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### **SOME LOCAL IMPROVEMENT COMPLETED IN 1916.**

#### **HAMILTON, ONT.**

4.7 miles of sewers; 5.1 miles of cement walks; 1.6 miles of curbs; 7.3 miles of asphalt pavements. City Engineer, A. F. Macallum.

#### **FORT WILLIAM, ONT.**

\$24,198 was expended on streets and sewers in 1915, against \$42,683 in 1914. Local improvement works which were initiated last spring cost the city \$39,754, and the laying of a feeder main to the west end of the city cost \$57,393. City Engineer, R. R. Knight.

#### **KINGSTON, ONT.**

2¾ miles concrete walks; 1.3 mile sewers; ½ mile concrete curb; 6 blocks asphaltic macadam pavements; macadam roadway; resurfacing of macadam roadways with Tarvia. City Engineer, R. J. McClelland.

#### **WELLAND COUNTY, ONT.**

Approximately 41 miles of new road were constructed last year—21.39 miles by the county and 19.67 miles by the contractors. The total mileage of improved road on the county system is now about 82 miles. Major James Sheppard, Engineer.

#### **WEST KILDONAN, MAN.**

Local improvements costing \$330,529.36 have been completed during the past eighteen months, including Main Street paving, 1½ miles, \$58,796.31; Main Street concrete sidewalks, 1¼ miles, \$8,000; trunk sewer, 1 mile, \$113,646.57; lateral sewers, 6.1 miles, \$58,211.05; water mains, 7.15 miles, \$79,294.74; fire hall, \$7,200. Engineer Eatwell.

#### **YORK TOWNSHIP, ONT.**

Sidewalks to the amount of \$35,791.98; pavements, \$12,550, and sewers, \$12,492. The work was let by contract, with the stipulation that 80 per cent township labor be employed. Frank Barber, township engineer.

# **Engineers—And what they are doing**

### **AMERICAN ROAD BUILDERS' CONGRESS.**

Rapid progress is being made on the plans for the Thirtieth Annual Convention of the American Road Builders' Association and the Seventh National Exhibition of Machinery and Materials, which will be held at Mechanical Hall, Pittsburg, Pa., February 28 to March 3.

Among the subjects of papers decided upon to date by the sub-committee in charge of the preparation of the programme are the following: "Railway Tracks on Paved Streets"; "Adaptability of Paving Materials"; "Bituminous Surface for State Highways"; "Concrete Roads"; "Recent Tendencies in Stone Block Pavements, Especially with Respect to Size of Blocks"; "Foundations"; "Control of Openings in Pavements"; "Roads at Low Cost for Moderate Traffic"; "Effects of Motor Trucks"; "Contractors' Suggestions to Engineers"; "Brick Streets and Roads." In addition to these technical papers there will be two others, both of a technical and descriptive character. One will deal with the Du Pont Road in Delaware and the other with the Columbia Highway in Oregon.

### **ROADS IN WINTER.**

Water, not cold, is the cause of the deterioration of roads in winter. Cold weather does not in itself injure roads, no matter whether they are earth, gravel, or macadam. In fact, an earth road will bear more traffic when it is solidly frozen than at any other time. Excess water, however, is always detrimental to highway. When cold weather turns this water into ice, the damage that it does is greatly increased.

The action which takes place when a wet road freezes to any considerable depth is similar to that which occurs when water is frozen in a closed vessel. It simply bursts or, as it is generally termed in road parlance, the road heaves. Later, when the frost leaves, the road is disintegrated and ruts badly. If this process is repeated a number of times during the winter, a gravel or macadam road may be practically destroyed, while an earth road may become entirely impassable.

The remedy is obvious; the road should be kept free of water. The time to begin preventive measures is early in the fall, before the rains begin. If the road goes into the winter thoroughly dry, with the surface and drainage in good condition, the chances are extremely favorable that it will be found intact the following spring.—Department of Agriculture, U.S.A.

### **WELLAND, ONT.**

Bldg. permits for month of Dec. this year....	\$ 19,635.00
Bldg. permits for month of Dec. last year....	2,250.00
Total for year to end of above month is....	191,232.60
Total for corresponding period last year.....	337,918.00

Mr. A. J. Carroll has been appointed district manager of Eugene F. Phillips' Electrical Works, Limited, with offices in Montreal.

### **EIGHT QUEBEC CITIES HAVE VOTED "DRY."**

As a result of the prohibition victory at Three Rivers, where the polls close with a majority of 461 in favor, there are now eight cities in Quebec that have adopted prohibition. They are Westmount, Verdun, Outremont, Lachine, Levis, Frazerville, Thetford Mines and Three Rivers. There are forty-two of the seventy-two county municipalities without licenses, and of the 1,143 municipalities in the province, 906 are under prohibition. On the basis of the census of 1911, there are to-day 1,098,021 of the population of the province living in municipalities that have adopted prohibition and 905,211 living under license conditions.