UNITED STATES PATENT OFFICE.

HENRY L. LILIENTHAL, OF SPOKANE, WASHINGTON.

COMPOSITION OF MATTER.

No. 885,768.

Specification of Letters Patent.

Patented April 28, 1908.

Application filed January 20, 1908. Serial No. 411,711.

To all whom it may concern:

Be it known that I, Henry L. Lilienthal, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented a new and useful composition of matter to be used for the improvement of streets and highways by constructing thereon a hard smooth surface, of which the following is a specification.

My composition consists of the following ingredients, combined in the proportions stated, viz: crushed rock 10 cubic yards, gravel 5 cubic yards, sand 3 cubic yards, liquid asphalt 808 gallons, petrolene 145 gallons, petroleum 117 gallons, water 20 gallons.

The liquid asphalt, petrolene, petroleum and water are to be thoroughly mixed and applied to the road surface, at a temperature of 185° Fahr., and the crushed rock, gravel 20 and sand spread upon this mixture, mixing with it. This operation is to be repeated as soon after the first application as the surface is firm enough to bear the weight of machinery. The surface is to be rolled with a steam roller, after the last application, until it becomes smooth and hard. The above quantities will cover approximately 360 square yards of surface of the street or highway. If a thicker covering is desired, other applications may be made.

By the use of this composition highway and street surfaces may be made to greatly resemble asphalt pavement, but it is very much cheaper, and can be used more extensively, for that reason.

I am aware that asphalt has been used to make pavements for city streets, as a wearing surface only, but I am not aware that liquid asphalt has been used in combination, as a composition or mixture, with other ingredi- 40 ents of my composition.

I claim:
1. The herein described composition of matter, consisting of liquid asphalt, petroleum, petrolene, water, crushed rock, sand 45 and gravel, substantially as described above for the purpose specified.

2. The herein described composition of matter for constructing hard and smooth surface of streets and highways, consisting of 10 50 cubic yards of crushed rock, 5 cubic yards gravel, 3 cubic yards sand, 808 gallons of liquid asphalt, 145 gallons of petrolene, 117 gallons of petroleum and 20 gallons of water, substantially as described.

HENRY L. LILIENTHAL.

Witnesses:
B. C. Mosby,
Benson Wright.