

Canada West Coast Navigation Co's Auxiliary Ships.

In view of the pressure on shipbuilding which is at present being exercised, and the regeneration of wooden shipbuilding, the performances of what may be termed the pioneers of the new type of auxiliary sailing vessels, are being watched with considerable interest. While an extensive programme of wooden shipbuilding is being undertaken in Canada, and also in the United States, the whole project is being very freely criticized, and it is being urged that such building should not be undertaken to any great extent, owing to the lack of seasoned lumber, that the vessels would be of low speed and not suitable for avoiding the submarine danger, that they could not be adequately armed, and that steel vessels are the only suitable means of meeting the emergency. Whatever arguments may be brought to bear on the subject, the fact remains that Canada West Coast Navigation Co., controlled chiefly by men associated with Canada Steamship Lines, Ltd., have had sufficient confidence in vessels of this type, and nearly a year ago placed orders on the British Columbia coast for the construction of eight auxiliary ships. Several of these have been delivered, and the balance are approaching completion. They are designed chiefly for the transportation of lumber, but without doubt could be so modified as to meet the exigencies of the demands for general cargo carriers. The recent trials of the ship Margaret Haney, show that a speed of 10 knots an hour can be obtained with sail and power combined, with a breeze of about 3 Beaufort scale.

The auxiliary power equipment, which is the same on each of the company's vessels, consists of two 160 h.p. Bolinder type, semi Diesel engines, the horse power being developed at 225 revs. per min. giving a speed under power alone of about 3 knots. The engines are of the two cycle type, and are fitted with a direct reversible with a one way clutch only, thus allowing the propeller to run free when the vessel is under sail. The clutch is operated by compressed air. The reversing gear is very simple, being controlled by one lever, which automatically stops the injection of fuel from the pumps, and as the engine comes to rest, injects a single jet of fuel into the cylinder, as the piston is on the up stroke. The pressure thus caused brings the piston to rest and starts it on the down stroke before it reaches the top centre. This is a new system and has not been used previously on engines of this type. The main fuel pumps can draw fuel from any one of the six main fuel tanks, and discharge into the service tanks, and can also be used for trimming purposes by discharging back into any of the tanks. The fuel pumps are in duplicate, and the filters on the main fuel line are so arranged that either of them can be taken out for cleaning without interfering with the flow of fuel to the main engines. All the auxiliary engines on the vessels, including windlass, four winches, and pumps, can be operated either by steam or compressed air. Steam is furnished by a donkey boiler under the fore-castle, and the air by two compressors on the main engines and one auxiliary compressor driven from the electric lighting plant. Crude oil is used as fuel, and the consumption when the engines are developing 160 h.p. is a little over 11 gallons an hour. The tanks have capacity for 30,000 gallons of fuel.

Electric light is furnished by a Canadian Westinghouse generator, driven by an 8 h.p. engine of similar type to the main engines. The officers' quarters are located under the poop deck and the crew's quarters are placed forward. The crew consists of 18 hands, including master, two mates, three engineers, one donkey man, two apprentices, seven seamen, cabin boy and cook.

A photograph of the ship Mabel Brown was reproduced in Canadian Railway and Marine World for May, and this illustration can be taken as typical of the other vessels under way for the company.

Shallow Draught Vessels for Indian Service.

Orders have been received recently by Yarrows, Ltd., Victoria, B.C., for the construction of the hulls of two shallow draught, stern wheel steamboats, for use in the shallow rivers and swampy regions of India, where navigation is difficult. This will make four of this type of vessel built at Victoria. One built early in the year is now in India, a second is ready for shipment, and the remaining two are in hand at the yards. The steel hulls only, with superstructure and rudder forgings, are made at Victoria, the engines, boilers, etc., being made by the parent company in Glasgow, Scotland, and shipped direct to India. The hulls are fabricated in Victoria and erected there, the port and starboard sides being painted with distinguishing colors, and all parts carefully numbered and named. They are then dismantled and crated for shipment to destination. The hulls are built of light weight steel, with steel main deck and holds for cargo. The upper deck, which is of wood, is for the cabins and passenger accommodation, with dining room and other conveniences, and above this is a galvanized iron roof. The wood work is done in India by the purchasers. The aim in the construction of these vessels is to have strength combined with lightness, so as to obtain the least possible draught when afloat. The hull is strengthened by 6 king posts of H section steel, 3 on each side, braced together with diagonal trussing of 3 in. double angle steel bars, also a longitudinal bulkhead in the centre running forward to aft, with deck stringers under the main deck. There are 8 transverse bulkheads, making the hull into watertight compartments, so that in the event of one of the compartments being punctured, the remaining ones will keep the vessel afloat. The vessels draw 18 in., light, and when loaded with 100 tons, approximately 36 in., and are engined for a speed of 9 to 10 knots.

