The Canadian Engineer

Established 1893

A Weekly Paper for Civil Engineers and Contractors

Terms of Subscription, postpaid to any address:

One Year	Six Months	Three Months	Single Copies
$3.00	$1.75	$1.00	10c.

Published every Thursday by
The Monetary Times Printing Co. of Canada, Limited

President and General Manager JAMES J. SALMOND — Assistant General Manager ALBERT E. JENNINGS

HEAD OFFICE: 62 CHURCH STREET, TORONTO, ONT.
Telephone, Main 7404. Cable Address, "Engineer, Toronto."
Western Canada Office: 1206 McArthur Bldg., Winnipeg. G. W. Goodall, Mgr.

PRINCIPAL CONTENTS

WATER POWERS OF BRITISH COLUMBIA

IN 1910 the Commission of Conservation undertook an inventory of the water power resources of Canada. As a result, in 1911 the Commission's first report on this subject was printed, "The Water Powers of Canada," covering in summary form the information then available for Ontario, Quebec, and the Maritime Provinces. In 1916 a second volume appeared, "The Water Powers of Manitoba, Saskatchewan and Alberta." The report on British Columbia, which was being compiled under the direction of Arthur V. White, consulting engineer to the Commission, was delayed by circumstances owing to the war, and has just been issued, completing the Commission's series of reports on this great natural resource.

The volume just issued is more than a report on the water powers of British Columbia; it is also a valuable textbook and an interesting account of all the factors that must be considered in connection with the utilization of water resources. It is written in Mr. White's usual forceful, lucid and logical style, and covers thoroughly all cognate phases of the subject under investigation. Not only is it comprehensive but also compact, no space being wasted despite the large number of pages in the volume. In illustrations, topography and general arrangement, the volume leaves nothing to be desired, and both text and tables bear evidence of painstaking care.

Advantage was sensibly taken by Mr. White of all existing information upon the subject, and of all contemporaneous work done by federal and provincial departments as well as by private companies. Naturally, therefore, some of the data contained in the present report is to be found in other previous publications, notably (so far as the stream-flow data are concerned) in the Water Resources papers of the Water Power Branch, Department of the Interior, but full credit is given to all such sources of information. By making use of others' records wherever they could be obtained and were deemed reliable, Mr. White avoided duplication of effort and saved money for the Commission and for the province, which co-operated in financing the report. Nowhere else has so much data pertinent to the water resources of British Columbia been brought within the compass of one book and so well summarized and correlated. In gathering his own field data, Mr. White had several parties of engineers engaged for a considerable period, and these men had many obstacles to overcome in performing their work, owing to the rough and mountainous sections covered.

The paucity of information concerning British Columbia's water powers existing when the Commission undertook its inventory, is well expressed in the British Columbia Year Book for 1911, which states: "Speaking generally, there is no field of economic interest in connection with the exploitation of the provincial resources respecting which there is less known than the extent to which our water powers may be rendered available." Any person reviewing Mr. White's report will readily perceive how radically different is the present status of British Columbia with regard to knowledge of water resources as contrasted with the status in 1911.

The engineer who has to deal with water power projects will be gratified to find such a complete assemblage of physical data as are presented in tabular form in various parts of the report. These include tables giving the estimated possibilities of water power sites throughout the province, which lists are based chiefly upon results obtained from the special field investigations conducted by the Commission of Conservation. There are also extensive digests of stream-flow, meteorological and other hydrometric records.

The report estimates that a total of 3,000,000 h.p. (24-hour power) is available in British Columbia, and states that "the conditions affecting powers in the province are unique, and do not closely correspond to those existent in other portions of Canada. This is especially true of the mainland Pacific coast. One cannot but be impressed with the fact that coastal water powers in British Columbia, which to the casual observer appear to be of comparatively small amount, nevertheless, may, when economically and fully developed, yield several-fold the estimate of power if appraised upon the same basis as similar streams in Eastern Canada. Glaciers, snow-fields, and heavy rainfall abound, and, with many storage possibilities, constitute unique factors which contribute to enhance the values of powers."

A study of the "Remarks" column of the power-site tables, and of comments throughout the report, reveals the diversified uses to which hydro-electric power in British Columbia has already been applied. The report is replete with references to the extensive and varied natural resources of the province. When one considers the mining, agricultural, lumbering, fishing, navigation and other activities, it is evident how great are the future possibilities for increased utilization and conservation of British Columbia's inland waters, and especially of the power derivable therefrom. In such development *The Canadian Engineer* believes that Mr. White's report will not disappoint the aim of the Commission of Conservation in providing a valuable compendium of data upon this subject.

INTER-PROFESSIONAL CONFERENCE AT DETROIT

WITH the purpose of bringing together the professional men of the United States in order to plan more effective relations and to act together on matters pertaining to the public good, an Inter-professional Conference is being called to meet in Detroit November 28th and 29th. The conference was suggested by the Post-War Committee of the American Institute of Architects, which was established to study the new obligations thrust upon the architectural profession by the war.

It is the hope of those fostering the movement to perpetuate to an appreciable degree the enthusiasm of the war-time service rendered to the public by the professional men. The subjects which are to be taken under consideration have been classified under three heads:—The functions and inter-