

T. F. MORRISON.
Eaves-Trough Supports.

No. 146,014.

Patented Dec. 30, 1873.

Fig. 1.

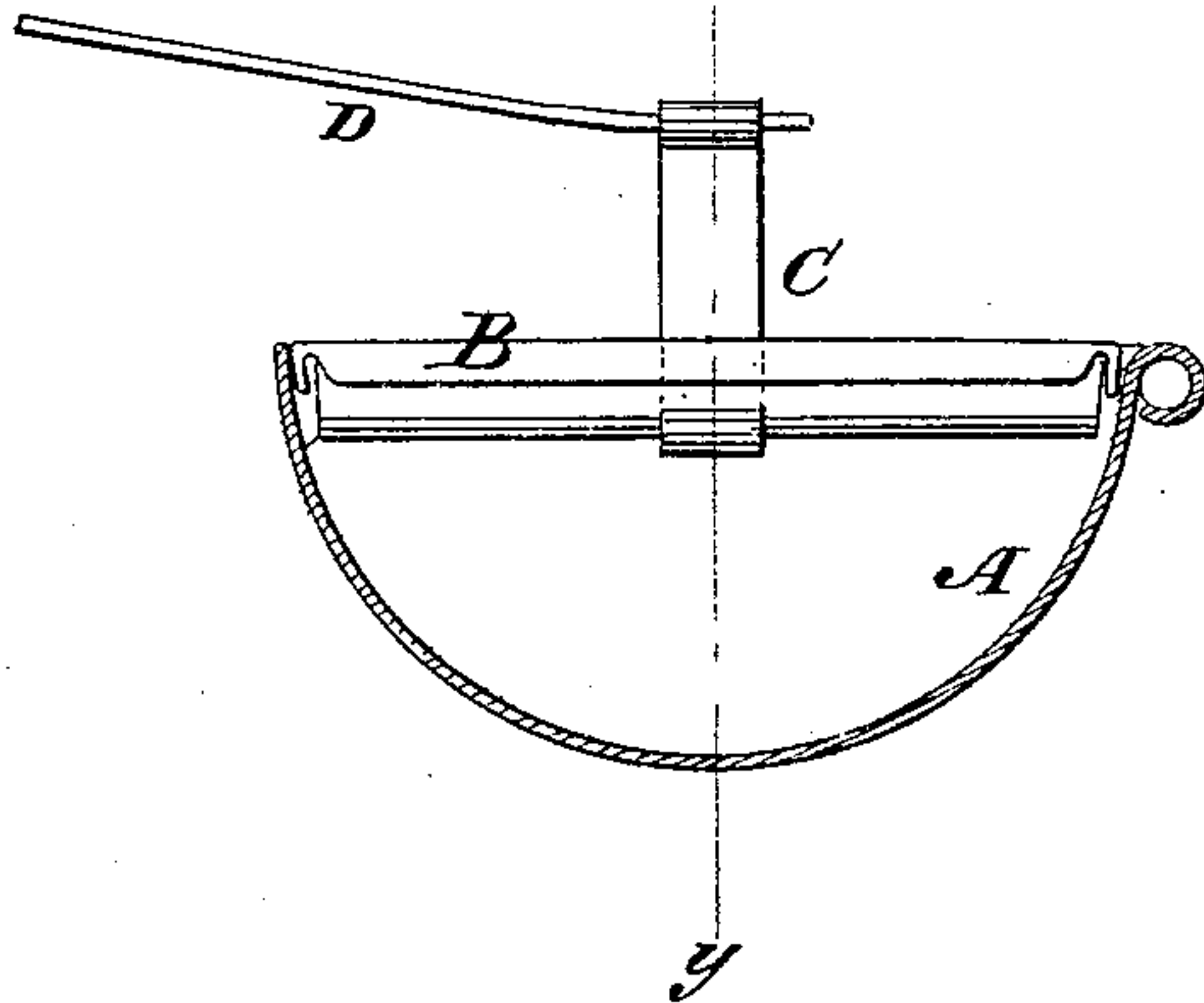


Fig. 2.

