

J. D. PIERCE.
Fire-Proof Roofs.

No. 156,309.

Patented Oct. 27, 1874.

FIG. 1.

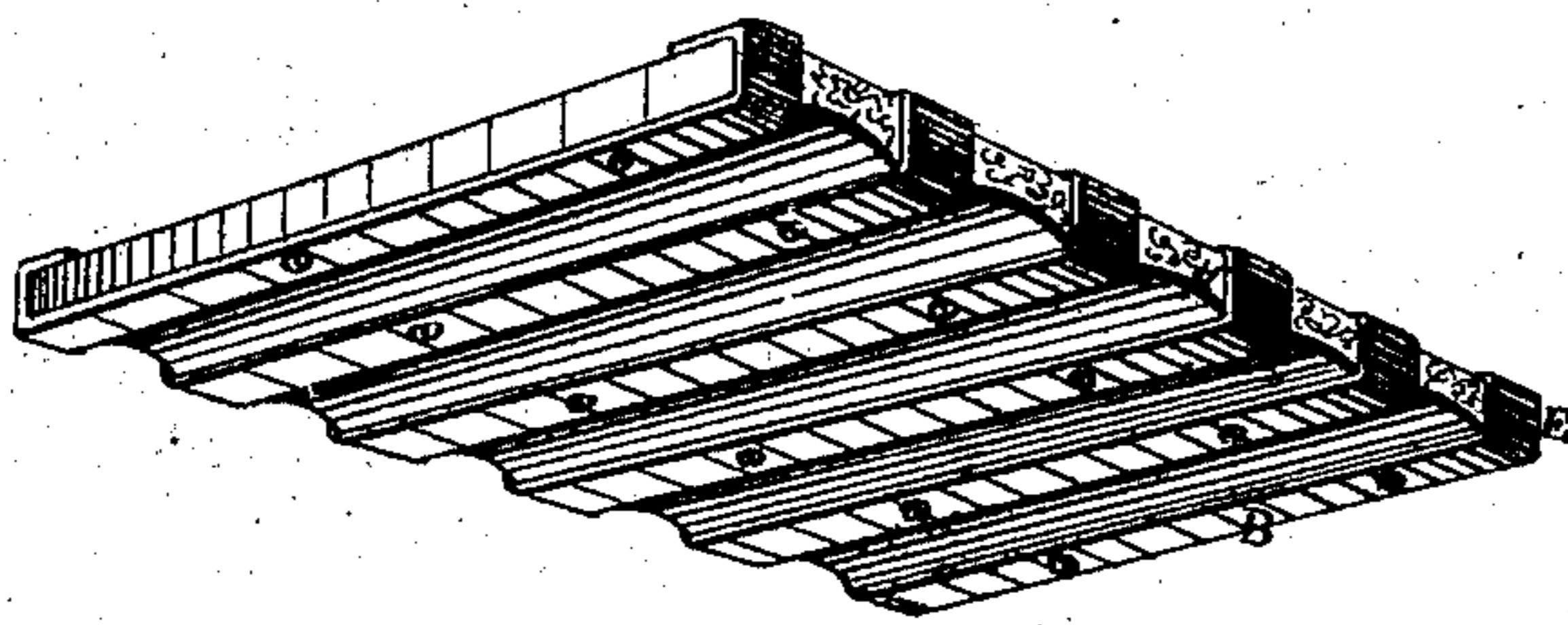
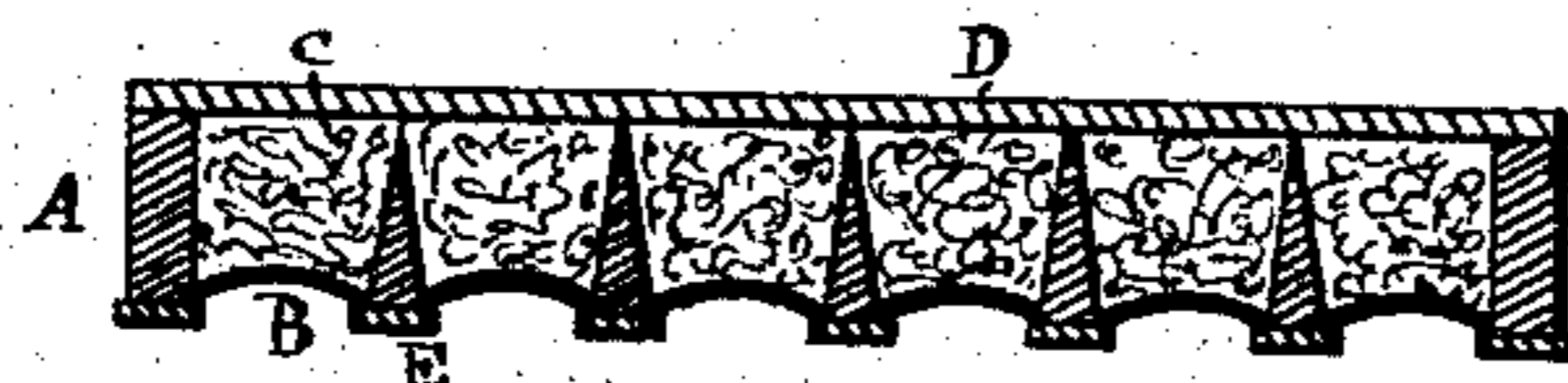


