

B. D. Sanders,

Composition Topping.

No. 101,314.

Patented Mar. 29. 1870.

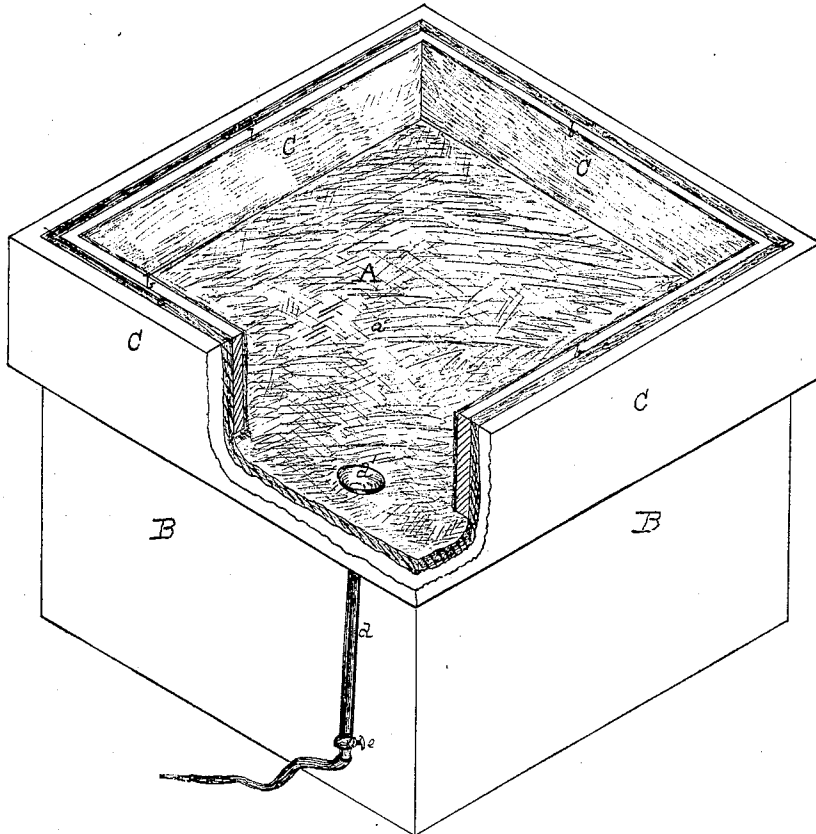


Fig. 1.

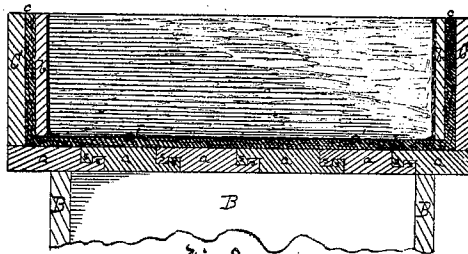


Fig. 2.

Witnesses:

R. C. Greenhall

Thomas

Inventor:

Benjamin D. Sanders,

by Bakewell, Lehnsky,

1014 Atty.

United States Patent Office.

BENJAMIN D. SANDERS, OF WELLSBURG, WEST VIRGINIA.

Letters Patent No. 101,314, dated March 29, 1870.

IMPROVEMENT IN COMPOSITION ROOFING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, BENJAMIN D. SANDERS, of Wellsburg, in the county of Brooke and State of West Virginia, have invented a new and useful Improvement in Roofing Composition and Roofs; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of a flat roof, to which my improvements are applied, and

Figure 2 is a vertical cross-section thereof.

Like letters of reference indicate like parts in each.

The nature of my improvement consists in an improved mode of applying the roofing material in soft composition roofs, and

Also, in an improved construction of floors for receiving composition roofing material.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same.

The composition I employ consists of any of the known materials used in the making of soft composition roof, mixed with hair, or other animal fiber, which possesses considerable strength with but little liability to decay.

The ordinary composition roofs, it is well known, are liable, in the changeable temperature of the temperate zone, to crack and leak.

The hair or other equivalent fibrous material I introduce into the composition while the latter is in a fluid condition, either during its manufacture or when remelted, and before or at the time of its being applied to the roof. Of course, it should be well and uniformly mixed in, especially on the surface or upper coating or layer, and here it may be applied, if so desired, after the composition is spread on the roof and before it has solidified.

Such fibrous material so introduced into or applied to the soft composition increases its adhesive power, and goes far to resist its tendency to crack by unequal expansion and contraction, as well as to run under the softening effects of the heat of the sun.

As a further improvement in roofing, I so apply the soft composition by which it is designed to render the roof water-tight as to prevent leakage at the edge of the roof.

This feature of my invention is especially designed for use with what are sometimes called tank-roofs, in which a flat roof, A, is laid on the walls B, and surrounded by a raised water-tight ledge, C, so as to store up or retain on the roof a constant supply of water for domestic or other purposes.

In such roofs the roofing composition, it has been found, is most liable to crack at the junction of the floor and raised ledge.

To prevent this I make a lining, b, place it just inside

the main ledge C, at a distance therefrom of, say, one-half an inch, more or less, and fill in between the two with the soft roofing composition, as shown at c. I then cover the floor a and the inside of the lining b with the roofing paper and composition a', in the usual way, taking care to flood the floor a so completely with the composition that even if it be melted by the heat of the sun's rays it cannot flow off, so as to leave any part bare.

The water waste-pipe d, by which water is carried down into, through or outside of the house, is supplied with a funnel, d', at its upper end, which is so set that its upper edge shall be above the surface of the composition of the roof.

If so desired, a layer of roofing paper and of roofing compound may be laid under the lining b.

I have also found the floors of such roofs, as ordinarily laid, rather facilitate than lessen the liability of the roofing material to crack.

The flooring is generally laid with a tongue-and-groove joint, and then when, the boards shrink, as they commonly do, the joints open and cause a crack in the composition.

In order to obviate this defect I make the flooring-boards a with a hook-joint; as shown, the contiguous boards having on the upper edge of one and the lower edge of the other a hook, s, each hook s entering and filling the groove in the adjacent board between its hook and the body of the board.

These hooks s and grooves are planed in the edges of the flooring-boards a by the use of a plane having a suitably-shaped bit.

In a floor so made, if the flooring-boards expand or swell, they close the joint the tighter, as in ordinary flooring, while if they contract and shrink, the inner faces of the hooks s s are made to engage each other the closer, which feature does not exist in roof-floors as heretofore laid.

The waste-pipe d should be provided with one or more cocks, e, by which to control the supply of water, and by the use of branch-pipes, flexible hose, &c., the water can be supplied at any desired point in or about the house or premises.

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

1. In composition tank-roofs, interposing a layer of composition between the main ledge C and a lining, b, substantially as described.

2. In the flooring of composition roofs, making the flooring boards with a hook-joint as described.

In testimony whereof, I, the said BENJAMIN D. SANDERS, have hereunto set my hand.

B. D. SANDERS.

Witnesses:

G. H. CHRISTY,
A. S. NICHOLSON.