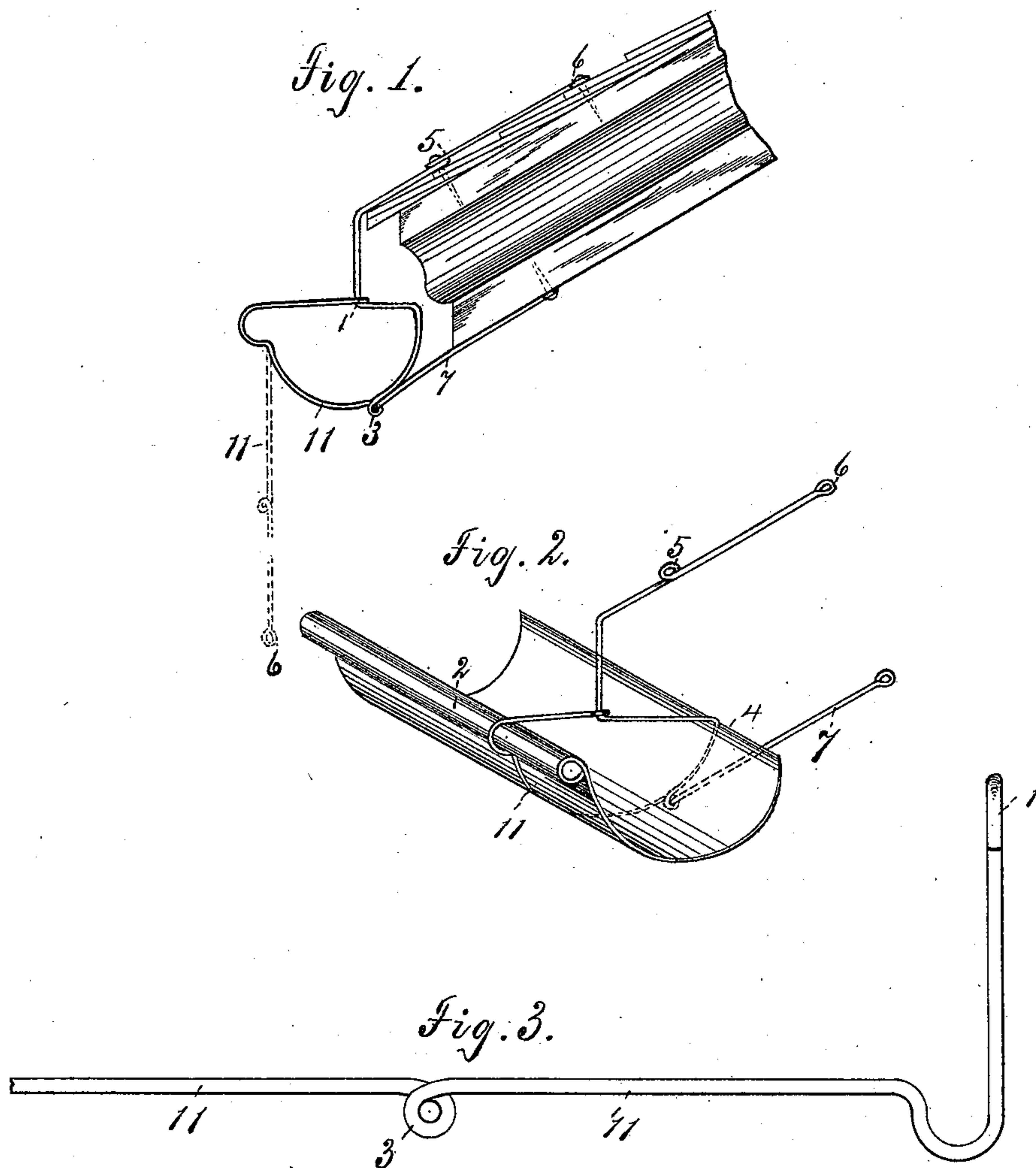


(No Model.)

E. T. KUNDERT.
EAVES TROUGH HANGER.

No. 356,046.

Patented Jan. 11, 1887.



Witnesses
C. H. Graham.
O. B. Porter

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UNITED STATES PATENT OFFICE.

EDWARD T. KUNDERT, OF MONROE, ASSIGNOR OF ONE-HALF TO DAVID
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EAVES-TROUGH HANGER.

