

against the French until 1653, and in that year it was open only for a short time.

In Champlain's day, Tadousac was the leading harbor of Canada, subsequently being displaced by Quebec and then by Montreal, for it is a rule of trade that it will ever go to the head of navigation.

During the French regime the St. Lawrence was the centre and not the boundary of Canada. Her trappers had over-run the country south to the Gulf of Mexico, had skirted the flanks of the Rocky Mountains, and d'Iberville had performed feats of valor against the British posts on Hudson's Bay. Lake Mistassini was known, and there was scarcely a pellucid stream west of the Alleghanias which had not rippled to the paddle of the courier de bois. The trade of Canada was chiefly in furs, and but for the expenditures from the military chest the country would have been in a state of chronic bankruptcy. Foreign trade was prohibited, and anyone engaged in it was treated as a pirate. Huguenots were forced to leave the country every fall, the more important trades were always in the hands of a monopoly, prices of commodities were fixed by Government officials; as also were freight rates. Non-resident merchants were not permitted to trade with the Indians, and could do business only below Quebec, and then only during three months of the year. But there was nevertheless some traffic in the country. The fur trade just before the outbreak of the war of the Conquest averaged from 200,000 to 300,000 livres per annum, and in 1615 there were, according to the Jesuit Biard, fully 500 French ships engaged in the fur, whale and codfish trade. Licenses for the fur trade were ultimately issued, costing from 500 to 1,000 livres at first hand, and good for one canoe. In 1754 the trade with the western posts amounted to 90 canoes. According to Lt. Gov. Miles the beaver trade never exceeded £ 140,000 stg. per annum, and it was not half that in 1754 and 1755. In 1688 Canada produced 101,000 bushels of wheat, increased by 1734 to 738,000 bushels. The exports of wheat at the latter period were about 60,000 bushels. At the close of the French period the exports were still only raw materials, furs of all kinds, porpoise oil, cod, salmon, eels, lumber, and such like, while even bacon and flour were imported, the imports amounting to about 8,000,000 livres, against 2,500,000 of exports. During 1759 the requirements of the colonists were met by 12,000 tons of shipping, although they were in the throes of war and depending almost entirely upon external support. I may here remark that these figures are not entirely reliable. The science of statistics did not come to anything like perfection in Canada until after Confederation. The imports of 1765 are placed by a memorial of the time at 4,000,000 livres and the exports at 1,500,000. I give the figures I find to hand, merely because they will in a measure give some idea of the early trade via the St. Lawrence.

The intendant Talon, to whom all honor, came to Canada in 1665 and may be looked upon as the father of commerce in Canada. He established a brewery that the money the people spent on liquor might at least be kept at home, a principle which is at the root of commercial progress. In 1667 he built the first Canadian built ship at Quebec, the beginning of a very important trade, carried to particular extent in the Maritime Provinces. This ship he sent to the West Indies to open a trade with those islands. It carried out salt cod, pease, salmon, eels, fish oil, staves and planks, and brought back sugar. Later, wheat was exported, of which 54,000 bushels were sent out in 1685. Attempts were also made to establish an export trade to France, exclusive of peltry. The season of navi-

gation on the St. Lawrence has been placed at about eight months. During the French regime it was only four months, the ships from France arriving in July, August and September, and sailing again in November. The duration of a voyage in those days was uncertain. The Jesuits Biard and Masse were four months between France and Canada, from January to May. Talon himself was 117 days en route, and de Levis was to be congratulated in crossing the ferry in 56 days in 1756. Sometimes the ships were blown back to France after sighting America, as was de la Roche in 1598; sometimes they became plague stricken, as was the "Rubis" in 1740; and wrecks were frequent, that of "la Providence" in 1718, "le Chameau" in 1725, "l'Elephant" in 1729, the "Beauharnois" in 1731, "la Trinite" in 1752, and the "Chamelion" in 1753. The ships of the day rarely equalled 200 tons, and Champlain crossed in one of 12 tons. One could wash in the sea from the deck of the vessel of "la Roche."

The cost of a passage in one of these ships was 33 livres in 1664, increased to 40 livres by 1672. In 1740 freight charges were 25 francs per ton. Every ship coming to Canada from France, and it might come only from a French port, had to conform to the tariff of prices in selling its cargo, had to bring out, if desired, one immigrant for every ton of its burden, refrain from trade with the Indians, and carry a certain proportion of salt, iron and coal, although the St. Maurice forges were in operation and the outcrops of coal in Acadia were utilized by the French in that district. From the Gulf of St. Lawrence to Quebec during the French regime there was not a single friendly light to guide the mariner through the sometimes tortuous channels. And the Gouffre and the Traverse, still somewhat boisterous at certain stages of the tide, were then as dangerous as the maelstrom. These once dangerous spots, a little below Quebec, have now been largely silted in, and are of small consequence to vessels of to-day. In the days of sailing vessels, however, many a wreck took place there and the first buoying of the St. Lawrence was done at the Traverse.

As already stated, the lower portion of the St. Lawrence is a seacoast with all the dangers of one; and it was early charted. There is a chart of the river in the Archives Department at Ottawa, bearing date 1695. It was, however, between 1717 and 1737 that the charting of the St. Lawrence was first developed to any extent. In 1723, l'Hermite, the father of charting on the river, began his labors. He and Richardiere, harbor master at Quebec, took soundings in the Gulf and river, and in 1737 the latter was busy cutting landmarks for the mariner. In the same year was first lit the fire tower of Louisburg, the only beacon that flamed along those shores for maritime purposes during the French regime. In passing, I may mention that the Indians in early times in crossing from Cape North to Newfoundland and back were wont to light beacons upon that towering mass, which they called Sakpeediah or Smoky Point in consequence.

Above Quebec there were no impediments to the vessels of the day, as far as Montreal, although Jacques Cartier ran aground in Lake St. Peter. The usual means of conveyance was by canoe and subsequently by rude batteaux, which were days and sometimes weeks upon the trip. The usual duration of a voyage between Quebec and Montreal was six days, Three Rivers being the mid-way point. It was customary to land each night and billet upon some seignory. The luxurious Bigot had a most sumptuous barge with silken awnings when he made his customary visits to the future metropolis.

The only important engineering work begun in