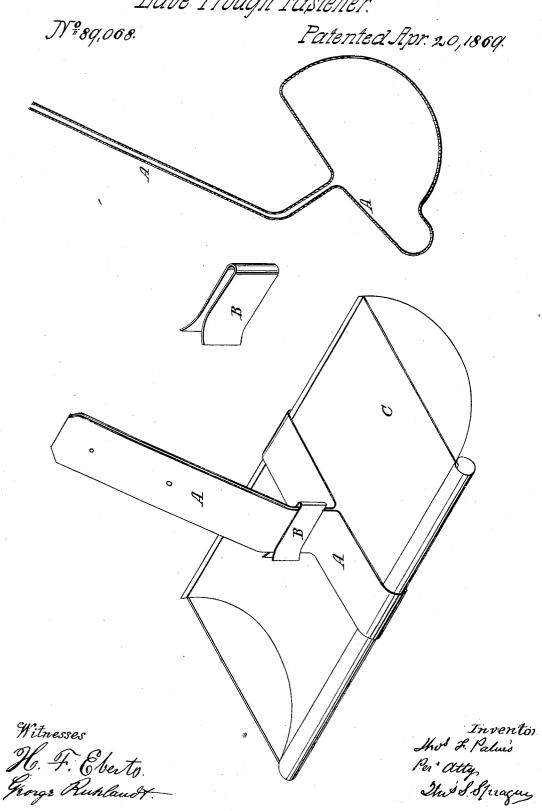
## I.F. Palm.

Eave Trough Fastener.





## THOMAS F. PALM, OF TOLEDO, OHIO, ASSIGNOR TO HIMSELF AND L. J. BLIVEN, OF SAME PLACE.

Letters Patent No. 89,068, dated April 20, 1869.

## IMPROVED EAVES-TROUGH SUSPENDER

The Schedule referred to in these Letters Patent and making part of the same

To whom it may concern:

Be it known that I, Thomas F. Palm, of Toledo, Lucas county, Ohio, have invented a new and improved Mode of Suspending Eaves-Troughs from Buildings; and I hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, which are hereby made a part of this specification.

Figure 1 is a perspective view. Figure A is a strap, or loop. Figure B is a clamp or clasp.

To enable others skilled in the art to make and use my invention, I describe its construction and use, as follows:

A is a metal strap, or loop, shaped, as nearly as possible, to conform to the outside shape of the eavestrough C, which is suspended in it.

At the top of each side of the trough, each part of the strap or loop is bent inward at a right angle, and across the face or mouth of the trough, to a point at or near the middle or centre of the same. Then the parts of the strap, or loop are bent upward at a right angle, immediately over which angle, where the parts of the strap, or loop, come in contact, the clamp, or clasp B, is placed, thus holding the parts of the strap, or loop, firmly together, and securely fastening the trough therein.

Above the upper edge of the clamp, or clasp B, the parts of the strap, or loop, are bent together, outward, at an angle of about forty-five degrees, or to conform to the pitch of the roof from which the eaves-trough is suspended. The distance between the two angles above referred to, may be varied, to give such pitch to the trough as will allow the water to flow freely.

The ends of the strap, or loop, are perforated with holes, to admit nails or screws, with which to secure it to the building, or it may be soldered to a metal roof.

B is a metal clamp, or clasp, formed by bringing the two ends of the material used together, and the parts parallel, so that the inner surfaces of the same shall touch, and the elasticity of the metal, when the clamp, or clasp, is placed across the parts of the strap, or loop, where they come in contact above the face or mouth of the trough, will hold them firmly together.

What I claim, and desire to secure by Letters Patent, is—

The arrangement of the metal strap, or loop B, and the metal clamp, or clasp A, applied to the trough, or roof, in the manner and for the purposes herein specified.

THOMAS F. PALM.

Witnesses:
GEO. R. HAYNES,
C. E. BLIVEN.