Corporation, and was also in charge of erection and equipment of foundry for same company at Midland. During 1910-14 he was with the Waterous Engine Works, Brantford, Ont.; 1914-15 with P. H. Secord & Co., general contractors, Brantford, and from June 1st, 1915, to date, shell examiner.

Collins, Lawrence Edward, of Windsor, Ont., elected a junior member. Mr. Collins was born at Sherbrooke, Que., in 1893. He took a two-year course in civil engineering at Valparaiso University. At present Mr. Collins is with the Canadian Steel Corporation, Ojibway, Ont.

CROCKARD, FRANK HEARNE, of New Glasgow, N.S., elected a member. Mr. Crockard was born at Wheeling, West Virginia, in 1873, and received his education at Lehigh University and the Michigan College of Mines. From 1895 to 1897 Mr. Crockard was in charge of blast furnaces for the National Tube Co., Wheeling, W. Va. He was later assistant manager and afterwards manager of the Riverside Works, National Tube Co., until 1906; 1906-1917, vice-president, Tennessee Coal, Iron and RR. Co., Birmingham, Ala., and at the present time is president of the Nova Scotia Steel and Coal Co., New Glasgow, N.S.

Cummings, Alfred, of Fernie, B.C., elected an associate member. Mr. Cummings was born at Omemee, Ont., in 1880. He received his degree of B.Sc., at Queen's University in 1908. For some time past Mr. Cummings has been engaged in engineering work for the British Columbia government.

FAIRBAIRN, RICHARD PURDOM, of Toronto, Ont., elected a member. Mr. Fairbairn was born at London, Ont., in 1855. From 1877 to 1879 he was a member of the firm of Robinson, Tracy & Fairbairn, city engineers, London, Ont.; 1879, Public Works Department, Ontario, work included sewers and water supply, locks, dams, bridges and railway inspection, etc.; 1895-1910, assistant engineer Ontario government public works, later chief engineer; 1910 to the present time deputy minister, Public Works Department.

Hanson, Edward Christian Adair, of Saskatoon, Sask., elected an associate member. Mr. Hanson was born at Glasgow, Scotland in 1883, and took a four-year course in electrical engineering at the Glasgow and West of Scotland Technical College. In 1911 he was superintendent of construction for Canadian General Electric Co.; 1911-13, superintendent for Canadian Light, Heat & Power Co., Montreal; 1913 and at the present time city electrical engineer, Saskatoon, Sask.

HOGARTH, GEORGE, of Toronto, Ont., transferred from associate member to member. Mr. Hogarth was born at Toronto in 1886 and graduated from the School of Practical Science, Toronto, in 1909. Since 1910 Mr. Hogarth has been with the department of public works, Ontario, and since 1916 has been chief engineer of highways.

Jacobson, Eric Anton, of Lindsay, Ont., elected a member. Mr. Jacobson was born at Stockholm, Sweden, in 1881. He took a three-year course at the Machine Technical College (Maskinyrkesskolan), Stockholm, Sweden, and studied hydraulics at die Technische Hochschule, Stuttgart, Germany. He also studied in the United States under State scholarship in 1904. From 1910 to 1915 Mr. Jacobson was hydraulic engineer with the Canadian Boving Co., Toronto, and later chief engineer with Boving & Co., of Canada, Limited, successors to the above company; 1915 and at the present time general manager of the Boving Hydraulic & Engineering Co., Ltd., Lindsay, successors to Boving & Co.

Kendall, Ralph, of Ojibway, Ont., elected a junior member. Mr. Kendall was born at Louisburg, C.B., in 1889. For some time he was associated with the Dominion Iron & Steel Co.. Sydney, N.S., and is at present with the Canadian Steel Corporation, Ojibway, Ont., as chief of survey party.

King, John Albert Shirley, of Ottawa, Ont., elected an associate member. Mr. King was born at Peterborough, Ont., in 1882, and received the degree of B.Sc. at Queen's University (School of Mining) in 1909. For some time past Mr. King has been employed on work for the Dominion Government.

Marshall, John, of Regina, Sask., elected an associate member. Mr. Marshall was born at Eastbourne, Eng., in 1880. He enlisted in December, 1915, as private in the 68th Battalion C.E.F., went to France with the 2nd Field Co. C.E.

McKenzie, James Edgar, of Calgary, Alta., transferred from the class of student to associate member. Mr. McKenzie was born at Minneapolis, Minn., in 1889 and received the degree of B.Sc. at Queen's University in 1912. At present he is president and manager-director of J. E. McKenzie, Ltd., general contractors and engineers.

Pratt, George Robert, of Winnipeg, Man., elected an associate member. Mr. Pratt was born at London, Eng., in 1876. From 1906 to 1910 he was inspector and engineer on construction of C.P.R., Winnipeg shops, under J. E. Schwitzer, and from 1911 to 1918, mechanical and fuel engineer, western lines, C.P.R.

Puntin, James Henry, of Regina, Sask., elected an associate member. Mr. Puntin was born at Gatehead-on-Tyne, England, in 1878 and was educated at Gatehead and Owens College, Manchester, Eng., and Royal Institute of British Architects. From 1915 to 1917 Mr. Puntin was on active military service and at present is practising as architect.

RANNIE, JOHN LESLIE, of Ottawa, Ont., elected an associate member. Mr. Rannie was born at Newmarket, Ont., in 1886 and received his degree of B.A.Sc. at the University of Toronto in 1909. Mr. Rannie is at present supervisor of triangulation on Geodetic Survey of Canada.

REILLY, FRANCIS BELL, of Regina, Sask., elected an associate member. Mr. Reilly was born at Wardsville, Ont., in 1874. From 1909 to date he has been a member of the firm of Reilly, Dawson & Reilly, architects, surveyors and engineers, Regina.

SMAILL, WILLIAM, of Winnipeg, Man., elected a member. Mr. Smaill was born at Montreal in 1870 and received his degree of B.A.Sc. at McGill University in 1890. At the present time Mr. Smaill is general superintendent of the Winnipeg Aqueduct Company.

SMITH, WILLIAM RAYMOND, of London, Ont., elected an associate member. Mr. Smith was born at Toronto, Ont., in 1888. From 1912 to 1913 he was in private practice for Coté, Tremblay & Pearson, civil engineers, Edmonton; 1913-14, resident engineer, Edmonton, Dunvegan & British Columbia Railway, and at the present time lieutenant, C.E.F., at Engineers' Training Depot, St. Johns, Que.

Somers, Newton L., of Sault Ste. Marie, Ont., transferred from junior member to associate member. Mr. Somers was born at Villa Nova, Ont., in 1888, and received the degree of B.A.Sc. at the University of Toronto in 1914. In 1913 he was draftsman and designer with James, Loudon & Hertzberg, Toronto; 1914-15, inspector of erection of bridges and building with the Canadian In-

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