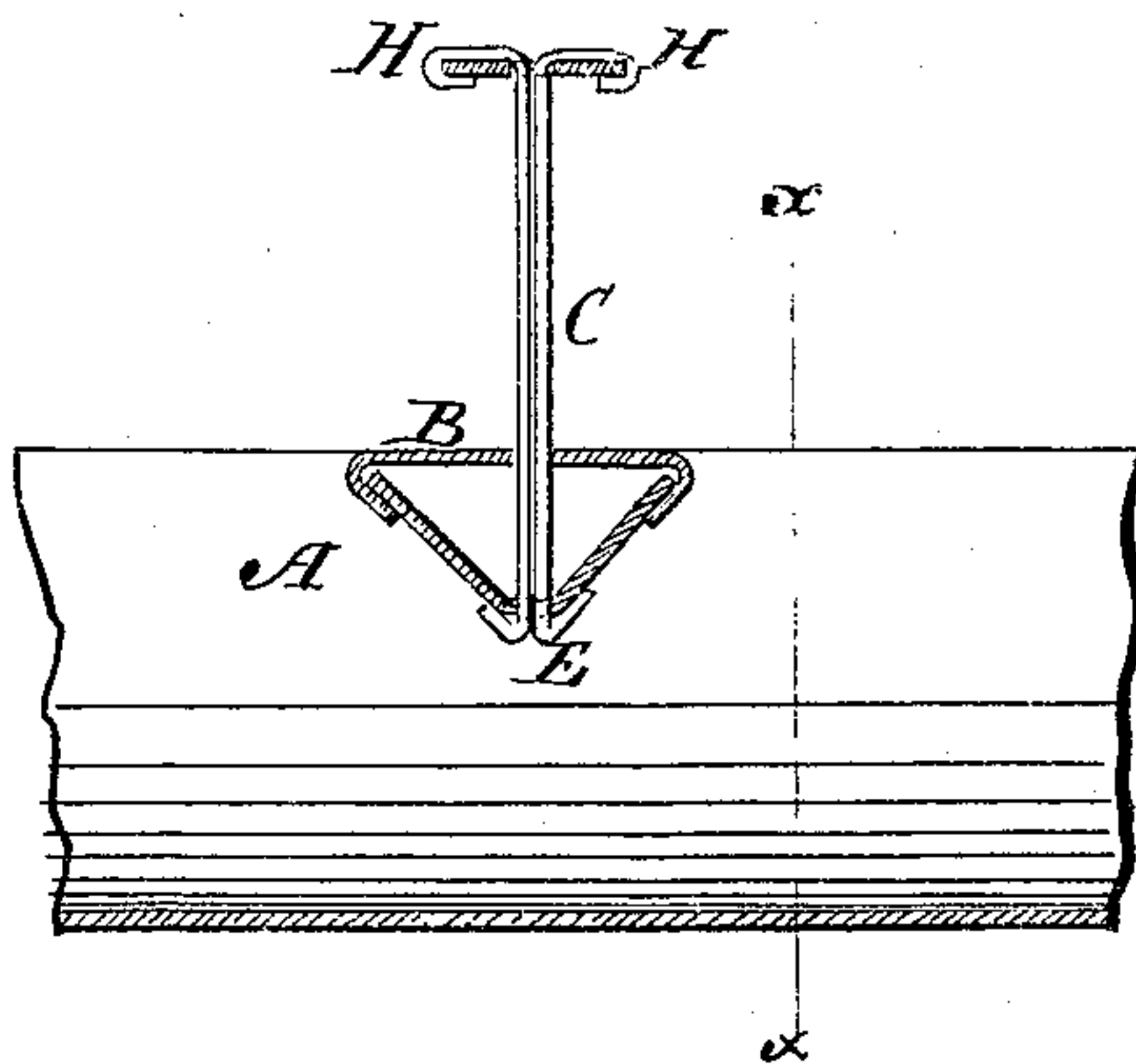


Fig. 3.

