

UNITED STATES PATENT OFFICE.

JOHN B. ROBBINS, OF MINNEAPOLIS, MINNESOTA.

METHOD OF REUSING OLD ASPHALT PAVEMENT.

SPECIFICATION forming part of Letters Patent No. 616,014, dated December 13, 1898.

Application filed July 14, 1898. Serial No. 685,945. (No specimens.)

To all whom it may concern:

Be it known that I, JOHN B. ROBBINS, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented a new and Improved Method of Reusing Old Asphalt Pavement, of which the following is a specification.

The object of this invention is to reuse asphalt pavement that, from any cause, it has become necessary to relay.

Heretofore when pavement of this character has been relaid the old pavement is taken up and material thereof is generally thrown away and wasted.

My invention consists in utilizing material of the old pavement by grinding or pulverizing the same; heating a suitable quantity of sand to a temperature of about 350° Fahrenheit, mixing the ground material from the old pavement with such sand at such temperature; adding to this, if necessary, a suitable quantity of pulverized carbonate of lime; and thereafter mixing with said compound, a sufficient quantity of asphaltic cement at a temperature of about 330° Fahrenheit.

In carrying out my invention I take the material of the old asphalt pavement which consists usually of asphaltic cement, nine to sixteen per cent., clean selected sand from sixty-seven to seventy-six per cent., and pulverized carbonate of lime from about fifteen to seventeen per cent., and this material I grind or pulverize. I then take a suitable quantity of selected sand and heat the same to a temperature of about 350° Fahrenheit. The ground pavement material is then thoroughly mixed with this sand in proportion of from six to thirty per cent. of ground pavement material and from forty-five to seventy-five per cent. of sand. If found necessary or desirable, about ten per cent. pulverized car-

bonate of lime may be added to the mixture; and I then mix with this material from nine to fifteen per cent. of asphaltic cement at a temperature of about 330° Fahrenheit. The compound thus prepared is then used as a pavement material in the ordinary or usual manner.

By my invention the old pavement material which is usually wasted is reused and the pavement which is formed from this material possesses all of the qualities of a pavement formed of material that has not previously been used. By grinding the old pavement material and mixing it with sand at the temperature of 350°, it is brought into such condition that the hot asphaltic cement may be thoroughly incorporated with the sand and old pavement material, and a very superior pavement compound may thereby be produced.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The method of reusing asphaltic pavement material which consists in grinding or pulverizing such material; heating clean selected sand to a temperature of about 350° Fahrenheit; mixing said ground or pulverized pavement material with said sand while the sand is at such temperature; and then mixing with said compound, asphaltic cement at a temperature of about 330° Fahrenheit, all substantially as described and for the purpose specified.

In testimony whereof I have hereunto set my hand, this 11th day of July, 1898, at Minneapolis, Minnesota.

JOHN B. ROBBINS.

In presence of—

A. C. PAUL,
A. F. HOLMES.