W. Stine,

Eaves Trough,

No. 78,617. Patented June 2, 1868.

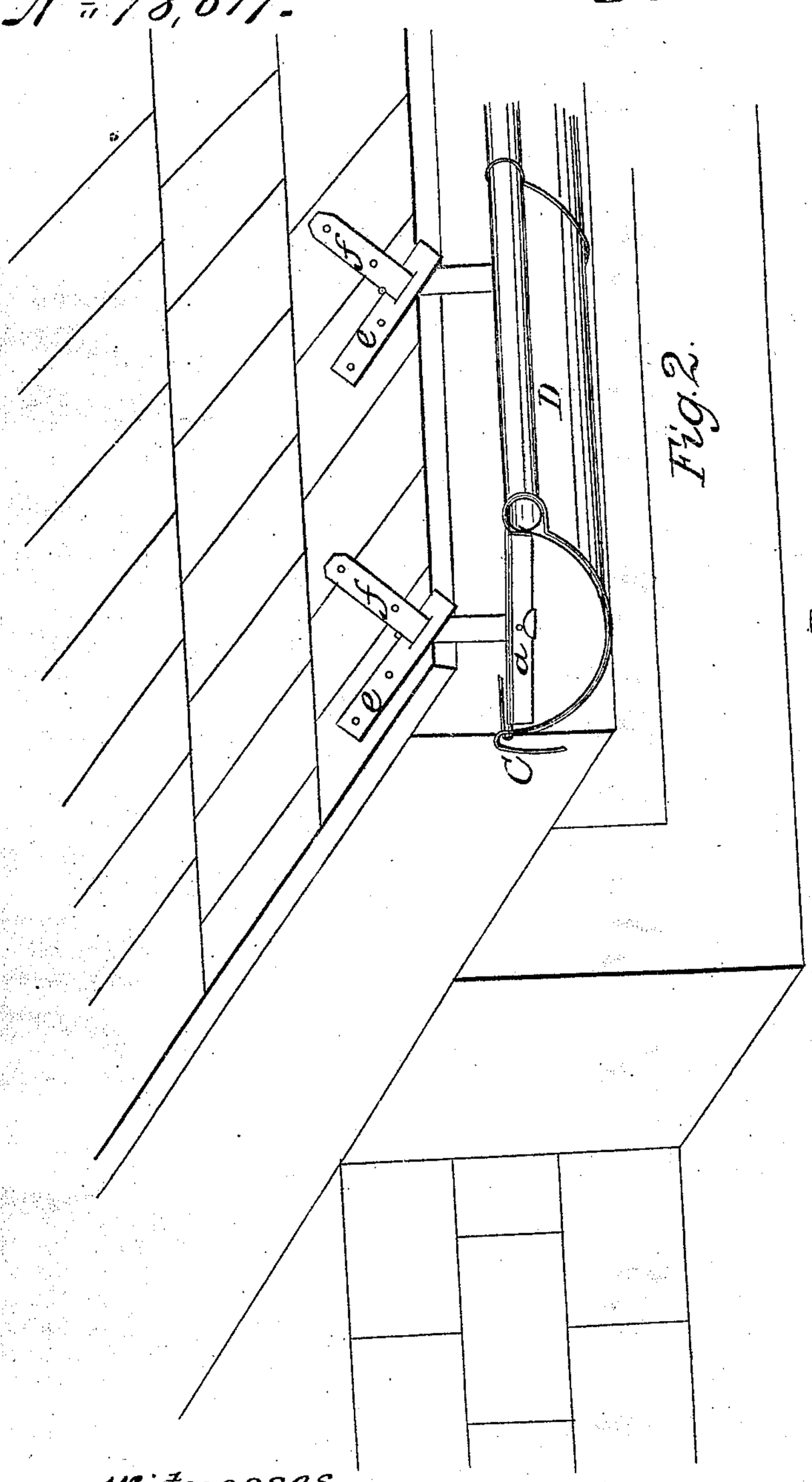

Fig. 2.

