

Table IV.—Consensus of Opinion as to Durability.

Pavement.	Small repair. Years.	Extensive repair. Years.	Complete reconstruction. Years.
Asphalt block	5 to 10	10 to 12	12 to 15
Asphalt concrete	4 to 6	6 to 8*	8 to 10*
Bitulithic	5 to 8	10 to 15	15 to 20
Brick	8 to 10	10 to 15	15 to 18
Concrete	5 to 8	10 to 12	15 to 18*
Scoria block and stone ..	10 to 15	15 to 20	20 to 30
Sheet asphalt	4 to 8	10 to 15	15 to 18
Untreated wood block ...	3 to 5	6 to 10	10 to 12
Treated wood block	8 to 10	12 to 15	15 to 18*

*These pavements have not attained an age in Canada sufficient to place the figures beyond conjecture.

Financing of Pavements.

Hamilton does all its paving by day labor and, estimating the life of a pavement at ten years, bonds are issued against them for that length of time. In Toronto ten years is also considered as a fair estimate, and ten-

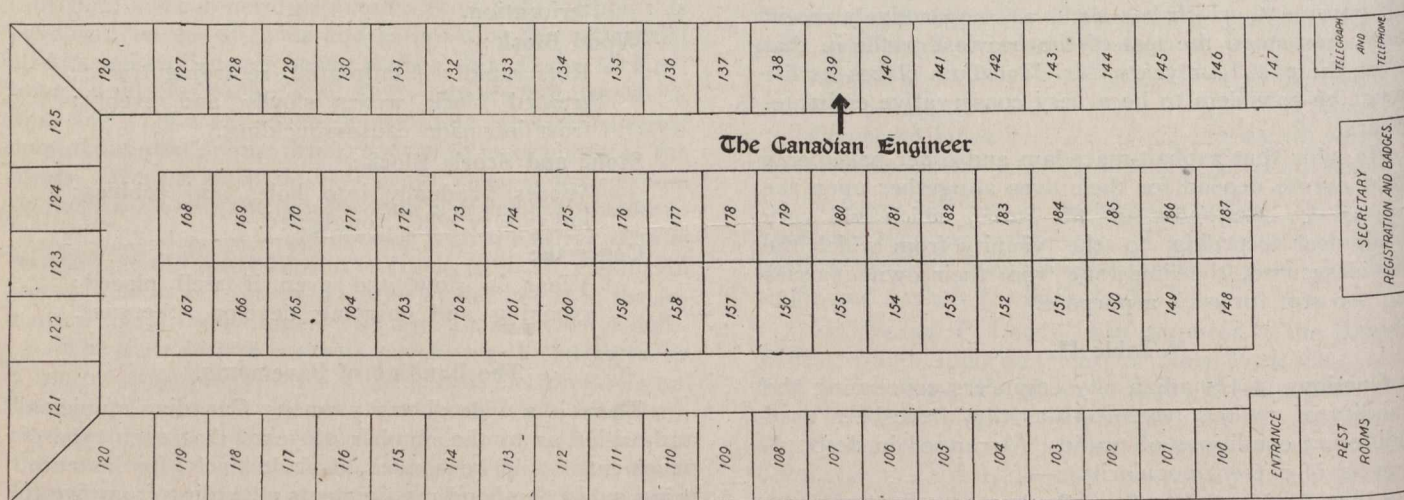
year debentures are issued to finance them. In Winnipeg practically all paving is done by day labor. The money for paving is secured in all cases by the sale of thirty to fifty-year stock, i.e., the city may redeem any time after thirty years to fifty years. The term of assessment on sheet asphalt pavements is fifteen years, on asphaltic concrete, ten years; on cedar block pavement, seven years.

It is interesting to note that the city of New York has assessed the entire cost of the first pavement upon the abutting property and has paid from city funds the cost of all subsequent renewals, raising money for this purpose by the issue of fifty-year bonds. This policy is discussed at considerable length in the report of the Board of Estimate and Apportionment for 1912. Since then, however, the city has decided to limit to ten years the bonds issued to meet the costs of re-paving.

Washington's pavements are paid for in cash under appropriations made by Congress, the funds being derived from revenues of the District of Columbia, and a contribution on the part of the General Government on the basis of its ownership of property.

Philadelphia and Chicago issue five-year bonds against their pavements of various types.

THE CANADIAN ENGINEER AT THE DETROIT ROAD CONGRESS.



Plan of Exhibition Building.

The Canadian Engineer will exhibit at the Third American Road Congress at Detroit. Canadian visitors to the Congress are invited to make Booth No. 139, *The Canadian Engineer* headquarters, their headquarters also, during the week. Mail, telegrams, packages, etc., may be addressed care of *The Canadian Engineer*, Booth 139, American Road Congress, Wayne Gardens, Detroit.

NEW YORK'S PROBLEM OF SEWAGE DISPOSAL.

The pollution of New York harbor by the sewage from the metropolitan district has been gradually increasing, and it is recognized that steps must soon be taken to correct the conditions. In 1906 the New York State Legislature passed a bill requiring the city of New York to appoint the Metropolitan Sewerage Commission to study the pollution of the harbor and devise a proper method of correcting the conditions. The magnitude of the work of this commission may be realized when it is understood that the area studied is some 700 square miles, with a present population of about 6,000,000, and a future population of about twice this figure. Within the metropolitan district there are over 100 cities and towns, and the sewage produced is about 765,000,000 gallons

per twenty-four hours. It is assumed that within thirty years the daily volume of sewage flow will be increased to 1,500,000,000 gallons. Of course, the volume of water in the harbor will not increase to furnish available dilution, and unless proper provisions is made for treatment of the sewage, a general intense pollution of the harbor is inevitable. The scope of the work of the Metropolitan Sewerage Commission includes a study of the facts and the formulation of a remedy for the existing and future conditions. As the work has progressed it has been found that the problem is of much greater magnitude than was at first anticipated, and several years' further study may be required before a final decision is reached.