

ance of Roads;" "Preparation and Use of Road Metal;" "Road Dimensions,—Crown, Width and Gradient;" "Road Management in Hastings;" "Duties of a Road Superintendent;" "Selection of Road Foreman;" "Raising Funds for Road Construction;" "Concrete Highway Bridges;" "Steel Highway Bridges;" "Township Road Systems;" "Road-making Machinery;" "Road Laws in the United States;" "Principles of Road Management."

Engineers' Club of Toronto.—"The use of high carbon steel for concrete reinforcement" was the subject discussed at the Engineers' Club last Thursday evening. The following gentlemen, led by Mr. Peter Gillespie, took part:—Messrs. C. R. Young, R. A. Baldwin, W. J. Fuller, L. J. Street, T. T. Black. Mr. C. M. Canniff presided.

Canadian Mining Institute.—The twelfth annual meeting of the above society will be held in Toronto, at the King Edward Hotel, on Wednesday, Thursday and Friday, March 2nd, 3rd and 4th. H. Mortimer Lamb, secretary, Windsor Hotel, Montreal, Que.

Association of Ontario Land Surveyors.—The next annual meeting is announced for 8th, 9th and 10th of March. The annual examination will commence on 14th February in the east hall of the University of Toronto. There are thirty candidates for final examination and six for preliminary.

McGill Applied Science Undergraduates.—A regular meeting of the Applied Science Undergraduates' Society of McGill University was held in the lecture theatre of the Chemistry and Mining Building, on Monday evening, January 31st, the speaker being Mr. J. K. L. Ross, of the Dominion Coal Company.

Mr. Ross, who graduated from the Science of Faculty of McGill in 1897, was introduced by Dr. Barnes, and spoke on "Life Saving Apparatus in use at the Dominion Coal Company's plant at Sydney, C.B." The apparatus was known as the Draeger, which, in general, consisted of a helmet and two cylinders. The cylinders were strapped over the shoulder and were air-filled with oxygen, each one being capable of allowing a man to live in the presence of poisonous gases for one hour. The helmet was air-tight around the face.

The address was supplemented by a practical demonstration of the working of the apparatus.

While essentially a life-saving apparatus, its advantages to the company from an economic standpoint were very great, as in the case of a fire in the mine the men could go down and fight it directly.

Dr. J. M. Elder also spoke on "Artificial Respiration."

Both addresses were very instructive, and were highly appreciated by the large body of undergraduates present.

Dean Adams, Dr. Barnes, Dr. Porter and Professor Evans contributed to the discussion.

OBITUARY.

Joseph Doupe, Civil Engineer and Dominion Land Surveyor, died at 169 Edmonton Street, Winnipeg, on Thursday. The deceased was one of the best known engineers in Western Canada. He went West with Dominion Government surveyors in 1871, and for twenty-five years was engaged on this class in work throughout the whole of Manitoba and the North-West. About fifteen years ago he retired from the service of the Dominion Government to enter upon a private practice which he continued with energy almost up to the hour of his death. The late Mr. Doupe was born at Napanee, Ont., in 1837, and was educated at McGill University, taking his degree of C.E. there. The deceased was out on an important survey at Calgary, Alta., only two weeks ago.

PERSONAL.

The Williamson Construction Company have moved into larger offices at 705 Builders' Exchange, corner Portage Ave. and Hargrave Street, Winnipeg, Man.

Mr. W. C. C. Mehan has been appointed general superintendent of the Mountain division of the G. T. P. Railway, with headquarters at Prince Rupert, B.C. Mr. Mehan is at present located at Melville, Sask.

Mr. W. H. Pearson, Jr., who has been connected with the Consumers' Gas Company of Toronto over thirty years has resigned to devote his time to a new process recently patented for the manufacture of gas. During the period of Mr. Pearson's connection with the Gas Company, the works have grown from 500,000 cubic feet capacity per diem to over 9,000,000 cubic feet. Mr. Pearson had entire charge of all construction and has designed and erected nearly all of the company's plants.

Mr. Pearson is vice-president of the Economical Gas Apparatus Construction Company, and one of the patentees of the Merrifield-Westcott Pearson Water Gas System. The new firm will start operations at once, and expect to have their system installed in one of the Canadian cities.

Mr. F. S. Darling, M. Can. Soc. C. E., until recently engineer in charge of construction on the eastern lines of the C.P.R. has been appointed engineer in charge of construction on the Alberta and Great Waterways Railways, a line



Mr. F. S. Darling, M. Can. Soc. C. E.

which will shortly be built from Edmonton to Fort McMurray, a distance of 350 miles.

Mr. Darling has been engaged in railway construction since 1886 when he joined the staff of the Great Northern. In 1902 he joined the staff of the C.P.R. as Division Engineer of Construction on eastern lines, and in this connection perhaps his heaviest work was the construction of the Toronto-Sudbury branch, the 220-mile cut off to the West.

NEW INCORPORATIONS.

Powassan, Ont.—Arthurs Co. \$20,000; J. Arthurs, J. N. Arthurs, W. F. Duncan. **Collingwood, Ont.**—Manson Bros., \$50,000; D. A. Manson, T. M. Manson, O. L. Hobbs. **Windsor Ont.**—Masonic Temple Association of Windsor, \$50,000; G. English, J. H. Carson, E. B. Winter. **Sandwich, East Township, Ont.**—Regal Motor Car Co., of Canada, \$50,000; J. E. Lambert, C. R. Lambert, B. Lambert. **Sault Ste. Marie, Ont.**—Sault Builders' Supply & Cartage Co., \$50,000; C. B. Sexsmith, D. P. McPhail, K. M. Wright. **Fort William, Ont.**—Enterprise Publishing Co. of Fort William, \$40,000; R. S. Piper, J. Garrity, M. Ferguson. City Cartage & Dray Co., \$40,000; A. H. Dowler, A. G. McAlpine, A. D. Stewart. **Pembroke, Ont.**—Joshua Brown Co., \$45,000; W. L. Hunter, J. C. Hunter, E. A. Dunlop. Silver Nugget Mines, \$1,000,000. S. Arnovitz, M. Landes, J. E. Bergeron. **Haileybury, Ont.**—Haileybury Construction Co., \$40,000; T. Shannon, W. A. Caddie, R. J. Shannon. **Ottawa, Ont.**—Fleming-Dupuis Supply Co., \$60,000; F. W. Bedard, T. Fleming, E. McMahon. Geo. W. Bailey, Ltd., \$40,000; G. W. Bailey, A. J. Moulds, A. T. Bailey. H. N. Bate Realty Corporation, \$1,000,000; H. N. Bate, H. G. Bate, H. A. Bate. Mackey Specialty Co., \$100,000; C. A. Parker, E. A. Larmonth, A. S. Mackey.