

tion can be carried out when desired, has five positions on the switch, similar to those of the ordinary engine room telegraph, each position being definitely fixed by cams and rollers so that a stoppage at an intermediate position is prevented. For half speed, no. 1 generator is coupled up to no. 2 winding of the motor, and no. 2 generator is running light or stopped; for full speed each generator is connected to its own winding in the motor. The controlling gear provides for the interruption of the excitation of the generators while the switch is being moved from one step to another. This method of operation renders the electric circuits dead while the switching over operation is being carried out and injurious sparking is avoided.

Two steam boilers are provided for operating the deck equipment, steering gear, electric lighting and heating. Fuel oil is used for the boilers. It is estimated that the vessel will carry about 250 tons more than a similar vessel equipped with reciprocating engines, and she is designed to carry 2,400 tons deadweight of cargo, fuel, fresh water and stores on a 14 ft. draught.

Her dimensions are, length between perpendiculars 250 ft., length over all 256 ft., breadth extreme 42½ ft., depth moulded 19 ft., forecastle 48 ft., poop deck 42 ft., speed 9 knots an hour.

The foregoing is adapted from the Marine Review.

Navigation Matters on the Yukon River

O. L. Dickeson, President White Pass and Yukon Route, has announced that the company will extend its Yukon river steamboat service next year to Fairbanks, Alaska, about 800 miles northwest of Dawson.

A Pacific Coast correspondent writes as that the additional service may be provided by putting in operation some more boats, which are idle at White Horse, Yukon. This, however, being contingent upon the U.S. Government opening Fairbanks as a subport of entry for these vessels. If this is not conceded, it is expected the company will build two more boats at Seattle, Wash., which will be shipped to White Horse in sections and put together there.

In the early rush to the Klondike, before the White Pass and Yukon route was entirely completed, there were a large number of people rushing into Dawson seeking gold, and it looked as though navigation would be closed, due to weather conditions, before a sufficient amount of supplies could be handled into Dawson to take care of the population. Hence the Canadian Government issued an order permitting United States bottoms to handle goods into Dawson as a free subport of entry. The necessity, however, for issuing this order, as it turned out, never existed, nor does it exist to-day, although no action was taken to have the Government rescind the order to protect British capital against the invasion of U.S. capital in British territory. This has given the U.S. company such a decided advantage over the British company that the British Yukon Navigation Co., Ltd., made application to the U.S. Government to be accorded a similar courtesy in the opening of Fairbanks as a subport of entry and thus enable it to establish a competing service, which is very badly needed all through the lower Yukon river country.

No decision has yet been given at Washington, but it is stated that the Collector of Customs for Alaska has reported adversely on the matter to the Secretary of the Treasury. The Fairbanks Commercial Association has petitioned the President of the U.S. to take favorable action in the matter, owing to the fact, according to peti-

tion, that the people who control the transportation facilities likewise control a large part of the merchandising business, thus making it very important for the protection of independent merchants to have another transportation company. Should the President refuse the request it will be most unjust discrimination, for as above pointed out the U.S. has enjoyed a similar courtesy at the hands of the Canadian Government for a number of years and it will most certainly be the Dominion Government's duty to withdraw the privileges under which United States steamboats can go to Dawson.

Canadian Notices to Mariners.

The Department of Marine has issued the following:—

79. Sept. 18. 216. Nova Scotia, Bay of Fundy, Lurcher shoal lightship, intended change in characteristic of fog alarm. 217. New Brunswick, east coast, North Tracadie gully, buoy established. 218. Quebec, Gulf of St. Lawrence, Harrington islands, Harrington harbor, changes in buoyage. 219. Quebec, River St. Lawrence, Saguenay river entrance, Bar reef, bell buoy established.

80. Sept. 19. 220. British Columbia, Burrard inlet, Vancouver harbor, Burnaby shoal, light and fog bell established on a float, caution. 221. British Columbia, Observatory inlet, Granby bay, Graves point, light established.

81. Sept. 23. 222. Ontario, Georgian bay, Victoria harbor, Port McNicoll, buoyage. 223. Ontario, Georgian bay, Byng inlet, buoys established. 224. Ontario, Lake Nipissing, North Bay, light established on wharf.

82. Sept. 26. 225. Nova Scotia, Cape Breton island, east coast, Sydney harbor, south arm, Sydney, Battery point range lights established. 226. Quebec, River St. Lawrence, St. Thomas channel, change in color of starboard gas buoy lights. 227. Newfoundland, east coast, Conception bay, Western bay head, change in character of light.