Welland Canal Accident.—The s.s. Natironco, owned by A. B. Mackay, Hamilton, while upbound light, on May 3, struck and carried out the two head gates of lock 3 of the Welland Canal. The rear of the bank on the easterly side of lock 2 was partly washed away by the rush of water. Two spare gates were placed in position and locking was resumed after an interruption of 11 hours. The cost of repairing the damage done is about \$4,000. The cause of the accident was due to the snubbing wire getting caught in the compressor, and the vessel helper being unable to put it around the mooring post. When this was discovered, the master signalled to the engine room for a reverse, but the engineer put the engines ahead. They were eventually reversed, but too late to avert the collision with the gates.

The U.S. Shipping Board Criticised.

During the past two or three years, considerable criticism has been directed at the shipping legislation undertaken by the U. S. government. The Pacific Marine Review, in commenting rather pointedly on some of the work undertaken by the Shipping Board, refers to an instance which may be enquired into, and in which Canada is interested, as follows: "It will be remembered that one clause of the shipping act provides that U.S. goods or shippers are to be in no way discriminated against by foreign ships. There is opportunity under this section of the act for innumerable court actions. As an instance of the class of cases the Shipping Board is going to try there is the case of the White Star-Dominion Line's apple shipments from Portland, Me. From late in April to Dec. 1, the White Star-Dominion vessels run out of the St. Lawrence and the other months of the year from Portland, where they receive nearly their entire cargo from the G.T.R. The White Star-Dominion Co. has a contract for Canadian apple shipments which uses up most of their freight space for months at a time. They refuse to take U.S. apple shipments because they have no space for them if they live up to their contract with the G.T.R. The only reason the steamships of this line go to Portland, in the winter rather than to St. John, N.B., is because of their agreements with the G.T.R. We understand the Shipping Board is to institute proceedings against the White Star-Dominion Line for discrimination against U.S. shippers. If these proceedings are successful the only losers will be the G.T.R. and the City of Portland. The Canadian shippers may be inconvenienced also; in fact, everyone concerned will be injured with the single exception of the concern against which the action has been taken. It does not look like a very sensible proceeding. Here we have goods of Canadian origin, shipped on a Canadian railway and carried on a British-Canadian ship. In transit, the goods pass through a small section of U.S. territory and are trans-shipped at a U.S. port, thus giving a U.S. city the chance to profit through at least one step of the transfer, the moving of the goods from rail to ship. The parties to the transaction are Canadian shippers, a Canadian railway and a British steamship line. What right has the U.S. to interfere in a case of this kind? Will the U.S. shipper have a better chance to ship goods on a White Star-Dominion vessel when she has been forced to sail from St. John than he has now when she is leaving Portland? If such cases as this one are to be the work of the Shipping Board, we need hardly look for any marked growth of the U.S. merchant marine resulting from the labors of that body."

Plant Line Service Cancelled.—A. W. Perry, General Manager, Plant Line, Boston, Mass., operating Canada Atlantic & Plant Steamship Co., has given notice that owing to conditions in the United States and Canada, on account of the war, the exceedingly high price and scarcity of fuel and of operating expenses, and the consequent falling off in passenger traffic, the company is unable to resume its service between Boston, Nova Scotia and Prince Edward Island. When the resumption of service is decided on notice will be given. All matters pertaining to the company's business will be attended to by F. H. Chipman, Plant Line, 453 Washington St., Boston.