

barrels, cases and packages, the process of filling these in quantities is fully described.

Several specifications are given covering the construction of tanks, stills, agitators, etc., and these are about the same as present day practice on this continent except that the requirements—insofar as workmanship is concerned—are more severe than is the case here. About the only exception to this is that the practice of building tanks with trussed roofs and centre posts is not now in general use, principally on account of the greater cost.

In an appendix is given a comprehensive list of pamphlets and books on petroleum technology such as would be interesting to those wishing more detailed information on the subject than could possibly be given in a single volume.

### ENGINEERING INSTITUTE OF CANADA, ELECTIONS AND TRANSFERS

AT a meeting of the Council of the Engineering Institute of Canada, held on October 22nd, 1918, in Montreal, the following elections and transfers were announced:—

ARMSTRONG, HARRY WESTROPP, of Toronto, Ont., now on active service, elected associate member. Mr. Armstrong was born at Cobourg, Ont., and finished his education at the Collegiate Institute in 1902. He was for a time with the C.P. Ry., and in 1906 became resident engineer of that company. In 1915, prior to enlisting, he was engineer of bridges on the Toronto-Hamilton Highway Commission. Mr. Armstrong was for seventeen months with the Canadian Machine Gun Corps, and has been for the past year and a half with the Canadian Railway Troops.

BATEMEN, EDWARD FLEMMING, of Saskatoon, Sask., elected associate member. He was born at Mirfield, Eng., and received his education at Victoria College, Jersey, and at King's College, London, and Thames Marine Officers' Training Ship. He has had engineering experience covering a period of over forty years, and is at the present time engaged on the erection of structural steel and bunkers at the new power house, reconstruction of pumping station, etc., Saskatoon, Sask.

BELLIVEAU, JOHN EDMUND, of Halifax, N.S., has been elected associate member. Born at Church Point, N.S., and educated at St. Ann's University, Mr. Belliveau since leaving college has been assistant engineer in the office of the Provincial Engineer, and has also served in the same capacity with the Western Division, Department of Highways and Bridges. He is at the present time assistant to chief engineer, Provincial Highway Board, Nova Scotia.

BERNIER, JOSEPH ADELARD, of Montreal, Que., transferred from the class of junior to associate member. He was born at Cap St. Ignace, Que., in 1885, and took his B.Sc. degree at Laval University at the age of twenty-two. After leaving college he became for one year leveller, etc., with A. T. Sabourin on the hydrographical survey of the Richelieu and Yamaska Rivers. In the following year Mr. Bernier became associated with the city of Maisonneuve as leveller and transitman with the chief engineer, and also draftsman and inspector of the construction for the Montreal Terra-Cotta Co., Ltd., Lakeside. Three years later he was made first assistant to E. Fusey, engineer in charge of sewers department. He is at the present time in charge of the sewers

department, superintending the general works in the office and the construction of sewers.

BURNETT, ARCHIBALD, of Swansea, Ariz., transferred from the class of associate member to that of member. He was born at St. Hyacinthe, Que., in 1876, and obtained the degree of B.Sc. at McGill University in 1902. Mr. Burnett was for a time with the British Columbia Copper Company as engineer and designer, and in 1912 became examining engineer and manager of two subsidiary mines with the Crown Reserve Mining Company. In 1917 he became efficiency engineer of Mine Methods, Limited, Verde Copper Co., of Jerome, Ariz. He is at the present time general superintendent of the Swansea Lease, Inc.

CALVERT DAVID GORDON, of Toronto, Ont., has been elected junior member. He was born at Napier, Ont., and received his education at the Public School and at Collegiate Institute, and in addition attended two and a half years at the S.P.S. at the University of Toronto. In 1913 he became assistant engineer on the C.P. Ry. under W. D. Pender, on construction of the Canadian Pacific Railway terminal yards at North Transcona, Manitoba. Mr. Calvert is at the present time engineer for the Canadian Stewart Co., Ltd., on Toronto Harbor Improvements, in charge of a portion of the work.

CHOWN, REGINALD CECIL FRANK, of Regina, Sask., elected associate member. He was born at Totnes, Eng., and educated at Plymouth College, and by private tuition in France and Germany. Mr. Chown was for five years in charge of the Berbice River District, Colonial Government, S.A., and later was in charge of prospecting West African Union Mines. In 1908 he became assistant to chief engineer with the Saskatchewan Government Telephones, and is at the present time construction engineer with the same organization.

CIMON, JOSEPH MARIE HECTOR, of Quebec, Que., transferred from the class of student to that of junior. He was born at Rivière du Loup, Que., in 1893, and obtained his B.A.Sc. at Laval University in 1916. Since leaving college to date Mr. Cimon has been engineer for Price Bros. & Co., Ltd., Quebec, in charge of surveys and general hydraulic works.

COX, OTIS STANLEY, of Halifax, N.S., transferred from the class of junior to associate member. He was born at Upper Stewiacke, N.S., in 1888, and educated at the Nova Scotia Technical College, where he received his degree. During the summer of 1912 he was engaged on instrument work with the I.C.R., Dartmouth to Deans Branch. Since 1913 to date Mr. Cox has been assistant engineer, Public Works Department, Halifax, N.S.

CROSSING, W. B., "Somewhere in France." He was born at Bristol, England, in 1893, and educated at Bristol University and Bristol Engineering College. He also attended the Merchant Ventures Technical College at Bristol and the University of Manitoba, completing his course at the latter school in 1914. He served for a time as draftsman on the C.N.R., and also with the C.P. Ry. as surveyor. When the war commenced he enlisted and is now on active service. Elected junior.

DALZIEL, NORMAN PEARSON, of Ottawa, Ont., transferred from the class of associate member to that of member. He was born at Edinburgh, Scotland, in 1878, and completed his education at the Heriot-Watt College in 1896. After serving as apprentice to Blythe & Westland, Edinburgh, for four years, he became assistant engineer with the same firm. He was later appointed assistant engineer on the Natal Government Railways, and on sur-