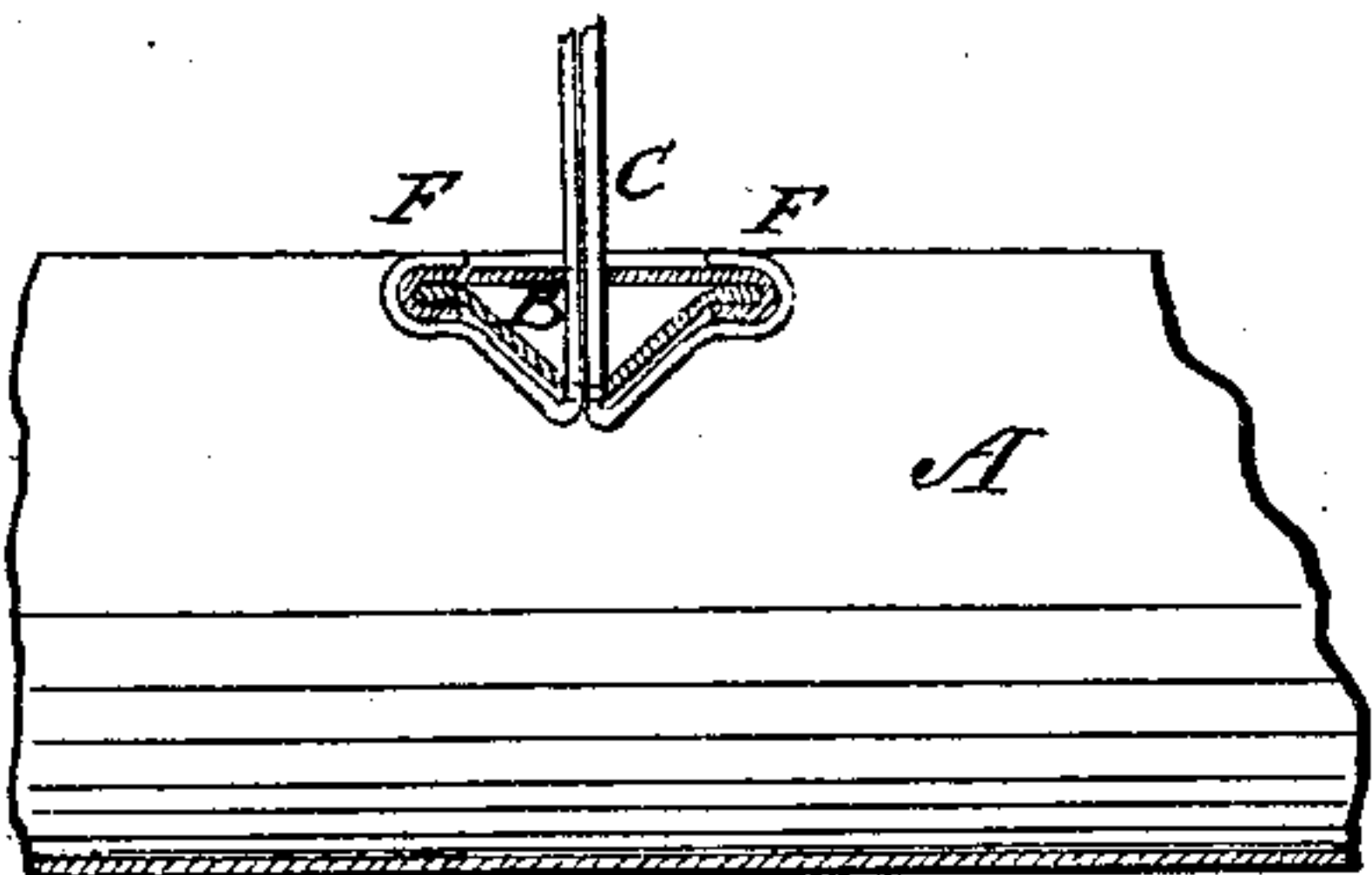
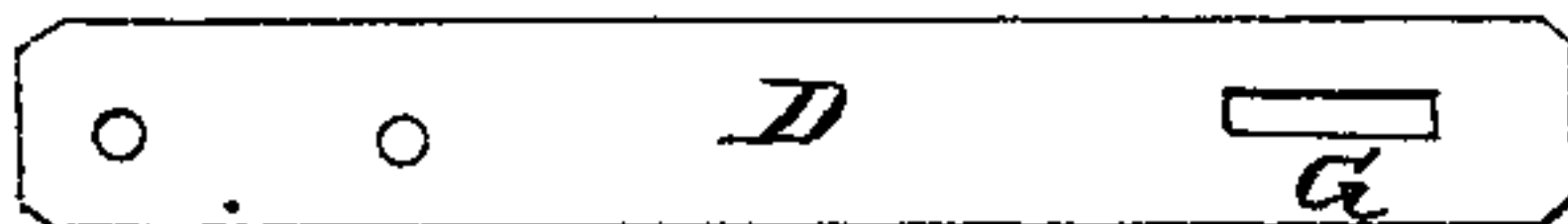


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

THORNTON F. MORRISON, OF FINDLEY, OHIO.

IMPROVEMENT IN EAVES-TROUGH SUPPORTS.

Specification forming part of Letters Patent No. **146,014**, dated December 30, 1873; application filed July 5, 1873.

To all whom it may concern:

Be it known that I, THORNTON F. MORRISON, of Findley, in the county of Hancock and State of Ohio, have invented a new and useful Improvement in Eaves-Trough Hangers, of which the following is a specification:

This invention relates to the manner of supporting eaves-troughs on buildings; and consists in the construction of the cross-ties and hangers, and the mode of connecting them together, and the latter to the roof-brackets, hereinafter more fully described.

In the accompanying drawing, Figure 1 represents a cross-section taken on the line *x x* of Fig. 2. Fig. 2 is a vertical section of Fig. 1 taken on the line *y y*. Fig. 3 is a modification, showing a different mode of attaching the hanger to the cross-tie. Fig. 4 is a view of the roof-bracket.

Similar letters of reference indicate corresponding parts.

A represents the eaves-trough, B the cross-ties, C the hanger, and D the roof-bracket, the latter being a simple strap of metal, slotted at one end to receive the hanger, and perforated at the other to receive nails for fastening to the roof. The cross-tie B is made triangular in cross-section, so as to secure strength and rigidity, as seen in the drawing. The hangers

are made in two pieces, which are passed directly through the ties and then hooked under the bottom, as seen in Fig. 2, at E. In Fig. 3 the hanger passes through the tie in the same manner, but the ends are bent upward from the bottom, and over onto the top side of the tie, as seen at F. The tie, in each case, is made of two pieces, soldered together, and soldered to the eaves-trough at each end. The upper end of the hanger passes through the slot G, and is clasped around the edges of the bracket, as seen at H H. When the hangers are attached to the ties and to the bracket in this manner they do not get loose, but form a sure and permanent support for the eaves-trough.

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

An eaves-trough hanger, C, having hooks E and clamps H H, the tie B, triangular in cross-section, and the bracket D, slotted at F, combined as and for the purpose described.

THORNTON F. MORRISON.

Witnesses:

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