the Louise, Hanna, Sarah, Susie, Alice, Leah, Belle, Marguerette & Victoria, together with the 8 barges wintered at Androfski. Some of the boats were expected in Dawson about June 15, while the others would wait for outside traffic. The North American Transportation & Trading Co. has 7 steamers & 3 barges. Its powerful tug Klondike will operate from St. Michaels to Ft. Hamilton. The Alaska Exploration Co. will operate 6 steamers & 6 barges on the lower river. The Mary F. Graff wintered at the Dahl River, the Linda & F. K. Gustin at St. Michaels, & the Herman just below Rampart City. This Co. also owns the Clara Belle & the Arnold. The Empire Line will operate 9 steamers on the lower river, the Tacoma & Victoria were recently reported on the way up the river, the Seattle is taking a load of government supplies, & the St. Michaels is loaded for the Standard Oil Co. The Dawson, Munook, Tanana, Yukon & Empire were to leave Seattle June 10 & steam to St. Michaels under their own steam. The Co. will operate ocean liners to accommodate its business. It is building warehouses at Dawson.

It is to be war to the death between the companies catering for the Klondike business via St. Michael & the lower Yukon river, & those which aim to control this trade by way of the White Pass & Yukon Ry. & the river steamers, the latter combination being favorite in the betting. Numerous conferences preliminary to a determination of through freight & passenger rates have been held by the four companies controlling the rail & river system, & as a result it is announced that the rates by the all-water route will be met in every particular while the four-sided combination has the advantage in being able to land passengers or consignments in Dawson in 10 days or less from Victoria, the round-about sea & river journey requiring the better part of two months, with a chance that shallows may prevent freight sent in that way from ever reaching its destination. The companies named in the combination are the Canadian Pacific Navigation Co., the Alaska Steamship Co., the Canadian Development Co. (in connection with which Capt. Irving's lake & river steamers will be operated), & the White Pass & Yukon Ry. Co., covering the land link from Skagway to Bennett. The adopted rate scale provides for a 1st class fare from any Puget Sound or B. C. port to Dawson, of $135, or $127.50 2nd class. Half rate tickets will be sold for children of from 5 to 12 years. On the full ticket 150 lbs. of baggage will be carried free, & on the ½ ticket 75 lbs. From Dawson to B. C. or Puget Sound ports the rate of the upper river combination is $185 1st class or $177.50 2nd class, these rates paralleling closely the rates announced by the round-about all-water route. The latter involves a journey of almost as many weeks as the former requires days. Besides, the connections have been so perfected with the completion of the railway link that one does not require to walk a foot of the way. The adopted freight tariff for Atlin, on all commodities, regardless of class, is $100 a ton from Vancouver, Victoria or Puget Sound points, on less than 10-ton lots; for 10 tons or more, a cut of $10 on the ton is made. A classification scale is made for the Klondike freights, 3rd class merchandise including provisions such as beans, bacon, flour, sugar, etc., for which the through rate is $136 a ton. Second-class freight embraces dry-goods, general supplies, etc., with a rate thereon of $155 a ton; & 1st class freight, consisting of perishable and breakable goods, commands a transportation charge of $160. Live stock for Dawson will be accepted in carload lots of 14 or more at $82 each. These rates stand out in marked contrast with the figures prevailing a year ago. The freight rate then was 60c. a pound, or $1,200 a ton from Skagway to Bennett, & 20 to 30c. more for the haul to Dawson, a total of at least $1,600 a ton through to the Klondike capital, a month or 6 weeks being at that time required for the carriage of merchandise even as far as Bennett.—Victoria Colonist.

The Plant Steamship Line.

The passenger traffic between the Maritime Provinces & the New England States has assumed such proportions that the Plant Co. has placed on the route its magnificent 5,000 ton steamship La Grande Duchesse. She made her first trip on the route in the middle of June, running from Boston light to Meaher's Beach light, near Halifax, in 21 hrs. 45 minutes, the previous best record being the s.s. Olivette's, 23 hrs. 40 mins. For the balance of the season she will run direct between Boston & Halifax, calling also at Hawkesbury, N.S., & Charlottetown, P.E.I.

La Grande Duchesse, which was built at Newport News in 1896, is fitted with every modern appliance known to the art of shipbuilding, including electric lights, searchlight, & telephone connection between staterooms & the purser's office. Her furnishings, from staterooms en suite, with bath, to the berths in the cabin, are in perfect taste. Her dining & main saloons are equally attractive, & her immense size is a guarantee of plenty of deck room even for her full quota of passengers. She is built entirely of steel, & is of the following dimensions: 404 ft. long over all, 380 ft. between perpendiculars, 47 ft. 9 ins. beam, 37 ft. 4 ins. deep from top of deck to base line, & is fitted with 2 steel masts fore-and-aft rigged. She has a water bottom extending from her stuffing box bulkhead to her collision bulkhead, also numerous steel decks; all the houses are of steel. The stern & rudder frames are made of cast steel, & the rudder stock of fluid compressed steel, the steering gear consists of a steel apparatus operated by a telemotor; also heavy Napier steering gear. The vessel is fitted with a steam windlass & capstan & hoisting engines for handling cargo, & has steam elevators in two of the hatches.

