

of the civilized parts and some of the uncivilized parts of Canada, showing the elevation of every sections.

ST. CATHARINES.—Drillers Weaver and Furry, of Humberstone, have just completed a good gas well on John Mains' farm in Wainfleet for the United Gas Companies of St. Catharines. It is the best struck in that vicinity this summer.

OTTAWA.—In an interview Mr. N. J. Ker, city engineer expressed himself in reference to roadway pavements. Mr. Ker said: "I have not initiated any tar macadam pavements for about two years, and what has been laid meanwhile is on account of petition. It should now be stopped on principle. At the very outside the life of a tar macadam pavement is five years. Asphalt pavements will last ten, fifteen or twenty years, and the difference in cost is only about 25 per cent. As we now have an asphalt plant of our own, I shall recommend stopping all further tar macadam construction. With one exception it has only been used on residential streets. On some it is in fair condition, and on others a lot of patching is required."

Manitoba.

WINNIPEG.—The Algoma Bridge Co., with branch office in Winnipeg, Man., are just completing three steel highway bridges at Shellmouth, Man. Two of them are 80-foot spans and one 160 feet. The company are also at work on an 87-foot span bridge at Virden, Man., to be completed by September 15, while another 75-foot span highway bridge is being constructed by them at Manitou, Man., to be in readiness by October 1st.

British Columbia.

NEW WESTMINSTER.—The Government is just finishing the building of a new road up the steep hill coming from Port Moody to this city, and the grade is made much easier, the heaviest portion being five per cent.

PERSONAL.

MR. C. H. RUST, City Engineer, Toronto, is making a special study of sewerage systems of American cities.

MR. T. P. WHITE has been appointed car service agent of the Grand Trunk Pacific with headquarters at Winnipeg.

MR. F. B. DeW. LAVENDER, C.E., of Toronto, has been appointed superintendent of the Bowmanville electric light plant.

MR. C. H. NORTON, of the C.P.R. engineering staff, Muskoka, has been transferred to a location party on C.P.R. work at Peterboro'.

MR. A. W. ELLSON FAWKES, of Montreal, Que., is stationed at Campbellford, Ont., where he has control of the erection of the new power house.

MR. G. REID MUNRO, B.A. Sc., Peterboro', Ont., has joined the staff of surveyors engaged by the Government on the survey of the Hudson Bay Railway.

MR. J. B. TYRRELL, mining engineer, of Toronto, has left for Port Arthur and Edmonton, and will be absent from Toronto till the end of the month.

MR. K. L. AITKEN, consulting engineer, Toronto, has been selected by the Board of Control as electrical engineer for Toronto at a salary of \$3,600 a year.

Mr. Thomas Deer, formerly of St. Thomas, has been appointed mechanical superintendent of the Grand Trunk Pacific on all its lines west of Winnipeg.

MR. T. H. HOGG, B.A. Sc., of Niagara Falls, Ont., has been appointed Demonstrator in Applied Mechanics in Faculty of Applied Science, Toronto University.

MESSRS. H. E. VAUTELET, C.E., of Montreal; Maurice FitzMaurice, M.I.C.L., of London, England, and Ralph Modjeska, of Chicago, have been appointed a Board of Experts to re-design and construct the Quebec Bridge. Mr. Vautelet, who will be chairman, is recognized as one of the leading civil engineers of Canada, having been connected with the bridge construction work of the Canadian Pacific Railway for many years. Mr. FitzMaurice is at present chief engineer for the London County Council. He was asso-

ciated with Sir Benjamin Baker in the erection of the great Forth Bridge, and was also one of the engineers entrusted with the carrying out of the Assouan dam across the Nile. Mr. Modjeska has had valuable experience in the building of railway bridges in the Western United States. He is a son of Countess Modjeska, the eminent actress. Both Messrs. Vautelet and Modjeska are graduates of the Polytechnic School of Paris.

OBITUARY.

Mr. A. J. Bailey, formerly superintendent of bridge and building department of G.T.R., died here on August 14th. He had been ill for about a month, and a stroke of paralysis hastened the end. He retired about 12 years ago and previous to that time was 43 years in the G.T.R. employ, first in the Portland Division, and, since 1862, when he came to Stratford, in the middle division. From his position he was well-known over the Grand Trunk System, and was a man of sterling integrity. He was 74 years of age. Mrs. Bailey and two sons and two daughters survive.

It is with regret that we record the death of Mr. T. Edward Lamb of the firm of Laurie & Lamb, consulting and contracting engineers, Montreal. Mr. Lamb passed away at Caledonia Springs on the 13th inst., after a very brief illness. His death was quite unexpected, as on leaving Montreal a couple of days before he expressed his intention of returning to the office within a few days. Mr. Lamb was only 44 years of age, and was an engineer of exceptional ability. He was well-known among mechanical engineers from one end of Canada to the other, as he was for many years superintendent and chief engineer of the original Laurie Engine Company, Montreal, and many of those who are now holding important positions in mechanical engineering circles passed under his control as apprentices, or engineers. The loss is a severe one to his partner, Major W. H. Laurie, with whom Mr. Lamb has worked continuously since leaving school at the age of seventeen, when he entered Mr. Laurie's service as apprentice draftsman, rising subsequently to the position of chief draftsman, shop foreman, superintendent, chief engineer, and for the last three years has been a partner with Mr. Laurie as consulting engineers. Such a life-long business connection is unusual in this country of quick and continual changes. Mr. Lamb was a prominent member of the Episcopal Church, being a churchwarden of St. Luke's Church, Montreal. He was a member of the Masonic order, and also a member of the Canadian Society of Civil Engineers. He leaves a wife and one daughter.

LOCOMOTIVE BUILDING.

The American Locomotive Company, Brooks' Plant, Dunkirk, N.Y., have received an order from the Central Northern Railway of Argentine for ten 10-wheel locomotives and twenty Pacific type locomotives. Herewith is given the principal dimensions, weights, etc., to these two types:

4-6-0 Type Freight.

Gauge	1 meter
Weight on drivers	66,000 lbs.
Total weight	82,000 lbs.
Cylinder, diameter	15 in.
Piston stroke	22 in.
Drivers, diameter	43 in.
Boiler type	Belpaire straight top
Working pressure	170 lbs.
Heating surface tubes	958.7 sq. ft.
Heating surface fire-box	100 sq. ft.
Tubes, number	155-2 in.
Tubes, length	11 ft. 11-9/16 in.
Grate area	15.89 sq. ft.
Water, capacity, tender	2,650 gallons
Fuel, capacity, tender	10 metric tons
Air brakes	Westinghouse American Combined
Axles	Siemens Martin steel