

power, as it had been to land carriages. The strings of pack-horses gave way to a procession of "billy-boys" as canal boats were termed, drawn at first by men, then by horses on a tow-path, then followed the trains drawn by steam power. For a time the railways drew away so much freight from canals that several were emptied of water and used for a new railroad. One, in Yorkshire, whose \$500 shares were marketable at \$2,500, before the railway era, sold out its course to a railway, which, to-day, runs along the bed of a disused canal that, in its time, had done incalculably valuable service by developing and providing an outlet from coal fields and manufacturing districts to a great seaport, and so rendering a railway a necessity. Canals, indeed, have been the forerunners of and pioneer preparers for railways. Canals have created traffic beyond their own capacity to accommodate. The railway system has this enormous superiority for transport, the capacity of a railroad can be enlarged at a moderate cost, and freight can be moved on rails at ten times the average speed of a canal boat. Still, the greater economy of water transport is telling in favour of canals and rivers for bulky freight, now they are so built as to allow of steam vessels of large capacity. Owing to this economy the vast crops of grain grown in the Northwest are likely to be moved towards this port for trans-shipment to Europe, via, for a considerable distance, our unequalled canals and natural waterways.

Speaking of the speed in canals, it is interesting to recall that in 1871 the legislature of New York offered a reward of \$100,000 for a better method of moving canal boats at a minimum speed of 3 miles an hour.

The same questions arise as in regard to railways, by whom were the canals built and by whom are they operated? In ancient times they were wholly government works, and in modern times so to some considerable extent. The Caledonian, Scotland, was built by the government, and the principal ones in Europe were either built as government works, or heavily subsidized by the State. German canals extending 8,640 miles, are imperial works; those of France, 4,940 kilometers, mainly so; the Netherlands have 1,907 miles of canals. The canals of Great Britain are as follows:

England.	Scotland.	Ireland.
3,167 miles.	154 miles.	586 miles.

Of these no less than 3,700 miles are owned by railway companies. The Manchester Ship Canal is 35½ miles long, the capital of the company, \$77,560,000. There is said to be no place in England distant more than 15 miles from a canal or navigable river.

Canada, up to 1826, practically had its western boundary at this city. There the St. Lawrence began and ended for navigation. In 1821 the Lachine canal was commenced, and with it a new era

for this country. About the same time the Welland was decided to be built by a company and, in 1829, was opened. By these two canals direct water communication was established between Lake Superior and the Atlantic Ocean, and this port was constituted for ever the head of ocean and the terminus of inland navigation. The following shows the volume and character of the goods that passed through the Welland Canal in years 1898 to 1901:—

	1901.	1900.	1899.	1898.
	Tons.	Tons.	Tons.	Tons.
Wheat and flour.....	160,564	148,768	209,357	213,225
Total food products....	290,909	375,720	459,688	720,183
Coal, iron, etc.....	164,244	119,315	133,380	190,468

The freight passed eastward from Lake Erie and the St. Lawrence canals to Montreal was as follows:

	1901.	1900.	1899.	1898.
	Tons.	Tons.	Tons.	Tons.
Eastward to Montreal.				
Wheat.....	132,702	121,896	169,978	184,154
Corn.....	14,319	109,359	150,999	310,498
Totals.....	184,420	288,231	354,485	538,108

The total expenditure charged to Capital Account on the original construction and enlargement of the several canals of the Dominion up to 30th June, 1902, was \$83,519,233, and a further sum of 128,965,441 has been expended in the repairs, maintenance and operation of these magnificent national works, making a total of \$102,454,674, or 40 per cent. of the national debt. The gross revenue received from the canals from 1868 to 1902, amounted to \$13,017,756. The through route between Montreal and Port Arthur, now open as a 14 foot navigation, comprises 73 miles of canal and 1,150 miles river and lake waters. The steamers on this service are 255 feet long, with a carrying capacity of 2,000 tons.

For transport facilities by natural waterways and canals, Canada carries the palm. No city, so far inland as Montreal, has wharves to and from which ocean vessels are moving daily. Nor is there any other city in such direct touch with boundless food producing capacities like those of the Northwest, and at the same time the port, whither the manufactured products of Europe come for distribution over a continent, and from whence the agricultural and manufactured products of a continent are shipped to the great markets of Great Britain, France and Germany. All these conditions have in them "the promise and the potency" of such development as will raise Canada to distinguished rank among the nations of the world.

ST. LOUIS AND ITS EXHIBITION had a narrow escape from a disastrous fire on the 5th inst. A bull fight, Spanish style, was announced to take place in the amphitheatre, but this disgraceful display was stopped, whereupon the audience of 7,000 persons broke out into rioting, during which the building was burnt and a number of persons fatally injured. The fire threatened to extend to the Exposition, but the fire protection proved equal to the emergency.