In 1800 there was not a mile of railway in the world. In the sense in which we use the word there was not a mile of railway in operation in 1825. The capital, which may be put down at thirty-four thousand million dollars, has been found. The mountains and the valleys have been brought to the same level; the thousands and hundreds of thousands of locomotives, cars, sleepers, &c., have all been manufactured within 70 years. The development of railway corporations has resulted in the growth of companies whose financial operations rival those of many nations. Railways of the United States earned in 1891, \$1,208,641,498. The public revenue of the Federal Government of the United States for the same year was \$461,716,562, or just a little more than one-third of the railway receipts.

319. The purpose of this paper is to trace briefly the beginnings and the growth of this system of railway movement in other countries, and then to give fuller attention to Canadian railways.

## GREAT BRITAIN.

320. 'The first Railway Act, pure and simple, passed by any Parliament was passed by the British Parliament in 1801 for the construction of a railway from Wandsworth to Croydon. Two years later another railway was sanctioned from Croydon to Reigate with a branch from Merthum to Godstone Queen. In 1814 a railway was sanctioned from Swansea to Oystermouth.

Trevethick's engine, which was tried on a railway in Wales about 1804, but abandoned on account of mechanical defects, was three years later than the first public railway. Blenkinsop's locomotive, which worked by a toothed rail, was in operation at the Middleton Colliery near Leeds in 1812. Hedley's engine, now on exhibition in the Patent Office Museum, South Kensington, as the oldest engine in existence, was working on the Wylam railway in 1813. In 1814, the first locomotive that propelled itself by the adhesion of its wheels on round-top rails was tried at Killingworth Colliery by George Stephenson and Nicholas Wood.

Thus the locomotive and the railway came into being almost simultaneously.

321. Besides the Railway Acts already mentioned, several others were passed before 1821, in which year the Stockton Darlington Railway Act was passed.

This Act was exceedingly voluminous, extending to 67 pages of closely printed matter. Within its four corners, however, there is no where mention made of the employment of engines whether locomotive or stationary.

But in the Company's second Act, passed in 1823, power was given for making and using "locomotive or moveable engines for the purposes of facilitating the transport, conveyance and carriage of goods . . . . and for the conveyance of passengers upon and along the same roads."

The marriage of the steam locomotive and the iron rail—forming the railway nearly as we now know it—was authorized.

322. In the autumn of 1821 George Stephenson commenced the survey of this line. The first rail was laid 23rd May, 1822. The first railway report the nations ever saw was that of the Committee of the Directors of