a special pipe cleaner, seeks suitable Canadian resident agents.

PATENTS.

The following is a list of patents recently granted to inventors in Canada; the list is furnished by Messrs. Fetherstonhaugh & Company, Royal Bank Building, King Street East, Toronto.

J. H. McKittrick and G. S. Ransom, cremators; P. L. Robertson, screw machines; J. M. Farrow, spike machines; T. Allatt, apparatus for making spacers for antifrugal separators; A. G. Ham and A. A. Homm, hair spring tester; M. E. Colhoun and W. Colhoun, ladies' hat fasteners; E. Carlson, harrows; T. C. Fleming, window refrigerators; E. A. Gerth, Jr., an advertising device; H. A. Gorrell, whip-holders; H. C. Hogarth, filters for wells; W. H. Landon, devices for tapping trees; F. A. Leslie, water coolers and heaters; J. McLaren, cocks; W. W. Ormsbee, Jr., containers; R. Roebuck, snow plows; C. E. Smith, tile draining machines; A. E. Williams, skirt elevators.

LESSON OF THE TITANIC DISASTER.

The Editor:

Sir,—We who build on land have learned some things from the naval architects and it is barely possible that they could learn a twist or two from us. The salvation of our buildings—from fire—lies in fire-resisting construction and small units of space where fire may originate; the salvation of a ship lies in making it fire and waterproof and cutting it up into as many water-tight compartments as possible.

Collision bulkheads, false keels and midship compartments are well enough, but not sufficient. The coal-bunkers, the trunk-hold, the supply compartments, any space about a ship that can be made water-tight should be so and have only emergency openings thereto and that can be closed from the bridge or automatically. But it seems to me, and I have had something to do with ships and am not altogether without experience, and I have advocated it for years (though mariners and naval constructors have steadfastly averred I was wrong) that the decks themselves be made buoyant. Not necessarily detachable decks that would float off in a wreck, a species of raft, as has been advocated, but just buoyant decks. Steel plates top and bottom of deep deck beams, very thin plates on the bottoms to save weight, but amply effective. There would be nothing to close off, no dependence in emergency upon man or machinery, but simply unsinkable construction. Between every two deck beams would be an air compartment. Suppose the ship be rammed by another, or rip its bottom open on ice, or have its bulkheads otherwise put out of commission, it would fill with water to the first deck. There would be encountered a species of "ship-preserver," not sufficient buoyancy to sustain the entire load, but enough to slacken the load. The water would rise to another deck, more buoyancy and so on up, perhaps submerging all but the top decks, but the vessel would float. You couldn't sink it in any storm or crash. Let the accident rip parts of the decks off, still, as long as any beams held together, there would be buoyancy enough to sustain the wreck. Few ships have higher than eight feet decks. Make the deck beams light of section but deep, at least a foot, and then you have, whatever may happen to the vertical water-tight compartments, at least one-eighth of the bulk of the ship in horizontal, absolutely air-tight and water-tight ship-preserving space. Supposing, to get abundant thickness of decks, you have to build ships of one deck less in maximum height, surely that "loss" is as nothing compared to the advantages of having an absolutely unsinkable ship, something our naval architects have not yet given us.

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A NEW DEVICE FOR THE DETECTION OF WATER IN HOLDS OF SHIPS.

An electric alarm to signal the presence of water in the hold of a vessel is the invention of Leon Ducharme, 160 Montcalm Street, Montreal, P.Q. It consists of an ordinary electric bell attached by wires to a cylinder with a float inside. As the water rises the float rises and closes the electric circuit, sounding the bell. The cylinder can be set to ring the alarm at any depth of water from inches to feet. The alarm can also be attached to the usual discindicator.

The invention claims that on a large ship with one of these cylinders in each compartment of the ship, all attached to a bell alarm and a discindicator in the chart room, the captain of the ship would know the very second that water entered his ship and be able to act immediately.