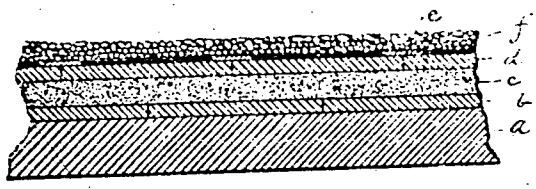
106-94

CROSS REFERENCE

M. B. BAILEY.

Composition Roof.

No. 200,122. Patented Feb. 12, 1878.



Witnesses

Forde R. Smith

A Blumenthal.

Michael B. Bailey Inventor

By Munday & Evarts his Attorneys

UNITED STATES PATENT OFFICE.

MICHAEL B. BAILEY, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO FRANK BAUER, OF SAME PLACE.

IMPROVEMENT IN COMPOSITION ROOFS.

Specification forming part of Letters Patent No. **200,122**, dated February 12, 1878; application filed June 11, 1877.

To all whom it may concern:

Be it known that I, MICHAEL B. BAILEY, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Composition Roofs, which are truly and fully set forth in the following specification and the accompanying drawing.

The object of my invention has been to make roofs of this character both fire-proof and durable; and it consists in the use of the materials hereinafter specified, and the application thereof in the manner and order described.

The drawing shows a vertical section of my improved roof. In it the letter *a* represents the plank upon which the roofing material is spread. *b* is a course of felt laid upon the board. To the upper surface of this felt I apply a fireproofing compound or paint. Any of the fire-proof paints in general use at the present time accomplish my purpose at this place very well. I next apply, in a layer of a quarter of an inch in thickness, or thereabout, a composition, *c*, the component parts whereof are the following: Portland cement, two barrels; coarse screened sand, two barrels; asphaltum, eighty pounds; gum-shellac, three pounds. India-rubber may be substituted for the gum-shellac, if preferred. This compound possesses the merit of hardening very rapidly and quickly after laying. It is impervious to moisture, and while it becomes very hard, yet it possesses, in a marked degree, a flexibility or elasticity which serves it in good stead, especially in cold climates.

Above this composition I lay a second course of felt, *d*, and secure the same, preferably at the joints, by strips of tin, *e*, or in some other suitable manner. This course *d* is then coated heavily with some elastic fire-proof paint, and the final finish, *f*, of sand, or sand and gravel, or gravel, is applied.

Two thicknesses of felt may be applied at *d*, if it is thought desirable, as also at *b*.

It will be noticed that the only combustible material above the wood of the roof is the felt, and that I render fire-proof by the use of the fireproofing compounds; also, that I dispense with the coal-tar so commonly used.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The roof herein described, composed of the layer of felt *b*, the composition *c*, the felt *d*, and the paint and gravel *f*, the same being applied in the order named, substantially as set forth.

2. The compound or composition consisting of Portland cement, coarse screened sand, asphaltum, and gum-shellac, in the proportions and combined in the manner described.

MICHAEL B. BAILEY.

Witnesses:
EDW. S. EVARTS,
JOHN W. MUNDAY.