ndsor with Green eering Scotmown

32.

st, A. MAN pronto

Van-West Sixth

front twice d the ne in

years overorted a son Bank. who

chool 23rd. ently trs of enue, tario chine was

ineer heatafter rn in when After giate ol of n the ago Idon. Shel-

wick, I, is

chool on of orted oint-, but gun at he ment

The Canadian Engineer

A weekly paper for Canadian civil engineers and contractors

NATIONAL PARKS ROAD CONSTRUCTION

FEATURES THAT DETERMINE ALIGNMENT AND GRADES—METHODS OF DRAINAGE, GRADING AND SURFACING—TYPES OF STRUCTURES USED—WORK OF A DOMINION GOVERNMENT DEPARTMENT IN THE GOOD ROADS MOVEMENT

By J. M. WARDLE, B.Sc., A.M.Can.Soc.C.E.,

Highway Engineer, Dominion Parks Branch, Ottawa.

THE Canadian National Parks are chiefly situated in the Rocky Mountain and Selkirk ranges,—the combined areas of the different parks including nearly 8,000 square miles of mountainous territory.

The park area in the Selkirk range is at present limited to some 563 square miles in the vicinity of Glacier and Revelstoke, B.C., the remainder of the mountain reserve being situated along the backbone of the Rocky Mountains range and lying between the forty-ninth and fifty still in the second states of the second state

fifty-third parallels. This large territory, in addition to its value as a mountain playground for the Canadian people and as a means of conserving the forest growth and wild life of Canada, is an invaluable commercial asset of the country due to the revenue derived from its tourist traffic.

Within the park areas are some of the grandest and most picturesque portions of the two great mountain ranges of the continent, and every park is rich in points of beauty and interest that annually attract thousands of visitors

In 1915, Rocky Mountains Park, in which the town of Banff is situated, drew over fifty thousand visitors from all parts of the world, and at a conservative estimate these

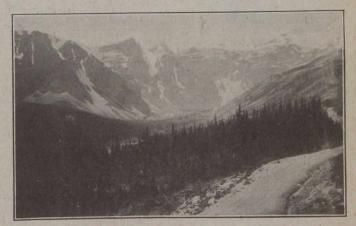


Motor Road near Banff, Alta.

people alone contributed some \$5,000,000 to the wealth

of the country. In 1913, before the outbreak of the war, the revenue derived from tourist traffic ranked fourth among the revenues produced by the natural resources of Canada. In that year it was estimated that the national income from the revenue for a concept.

from tourist traffic was estimate \$50,000,000. When it is recorded that Switzerland with natural scenic attractions not superior to those of the Canadian Rockies, had an annual income of over \$150,000,000 from tourist traffic, the great possibilities of this source of revenue are evident. The drawing power of the Canadian National Parks will increase as they become opened up and made more accessible to the travelling public, and



Moraine Lake Road and the Valley of the Ten Peaks (near Lake Louise, Alta.)

the essential factor of this development is the construction and maintenance of good roads.

This necessary development work is being undertaken by the Dominion Parks Branch of the Department of the Interior, by which the park areas are administered. Road location and construction in the different parks were originally left to a great extent to the judgment of local park superintendents. A few years ago, however, this important work was placed on a more definite engineering basis, and the location of park highways, and the greater part of their construction, are now under the immediate direction of the highways department of the Parks Branch.

Although the development of a system of park highways is still in its early stages, there are at present some 240 miles of graded roads in the National Parks, and new roads are being located every season. Roadwork generally has been greatly reduced owing to war conditions, construction during the past two years being practically limited to the work performed by interned alien enemies who have been utilized to build several sections of park roads.

Location.—The location of park highways is generally proceeding on previously defined lines. Park highways may be divided into two classes:

- (a) Main or trunk roads, and
- (b) Secondary roads.