

While this was being done an average of 18 trains a day passed over the bridge during working hours.

The work was accomplished by cantilevering spans from the piers supporting the old bridge, by the sinking of pneumatic caissons under the direction of the Foundation Company, by employing floating barges, and transferring traffic from the old to the new spans as the latter were completed.

CALGARY BRANCH CAN. SOC. C.E.

Some very interesting meetings have been held by the Calgary branch Canadian Society of Civil Engineers since its inception last summer. These meetings usually take the form of a 6 o'clock dinner with an address and discussion following. Mr. J. S. Dennis, M.Can.Soc.C.E., assistant to the president of the Canadian Pacific Railway Co., gave an interesting address to the meeting held on December 29th. His subject was "Early Surveys and Surveyors of Western Canada." Upon a similar event on January 9th, Mr. Geo. W. Craig, M.Am.Soc.C.E., city engineer of Calgary, read a paper on "Modern Pavements." On January 23rd, Mr. Sam. G. Porter, B.A., B.S., M.Am.Soc.C.E., irrigation inspecting engineer for the Dominion Government, read the paper "The Civil Engineer and his Relation to Society," which appears elsewhere in this issue. On February 6th, Mr. H. A. Moore, M.Can.Soc.C.E., and general manager of the Calgary Power Co., addressed the meeting, describing the company's new power plant at Kananaskis Falls on Bow River.

"Irrigation Engineering" is the subject of an address to be delivered at the February 20th meeting by Mr. W. D. Hays, M.Am.Soc.C.E., chief engineer of the Southern Alberta Land Co. at Medicine Hat. At later dates, not as yet definitely decided upon, the speakers will be Mr. F. H. Peters, A.M.Can.Soc.C.E., Commissioner of Irrigation for the Dominion Government; Mr. H. B. Muckleston, M.Can.Soc.C.E., assistant chief engineer, Department of Natural Resources Canadian Pacific Railway; and Mr. H. J. Duffield, B.E., M.I.C.E.

These dinners are held fortnightly and are being largely attended by the members of the Canadian Society resident in Calgary and vicinity. Mr. P. M. Sauder, P.O. Drawer "V," Calgary, is secretary-treasurer of the branch.

TORONTO BRANCH CAN. SOC. C.E.

The local branch of the Canadian Society of Civil Engineers held a luncheon on Wednesday, February 11th, at which a good representation of the members were present. A short address was given by Prof. C. R. Young, Department of Structural Engineering, University of Toronto, who spoke concerning the library which the Society possesses, making a number of apt suggestions respecting its enlargement and concerning ways in which it might be made of more service to the members. In addition to its monthly meetings the branch contemplates holding a monthly luncheon of this nature during February, March and April. The secretary is John S. Galbraith, 57 Prince Arthur Avenue, Toronto.

CHICAGO CEMENT SHOW.

The Seventh Chicago Cement Show begins on February 12th and will continue to February 21st. During this period the following organizations are also convening in Chicago:—American Concrete Institute, National Builders' Supply Association, Interstate Cement Tile Manufacturers' Association, Illinois Lumber and Builders' Supply Dealers' Association, Illinois Association of Municipal Contractors, National Conference on Concrete Road Building.

CANADIAN MINING INSTITUTE.

Among the papers that have already been arranged for in the programme of the annual meeting to be held in Montreal next month, are the following:—

"Mill and Metallurgical Practice at the Nipissing Mining Co., Cobalt, Ont.," by James Johnston, Cobalt, Ont.; "The Sampling of Cobalt Ores," by C. St. G. Campbell, Cobalt, Ont.; "The Veins of Cobalt District," by Arthur A. Cole, Cobalt, Ont.; "Recent Improvements in Cyanidation," by Herbert A. Megraw, New York; "Some Notes on Mining and Milling Practice at the Alaska Treadwell Mine," by H. C. Meek, South Porcupine, Ont.; "Ore Dressing Improvements," by Robert H. Richards, Boston, Mass.; "Recent Metallurgical Developments," by A. Stansfield, Montreal; "Methods of Excavation in the Mount Royal Tunnel," by S. P. Brown, Montreal; "Factors Influencing the Cost of Power for Mining Purposes," by J. M. Forbes, Montreal; "High Carbon Steel for Sluice Linings in Hydraulic Mining," by Howard W. Dubois, Philadelphia; "Mining in British Columbia" (illustrated by colored lantern slides), by Howard W. Dubois, Philadelphia; "Scientific Management," by F. B. Gilbreth, New York; "Efficiency Engineering Applied to Mining, Quarries and Industrial Plants," by H. M. Payne, New York; "The Chisana Gold Field," by D. D. Cairnes, Ottawa; "Coal Resources of the World," by D. B. Dowling, Ottawa; "Asbestos Resources of the Thetford Area," by W. J. Woolsey, Thetford Mines, Quebec; "Safety in Coal Mines" (illustrated by moving pictures), by a representative of the H. C. Frick Coke Co., Pittsburgh.

EDUCATIONAL INVESTIGATION OF INDUSTRIAL METHODS.

A number of students taking the Chemical Engineering course at the University of Toronto, under the direction of Professors Bain and Ardagh and Mr. Rogers of the Faculty of Applied Science and Engineering, spent a week on a tour of investigation to points in Western Ontario. The party visited the plants of the Dominion Sugar Co., the Empire Refining Co., and the Canadian Glass Co., afterwards proceeding to Windsor where the works of the Canadian Felt Co. were visited. The new electrolytic alkali plant of this company at Sandwich was also inspected. The party included men of the second, third and fourth years.

COMING MEETINGS.

AMERICAN CONCRETE INSTITUTE.—Tenth Annual Convention to be held in Chicago, February 16th to 20th, 1914. Secretary, E. E. Krauss, Harrison Building, Philadelphia, Pa.

NATIONAL CONFERENCE ON CONCRETE ROAD BUILDING.—Meeting will be held in Chicago, Ill., February 12th to 14th, 1914. Secretary, J. P. Beck, 72 W. Adams Street, Chicago, Ill.

CANADIAN MINING INSTITUTE.—Sixteenth Annual Meeting to be held at Windsor Hotel, Montreal, March 4, 5 and 6th, 1914. Secretary, H. Mortimer Lamb, Windsor Hotel, Montreal.

AMERICAN WATER WORKS ASSOCIATION.—Thirty-fourth Annual Meeting to be held in Philadelphia, Pa., May 11-15, 1914. Secretary, J. M. Deven, 47 Slate Street, Troy, N.Y.

CANADIAN AND INTERNATIONAL GOOD ROADS CONGRESS.—To be held in Montreal. May 18th to 23rd, 1914, Mr. G. A. McNamee, 909 New Birks Building, Montreal, General Secretary.