

UNITED STATES PATENT OFFICE.

HENRY K. SHANCK, OF CLAYTON, OHIO.

IMPROVEMENT IN ROOFING COMPOSITIONS.

Specification forming part of Letters Patent No. 185,050, dated December 5, 1876; application filed October 23, 1876.

To all whom it may concern:

Be it known that I, HENRY K. SHANCK, of Clayton, in the county of Montgomery and State of Ohio, have invented a new and useful compound called "Vulcanized Roofing and Paving Compound," which will be hereinafter more fully described.

The object of my invention is to furnish a cheap but good compound that can be vulcanized, and hence make a roofing compound at a minimum expense that will harden quickly when applied; that will be elastic, so as not to crack with the ordinary vibrations of houses, &c.; that will not "run" in the summer, nor crack in the winter.

In order to enable others skilled in the art to which my invention pertains to make and apply the same, I will now proceed to more fully describe the process employed.

I use two kettles, (preferably of the kinds that sit in stoves,) the one rather small, the other large enough to hold fifty gallons. Into the small kettle I put three (3) gallons linseed-oil, five pounds oxide manganese, two pounds litharge. Into the large kettle I put twenty-five gallons coal-tar, twenty pounds sulphur, and eighty pounds hydraulic cement, if the compound is to be applied with mop or brush as a coating; but if it is to be applied as a mastic with a trowel, I add enough more cement to make the compound a pasty mass. Then I heat both kettles, thoroughly stirring the respective contents till 260° Fahrenheit shall have been maintained five minutes in the small kettle, when I add (without firing more) one and a half pound shellac, and stir

thoroughly same till dissolved. By this time the contents of the large kettle must be at 210°, the same having been thoroughly stirred and mixed; then pour contents of small kettle into the large one; then thoroughly stir same, increasing the temperature till 280° shall have been maintained five minutes. The compound is now vulcanized, and ready for application, while hot, either on tight narrow roof-boards or felt for houses, &c., and may be sanded immediately, if desired.

For paving I use ten gallons pitch and fifteen gallons coal-tar, (instead of twenty-five gallons all tar,) and the eighty pounds cement, but otherwise proceed same with both kettles as for the roofing till the compound is vulcanized, when I pour it on enough fine gravel (dried by heat in a large pan) to make, by mixing, a thick bulky mass. This then I put down on a prepared solid road or pavement bed, and level it by beating or rolling quickly ere the compound "sets."

Having fully described the process of making and applying my roofing and paving compound, I claim—

A roofing and paving compound consisting of linseed-oil, oxide manganese, and litharge, combined, in the manner described, with shellac, coal-tar, sulphur, and hydraulic cement, the whole prepared in the manner and in the proportions set forth, and for the purposes specified.

HENRY K. SHANCK.

Witnesses:

NOAH SWANK,
JABEZ SWANK.