

miles, a further 15 miles towards the St. John River; & in addition to the 12 miles subsidized by the said chapter on the westerly section of the line, a further distance from the easterly end thereof of 15 miles, towards Campbellton, N.B., not exceeding 30 miles, \$96,000.

From St. Charles Jct. on the I.C.R. towards the St. Francis Branch of the Temiscouata Ry., not exceeding 45 miles, & from the mouth of the St. Francis River, N.B., westerly towards St. Charles Jct., 15 miles, in all not exceeding 60 miles, \$192,000.

From Bristol, on the C.P.R., westerly, not exceeding 17 miles, \$54,400.

From Shediac to Shemogue, not exceeding 38 miles, \$121,600.

#### QUEBEC.

Grand Trunk Ry. towards cost of rebuilding & enlargement of Victoria Bridge, in addition to amount received by the Co. on account of the subsidy granted by 60-61 Vic., chap. 4, viz.: \$270,000, to make up the grant in aid of the undertaking to \$500,000, not exceeding \$230,000.

Railway & traffic bridge over the Ottawa River at Nepean Point, between Ottawa & Hull, upon condition that the bridge provide suitable facilities, to the satisfaction of the Minister of Railways & Canals, for free vehicular & foot passenger traffic, the same as upon a public highway, in addition to the \$112,500 already granted, not exceeding \$100,000.

See from St. Charles Jct. on I.C.R. towards St. Francis branch of Temiscouata Ry., under head of New Brunswick subsidies.

Montfort & Gatineau Colonization Ry. from Arundel to Preston Township, near Hartwell, not exceeding 30 miles, \$96,000.

Chateauguay & Northern Ry., from Hochelaga Ward, Montreal, to the Great Northern Ry. in or near Joliette, passing near L'Assomption, Quebec, with a spur into that town, not exceeding 42 miles, \$134,400.

Single track standard railway bridge, with two roadways 10 ft. wide, from Bout de L'Isle to Charlemagne, at the junction of the Ottawa & St. Lawrence rivers, \$150,000.

Bridge across the Lac Ouareau River, \$15,000.

Arthabaskaville Ry., from Victoriaville to Chester West, not exceeding 12 miles, \$38,400.

Great Northern Ry., branch from or near Joliette towards Ste. Emilie, touching the parishes of Ste. Beatrix & St. Jean de Matha, not exceeding 20 miles, \$64,000.

From Farnham to Frelighsburg & the International Boundary Line, not exceeding 21 miles, \$67,200.

A railway bridge over the St. Francis River, in lieu of the grant under 62-63 Vic., chap. 7, at St. Francois du Lac, on condition that the bridge be built so as to allow the municipalities to make use thereof, to establish & maintain a suitable railway for the free passage of foot passengers, vehicles & animals, to be approved by the Minister of Railways and Canals (revote), \$50,000.

A railway bridge over the Nicolet River at Nicolet, in lieu of grant under 62-63 Vic., chap. 7 (revote), \$15,000.

Quebec Bridge.—The subsidy provided by chap. 7 of the statutes of 1899 towards the construction of a railway bridge over the St. Lawrence River at Chaudiere Basin, near Quebec, shall be deemed to be applicable, as to one-third thereof, to the substructure & approaches, & as to two-thirds thereof to the superstructure, & the same may be paid upon that basis by authority of the Governor-in-Council, upon progress estimates to be furnished by the Chief Engineer of Government Railways & Canals, so that one-third of such subsidy, & no more, may be paid in respect & upon completion of the masonry of the substructure & approaches of the said bridge, one-third, & no more, upon the work & material of one-half of the superstructure being

done & supplied, in respect of such work & material, & the remaining one-third upon the completion of the whole work.

#### ONTARIO.

From or near the junction of the Irondale, Bancroft & Ottawa Ry. & the G. T. R. to Minden, not exceeding 12 miles, \$38,400.

Strathroy & Western Counties Ry., from or near Caradoc Station on the C. P. R. to Strathroy, not exceeding 7 miles (revote), \$22,400.

From the Pembroke Southern Ry., at or near Golden Lake, towards the Irondale, Bancroft & Ottawa Ry. at or near Bancroft, for the further extension westerly from the western terminus of the 20 miles granted in 1897 for not exceeding 20 miles, \$64,000.

Algoma Central Ry. Co., for 25 miles from its terminus at Michipicoton Harbor, towards the main line of the C. P. R., & for a further extension from Sault Ste. Marie towards Michipicoton River & Harbor, towards the main line of the C. P. R., 25 miles in all, not exceeding 50 miles, \$160,000.

Central Ontario Ry., for a further extension from or near Bancroft to the Canada Atlantic Ry., between Whitney & Barry's Bay, not exceeding 20 miles, \$64,000.

