

storing ice to preserve the catch of fish, and for storing the fish itself. The larger vessels are fitted with a reserve bunker, for use when steaming to distant fishing grounds. On the outward voyage the coal is worked from this bunker, so that the space can be used for storing fish on the homeward voyage. The fish room is divided up into several compartments, both vertically and horizontally, into which the various kinds of fish are carefully packed in ice, which preserves the catch in good condition during the return voyage, the ice being finely crushed before it is deposited in the ice room. In consequence of the vessels frequenting distant fishing grounds, sometimes as far as 1,000 or 1,200 miles from the home port it has been found necessary to adopt a system of insulation for the better preservation of the fish, especially during the summer. The entire structure is of unusual strength, the scantlings being considerably in excess of Lloyd's requirements for their 100 A1 class, while the vessels are double rivetted throughout, these precautions having been found necessary, to enable this class of vessel, not only to withstand all conditions of weather, but also the heavy strains consequent on having to tow or trawl with a maximum weight of gear, with all the contingent risks of fouling obstacles, such as sunken wreckage and protruding rocks at the sea bottom. For the same reason very powerful machinery is fitted, ample boiler power being an important consideration. The engines are of the triple expansion type, and the principal working parts are of excessive dimensions, to provide against the severe and sudden strains the machinery of necessity has to contend with. A very powerful double barrelled steam winch, capable of winding 2 steel warps, varying from 1,000 to 1,500 fathoms in length, is fitted in a convenient position, while, as before mentioned, there are special deck fittings of a most ingenious design, for working the fishing gear, the nature and position of which demand very careful study.

Steam herring drifters are used, round the coast of Great Britain, in the herring fisheries. The modern steam drifter is a smart, sturdy, little craft with two masts, fore and mizzen, the foremast being arranged to lower when the vessel is drifting with the nets, so as to offer less wind resistance. The majority of steam drifters are now built of steel (but those to be built in Canada will be of wood) and vary from 80 to 99 ft. between perpendiculars by about 18 ft. breadth and 9½ ft. depth to top of keel. They are fitted with compound surface condensing engines of from 200 to 250 i.h.p. and attain a speed of from 9 to 10 knots. The general design of these vessels is a somewhat intricate study, owing to the great change of trim to which they are subject. To allow for this they are given a draft of from 10 to 11 ft. aft and only a 4 ft. forward. This deep aft is necessary, on account of the machinery and bunkers being placed abaft the centre line of the vessel, so as to leave sufficient space for fish and net rooms forward and thus prevent the vessel from going down by the head, when returning to market with a heavy load of fish. The fish room is divided off at each side into sections or "pounds," the object of this being to break up the bulk of the fish, which would otherwise be damaged by the vessel's motion. The only deck machinery is a self contained steam capstan, fitted near the bow of the vessel, for hauling in the rope to which the nets are attached. These are very ingenious machines of special design and workmanship. A comfortable cabin is

provided in the after part of the vessel and the crew are berthed under the fore-castle forward, although in some cases the whole of the crew are accommodated in the after cabin. A separate galley is provided on the deck at the after part of the engine room casing.

#### Additional Shipbuilding Plants.

There are a number of rumors as to the establishment of new shipbuilding plants, probably only a few of which have any foundation in fact.

An Ottawa press dispatch says that negotiations are in progress with a view to the establishment in Canada of a branch of another of the large British shipbuilding firms, that the matter is occupying Sir Robert Borden's attention and that the plant will probably be located on the Atlantic seaboard.

The St. John Shipbuilding Co. is being organized at St. John, N.B., and will, it is said, be incorporated by Dominion charter, with an authorized capital of \$1,000,000. Thos. Nage is mentioned as the principal promoter.

Another project is spoken of for Newcastle, N.B., E. A. McCurdy being one of the promoters, and Lord Beaverbrook being mentioned as one of those interested.

International Shipbuilding Corporation Ltd. was incorporated recently, by Dominion charter, with authorized capital of \$2,000,000, and office in Montreal. The incorporators are all in the office of H. A. Lovett, K.C., there. It is said that United States people are interested among others.

Hamilton Shipbuilding and Ferry Co., a subsidiary of Canada Steamship Lines, Ltd., is said to be contemplating estab-

lishing a plant at Hamilton, Ont., and in this connection has informed the city council that a condition is that it should be given a lease of Wabasso Park, with a right to operate a ferry service.

The Canadian Shipbuilding Co.'s plant, which was established at Bridgeburg, Ont., as a Canadian General Electric Co.'s subsidiary, and which has not been operated for the past 10 years, or so, will it is reported, be started up again.

The National Shipbuilding Co., Ltd., has been incorporated, with an authorized capital of \$100,000, and office at Goderich, Ont., and will, it is said, take over the old Doty plant there.

Ocean & Inland Transportation Co., Ltd., has been incorporated under the Dominion Companies Act, with \$40,000 capital, and office at Montreal, to own and operate steam and other vessels, and to carry on a general navigation, salvage and towage business. The incorporators are: W. R. L. Shanks, F. G. Bush, G. R. Brennan, A. G. Yeoman and H. W. Jackson, Montreal.

The Australian Navigation Co., Ltd., incorporated under the Nova Scotia Companies Act, with office at Halifax, N.S., has been removed from the register and the company dissolved, as it is not carrying on business, and is not in operation.