FIG. 2.



WITNESSES.

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INVENTOR.

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by his attys
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UNITED STATES PATENT OFFICE.

JAMES D. PIERCE, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF
HIS RIGHT TO JOHN B. SMITH, OF SAME PLACE.

IMPROVEMENT IN FIRE-PROOF ROOFS.

Specification forming part of Letters Patent No. **156,309**, dated October 27, 1874; application filed
February 24, 1873.

To all whom it may concern:

Be it known that I, JAMES D. PIERCE, of Milwaukee, in the county of Milwaukee, in the State of Wisconsin, have invented certain Improvements in Fire-Proof Roofing, of which the following is a specification:

My invention is for the purpose of making the roofs of buildings fire-proof; and consists in chamfering the upper edges of the joist and placing on the lower edge of the joist irons running their whole length, and turned up over the ends of the joist and bolted to their ends, and then placing these joists in the top of a building for roof-frame.

The irons are for the purpose of stiffening the joists and preventing them from sagging. I then place between the joists sheets of iron in the form of an arch, the edges of the sheets resting on the edges of the iron, which projects out beyond the sides of the joists, forming a flange. I then fill in on the top of these sheets of iron, to the top and above the joists, concrete or any fire-proof material, and then cover the whole with any kind of fire-proof roofing.

Figure 1 is a sectional view of my invention, showing one of the joists chamfered.

C is the wooden joist, chamfered to an edge on the upper side; E, strips of iron running

from end to end of the joist C, and turned up over the ends, and bolted to the joist to sustain the same from sagging. The iron, being wider than the thickness of the joist, forms a flange. B are arched sheets of iron placed between the joists, with their edges resting on the edges of the iron E, which projects over the joist. D is concrete or other fire-proof material filled in between and on the top of the joist, the whole being covered with any kind of fire-proof roofing.

This will make a strong and secure fire-proof roof. The whole surface presented to the fire from the outside being fire-proof, there will be no danger of the roof catching fire from flying sparks.

I claim as my invention—

A fire-proof roof when constructed with joist C, the top edge chamfered, irons E on the under side of joist C, running from end to end, and secured by bolts passing through the ends of the iron into the joist, and filled in with concrete or other fire-proof material to the top and above the joist, and supported by irons B, substantially as specified.

JAMES D. PIERCE.

Witnesses:

J. B. SMITH,
E. J. SMITH.