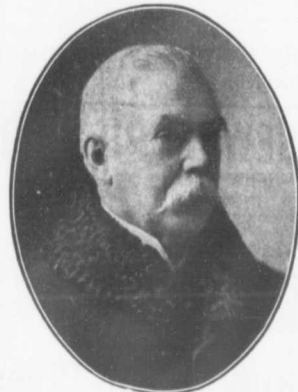


OFFICERS OF THE ENGINEERS' CLUB OF TORONTO.

Of the younger engineering organizations in this country, perhaps none have done more to encourage a spirit of good fellowship among the members of the profession than the Engineers' Club of Toronto. Organized early in the year 1899, it has now a membership of 139, embracing persons engaged in all the different branches of engineering. While the social side of the Club has been developed, the question of educational advancement has not been overlooked, as many valuable papers and addresses on engineering subjects have been delivered at the regular meetings. We present herewith the officers for the current year.



CAPT. KILLALY GAMBLE.

Capt. Gamble, the president of the Club, was educated at Portora Royal School, Ireland, and the Royal Military Academy, Woolwich. He was gazetted Lieutenant of Royal Artillery in 1866 and served at home, in the Mediterranean, and in the West Indies. He commanded the Royal Artillery in the Bermudas in 1880. The Captain retired from the service in 1882, and after serving for a short time on railway work, under Mr. James Barton, C.E., in Ireland, he came to Canada and settled in Winnipeg. He became a Provincial Land Surveyor for Manitoba in 1886 and a Dominion Land Surveyor in the same year. Removing to Toronto he became an Ontario Land Surveyor in 1888, and in 1902 was appointed secretary-treasurer of the Association of Ontario Land Surveyors. He has always taken an earnest interest in the Engineers' Club, having served as a director in 1902 and as second vice-president in 1903.



MR. R. F. TATE.

Mr. Robert Frederick Tate, Mem. Can. Soc. C.E., has for the past four years been resident engineer for Mackenzie, Mann & Company, Limited. He began his pro-

fessional career as rodman on the Midland Railway (now a portion of the Grand Trunk Railway System) in 1871, and since that time has obtained a railway engineering experience covering all branches. He remained in his first position ten years, completing the construction of the line to Midland and laying out and constructing the first yards, docks and elevator sites at that port. During the last five years of his connection with the road he was chief engineer. Mr. Tate has since been engaged with the principal Canadian railways in charge of location, construction and chief of construction offices in design and general work pertaining thereto. He was with the Grand Trunk Railway as resident engineer in charge of double track construction and a branch to the Sarnia Tunnel, and with the Canadian Pacific Railway on their line from Farnham, Que., to Mattawamkeag, Maine, the Smith's Falls extension and the Crow's Nest Pass Railway, as well as surveys for the company. Mr. Tate comes from an engineering family of three generations. He was director of the Engineers' Club in 1903, and is now its first vice-president.



MR. JAMES MCDUGALL.

Mr. James McDougall, C.E., second vice-president of the Engineers' Club, was one of the first graduates in engineering of the School of Practical Science. From July, 1884, to August, 1886, he was assistant to the late J. T. Stokes, C.E., County Engineer for the County of York, giving his attention to the designing of bridges and to construction of sewers, water works, street grading and paving in the town of Parkdale. The following year he was engaged in the construction offices of the Canadian Pacific Railway under Mr. W. T. Jennings, being sent to Wingham to take charge of the construction of the Wingham extension. He was later employed on calculations necessary for the final estimates connected with the deepening of the Welland canal. From December, 1888, to September, 1891, he was again employed by the Canadian Pacific Railway, during which time he obtained an experience in all phases of railway work, including surveys, grading, bridges, excavation by train and steam shovel, terminal docks, etc. Early in the year 1892 Mr. McDougall was appointed county engineer for the County of York, in which capacity he has been in charge of various works, beginning with the construction of the Toronto and Mimico Electric Railway, of which he was chief engineer. He has represented both county and companies in the construction of extensions of the Metropolitan Railway from York Mills to Newmarket; the Toronto Suburban Electric Railway to Lambton Mills and extension through Weston; and the Toronto and Scarboro Electric Railway from the beginning to its present terminus. He has also made locations for further extensions of the above named roads and was chief engineer during survey and construction of the Schomberg and Aurora

Railway, a steam road but lately opened. In addition to his county work Mr. McDougall has built a large number of steel bridges in other counties. Several outside railways, such as the Lindsay, Bobcaygeon and Pontypool line, were wholly or in part located by him.



MR. WILLIS CHIPMAN.

The secretary of the Club, Mr. Willis Chipman, is an honor graduate in civil and mechanical engineering of McGill University, Montreal. He first established an office in the town of Brockville, Ont., and in 1881 was appointed town engineer, which position he occupied until 1893. Three years prior to the latter date he removed his head office to Toronto, where he has since been located, conducting a very extensive engineering practice. While he has made a specialty of waterworks and sewerage construction, the scope of his practice embraces all branches of municipal engineering. He has designed and constructed sewerage works for London, Brantford, Brockville, Sault Ste. Marie, Smith's Falls, Campbellton, N. B., and many other corporations. The waterworks systems designed and constructed under his supervision include those for such towns as Galt, Goderich, Gananogue, Petrolia, Smith's Falls, Sturgeon Falls, Midland, Pembroke, Edmonston, Alta., Kamloops, B. C., etc. Mr. Chipman has also been engaged as engineering expert by several cities and towns during the proceedings for expropriating their waterworks. Among these might be mentioned Barrie, Belleville, Berlin, Cornwall, Moncton, N. B., and Sherbrooke, Que. He has made a careful study of sewage disposal, having during the last ten years inspected the principal sewage disposal works in Canada, the United States and Great Britain. He has recently made an exhaustive report on the extension of the water supply for the city of London. Mr. Chipman took an active part in the organization of the Ontario Land Surveyors Association in 1886, being its first secretary and subsequently becoming president. He has been secretary of the Engineers' Club from its inception, and it is admitted that the success of the Club is in large measure due to the efficient services rendered by him. Mr. Chipman is a member of the Canadian Society of Civil Engineers, the American Society of Civil Engineers, American Waterworks Association, and the Association of Executive Health Officers of Ontario.

Bond & Smith, architects, are building an office at 255 College Street, Toronto, with the new hollow wall construction which is being introduced by the Roman Stone Company, Limited. The unique construction is creating considerable interest in the building trade and with architects, and promises to be an important feature in future building work.