of the problem faced in the construction of these traffic routes is illustrated. A small population scattered over a large area has made this, like other transportation problems, particularly difficult of solution.

33.—Classification of Canadian Highways, by Provinces, De	Dec. 31, 1930. <sup>1</sup>
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Province.	Unim- proved.	Im- proved Earth.	Gravel.	Water- bound Macadam.	Bitu- minous Macadam.	Bitu- minous Concrete.	Cement Concrete.	Total.
	miles.	miles.	miles.	miles.	míles,	miles.	miles,	miles.
P. E. Island Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia.	2, 190·2 7, 418·2 3,000·0 19,368·5 - 23,056·0 60,396·0 43,191·0	3,388-3 4,229-0 849-4 21,182-0 <sup>2</sup> 92,267-0	153.0 3,833.5 4,581.0 11,269.9 38,547.9 3,071.0 1,926.0 1,326.0 6,639.4	30·2 1,343·2 3,468·2	13·0 214·8	- 371∙7	103·3 1,268·8	14,681-6 11,825-0 33,040-3 65,922-8 26,152-0 154,589-0 62,426-0
Totals	158,639-9	155,234.9	71,347.7	4,991-8	1,445.1	1,275 -1	1,421.0	394,372-73

Manitoba figures are for April 30, and B.C. figures for Mar. 31, 1930.

Good Roads Movements.—The building of new roads and the improvement of those already in use is a matter of such general interest that numerous organizations have been developed throughout the country for the purpose of advising and assisting the various Governments in the work. Good roads associations, assisted by the automobile and motor clubs, are to be found in most of the provinces, for the distribution of propaganda and the education of the public in the need or improved highway routes. Provincial revenues from the taxation of motor vehicles and gasolene are very generally allocated to the construction and maintenance of improved highways. Thus Ontario alone, in its fiscal year ended Oct. 31, 1930, spent for highway maintenance and construction \$24,000,000, as compared with a revenue of \$16,000,000 from gasolene tax, motor licences, etc.

The Canada Highways Act.—By c. 54 of the Statutes of 1919, the Dominion Parliament authorized the expenditure of \$20,000,000 for the purpose of constructing and improving the highways of Canada during the five years succeeding the passage of the Act. In its apportionment, grants of \$80,000 were made to each province during each of the five years, the remainder being allotted in proportion to their respective populations. Details as to cost, time, methods of construction, etc., of all roads built under the scheme were to be arranged between the Minister of Railways and Canals and the various Provincial Government Departments. By c. 4 of 1923 and c. 4 of 1925 the operation of the Act was extended to April 1, 1928. A table on p. 669 of the Canada Year Book, 1929, shows the working of the Act and the allocation of expenditure as between the Dominion and the various provinces down to Mar. 31, 1928. The grant has been expended and no further Dominion appropriation has been made under this Act.

## PART VI.--MOTOR VEHICLES.

The earliest motor vehicles were propelled by steam, the history of the gasolene motor car commencing with the successful construction of a gasolene engine by Dajmler in 1884. Until 1900 France remained the headquarters of the industry,

<sup>&</sup>lt;sup>3</sup>Includes some unimproved earth roads, <sup>3</sup>Includes 17.2 miles of other classes.