

C. PARKER.  
Fire-Proof Roofing.

No. 138,813.

Patented May 13, 1873.

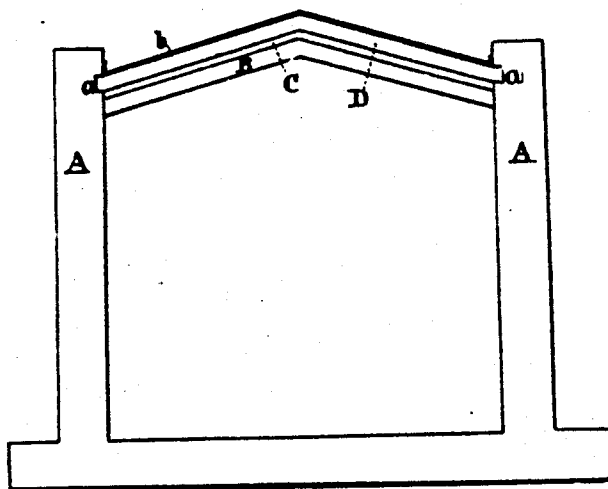


Fig. 1.

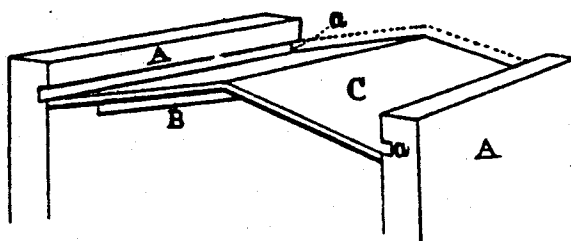


Fig. 2.

Witnesses  
James Thurston  
John C. Larned

Charles Parker  
by E. Thurston,  
His Atty in Fact

# UNITED STATES PATENT OFFICE.

CHARLES PARKER, OF WENONA, ILLINOIS.

## IMPROVEMENT IN FIRE-PROOF ROOFINGS.

Specification forming part of Letters Patent No. 135,813, dated May 13, 1873; application filed March 3, 1873.

*To all whom it may concern:*

Be it known that I, CHARLES PARKER, of Wenona, in the county of Marshall and in the State of Illinois, have invented an Improvement in Fire-Proof Roofing, &c.; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents an elevation or end view of the roof and roofing; Fig. 2, perspective view of roof, showing the recesses along the walls to admit the roofing-composition.

A composition of ashes of wood, coal, or peat, sifted salt, powdered clay, and powdered alum, is spread, after being incorporated into a thick mortar with water, over the sheathing of the roof to the thickness of from two to four inches, passing at the lowest part or gutter of the roof into a horizontal groove of an inch or so in depth, left in the wall or parapet, at the level of the sheathing. This is covered with the usual tin metal, gravel, or other final covering. The proportions of the composition may be in order, respectively, as above recited; three parts sifted ashes; one part of salt; one-fourth of one part of powdered alum or alum in solution; one-half part of powdered clay. These are thoroughly incorporated, with water, into a stiff paste or mortar, and spread over the sheathing-boards, which cover the rafters, which sheathing must be closely set together to keep the composition from running through while in the paste state. At the edges of the sheathing, where it adjoins the walls or parapets, the composition is carried beyond this junction into the walls for an inch or more to prevent the passage of fire between the roof and the walls, a groove or recess being cut or left in the walls for this purpose, of the same height as that of the thickness of the applied composition.

In the drawing, A represents the walls; B, the rafters; C, the sheathing; D, the compo-

sition; a, the recess or groove to receive the composition; b, the final metal covering.

This composition forms, in a dry state or without admixture with water, a packing for safes or fire-shutters, by applying a thickness of it to the latter and covering it with iron or other metallic sheeting, and either dry or in paste for the packing between the walls of corrugated-metal buildings or between the floors of buildings, in which metal joints or other non-combustible supports are used; the composition in this case being of course spread in a paste to the thickness of several inches upon a metal sheeting or other incombustible support or surface to receive it.

When used for a fire-proof application or coating for heating-pipes for houses, &c., the pipes may be embedded in it in the paste state, or the composition can be used as a mortar between the pipes or flues and the wood-work or other combustible wall or object through which they may pass.

What I claim as my invention is—

1. The roofing-composition, when composed of the ingredients and compounded in the manner specified, and laid upon a foundation of wood sheathing or other known rafter-sheathing, and covered with tin or iron sheeting, tiles, or slating, or other known final weather covering, substantially as described.

2. The combination of the roofing or its edge with the recesses a in the walls or parapets, to prevent the passage of fire downward into the house, as described.

3. The combination of the ingredients named, with or without water to incorporate them, to form a roof, and for other purposes, substantially as described.

In testimony that I claim the foregoing improvement in fire-proof roofing, &c., I have hereunto set my hand this 15th day of February, A. D. 1873.

Witnesses: CHARLES PARKER.  
HENRY W. WELLS,  
JAMES M. MORSE.