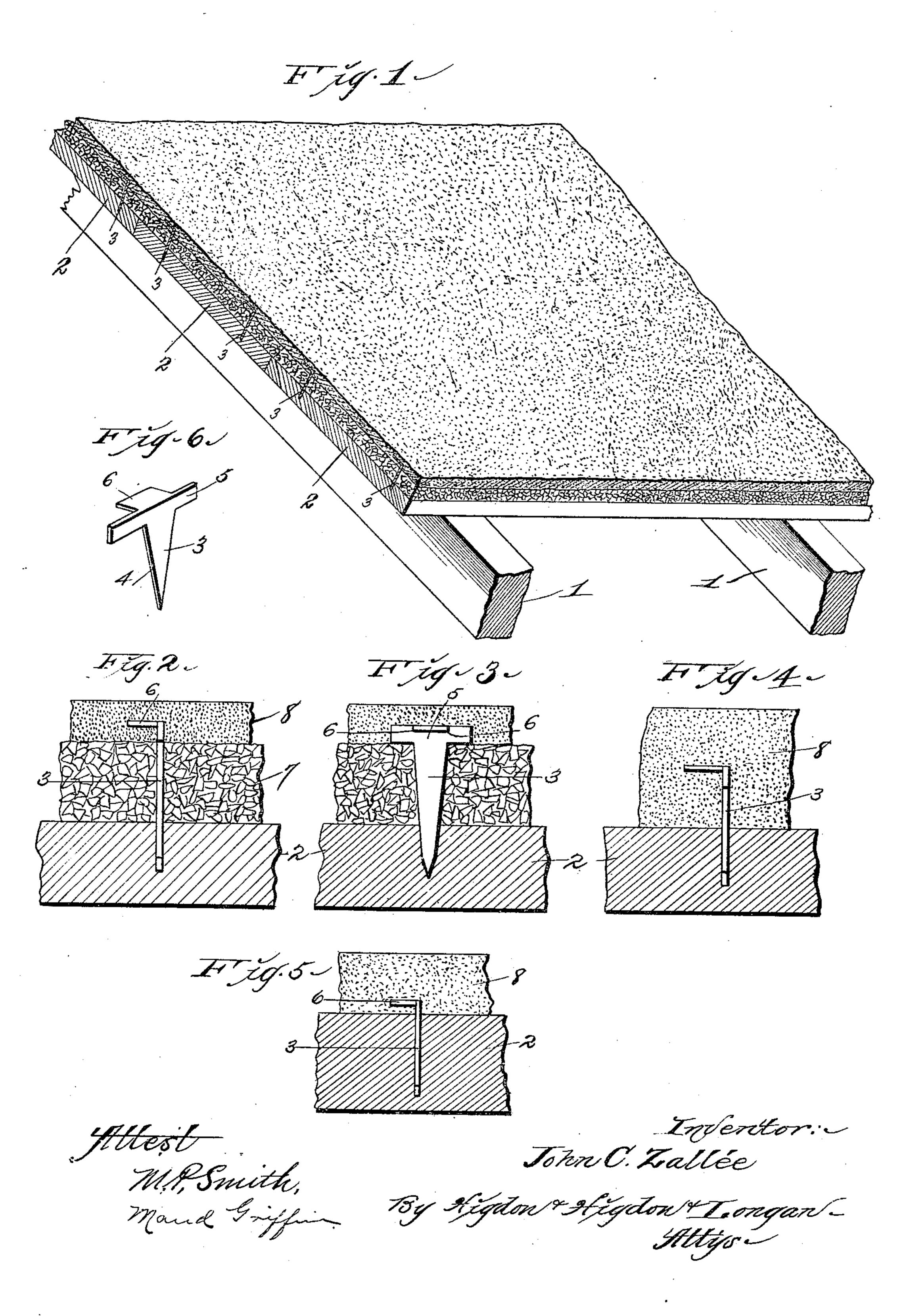
## J. C. ZALLÉE. ROOF.

No. 547,104.

Patented Oct. 1, 1895.



## United States Patent Office.

JOHN C. ZALLÉE, OF ST. LOUIS, MISSOURI.

## ROOF.

SPECIFICATION forming part of Letters Patent No. 547,104, dated October 1, 1895.

Application filed March 12, 1894. Serial No. 503,739. (No model.)

To all whom it may concern:

Be it known that I, John C. Zallée, a citizen of the United States, residing at St Louis, in the State of Missouri, have invented cer-5 tain new and useful Improvements in Roofs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to roofs and is an im-10 provement on the roof a patent for which was granted me October 21, 1890, No. 438,973.

