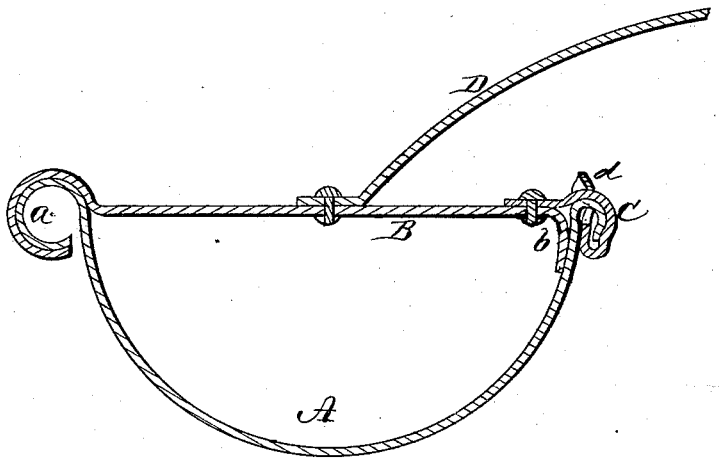
W. E. MANROW.

Eaves-Trough Hanger.

No. 168,572.

Patented Oct. 11, 1875.



WITNESSES

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WILLIAM E. MANROW, OF GOSHEN, INDIANA.

IMPROVEMENT IN EAVES-TROUGH HANGERS.

Specification forming part of Letters Patent No. **168,572**, dated October 11, 1875; application filed July 23, 1874.

To all whom it may concern:

Be it known that I, WILLIAM E. MANROW, of Goshen, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Eaves-Trough Hangers; 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 which it pertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification, and in which the figure thereon represented is a transverse vertical section of an eaves-trough having my improved hanger.

Experience has demonstrated that in all that class of hangers whereby the trough is detachably secured to the hanger by swinging locks, buttons, or similar devices the trough will, in course of time, work loose from its fastenings, owing to the storms and gales to which, in its exposed situation, it is continually subjected, so as to project on one side of the building to which it is attached, and not reach far enough on the other.

To obviate this difficulty, and at the same time do away with soldering, which is usually employed to connect the trough permanently to its hangers, I clinch one side of the trough between the shoulder of the cross-bar and a projecting metal strip riveted onto the cross-bar, substantially as hereinafter set forth.

In the drawing, A represents the eaves-trough, formed with a bead, *a*, along its outer edge, as usual. B is the cross-bar, preferably made of light band-iron, which passes around the bead *a* and backward, turning down on the inside of the back part of the trough, so as to form the shoulder *b*. C is a malleable-metal strip, riveted onto the top of the cross-bar B, near the shoulder *b*, and which, before the trough is secured to the hanger, projects straight out from the cross-bar, at right angles to the downward-projecting shoulder *b*.

When the trough is to be placed in position the bead *a* is first slipped through the outward curve of the several cross-bars B, and the back edge of the trough, which is straight and without any curve or bead, is then raised up, so as to pass on the outside of the shoulder *b*, its edge touching the flat projecting strip C. By the aid of a pair of pinchers or other suitable tool the metallic strip C is then bent so as to encompass and clutch that part of the edge of the trough which is immediately beneath it, thus forming an indentation or depression in that part of the edge, and leaving the edge project straight up on both sides of the depression, as shown at *d* in the drawing.

By this arrangement lateral motion of the trough is absolutely prevented, and it must, of necessity, remain in its place, no matter how frequent or how strong the gales to the effect of which it is subjected.

I am aware that hangers have been constructed of malleable iron, with downward-projecting fingers, so arranged that they may be made to clutch and crimp the back part of the trough, as shown—for instance, in the patent to J. P. Abbott, No. 146,855, dated January 27, 1874. I do not claim this arrangement, which is necessarily somewhat expensive, because the conformation of the cross-bar and fingers is such that the whole must be made of malleable cast-iron in order to accomplish the result stated, or else must be hammered out of one piece of malleable iron.

The object of my invention is to furnish a cheap as well as effective hanger, and this may be done by making the cross-beam B, with its bead *a* and shoulder *b*, of common hoop-iron, and riveting thereto the malleable strip C in such a manner that it projects at right angles from the shoulder *b*.

Another advantage of my invention is, that the trough may be put up by any one, simply by the aid of a pair of nippers or pinchers; whereas the downward-projecting fingers used in some hangers cannot be manipulated without the aid of a tool made for the purpose, requiring skilled labor to put it up.

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

In an eaves-trough hanger made of hoop-iron, the combination of a rigid cross-piece, B, having the bead *a* and downward-projecting shoulder *b*, with a malleable metal strip, C, the latter so arranged that it projects laterally outward from the cross-piece B, and at right angles to the shoulder *b*, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of June, 1874.

WM. E. MANROW.

Witnesses:
I. D. OSBORN,
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