On the main deck forward is the dining saloon, with seating capacity for 125. This is handsomely fitted up & decorated in white & gold. Forward of the dining room is a reception room, forward of which are sleeping accommodations for passengers. In the after end of the dining saloon is a grand stairway leading to the social hall above, On the main deck aft of the dining saloon is the pantry, & aft of this is the large gallery. On this deck are located cold storage for provisions, officers' mess room, baker & porter shop, telephone exchange room, stewardess' room & a number of staterooms abreast of the boilers & engine hatches for oilers, water tenders, etc. Aft of the machinery is the main saloon with 2 tiers of staterooms on each side; in the forward end of this saloon is the grand stairway leading to the social hall above. Immediately aft of the main saloon are toilets, bathrooms etc., for ladies and gentlemen. In the forward end of the upper or promenade deck is a social hall for 2nd class passengers, with a stairway leading to the dining room. This social hall has quite a number of staterooms for 1st class passengers. On the pilot-house deck forward is the pilot-house, aft of which is the captain's room & 2 tiers of state rooms continuing to the smoke stack. Over the social hall aft is a large steel house fitted up as a ladies' observatory. The 2nd class social hall & reception room are finished in quartered oak.

The vessel is equipped with 12 life boats, 6 life rafts & the necessary life preservers, etc. There is a complete ventilating system connected to every compartment & stateroom in the vessel; she is also fitted with a complete fire alarm system, & is lighted by electricity, which is furnished by 2 generators direct driven, also search light, etc. The machinery consists of 2 inverted, direct acting service condensing, quadruple expansion engines, driving twin screws; wheels made of manganese bronze. The total horse-power of the engines is 7,000. Steam is supplied by 8 boilers built for a working pressure of 250 lbs. of steam, fitted with 1 smoke stack. In addition there are numerous pumps for ballast, bilge, sanitary fire & feed purposes. Unusual precaution has been used in every part in the construction for the safety & comfort of passengers, having accommodations for 500 1st class & 200 2nd class. The vessel has also been designed in compliance with U.S. government requirements for auxiliary cruisers.

Since the Mascotte was built in 1885, the Plant line has steadily extended its service. From the system about the Florida coast, & between Port Tampa, Cuba & Jamaica, catering in hotels & steam communication to winter tourists & travellers, the line a few years ago extended its service eastward & absorbed the Canada Atlantic Steamship Co., with its ocean str. Halifax, plying between Boston & Halifax, & also the Old Colonial line between Boston, Halifax, the Strait of Canso & Charlottetown, with its strs. Carroll & Worcester, which were retired or broken up, the service being improved in summer by the Olivette or Florida, the latter also another large addition to the line. This eastern business has developed very extensively, with demands by summer tourists often exceeding accommodations.

Using Oil in Stormy Weather.

A circular on this subject recently issued by Lieut. W. J. Wilson, nautical expert in charge of the Branch Hydrographic office at Chicago, is attracting a good deal of attention. It reads: "Masters of vessels cannot be reminded too often of the use of oil in stormy weather. Its importance is well illustrated by the fact that it is now recognized in standard books on seamanship. The international marine conference at Washington recommended that the several governments require all their seagoing vessels to carry a sufficient quantity of animal or vegetable oil for the purpose of calming the sea in rough weather, together with suitable means of applying it. Thick & heavy oils are the best. Mineral oils are not so effective as animal or vegetable oils. Raw petroleum has given favorable results, but not so good when it is refined. Certain oils, like cocoanut oil & some kinds of fish oil, congeal in cold weather, & are therefore useless, but may be mixed with mineral oils to advantage.

"As a general rule, probably the best way to use oil is by filling the wash bowls forward with oakum & oil, letting the oil drip out slowly through the waste pipes. Another simple & easy way to distribute oil is by means of canvas bags about 1 ft. long, filled with oakum & oil, pierced with holes by means of a coarse sail needle & held by a lanyard. Running before a gale, use oil from bags at the cathead or from forward waste pipes; if yawning badly & threatening to broach to, use oil forward & abaft the beam on both sides. Lying to, distribute oil from the weather bow. With a high beam sea, use oil bags at regular intervals along the weather side. In a heavy cross sea, have bags along both sides. Steaming into a heavy sea, use oil through forward waste pipes. There are many other cases where oil may be used to advantage, such as lowering & hoisting boats, riding to a sea anchor, crossing rollers or surf on a bar & from lifeboats & stranded vessels."

Lieut. Wilson further says: "If captains could be made to understand the many advantages offered by the proper use of oil in rough weather & in case of accidents, there would not be a boat leave port without a sup-