

UNITED STATES PATENT OFFICE.

GRAHAM PULVER, OF JACKSON, MICHIGAN.

IMPROVEMENT IN ROOFING AND PAVING COMPOSITIONS.

Specification forming part of Letters Patent No. **184,263**, dated November 14, 1876; application filed "February 11, 1876.

To all whom it may concern:

Be it known that I, GRAHAM PULVER, of Jackson, in the county of Jackson, and State of Michigan, have invented certain new and useful Improvements in Roofing and Paving Compositions; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the combination of asphaltum with pine-tar and rosin for roofing and paving purposes, as hereinafter more fully set forth.

In order to manufacture my invention, I mix the ingredients named in about the following proportion: Pure pine-tar, six (6) parts; rosin, three (3) parts, and pure asphaltum one (1) part. The mass thus formed may be brought to a proper consistency by mixing it with crushed slate, granite, or quartz, and middlings of rye or wheat, and plastering-hair may be added, in order to give strength and elasticity to the composition.

I am aware that it is old to combine asphaltum and coal-tar, or asphaltum and rosin, or asphaltum, coal-tar, and rosin, for roofing

and paving purposes. But either of these combinations has been objectionable, on account of the liability of the compositions thus formed to crack in cold, or melt (run) in hot weather. These objections are in a measure removed by my combination of asphaltum and rosin with pine-tar, in about the proportions above named, which possesses superior qualities of elasticity and, consequently, strength and durability.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination, for roofing and paving purposes, of asphaltum, rosin, pine-tar, crushed slate, granite, or quartz, middlings of wheat or rye, and plastering-hair, substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

GRAHAM PULVER.

Witnesses:

HORACE HUNT,
GEORGE A. KNIGHT.