The object of my invention is to construct an improved roof that may be easily and quickly put down, that is entirely water and 15 fire proof, that when finished will present a desirable and pleasing appearance, and that can be easily cleaned.

A further object of my invention is to construct a roof that possesses superior advanzo tages in point of simplicity, durability, and

general efficiency.

My invention consists of the ordinary roofboards supported by the rafters, hooks, or spikes driven into said roof-boards, a layer of 25 suitably-mixed crushed coke or flakes of mica and asphaltum, and then a layer of asphaltum, fine sand, cement, and brick-clay or limestone-dust, suitably mixed and bonded together, as hereinafter specified.

Referring to the drawings, Figure 1 is a view in perspective of a portion of a roof constructed in accordance with my invention. Fig. 2 is a vertical sectional view of a portion of a roof, said view being taken approximately 35 on a line drawn parallel with the rafters. Fig. 3 is a vertical sectional view taken at right angles to that of Fig. 2. Fig. 4 is a sectional view similar to that of Fig. 2, but showing the boards and a single layer of mixed material 40 thereon. Fig. 5 is a sectional view, in which a hook or spike is shown driven nearly its entire length into the roof-board. Fig. 6 is a view in perspective of one of the hooks or spikes.

Referring by numerals to the accompanying drawings, 1 indicates the ordinary roofrafters, supporting the roof-boards 2, directly upon which the layer or layers constituting my improved roof is laid. Driven into the 50 roof-boards 2 at suitable intervals are the hooks or spikes 3, said hooks comprising the

attenuated body portion 4, longitudinal head 5, and widened portion 6 of the head. Directly upon the roof-boards 2 and the hooks or spikes 3 is placed the first of the layers, 55 which is a composition of properly-mixed crushed coke or flakes of mica and asphaltum. This layer is designated by the numeral 7. By reason of the broad heads of the spikes or hooks this layer 7 is securely held and an 60 chored to the roof and all liability of this layer becoming loose and slipping down the incline of the roof entirely precluded. Directly upon this layer 7 is placed a second layer 8, this layer being a composition of as- 55 phaltum, fine sand, cement, and lime-dust, all mixed and bonded together in proper proportions. The roughened surface of the layer 7 owing to the crushed coke therein effectually holds this second layer in proper position, 70 the heads 5 of the spikes or hooks materially assisting in the proper positioning of this second layer. Thus by means of the spikes or hooks, together with the interlocking of the two layers, said layers are effectually held 75 and prevented from slipping from the roof. In some instances it is found desirable to apply but one of the layers of composition to a roof, this construction being clearly shown in Fig. 4. This second layer having been placed upon 80 the first layer by means of a trowel or in any suitable manner has cement sifted over its entire surface, and is then rolled smooth and allowed to dry and harden. If desired, while the composition is yet plastic it may be 35 stamped or fashioned into any suitable form or design. For steeper roofs the preparation is slightly changed, the first layer being a composition of crushed coke and cement moistened with water and laid directly upon 90 the roof-boards and held in position by the hooks or spikes, the second layer being a composition of fine sand and cement moistened with boiled linseed-oil and resin. In practical use the second layer need only be partly as 95 thick as is the first layer. These compositions, as described, may be applied also to wooden gutters and cornices as a protection from fire caused by ignition of electric-conducting wires, &c. What I claim is—

1. A roof, comprising a layer of boards, a

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layer of suitably mixed crushed coke, and asphaltum, and a layer of suitably mixed asphaltum, fine sand, cement and lime.

2. A roof, comprising a layer of boards, a multiplicity of hooks or spikes driven therein, a layer of suitably mixed crushed coke, and asphaltum laid directly upon the layer of boards and around the spikes or hooks, and a layer of suitably mixed asphaltum, fine sand, cement and lime laid directly upon the first said layer and around the heads of the

hooks or spikes.

3. A roof consisting of a suitable foundation, on which is a body covering of asphalt

of material, and an absorbent, substantially as described.

4. A roof consisting of a foundation on which is a body covering of asphalt and a

body material mixed in substantially the proportions of ninety-five per cent. of body material and five per cent. of asphalt and a top dressing on said body covering, substantially as described.

5. A roof, consisting of a suitable founda- 25 tion, a body covering of asphalt and a body material and a top dressing of asphalt, sand, clay and lime, substantially as described.

6. A roof consisting of a suitable foundation, a covering of asphalt and coke and a top 30 dressing of asphalt, sand, clay and lime, substantially as described.

Witness my hand this 26th day of February, 1894.

JOHN C. ZALLÉE.

Witnesses:

C. D. MOODY, JAS. C. JONES.