83. Sept. 27. 228. Ontario, Lake Erie, Port Colborne, light exhibited on eastern breakwater. 229. Ontario, Lake Superior, Thunder cape fog alarm, direction in which horn points. 230. Ontario, Lake Superior, Thunder bay, Fort William, off mouth of Kaministiquia river, gas buoy replaced by gas and bell buoy. 231. Ontario, Lake Superior, Thunder bay, Mutton island, Burke shoal, buoys established.

85. Oct. 1. 234. Ontario, River St. Lawrence, Thousand islands, Fiddlers Elbow, shoal being dredged, gas buoy removed, new channel opened. 235. Ontario, Detroit river, Ballard reef channel, increased width of available deep channel, buoys moved. 236. Ontario, Lake Huron, chart issued, Cove island to Duck islands. 237. Ontario, Lake Huron, chart issued, Duck islands to Detour passage.

86. Oct. 3. 238. Quebec, Gulf of St. Lawrence, Ste. Anne river, Ste. Anne des Monts, light established on pier. 239. Quebec, River St. Lawrence, Orleans island, south shore, St. Francois wharf, light established.

87. Oct. 4. 240. Nova Scotia, Cape Breton island, Cape North light station, fog alarm destroyed by fire.

88. Oct. 7. 241. Quebec, Ottawa river, Ste. Anne de Bellevue, third range light established. 242. Quebec, Ottawa river, Chute a Blondeau, range lights established.

89. Oct. 12. 243. Quebec, Saguenay river, east of river Caribou, Savard range lights discontinued. 244. Quebec, Saguenay river, change in position of river Caribou range lights. 245. Quebec, Saguenay river, Simard range lights established.

90. Oct. 16. 246. Quebec, River St. Lawrence, Ile Verte, range lights established. 247. Newfoundland, south coast, Placentia bay, Tides Cove point, fog signal established. 248. United States of America, Maine, Moose Peak light station, fog signal established. 249. Ireland, east coast, Ross-lare harbor approach, South Long bank buoy, replaced by light and bell buoy.

91. Oct. 18. 250. New Brunswick, south coast, Bay of Fundy, Sisters rock, buoy established. 251. New Brunswick, Chignecto channel, Cumberland basin, eastward of Amherst basin, buoy established. 252. Nova Scotia, Bay of Fundy, Lurcher shoal, lightship replaced on her station. 253. Nova Scotia, south coast, Aspotogan peninsula, shoal off Bayswater, buoy established. 254. Prince Edward Island, east coast, Cardigan bay, Georgetown harbor, daymark on Georgetown back range lighthouse. 255. Prince Edward island, south coast, Hillsborough bay, Haszard point, daymarks on range lighthouses. 256. Prince Edward Island, south coast, Hillsborough bay, Charlottetown harbor, daymarks on Brighton beach range lighthouses.

The Canadian Interlake Line's Vessel Fordonian.

This vessel which has been built at Port Glasgow, Scotland, by the Clyde Shipbuilding and Engineering Co., Ltd., has already been partly described in Canadian Railway and Marine World, and is of special interest as the first of her type to be built in Great Britain. She is 250 ft. long, 42½ ft. beam and 26½ ft. deep to awning deck. The special feature is that she has been fitted with oil motors of the Carels-Diesel type. The engines are of the two cycle type, and have a brake horsepower of 750, which is equal to an indicated horsepower in a steam engine of 875.

The trial trip took place Sep. 21. We are advised that from the time of starting off the engines at 8 a.m. they were never stopped, excepting by the orders from the pilot on the bridge, until 9 p.m. Several runs on the Firth show the vessel to have a speed of 10 knots, although only developing considerably under the maximum power. During the whole of the trials the engines worked very satisfactorily and very smoothly. Vibration in the ship was practically nonexistent. Representatives from the British Admiralty, Imperial Japanese Navy, Australian and Canadian steamship owners, and very many of the principal shipping companies in Great Britain and Ireland were present, and to the majority of them the smooth and satisfactory working of the machinery was a revelation. During the course of the trials, the engines were tested for manœuvring purposes, and were put through a very severe test. During 40 minutes, 61 manœuvres were executed, this being a much more severe test than a steam engine is usually subjected to, but the whole performance was carried out with very commendable dispatch, and with great satisfaction. The time occupied in going from full speed ahead to full speed astern was eight seconds.

After the trial trip the vessel returned to Glasgow to load, and after further runs on the measured mile, which were satisfactory in every way, sailed Sep. 28 for Canada. On Oct. 21 it was reported that the vessel had met with an accident in the Irish channel, and had put back for Glasgow.

V. W. Ferneret, Superintending Engineer, St. Lawrence ship canal, has been appointed a member of the Lighthouse Board, in place of Capt. L. A. Demers, recently appointed harbor master at Montreal.