work in the Roads Department to warrant Mr. Barlow, city surveyor being given a competent assistant.

Ottawa, Ont.—An order-in-council has been passed by the government granting a subsidy of 3 per cent. on the cost of the new dry dock which is to be constructed at Port Arthur, estimated at \$1,200,000.

Calgary, Alta.—The C.P.R. have practically completed the irrigation works in the western section of the block, comprising some 1,600 miles of canals and ditches, and plans and estimates recently submitted to the management covered the extension of the system to the eastern and central sections of the block, and involved a further expenditure of \$12,000,000.

PERSONAL.

Mr. H. Roy Miles, resident engineer, C.P.R., North Bay, Ont., has been elected to the council of the town of North Bay, Ont.

Mr. R. S. Lee, consulting engineer, Montreal, has been elected a member of the Institution of Civil Engineers, Eng-

Mr. F. H. McFadden is the new superintendent of the prairie division of the Grand Trunk Pacific, with headquarters at Melville, Sask. Mr. McFadden replaces Mr. Meahan who has taken charge of the mountain division.

Dr. Charles A. Hodgetts, secretary of the Provincial Board of Health, has recently been appointed by the King an Esquire in the Grand Priory of the Order of the Hospital of St. John of Jerusalem, of which His Majesty is the head.

Mr. A. J. Latornell, B.A.Sc., D.L.S., has been appointed City Engineer of Edmonton, Alta. Mr. Latronell has been acting City Engineer for two years, and his promotion has been expected for some time. Mr. Latronell graduated from Toronto University, Department of Engineering, 1903, and is an A.M. Con. Sec. C.F. is an A.M. Can. Soc. C.E.

Mr. Norman D. Wilson, B.A.Sc., has commenced practice in Toronto as a surveyor and engineer. Mr. Wilson is an A. M. Can. Soc. C.E., and has had considerable experience in connection with railroad and municipal work. For the present he will have temporary offices at 41 Murray Street,

Toronto, Ont.

Messrs. Jago & Harris (F. J. Jago and R. R. Carr Harris, C.E.), civil engineers and reinforced concrete contractors, have opened an office at Toronto in the Confederation Life Building. Mr. Jago will remain in charge of the Montreal office, 518 Coristine Building, while Mr. Harris will conduct affairs at the Toronto end.

Mr. B. S. Mackenzie, C.E., of the Quebec Bridge Company, is leaving Montreal to accept the position as assistant engineer on the G.T.P., with headquarters in Winnipeg. Mr. Mackenzie has been with the Quebec Bridge Company for the past six months. Previous to that he was assistant division engineer on the Eastern Division of the C.P.R., being associated with that road for ten years altogether. He is a gradu-

ate of McGill University.

Mr. S. J. Hungerford, shop superintendent for the C.P.R. at Winnipeg, has been appointed superintendent of rolling stock for the Canadian Northern Railway, with headquarters in Winnipeg. This is a newly-created office. ford served for sixteen years with the C.P.R. He began railway work in 1886 with the South-Western Railway, afterwards incorporated with the C.P.R. Then he was for several years with the Central Vermont, returning to the C.P.R. in 1894.

Mr. E. W. Beatty has been appointed general solicitor for the C.P.R., with office at Montreal. Mr. Beatty is a Upper Ontario boy. Born at Thorold, he was educated at Upper Canada College and the University of Toronto, studying law at Osgoode Hall, with the firm of McCarthy, Osler, Hoskin & Creelman. On Mr. Creelman being appointed Hoskin & Creelman. On Mr. Creelman being appointed chief solicitor for the Canadian Pacific, Mr. Beatty, who was called to the Bar in 1901, accompanied him here, and in 1904 he was appointed assistant solicitor. His promotion creates a new office, consequent upon the appointment of Mr. Creelman as general counsel.

SOCIETY NOTES

(Continued from page 231).

would in perhaps 15 years time look to Canada for quantity of wheat, as it now does for quality.

Mayor Guerin eulogized the engineering profession for the work it has already done in the development of the country.

Controller Wanklyn mourned the fact that the engineering profession was the poorest paid for the hardest work. He advocated the same protection to engineers as is now accorded by the Government to doctors and lawyers.

"Alma Mater" was handled by Mr. George Murray and Principal Paterson. The latter spoke of the difficulties encountered in gaining the support of the citizens of Montreal

for the University.

In a brilliant speech Mr. E. Vinet proposed "The Faculty," to which Dean Adams responded. "One of the things we must be thankful for," said the Dean, "is that we still retain our professors in spite of the high cost of living." He prophesied an aviation course on the college curriculum.

Other toasts were "Sister Universities," proposed by

Prof. Evans and responded to by Mr. G. Archambanet of Laval; "The Profession," by Dr. Milton Hersey and Mr. John Kennedy, and "Sister Faculties," by Dr. Barnes and Dean Moyse.

Engineering Society (McGill).—A regular meeting of the Applied Science Undergraduates' Society of McGill was held on the evening of February 24th, when Mr. George C. Whipple, of Hazen & Whipple, New York City, read a most instructive paper on "Water Filtration in Theory and Practice." The society were honored in having at the meeting Mayor Overin and Messrs. Lachapelle, Wanklyn and Amey of the new Board of Control.

While the great epidemics have been an important influence in hastening the installation of filters, a still more potent force, said Mr. Whipple, is the public opinion that is rolling up in tremendous volumes in favor of better sanitation and

greater cleanliness.

It is true that running water purifies itself but it does so only to a certain extent. These natural purifying processes may all occur and yet the water of a stream may remain unfit to drink because the processes have not been completed and the element of time has not been long enough. It is for the reason that we cannot depend upon the natural processes of purification, therefore, that artificial methods must be resorted to.

The question as to the relative merits of sand filtration ated by the lecturer as sedimentation, filtration, coagulation, While a short descripaeration, disinfection and distillation. tion of each method was given the speaker's remarks were confined chiefly to filtration. In this connection the slow sand filtration process and that of mechanical filtration were described from the standpoint of efficiency, initial cost and cost of maintenance. Slides were shown of filtration plants in operation in various cities in the United States.

The question as to the relative merits of san filtration and mechanical filtration was sometimes a difficult one, said Mr. Whipple, depending largely on local conditions. Generally speaking, however, sand filters are to be preferred when they can be used.

In regard to purification of sewage Mr. Whipple stated that while it was a disgrace to allow our naturally pure streams to become as foul and unsanitary as many of them are, yet sanitary improvements, like all other improvements, cost money, and it is wisest to spend our money where it will go farthest. Water filtration is very much cheaper than the purification of sewage, and experience has demonstrated that from a sanitary standpoint it is more efficient.

"In conclusion," said Mr. Whipple, "while it is true that sedimentation and chemical coagulation, aeration and disinfection will improve the sanitary condition of a water it is only by filtration with or without the use of these supplementary processes, as they may or may not be necessary, that a public water supply can be secured that conforms to modern standards of hygiene and decency.'

Mayor Overin and Controllers Lachapelle, Wanklyn and Aviery spoke briefly in appreciation of Mr. Whipple's address, and in favor of filtration.

Others present included Dean Adams, Dr. Starkey, Dr. Milton Hersey and Mr. R. S. Lea.

The annual meeting of the society will be held on March there. Turning to the United States Mr. Fisher said that country in a short time would cease to export wheat and lems of Winter Navigation."