Manitoulin & North Shore Ry., between Little Current, Manitoulin Island & Sudbury, on the C. P. R., the Co. undertaking to bridge between Little Current & the mainland, the bridge to be so constructed & maintained as to afford suitable facilities, in the opinion of the Minister of Railways & Canals, for free vehicular traffic, the same as upon a public highway, the work to be begun & prosecuted from Little Current & Sudbury, one-half of the subsidy to be applicable, as earned, in respect of the work beginning at Little Current & carried on towards Sudbury, & one-half to be applicable, as earned, in respect of the work beginning at Sudbury & carried on towards Little Current, the railway to cross the Sault Ste. Marie branch of the C. P. R., not exceeding 66 miles, \$211,200.

From Bracebridge to or near Baysville, not exceeding 15 miles, \$48,000.

From a point northerly 20 miles from Parry Sound, to the French River, not exceeding 35 miles, \$112,000.

From 20 miles easterly from Haliburton, via Whitney, towards Mattawa, not exceeding 40 miles, \$128,000.

Kingston & Pembroke Ry., for a branch to iron mines in Bedford Township, not exceeding 12 miles, \$38,400.

Thousand Islands Ry., for an extension from the present northerly terminus easterly, not exceeding 2 miles, \$6,400. Also for an extension to connect with the Brockville, Westport & Sault Ste. Marie Ry., the Bay of Quinte Ry., the Kingston, Smith's Falls & Ottawa Ry. or the waters of the Rideau Canal, the balance remaining of subsidy granted by 55-56 Vic., chap. 5, not exceeding 93 miles (revote), \$30,400.

From Dymont, on the C. P. R., to the New Klondike mining district, not exceeding 7 miles, \$22,400.

Schomberg & Aurora Ry., for an extension from its easterly terminus to or near Bond's Lake, not exceeding 4 miles, \$12,800.

Nipissing & James Bay Ry., from or near North Bay, on the C. P. R., towards James' Bay or Lake Tamagaming, not exceeding 20 miles (revote), \$64,000.

Ottawa & New York Ry. Co's bridge over the St. Lawrence River & for the Canadian portion of such bridge, not exceeding, \$90,000.

Interprovincial Bridge between Ottawa & Hull. See under Quebec subsidies.

#### MANITOBA & NORTHWEST TERRITORIES.

Canadian Northern Ry. extension, north of Swan River towards Prince Albert, in addition to the grant by 62-63 Vic., chap. 7, a further mileage not exceeding 100 miles, \$320,000.

From the westerly end of the Waskada branch of the C. P. R., further westward, not exceeding 20 miles, \$64,000.

From the Alberta Ry. & Coal Co's Ry. towards Cardston, 30 miles at \$2,500 a mile, \$75,000.

#### BRITISH COLUMBIA.

Kaslo & Lardo-Duncan Ry. from Duncan Lake towards Lardo or Arrow Lake, or from Lardo to Arrow Lake, not exceeding 30 miles, \$96,000.

It is provided that all the lines for which subsidies are granted, unless they are already commenced, shall be commenced by Aug. 1, 1902, & completed by Aug. 1, 1904. The following portions are quoted fully.

That the granting of such subsidies, & the receipt thereof by the respective companies, shall be subject to the condition that the Governor-in-Council may at all times provide, & secure to other companies such running powers, traffic arrangements and other rights as will afford to all railways connecting with those so subsidized, reasonable & proper facilities in exercising such running powers, fair & reasonable traffic arrangements with connecting companies, & equal mileage rates between all such connecting railways; & the Governor-in-Council shall have absolute control at all time over the rates & tolls to be levied & imposed by any of the companies or upon any of the railways hereby subsidized.

That every company receiving a subsidy under this Act, its successors or assigns, & any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation for men, supplies, material & mails over the portion of its line in respect of which it has received such subsidy, & whenever required, shall furnish mail cars properly equipped for such mail service, & such transportation & service shall be performed at such rates as are agreed upon between the Minister of the Department of the Government for which such service is being performed & the company performing it, & in case of disagreement, then at such rates as are approved by the Governor-in-Council; & in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to 3% per annum on the amount of subsidy received by the company under this Act.

#### SHIPPING MATTERS.

##### Ice-Breaker for the St. Lawrence.

Joseph Reynar, of Three Rivers, Que., writes: The question of navigating the St. Lawrence in winter will probably never be seriously entertained—now that we have sufficient railway connection with the Atlantic winter ports of Halifax, St. John, N.B., Portland, Boston, Baltimore & New York. But we should try to open the St. Lawrence from Quebec to Montreal nearly one month earlier, & keep it open a couple of weeks longer than under present circumstances—when we depend on the sun to do our work.

In the spring of 1898 the St. Lawrence was clear of ice in the first week of April—the Richelieu Co.'s steamer Berthier arrived at Three Rivers from Montreal on April 6. The spring opened early, & the warm sun had the effect of doing what a good ice-breaker can do every spring at about the same date—or earlier—and not at a heavy outlay.

The ice-breakers built for Russia by Sir W. G. Armstrong, Whitworth & Co., of Newcastle-on-Tyne, are probably the best in the world—and have done remarkably good work in opening harbors—and, in some cases, keeping up regular communication through ice-fields, in various parts of Russia, during the winter months. The Ermack is undoubtedly the largest & strongest ice-breaker ever constructed. Her dimensions are as follows: