

UNITED STATES PATENT OFFICE.

BENJAMIN HINKLEY, OF TROY, NEW YORK.

IMPROVED ROOFING COMPOSITION.

Specification forming part of Letters Patent No. 57,324, dated August 21, 1866.

To all whom it may concern:

Be it known that I, BENJAMIN HINKLEY, of the city of Troy, in the county of Rensselaer and State of New York, have invented a new and useful Improved Roofing Composition, of which the following is a full and exact description.

My improved roofing composition is applicable to either flat or steep roofs, and to any suitable foundation—as, for example, to a foundation of boards laid edge to edge, and made sufficiently tight either by having the boards tongued and grooved and matched together, or by nailing battens over the joints between the boards, or by covering the boards with tarred paper or other suitable fabric.

My improved roofing composition is composed, applied, and finished as follows, viz: Any suitable quantity of tar, either coal-tar or wood-tar, is placed in a kettle or other suitable vessel and heated so as to make the tar very fluid, and then, while the tar is hot, slaked lime or hydraulic lime, or slaked lime and hydraulic lime, in a fine state, is added to and thoroughly mixed with the hot tar until the mixture, while hot, becomes semi-fluid, or of about the consistence of thin hot hasty-pudding. In making this mixture, one barrel of tar commonly requires about two barrels of the other ingredient or ingredients aforesaid, more or less; then this hot semi-fluid mixture is spread, as with a mop or broom, on whatever foundation has been prepared to receive it, and is immediately afterward filled in and covered over with sand; then, after the whole has become cool, and thereby comparatively hard, the excess or loose portion of the sand is swept off, and the roofing composition finished by covering it with a coat or coats of whitewash.

In making my aforesaid roofing composition it is important that the lime of either kind, or of

both kinds aforesaid, should be combined with the tar while the latter is hot, so that there shall be a more easy and complete chemical as well as mechanical union between the tar and the lime than would be if the same ingredients were mixed at any ordinary atmospheric temperature. And it is essential to my improved roofing composition that the sand thereof should be combined with the compound of tar and lime, not before, but after, the compound of tar and lime shall have been applied hot to the foundation roofing, and that the sand should then be put on top of the said layer of hot or warm compound of tar and lime, so that the said compound of tar and lime shall strike or penetrate into and adhere to the said roofing-foundation without hinderance from the sand, and so that the top or outer portion of the roofing composition may embody the greatest proportion of the sand. And it is also essential to my improved roofing composition, when composed and applied as hereinbefore described, that it should be coated with whitewash, which latter, while costing but very little, not only has an affinity for and will adhere to the compound of tar, lime, and sand aforesaid, but will reflect light, so as to make the otherwise dark and unsightly composition appear neat and cheerful on a roof, and will also reflect the sun's heat, and thereby prevent or greatly lessen any liability of the composition to melt and run under the heat of strong sunshine in hot weather.

What I claim as my invention, and desire to secure by Letters Patent, is—

A roofing composition composed, applied, and coated with whitewash as herein described.

BENJA. HINKLEY.

Witnesses:

CHAS. A. BRIGGS,
AUSTIN F. PARK.