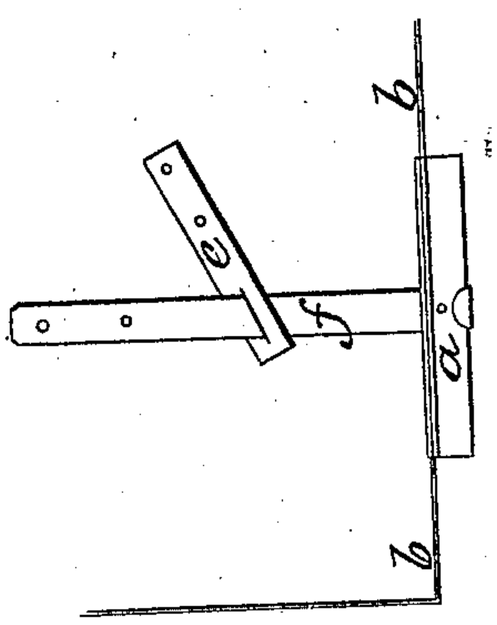

Fig. 1.

Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM STINE, OF ELMORE, OHIO.

IMPROVEMENT IN EAVES-TROUGHS.

Specification forming part of Letters Patent No. **78,617**, dated June 2, 1868.

To all whom it may concern:

Be it known that I, WILLIAM STINE, of Elmore, in the county of Ottawa and State of Ohio, have invented a new and useful Improved Eaves-Trough Fastening; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to furnish a cheap, substantial, and convenient eaves-trough fastening; and the invention consists in providing a sheet-metal cross-bar with a wire or strip of sheet metal secured to the upper edge. To the middle of the cross-bar is fastened the end of a strap of hoop-iron. The upper end of the strap of hoop-iron is passed through a slot cut through a piece of like material for the purpose of fastening to the roof of a building, as will hereinafter appear.

Figure 1 represents one of my fastenings ready to attach to an eaves-trough. Fig. 2 represents a section of eaves-trough fastened to a roof by my method and the manner of securing the fastening to the trough.

In Fig. 1 the cross-bar *a* is an oblong piece of sheet metal, with a wire, *b*, secured to the upper edge and the end of the suspending-strap *f* riveted to the middle of the cross-bar *a*. The upper end of the suspending-strap *f* is passed through a slot, *o*, cut through the flat bar *e*.

To attach the fastening to the trough D, the lower edge of the cross-bar *a* is placed across the top of the trough, on the inside, the wire *b* is placed over the top and bent around the outside of the trough, and the ends of the wire fastened together by bending around each other, as shown at *c* in Fig. 2.

To fasten the trough to a building, the flat bar *e* is nailed to the roof, the trough brought to a proper level by passing the suspending-strap *f* up or down, as may be required, in the slot *o* in the bar *e*, and bent over and twisted so as to tighten it in the slot *o*. The suspending-strap *f* is then nailed to the roof.

Eaves-trough fastenings have been made consisting of a cross-bar and a suspending-strap; but the cross-bar was fastened to the trough by soldering, or the cross-bar was fastened on the outside of the trough by means of a bar on the inside, and those bars were flat. In mine it is placed in the trough with the edges perpendicular, thus securing more strength; and securing the bar to the trough by means of the wire makes it more secure and firm than when secured by the pressure of an inside bar against one on the outside of the trough. The suspending-strap in my fastening is different from others in being a single strip of hoop-iron passing through a slot and with its edge against the roof, thus being more firm than when bent flat over the edge of the roof.

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

1. The construction and arrangement of bars *e* and *f* and cross-bar *a*, for holding an eaves-trough, substantially as described.

2. In combination with the above, the wire *b b*, as and for the purpose set forth.

WILLIAM STINE.

Witnesses:
W. S. MILLER,
JOHN EOFF.