(No Model.)

C. FRENCH.

ROOFING.

No. 359,925. Patented Mar. 22, 1887.

Fig. 1

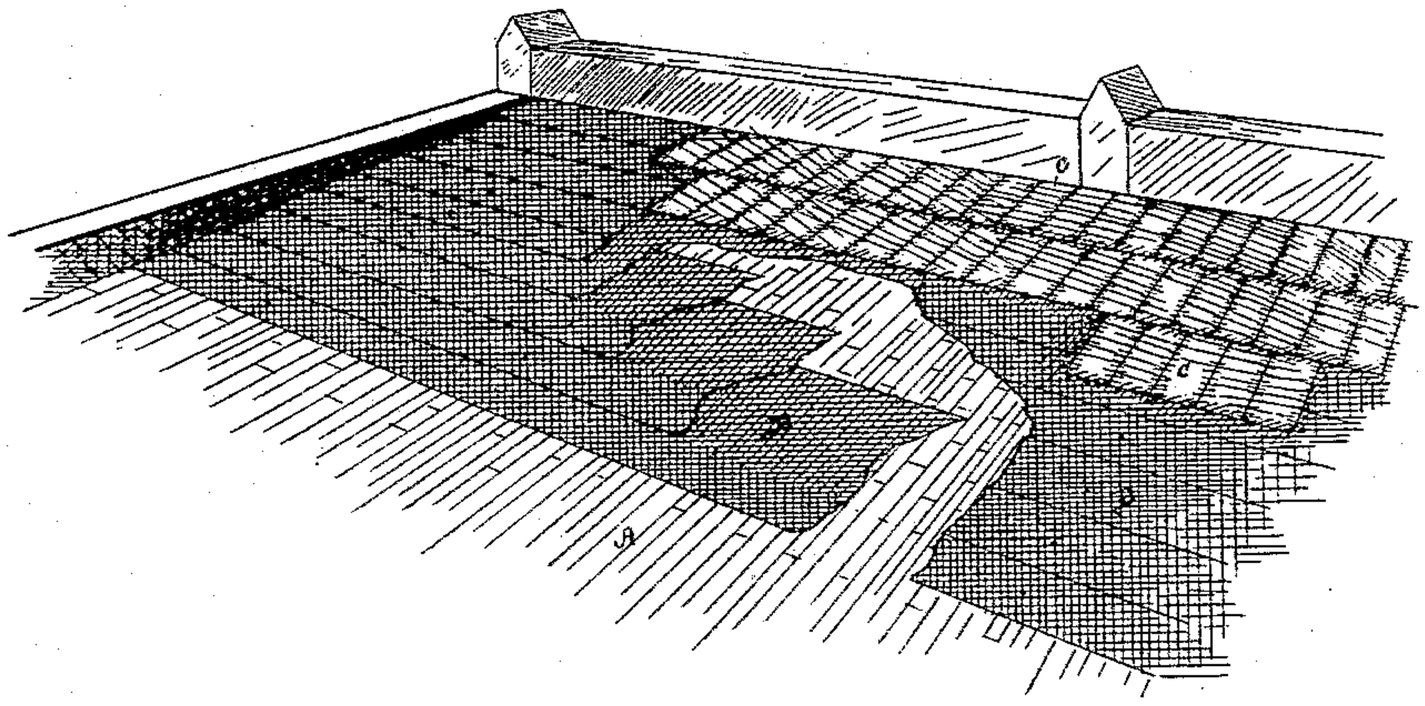
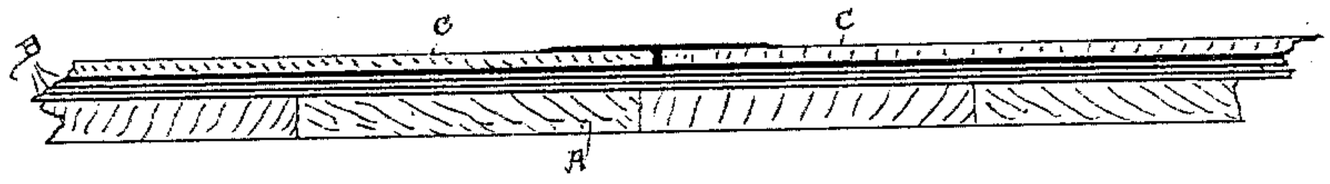


Fig. 2.



Witnesses
W. S. Austin.
H. W. Shumway

Clinton French Inventor
By Jno. Crowell.
Attorney

UNITED STATES PATENT OFFICE.

CLINTON FRENCH, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO JOHN P. HUMPHREY, OF SAME PLACE.

ROOFING.

SPECIFICATION forming part of Letters Patent No. 359,925, dated March 22, 1887.

Application filed November 21, 1885. Serial No. 183,473. (No model.)

To all whom it may concern:

Be it known that I, CLINTON FRENCH, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Roofing; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in roofing in which the roof-boards are covered with ordinary roofing-paper or so-called "roofing-felt," the sheets thereof preferably running crosswise of the roof and overlapping, like shingles. This foundation is covered with coal-tar or other suitable binder, into which, in the liquid condition, the binder is applied to the roof. Roofing-slates are embedded so as to cover the roof without the slates overlapping each other. The joints between the slates are filled with coal-tar, or whatever is used for a binder, which completes the roof, the object being to provide a cheap water-proof slate roof adapted to a slight grade or pitch, and that may be walked upon without danger of breaking the slates.

In the accompanying drawings, Figure 1 is a view in perspective showing the construction of my improved roof. Fig. 2 is a vertical section of the same.

A represents the roof-boards, and B the sheets of roofing-paper, or so-called "roofing-felt." These sheets extend preferably crosswise of the roof and overlap each other, like shingles, so that the paper is preferably about four thicknesses, (more or less.) Next, the roof is coated with coal-tar or other suitable water-proof binder, the same being heated to reduce it to a liquid condition. Into the binder, while the latter is in a plastic condition, roofing-slates C are embedded. The slates are arranged side by side, but do not overlap. The joints between the slates are filled with coal-tar, or whatever is used for a binder, and this latter operation completes the roof. Such roofs are practicable with as little grade as a tin roof, and are as effectually fire and water proof as the best metal roofs, and are much less expensive. As the slates do not overlap, a comparatively small number of slates cover the roof, and these being firmly embedded in the coal-tar or other binder may be walked upon at pleasure without any danger of breaking the slates.

My improved roof does not readily transmit heat, and therefore tends to render the house cool in summer and warm in winter.

Owing to the durability of the materials used, the roof is likely to last as long as the roof-boards, and these latter, being protected against moisture from without and having no tendency to condense moisture on the inside, will last, if of good quality, for generations.

Asphaltum in various conditions may be used for a binder; but I prefer the coal-tar on account of its cheapness.

I am aware that a roof consisting of roof-boards covered with sheets of felt laid side by side, the top layer of the latter being coated with a plastic composition, and slabs or slate laid on said composition, is not new, and hence I make no claim, broadly, to such construction.

What I claim is—

A roof consisting, essentially, of roof-boards covered with roofing-paper, or so-called "roofing-felt," the sheets thereof overlapping, so as to form several thicknesses, a coating of coal-tar or other suitable water-proof binder applied in a liquid condition to the roofing-paper, and roofing-tiles arranged side by side without overlapping, and embedded in such binder while the latter is in a plastic condition, the joints between the tiles being filled with such binding material, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 18th day of November, 1885.

CLINTON FRENCH.

Witnesses:
N. S. AMSTUTZ,
G. W. SHUMWAY.