No. 629,468. Patented July 25, 1899.

J. RAY.

FIREPROOF STRUCTURE.

(Application filed Feb. 24, 1897. Renewed Jan. 18, 1899.)

(No Model.)

Fig. 1.

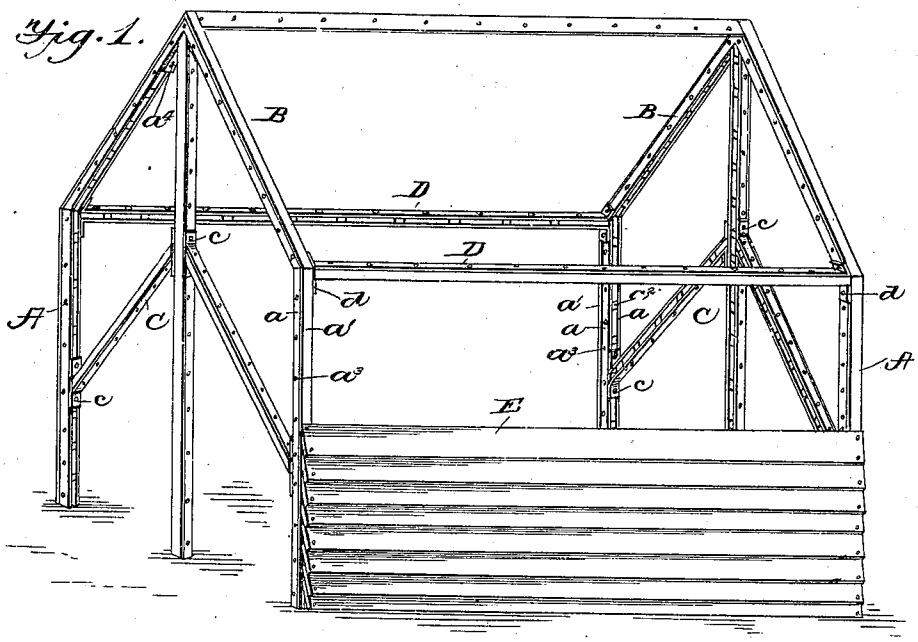
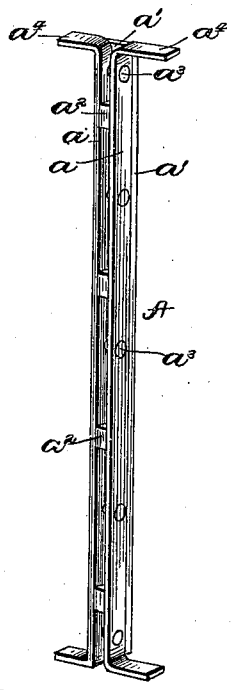


Fig. 2.



WITNESSES

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FIREPROOF STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 629,468, dated July 25, 1899.

Application filed February 24, 1897. Renewed January 18, 1899. Serial No. 702,581. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH RAY, a citizen of the United States, residing at Emery, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Fireproof Structures; 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 appertains to make and use the same.

This invention relates to improvements in houses, and has more particular relation to fireproof houses.

The invention consists of certain novel constructions, combinations, and arrangements of parts, all of which will be hereinafter more particularly set forth and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 represents the framework of a house or barn constructed according to my invention, the same being partly covered with metallic weather-boarding; and Fig. 2 represents an enlarged detail perspective view of one of the metallic beams forming the fireproof structure.

A A in the drawings represent the vertical beams of the framework of the house; B B, the roof-beams; C C, the end brace-beams, and E the metallic weather-boarding.

The vertical beams A, comprising my improved fireproof structure, consist, respectively, of two spaced parallel metallic plates a a and an auxiliary plate a', applied along one end of said spaced plates and provided with a plurality of projections a^2, that extend between said plates a for holding them the desired distance apart. Said plates a a are suitably secured together by bolts, rivets, or the like a^3, thus clamping the auxiliary plates a' firmly in position. The ends of the vertical strips a are turned outward at right angles, as at a^4, to form attaching-flanges, whereby said strips may be secured to any suitable brace by bolts or otherwise. The roof-beams B are connected to the upper ends of the beams A and form approximately an inverted-V shape. These beams are identical in construction with the beams A. The central vertical beam A is provided at its upper end with attaching-flanges a^4, whereby it is bolted to the roof-beams B. The brace-beams C are each provided at each end with attaching-flanges c, whereby they may be securely bolted to the vertical side beams and the central end beam, respectively. The two end sections of the house structure are connected by horizontal beams D, which are identical in construction with the aforementioned beams and are provided at each end with flanges d, whereby they may be bolted or otherwise secured to the end sections. The framework thus formed is covered by metallic weather-boarding E, secured thereto by suitable screws or rivets and provided with doors or windows, as desired.

My invention is intended principally for the construction of barns, carriage-houses, and animal-sheds, which at predetermined intervals require fumigation for the removal of vermin, which fumigation is often attended with fire, caused by the burning of the fumigating compound.

It will be observed that by the employment of this invention the building is rendered altogether fireproof, as it is constructed throughout of metal, and no combustible materials are employed at all.

Although my invention is intended principally for the above-described structures, I do not care to limit it to the same, as my improved fireproof structure may be applied to a great many classes of buildings. I also contemplate forming the uprights and the roof-beams together. This construction will only be employed in small houses, where ordinary lengths of metal may be employed to form both the uprights and roof-beams.

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

1. In a fireproof structure, the combination with a suitable base, of a framework comprising a plurality of connected beams each consisting of two spaced metallic strips and an auxiliary metallic strip lapped over two of the side edges of the spaced strips and having a plurality of spaced projections which extend between said spaced strips to hold them the desired distance apart, and connecting-bolts passed through the respective spaced strips to secure the whole together, substantially as described.

2. In a fireproof structure, the combination with a suitable base, of a framework compris-

ing metallic side beams and end beams, a plurality of inclined beams connecting the side and end beams, and a plurality of horizontal beams connecting the side beams, each of said side beams comprising two spaced metallic strips, and an auxiliary strip having a plurality of projections adapted to extend between the spaced strips, and metallic weather-boarding applied over said beams, substantially as described.

3. In a fireproof structure, the combination with a suitable base, of a framework comprising a plurality of connected beams, each of which consists of two spaced metallic strips, the opposite ends of which are bent at right angles to their lengths to form attaching-flanges, and an auxiliary metallic strip lapped over two of the side edges of the spaced strips and having a plurality of spaced projections which extend between said spaced strips to hold them the desired distance apart, and bolts connecting said spaced strips to bind the whole securely together, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOSEPH RAY.

Witnesses:
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