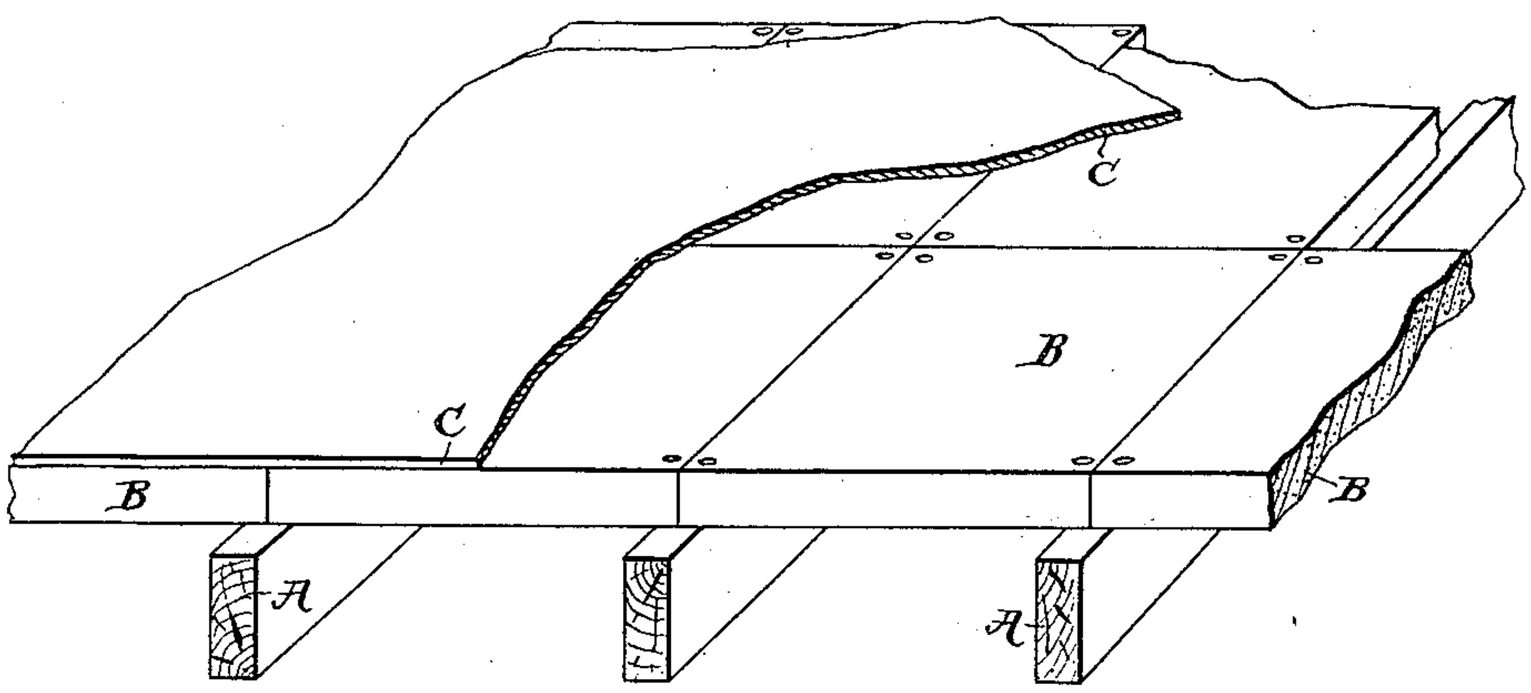
(No Model.)

C. C. GILMAN.

ROOF.

No. 338,515. Patented Mar. 23, 1886.



Attest:

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Atty.

UNITED STATES PATENT OFFICE.

CHARLES CARROLL GILMAN, OF ELDORA, IOWA.

ROOF.

SPECIFICATION forming part of Letters Patent No. 338,515, dated March 23, 1886.

Application filed August 14, 1885. Serial No. 174,360. (No model.)

To all whom it may concern:

Be it known that I, CHARLES CARROLL GILMAN, a citizen of the United States, and a resident of Eldora, Hardin county, Iowa, have invented a new and useful Improvement in Roofs, (Case E,) of which the following is a specification.

The object of my invention is the construction of a cheap and durable asphalt or cement covered roof, and I attain this object by the construction hereinafter described and claimed.

The accompanying drawing is a perspective view of a roof embodying my invention.

Referring to the drawing, A represents the wooden rafters, placed, preferably, about twelve inches apart, and owing to the weight imposed they should be three inches wide. I apply to the outside of said rafters slabs or blocks B, of terra-cotta lumber or a porous burned-brick material, which are nailed to said rafters, or secured thereto in any other appropriate and effective manner. Said slabs or blocks should be from three to four inches thick, about twelve inches wide, and from twelve to twenty-four inches long. I use this material because of is porous structure, which provides numerous anchorages for the cement or asphalt covering, and also because it is to a very high degree a non-conductor of heat and cold, can be easily sawed or worked with carpenters' tools, and will receive and hold nails. I apply to said slabs or blocks a layer of mastic, C, made of asphalt, coal-tar, or equivalent substance mixed with sand or gravel or broken limestone. This mastic is rolled over the porous slabs, in the manner that similar compositions are rolled upon streets and walks, and to a depth of about one inch. Instead of this mastic of asphalt, a layer of cement may be used. This outer finishing-layer of asphalt or cement becomes thoroughly united to the porous slabs, so that it is impossible to detach it therefrom, protects the slabs from the action of the weather, and forms with said slabs a roof which is proof against fire and the action of the weather and prevents the penetration of heat and cold to the interior.

It is evident that the described combination of terra-cotta-lumber blocks and a layer of mastic of asphalt is equally applicable to a frame-work of iron instead of to one of wood.

I do not desire to limit myself strictly to "terra-cotta"-lumber, so called, as any porous burned-brick material having substantially the same properties is within the scope of my invention.

I am aware of patent to Loring, Reissue No. 10,030, and of patent to Johnson and Fryer, No. 143,352, and what is described and shown in said patents is hereby disclaimed.

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

The combination, with the wooden rafters, of slabs or blocks of terra-cotta lumber or its equivalent, laid on said rafters and secured to the same by nails, said slabs extending from rafter to rafter, and a finishing-layer of asphalt mastic or its equivalent spread over the same, said layer adhering tenaciously to said slabs, by reason of their porous character, substantially as described.

In testimony whereof I have signed my name in the presence of two witnesses.

CHARLES CARROLL GILMAN.

Witnesses:

EDMUND RICE,

R. B. GALUSHA.