

Editorial

CONFERENCE ON HIGHWAY CONSTRUCTION.

Beginning with this issue of *The Canadian Engineer*, and continuing through several numbers to follow, we present a series of abstracts from the papers and lectures given before the Conference on Road Construction, held at the Parliament Buildings, Toronto, during the week of February 7th. This conference, arranged especially for county road superintendents and engineers by W. A. McLean, C.E., Deputy Minister of Highways for the Province, is the second of its kind in Ontario. The first conference, held in February, 1915, was an exceedingly successful one, and its measure of usefulness, combined with the high efficiency and service of the Department, has undoubtedly established in the opinion of the Government of Ontario, as well as in the minds of the road engineers and superintendents of the province, the value of a yearly conference.

The series of lectures and demonstrations has as its chief object a means of giving departmental instruction to county engineers and superintendents who are in charge of roads subsidized by the Provincial Government under the Highway Improvement Act. The information which these lectures convey, however, is sufficiently general to be of interest to every road man in Canada. It has been presented by engineers in close touch with advanced practice, and whose knowledge of new and tried methods of construction and maintenance, as well as of materials and equipment, bespeaks a large sphere of observation and study.

Last year *The Canadian Engineer* reviewed the papers presented at the various sessions, publishing in as complete form as space would permit those of more marked interest to the majority of our readers. Through the kindness of Mr. McLean, and of Mr. Hogarth, Chief Engineer of Highways, this year's conference will be reviewed in a similar manner in so far as available space will permit.

MILITARY TRAINING AND ENGINEERING.

The Institution of Civil Engineers (London) is making special provision for candidates for admission, who, in the midst of their studies and practical work, have joined the army or navy. The council, recognizing that the unavoidable interruption, serious in any case, would make it practically impossible for many of them after the war to complete those studies and courses of training in exact accordance with the existing requirements, have submitted to the members of the Institution the desirability of modifying the requirements in order to meet such cases. With this purpose they have asked to be empowered to accept military or other approved national service as part fulfilment of the conditions of training; and, further, in certain circumstances, to exempt from examination candidates who have been engaged in military or other approved national war service for a period of at least one year.

Under the existing regulations a candidate for admission to corporate membership in the Institution is required, in addition to passing an examination, to pro-

duce evidence that he has served for at least three years as a pupil or apprentice of a civil engineer. In the case of a candidate holding a recognized qualifying degree exempting him from further examination, the period of service is reduced to two years, and may be fulfilled by service under agreement to a civil engineer.

Commenting upon the proposed modification of the standard for admission, the "Times" (London) editorially emphasizes its relation to the interests of the Institution and the public at large, membership in the former being so widely accepted as a guarantee of professional efficiency. It observes that the standard of actual efficiency required from those candidates who may be admitted under the proposed modified regulations will in effect be raised rather than lowered.

The exigencies of the war have certainly interfered with the trend of engineering study and practice. While the effect may not be so pronounced in Canada as in Great Britain, it is interesting, at all events, to learn that the governing body of the Institution of Civil Engineers contemplates professional recognition for the training that its candidates are undergoing while in service on land and sea.

SERIOUS POLLUTION OF STREAMS IN CANADA.

In "Conservation" it is stated that sewerage and sewage disposal is dealt with thoroughly in a report on "Waterworks and Sewerage Systems in Canada," to be published shortly by the Commission of Conservation. The gravity of the problem of stream pollution in Canada is shown by the great number of our inland waters receiving raw or untreated sewage. Particularly is this the case in the eastern portion of the Dominion. In the West we have the excellent example of the Province of Saskatchewan where 80 per cent. of the sewerage systems have treatment plants.

The supply of water to communities is universally recognized as the most important function of inland waters. If these waters are allowed to become polluted, they constitute a grave menace to public health. This may be the case even where filters are employed, as a grossly polluted source of supply may overload the filter, which latter should only be regarded as an additional safeguard in an operation which should begin with the proper treatment of the sewage before it is discharged into any body of water.

RAILWAY WORK IN NORTHERN ALBERTA.

The J. D. McArthur Co., which has under construction the Edmonton, Dunvegan and British Columbia Railway, the Alberta and Great Waterways Railway, and the Central Canada Railway from McLennan to Peace River, recently made some interesting announcements concerning the work projected for this year. They are as follows: The last spike on the Grande Prairie branch (60 miles) of the E.D. & B.C. will be driven in March. The Heart River bridge will also be completed next month, allowing trains to enter Peace River Crossing. Plans are being prepared for a large steel bridge across the Peace River