

50 cents. This is a book of drawings, specifications and other data prepared for engineers, architects and designers having to do with concrete pile foundations. It is comprehensive in its scope, and no important feature of design has been overlooked. It contains standard details of reinforced concrete pile caps; specifications for all types of concrete piles; a comparison of costs of concrete vs. wood pile under various soil conditions; theory of pile support, and description of method of testing a concrete pile.

Bow River Power and Storage Investigations.—By M. C. Hendry, B.A.Sc., chief engineer, water power branch, Department of the Interior, Ottawa. Published by the Department as water resources paper No. 2. 345 pp.; numerous illustrations, maps and diagrams; 6½ x 10 ins.

This report covers investigation carried out during 1911, 1912 and 1913. The importance of the conservation of the Bow River flow has been well recognized in that section of Canada, both from a power-producing and an irrigation point of view. The Water Power Branch has made its investigation a most thorough one, and the report states that it is economically feasible to regulate the flow of the river by means of storage works in its upper waters, to warrant the development at six power sites of over 45,000 h.p., continuously for 24 hours, all within a 50-mile radius of Calgary. The report shows also that the use of such waters for power purposes does not conflict with its use for irrigation purposes, and that the regulation necessitated by the former would be a distinct advantage to the latter.

The report reviews studies of rainfall, precipitation, run-off and other phenomena, observations of which have been taken for a period of years. The existing developments on the river are described, and the possible developments outlined with estimates of cost, etc. The question of storage is very fully considered.

The report will be found of great value to hydraulic and hydro-electric engineers. It is accompanied by a full set of maps and plans.

CATALOGUES RECEIVED.

Small Motors.—Leaflet in two colors descriptive of the advantages of Westinghouse electric small motors for alternating and direct current.

Storage Batteries.—Eighteen-page leaflet descriptive of the "iron-lad-exide" battery for storage battery locomotives. Issued by the Electric Storage Battery Co., Canadian agents, Canadian General Electric Co., Toronto.

Belt-driven Friction Hoist.—A 4-page illustrated leaflet, issued by the Herbert Morris Crane and Hoist Co., Toronto, describing this hoist for small loads. The leaflet quotes dimensions, prices and general particulars.

Air-Compressors.—Twenty-four-page illustrated catalogue issued by the Chicago Pneumatic Tool Co. describing several classes of fuel-oil and gas-driven compressors and their application to the unit system of air-power plants.

Stock List.—The 144-page monthly catalogue list of Joseph T. Ryerson & Son, Chicago, in which is announced an offer of a \$100 prize for the best trade name to cover their product. They manufacture a complete line of tool steel.

Cranes and Hoists.—A handsomely illustrated little 32-page booklet issued by the Northern Crane Works, Limited, Walkerville, Ont., illustrating many notable installations in Canada, and showing the widely varying uses to which they are put.

Concrete Machinery.—A 48-page miniature illustrated catalogue of the London Concrete Machinery Co., describing their types of mixers, barrows, scrapers, tampers, block and

brick machines, hoists and engines, tile and pipe machines, moulds, pumps, etc.

De Laval Centrifugal Pumps.—A very complete commercial publication devoted entirely to centrifugal pumps. It contains about 300 pages and over 300 illustrations of pumps of all capacities and heads for various drives and uses. The text matter is divided by suitable chapter headings. The catalogue is well supplied with tables and charts required in the determination of pipe resistance, and relation between heads and spouting velocities, etc. The catalogue will be found of considerable value, as some of the chapters, particularly that entitled "Pump Characteristics," contain some very valuable information. The catalogue is issued as catalogue B, De Laval Steam Turbine Co., Trenton, N.J.

PERSONAL.

WESTRUPP ARMSTRONG has recently been appointed engineer of bridges to the Toronto-Hamilton Road Commission.

ARCH. STURROCK, formerly district master mechanic at Cranbrook, B.C., has been appointed master mechanic of the Alberta division of the C.P.R.

M. B. R. GORDON, who has been manager of the Cobalt Lake Mine for the past four years, has retired, and is being succeeded by Mr. Chas. E. Watson.

H. D. LANGILLE, of Portland, Oregon, is the author of an article on Canadian competition in the lumber industry which appears in the American Forestry Magazine for February.

H. C. BARBER, B.A.Sc., previously with the Toronto and Hamilton Hydro-Electric Systems, has accepted a position with the Standard Underground Cable Co. of Canada, Limited, Hamilton, Ont.

G. A. IRWIN has been appointed sales manager of the Algoma Steel Corporation, Limited, with headquarters in the McGill Building, Montreal, the corporation having decided to reopen its Montreal office.

OBITUARY.

The death occurred in Winnipeg last week of Horatio F. Forrest in his 76th year. Mr. Forrest was born in Montreal. He took a course in the military college at Quebec, and engaged in civil engineering on the Intercolonial Railway. Later he identified himself with the Canadian Pacific Railway, and in 1873 he assisted in the location of the line from Kenora to Winnipeg. Later he was appointed government inspector of railways, which position he held for a number of years. He then entered the employ of the Canadian Northern Railway as district engineer. He resigned two years ago because of ill-health.

The University of Michigan has established a short course in highway engineering under the direction of its department of engineering in co-operation with the Michigan State Highway Department. Lectures are to be given on February 15th to 20th, inclusive.

The American Wood Preservers' Association held its 11th annual convention in Chicago on January 19th, 20th and 21st. A number of very instructive papers were read and discussed under the following sessional headings: Plant Operation and Miscellaneous; Preservatives and Specifications; Ties, Timbers, Piling and Cross-Arms; Wood-Block Paving.