H. Savigny, bridge tender on the Welland Canal, has been awarded \$300 for injuries sustained when the s.s. Mapleton collided with a bridge at Port Robinson last year.

The s.s. Westmount, which is being built for the Montreal Transportation Co. by the Collingwood Shipbuilding Co., will be launched on Apr. 5.

### Grain in Store at Terminal Elevators, Interior Terminal Elevators and at Public Elevators in the East.

Week ending Mar. 9, 1917.	Wheat. bushels.	Oats. bushels.	Barley. bushels.	Flax. bushels.	Totals. bushels.
<b>Port William—</b>					
C.P.R. . . . .	4,558,271	2,126,112	228,587	.....	6,912,970
Consolidated Elevator Co. . . . .	1,033,785	238,839	38,772	179,761	1,491,157
Empire Elevator Co. . . . .	844,647	299,695	40,390	253,915	1,438,647
Ogilvie Flour Mills Co. . . . .	1,174,051	68,793	35,409	.....	1,278,253
Western Terminal Elevator Co. . . . .	907,767	296,006	35,367	479,857	1,718,497
G. T. Pacific . . . . .	3,240,888	2,202,249	132,679	83,986	5,659,802
Grain Growers' Grain Co. . . . .	1,234,283	779,649	96,266	.....	2,110,198
Port William Elevator Co. . . . .	832,943	456,514	28,425	63,118	1,381,000
Eastern Terminal Elevator Co. . . . .	1,038,088	575,238	28,163	.....	1,636,489
Thunder Bay Elevator Co. . . . .	675,836	381,238	60,376	66,087	1,383,537
Davidson & Smith . . . . .	603,989	252,383	12,533	.....	868,905
<b>Port Arthur—</b>					
Port Arthur Elevator Co. . . . .	4,690,718	2,559,421	417,452	166,039	7,833,630
D. Horn & Co. . . . .	267,784	143,401	29,852	140,473	581,510
Dominion Government Elevator . . . . .	2,018,539	724,047	87,597	146,029	2,976,212
Grain afloat . . . . .	89,245	101,331	.....	.....	190,576
<b>Total terminal elevators . . . . .</b>	<b>23,205,834</b>	<b>11,204,916</b>	<b>1,271,868</b>	<b>1,578,765</b>	<b>37,261,383</b>
<b>Saskatoon Can. Govt. Elevator . . . . .</b>	<b>2,209,952</b>	<b>666,967</b>	<b>37,132</b>	<b>67,079</b>	<b>2,981,130</b>
<b>Moose Jaw Can. Govt. Elevator . . . . .</b>	<b>2,072,845</b>	<b>571,857</b>	<b>21,491</b>	<b>97,634</b>	<b>2,768,827</b>
<b>Calgary Can. Govt. Elevator . . . . .</b>	<b>976,023</b>	<b>1,166,620</b>	<b>99,835</b>	<b>12,379</b>	<b>2,254,857</b>
<b>Vancouver Can. Govt. Elevator . . . . .</b>	<b>4,758</b>	<b>57,051</b>	<b>.....</b>	<b>.....</b>	<b>61,809</b>
<b>Total interior terminal elevators . . . . .</b>	<b>5,623,578</b>	<b>2,462,495</b>	<b>158,458</b>	<b>177,092</b>	<b>8,061,623</b>
<b>Depot Harbor . . . . .</b>	<b>.....</b>	<b>264,535</b>	<b>.....</b>	<b>.....</b>	<b>264,535</b>
<b>Midland—</b>					
Aberdeen Elevator Co. . . . .	173,166	183,420	.....	.....	356,586
Midland Elevator Co. . . . .	17,961	.....	.....	.....	17,961
Tiffin, G.T.P. . . . .	459,288	532,971	93,109	.....	985,368
Port McNicol . . . . .	469,391	834,848	51,104	.....	1,355,343
Collingwood . . . . .	.....	8,450	.....	*17,793	26,243
Goderich . . . . .	556,201	178,083	.....	.....	734,284
Western Canada Flour Mills Co. . . . .	262,260	37,402	.....	.....	299,662
<b>Kingston—</b>					
Montreal Transportation Co. . . . .	.....	144,992	.....	.....	144,992
Commercial Elevator Co. . . . .	2,240	58,804	.....	.....	61,044
Port Colborne . . . . .	606,249	803,668	.....	.....	1,409,917
<b>Montreal—</b>					
Harbor Commissioners no. 1 . . . . .	12,939	135,463	17,886	.....	166,288
Harbor Commissioners no. 2 . . . . .	404,520	103,652	61,767	.....	569,939
Montreal Warehousing Co. . . . .	236,261	1,062,223	1,247	.....	1,299,731
Quebec Harbor Commissioners . . . . .	2,960	245,548	.....	.....	248,508
West St. John, N.B. . . . .	111,570	2,957	29,916	.....	144,443
<b>Total public elevators . . . . .</b>	<b>3,315,006</b>	<b>4,497,016</b>	<b>255,029</b>	<b>*17,793</b>	<b>8,084,844</b>
<b>Total quantity in store . . . . .</b>	<b>31,784,418</b>	<b>18,164,427</b>	<b>1,685,355</b>	<b>1,755,857</b>	<b>53,407,850*</b>
*Rye.					