power development of the West Kootenay Light, Heat and Power Company. He was then for four years assistant to the city engineer of Toronto, in charge of sewage disposal and intercepting sewers, gaining there both design and construction experience. From 1911 to 1913 Mr. Blanchard was city engineer of Lethbridge, Alta.

CHAS. J. BRUCE.—Received his engineering training in the field and in practice since 1903. He has served the Dominion Coal Company of Sydney, N.B., as chief mine surveyor for two years. He was for three years with the Dominion Government on the Trent Canal and for three years on the surveys and final location of the Hudson's Bay Railway.

Messrs. Richan, Paget, McLean, Blanchard and Bruce, are each in charge of a survey party in exploration and location of the aqueduct line.

The work to date has engaged the services of about 100 men, including engineers and their assistant labor. They have cross-sectioned and explored the country between Winnipeg and Indian Bay, all in Manitoba, and trial lines are being run for the aqueduct. Considerable success is being attained in effort to discover a uniform continuous down grade from Shoal Lake to Winnipeg, so that a gravity supply at minimum cost may be available in Winnipeg. The remainder of the winter will be required for completing studies of this problem.

A large staff has also been engaged in the office in the collating of field notes, in making the preliminary designs. Good progress can be reported in drafting of specifications for the preliminary stages of the work, as is evidenced by the fact that the Commission is already calling for tenders.

## ANNUAL MEETING, TORONTO BRANCH, CANA-DIAN SOCIETY OF CIVIL ENGINEERS.

On Wednesday evening, January 21st, the annual meeting of the Toronto Branch of the Canadian Society of Civil Engineers was held in the lecture room of the Engineer's Club. Mr. E. A. James, chairman of the Branch, presided.

The treasurer's report, read by Mr. A. B. Garrow, secretary-treasurer of the Branch, showed a cash balance of \$877.50, a large portion of which sum is to be expended forthwith in the enlargement of the already extensive library belonging to the Branch and open to its members in the library rooms of the Engineer's Club.

The election of officers for the coming year resulted in the unanimous selection of Mr. A. F. Stewart as chairman, and Mr. John S. Galbraith as secretary-treasurer. Messrs. J. G. G. Kerry, C. H. Mitchell and Prof. P. Gillespie were elected members of the executive committee. Mr. Kerry was also nominated as representative for District No. 5 of the nominating committee of the parent Society.

The proceedings of the evening included a discussion of the proposed extension to the library. It was generally felt that the members would derive much benefit from the compilation and publication of a comprehensive index, covering the libraries of the Toronto Branch of the Society, the Ontario Land Surveyors' Association, the Ontario Association of Architects and the Engineer's Club. A general lack of knowledge on the part of the members of the extent of the library and the books contained therein seemed to exist. Messrs. W. Chipman and T. C. Irving, Jun., made some valuable suggestions for the speedy carrying out of extensive library development. A library committee was appointed to investigate and recommend additions, this committee consisting of Prof. C. R. Young, and Messrs. A. L. Mudge and W. A. Hare.

J. G. Kerry, A. F. Stewart, H. E. T. Haultain, J. G. Sing,

Willis Chipman, A. R. Davis, C. H. Mitchell, C. R. Young, F. W. Thorold, G. A. McCarthy, J. R. W. Ambrose. Associate Members:—L. M. Arkley, F. B. Goldike, T. H. Hogg, E. T. Wilkie, J. Hutcheon, S. M. Oborn, J. M. M. Greig, Peter Gillespie, A. L. Mudge, W. A. Hare, T. R. Loudon, E. T. Brandon, W. A. Bucke, E. L. Cousins, E. R. Clarke, A. W. Connor, E. A. James, A. B. Garrow, P. H. Mitchell, A. E. Jopp, P. W. Greene, T. C. Irving, Jr., O. L. Flanagan. Junior Members:—D. C. Blizard, C. C. Bothwell. Student Members:—R. P. Johnson, C. H. Fuller, D. H. Fleming, A. S. Miller, E. P. Muntz, John S. Galbraith.

## CLAY WORKERS' ANNUAL MEETING.

The Canadian National Clay Products Association is in convention this week in Toronto. The following are among the speakers whose names appear on the programme of the meeting:—

Herbert N. Casson, Vice-President of H. K. McCann, New York; M. E. Gregory, President of the Brick Terra Cotta and Tile Company, Corning, N.Y., on "Commercial Side of the Clay Business"; Joseph Keele, Dominion Geological Survey; Prof. Edward Orton, Jun., Ohio State University, Columbus, Ohio, on "Ceramic Course"; Prof. Day, Ontario Agricultural College, Guelph; Prof. M. B. Baker of Queen's University, Kingston; A. F. Greaves-Walker, Ceramic Engineer with the Sun Brick Company, Toronto, on "Brickyard Kinks"; Miller Gibson, Ceramic Engineer, National Fireproofing Company, on "Different Types of Fireproofing, Their Manufacture and Burning"; John F. Wilde, Ceramic Engineer with E. H. Crandell Pressed Brick Company, Calgary, Alta., on "Types and Construction of Kiln Furnaces"; Dr. McKay, Principal of Toronto Technical School; D. O. McKinnon on "History of Our Association"; A. L. McCredie, on "Advertising Clay Products"; John Millar, Clayburn, B.C.

The Convention is being well attended and the gathering is quite representative of the ceramics industry of the Dominion.

## COMING MEETINGS.

CANADIAN SOCIETY OF CIVIL ENGINEERS.—Annual meeting will be held in Montreal, Que., January 27-29, 1914. Secretary, Prof. C. H. McLeod, 176 Mansfield Street, Montreal, Que.

CANADIAN CLAY PRODUCTS MANUFACTURERS' ASSOCIATION.—Annual Convention to be held at King Edward Hotel, Toronto, Jan. 27th, 28th, 29th, 30th. Secretary, J. R. Walsh, 40 Blake Street, Toronto.

WESTERN ONTARIO CLAY PRODUCTS ASSOCIATION.—Convention to be held in Chatham, Ont., February 4 and 5, 1914.

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.

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