

Hon. CHAS. HYMAN (Acting Minister of Public Works):

1. Yes.
2. Yes; \$5,000 in 1903-4, \$10,000 in 1904-5 and revote of \$10,000 in 1905-6.
3. No.
4. Post Office Department report that they have no such request.
5. Yes, as soon as plans are completed, in the usual manner.

PAVEMENT IN PARLIAMENT GROUNDS.

Mr. SAM. HUGHES. Mr. Speaker, before the House passes to the Orders of the Day, I desire, with the object of encouraging advertising for tenders and giving all firms in the country an opportunity of having fair competition for any work on which public money is expended, to draw the attention of the House to the pavement which has been laid in front of the parliament buildings some time since the close of last session. The minister, in response to request, has been good enough to furnish me with the information that the area of the pavement laid consists of 4,250 square yards, and that it cost per yard \$2.25.

Sir WILFRID LAURIER. Order. Does my hon. friend desire merely to ask a question or to bring up a subject for discussion?

Mr. SAM. HUGHES. I intend closing with a motion. With regard to the nature of the manufacture, the memorandum says:

After the street has been graded and rolled, the entire surface shall be coated with a heavy coating of Warren's No. 24 Puritan brand hard bituminous cement. On this shall be laid the wearing surface.

The wearing surface is composed of crushed stone mixed with bitumen. The stone is screened into six sizes and it is heated to a temperature of about 250 degrees, and each of the sizes are accurately weighed in the proportion previously determined to give the best results, that is, the most dense mixture of mineral aggregate. Then, bitulithic cement is added to thoroughly coat all particle of stone, and to fill all voids, and the whole heated to a temperature of between 200 and 250 degrees.

That is the description of the material. The contractor's name is The Warren Bituminous Company, 164 Bay street, Toronto. I have taken the precaution of ascertaining who the chief members of that company are, and I find a gentleman of the name of Mr. T. C. Robinette, a very estimable gentleman, a very able gentleman, a gentleman who bore the standard for his party in Centre Toronto on one occasion, but who failed to take the hurdle on a recent occasion. Another is Mr. W. G. McKendrick, also well known in Liberal circles in Toronto. Others are Charles Curtis, Harvey J. Page, Wm. Connor, H. J. King, of Toronto; John Fallahae, of London, who, I understand, is well versed in the pedal extremities of a certain well-known animal, and a former hotel-

keeper; and the Warren Brothers' Company of Boston. These are the members of the firm. Now, my information is that no tenders were called for this work, and that the contract was let without tender. Perhaps it might simplify matters if I gave the House some specific data which has been furnished to me by a gentleman in whom I have every confidence. If there is anything in it which is incorrect, the minister will have an opportunity of rectifying it. This gentleman says:

The pavement in front of the House of Parliament is Warren Bros', patented monopoly tar macadam, bituminous macadam or bitulithic pavement—take your choice as to the name.

This is the pavement, or rather dust heap, laid in front of the House of Parliament last summer by the Warren Co., in which Mr. Robinette of Toronto is largely interested.

We all have noticed how this dust has been blown about, to the great inconvenience of passers by.

The contract was awarded without tenders being called, the price was between \$2.50 and \$3.00 per square yard.

I may say, in justice to the minister, that his figure is \$2.25 a yard.

A superior tar macadam pavement and similar to the one laid on Daly Avenue or on Slater St. could have been laid for \$1.30, while a Trinidad asphalt pavement with 4 inches solid concrete and 2 inches asphalt could have been laid for about \$2.40, and would have been agreeable to walk on instead of the reverse being the case.

Sir Wilfrid Laurier spoke of making this city the 'Washington of the north.' Now, this is what they had to do in the 'Washington of the south,' and which shows the regard they have for bitulithic pavements. Of the 960,000 square yards laid, the record showed but 269,000 remaining on July 1, 1900, and that 631,000 square yards had been re-surfaced with asphalt, and in 1901, \$26,000 were spent for re-surfacing about 12,000 yards. A few years ago the Warrens were laying asphalt pavements, and this is what they had to say at the time of their new patented monopoly: When coal-tar is exposed to the varying conditions of the weather, as it is in pavements, the volatile oils slowly evaporate, leaving a coke which is friable and which rapidly crumbling, less oil is distilled from the tar in its preparation, the pavement when laid is too soft in summer and lacks the essential quality of firmness. A long-lived coal-tar pavement has three phases of condition: (a) When first laid it is soft in hot weather; it then (b) gradually loses the softening oil by exposure to the weather, and for a short period is quite acceptable; but it soon (c) loses all the oils and becomes friable, as already explained. Coal-tar is sensitive to changes of temperature, and as a pavement, gets hot enough to become soft under our summer sun. It is impracticable to combine in a tar pavement the qualities of firmness in summer and plasticity in winter.

Later on, the Warren Company, tiring of fair returns on their money, got out a patented specification so as to exclude competition in order that they might get an extra price for their pavement, and on which no one could tender but themselves, and showing about 100 per