page 667 of the June 22nd issue of *The Canadian Engineer*. Controller Villeneuve says that the aqueduct will cost over eleven million dollars and that it is a blindly recommended project, poorly defined and little studied, and based upon defective plans that are impossible of fulfilment.

Mr. Villeneuve says that $6,742,661 has already been spent or is involved in the work now being done, and that in addition to that sum the following amounts will be necessary to complete the work: Land to be expropriated, $225,000; bridges and head gates, $650,000; ditches and ferries, $50,000; basin and breakwater, $475,000; plant and buildings, $1,500,000; engineers, etc., $90,000; electrical lines, lamps, auxiliary steam plant, interest during construction, etc., $2,000,000. If Controller Villeneuve's figures are right, it will mean that the aqueduct will cost $11,242,000. "This," says the controller, "would put the cost per horse-power at $1,124, which is eight times the cost of Lachine Rapids power." Mr. Villeneuve quotes figures to show that the operating cost per horse-power year will be $76, "which is far from the cost of production as stated by the (former) chief engineer of the city to be only $12.62." This cost of production would in itself be more than three times the price at which the city could purchase power from any of the private companies in the district.

EDITORIAL INDEX.

The index to articles in *The Canadian Engineer* for the year ending June 30th, 1916, will be printed within the next few weeks, and will be distributed to all subscribers as an integral part of one of our regular issues.

PERSONAL.

Major T. M. McAVITY, of St. John, N.B., has been awarded the Distinguished Conduct Medal.

WILLIAM TODD has been appointed superintendent of the Edmonton, Alta., pumping and filtration plant.

GEORGE L. SPRAGUE, of New York, is to be the new principal of the Technical School at Hamilton, Ont.

W. H. HORWOOD has been promoted to the position of sales manager with the Canadian Steel Foundries, Welland, Ont.

MARTIN UPPER has been appointed road commissioner of Stamford Township, Ont., to succeed Sylvester Bradley, resigned.

Sir WILLIAM PRICE, chairman of the Quebec Harbor Commission, has resigned and is going overseas. He is succeeded by D. O. Lesperance.

J. McGREGOR, superintending engineer of the Halifax Ocean Terminals, now under construction, has obtained leave of absence to go to the front.

W. K. JEFFREY, formerly manager of the Ottawa Car Manufacturing Co., has joined the Lyman Tube and Supply Co. as sales manager, with headquarters in Montreal.

W. R. GILMORE, manager of the Canadian Steel Foundries, Welland, Ont., is resigning to become vice-president and general manager of a steel company at Benton Harbor, Mich.

ARTHUR D. LITTLE, who is organizing the research department of the C.P.R., gave an address last week before the Vancouver Branch of the Canadian Society of Civil Engineers.

RICHARD DEANS WAUGH, mayor of the city of Winnipeg, has been appointed chairman of the Board of Commissioners of the Greater Winnipeg Water District, taking the place of the late Samuel H. Reynolds.

A. R. MURPHY, Jun.Am.Soc.S.E., of Knoxville, Tenn., has become associated with the engineering staff of Wallace & Tiernan Co., manufacturers of chlorine control apparatus, New York City. Mr. Murphy is a graduate of the University of Tennessee and has had several years' general waterworks experience.

Prof. ARTHUR L. CLARK, professor of Physics at Queen's University, Kingston, Ont., has returned home from Holland, where he conducted a series of experiments with liquid air at the University of Leiden. Prof. Clark intends to install a liquid air machine at Queen's for the purpose of continuing his experiments.

G. A. McCARTHY, engineer of railways and bridges of the city of Toronto, is engaged in a valuation to determine what the Bloor Street viaduct would have cost the city under the original order of the Board of Railway Commissioners. The city council will then determine the amount payable under the new order.

A. M. MOUAT, C.A., city controller of Edmonton, Alta., has just issued the city's financial report in printed form. These figures, which have already appeared in The Monetary Times, are issued in as simple form as possible, in order that they may be readily understood by the taxpayer. Municipal accounts are, unfortunately, usually submitted in such form that only the professional accountant can comprehend them, and they are frequently a source of much mystery to the man on the street. Mr. Mouat is to be congratulated upon the appearance of his city's financial statements and reports for the past year.

OBITUARY.

MICHAEL A. PIGOTT, a retired contractor of Hamilton, Ont., died suddenly last week aged 66 years. Deceased was born in Guelph, Ont., but resided in Hamilton for forty years. He was an architect, but undertook contracting work many years ago. In partnership with Sylvester Neelan, a well-known St. Catharines contractor, Mr. Pigott built the Hamilton city hall and also secured the contract for Toronto's municipal building, but owing to a dispute the work was taken from them when about half completed. The Guelph-to-Goderich C.P.R. line was one of the firm's jobs; also a considerable amount of government harbor and dock work at Midland, Ont. Following a paralytic stroke two years ago, Mr. Pigott had retired from business.

The results of a series of efficiency tests on a 30,000 kilowatt cross-compound steam turbine in a power station of the Interborough Rapid Transit Company, of New York, have been given in a paper before the American Society of Mechnical Engineers. It was stated that "the thermal efficiency of the turbine was now nearly 25 per cent., equal to that of the gas engine, while the latter involved much higher overhead charges and maintenance costs. For the same reason hydro-electric power, which looked like a gold mine 15 years ago, was, to-day, not a good investment. Even at Niagara Falls, where the development charge was at a minimum, and where the supply of water was practically unlimited, hydro-electric power could not compete with that obtained from a modern steam turbine station when the load factor was less than 50 per cent."