SPECIFICATION forming part of Letters Patent No. 356,046, dated January 11, 1887.

Application filed August 16, 1886. Serial No. 211,075. (No model.)

To all whom it may concern:

Be it known that I, EDWARD T. KUNDERT, a resident of Monroe, in the county of Green and State of Wisconsin, have invented certain new and useful Improvements in Eaves-Trough Hangers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

In the accompanying drawings, to which this specification refers, Figure 1 shows the hanger attached to a simple form of projecting roof. Fig. 2 is a perspective view of a portion of a trough supported by this hanger. Fig. 3 shows the body of the hanger in the form in which it may come to the hands of the workman who attaches it to the building.

The hanger consists of two wires, of which one forms the body and supporting portion, the other a brace running from the body of the trough to any convenient point of support. The first wire, beginning with a locking-hook, 1, immediately over the middle of the trough and in the plane of its upper edges, passes horizontally to the trough's front edge, whence it follows the outer surface to a point vertically, or nearly so, below the hook 1. Here it makes a complete turn upon itself, forming a vertical loop, 3. It is then carried in the same direction as before to the other edge, 4, of the trough, thence horizontally to the hook 1, which it engages. It then passes vertically upward to the edge of the roof, and by a suitable deflection is caused to lie upon its surface, where it is secured by nails driven through loops 5 6. The other wire or brace, 7, by means of a hook at its extremity, is attached to the loop 3 at the bottom of the trough, and the hook is then closed. The brace then swings freely in any direction and may be carried to the under side of the cornice, as shown in Fig. 1, or to any convenient portion of the cornice or of the wall of the building, and, like the other part, be fastened by a nail driven through a loop, 8.

The body of the hanger inclosing the trough is made slightly narrower than the normal width of the trough itself, so that when in place it may slightly compress the latter and pre-

vent all the motion and noise, which are often consequent upon the action of the wind.

The braces 7 may be omitted from any desired proportion of the hangers when the full number of braces is deemed unnecessary to secure proper rigidity, and, indeed, when the brace is attached at the bottom of the trough, instead of at a point above its body, fewer braces are required to produce the same degree of security.

As has been said, the hanger may be partially formed as indicated in Fig. 3 and by dotted lines in Fig. 1, leaving the workman to complete it at the time of its attachment to the building, as he may readily do if the hook, loops, and shorter bends have been properly formed.

I am aware that a hanger has already been constructed of a single wire bent in substantially the same form as the hanger proper, shown and described herein, but lacking the brace-attaching eye 3 or any equivalent thereof; and I am further aware that a wholly-different hanger has been made of sheet metal, the body of the hanger being curved to conform to the bottom of an eaves-trough and bent over the edges thereof, and a tangential spike or pointed brace being formed from said body, the head of said spike or brace being near the middle of the body, to which it adheres. It is therefore not broadly new to form a hanger of a single wire encircling the eaves-trough, and to supply such hanger with a brace of wire or other material. So far as I know, however, it is novel to form in the body of the hanger, at a point beneath the eaves-trough, an eye for the attachment of a brace, the brace being connected with the hanger by hooking it in said eye, and thus forming a universal joint. This form of connection evidently gives the brace the greatest possible range of position and makes it possible to use a straight brace-rod, of any reasonable uniform length, in any of the varying positions in which the trough and hanger must be placed.

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

1. In an eaves-trough hanger, the combination, with a body curved to conform to the

bottom of an eaves-trough and having an eye formed in it near its middle, of a brace having one of its ends hooked in said eye, said hook and eye forming a universal joint between said
5 body and brace, substantially as and for the purpose set forth.

2. In eaves-trough hangers of the class described, the combination of a vertical supporting-rod, a looped attaching member continuous
10 therewith above a curved trough-embracing member continuous therewith below, provided near its middle with an integrally-formed eye and at its free end with an integrally-formed hook for engaging said rod, and a brace articu-

lating with said eye and adapted to connect it 15 securely with the building, substantially as and for the purpose set forth.

3. The hook 1, body 11, and loop 3, supporting portion 10 9, and loops 5 6, and the brace 7, combined and co-operating substan- 20 tially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EDWARD T. KUNDERT.

Witnesses:

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OTTO A. TSCHUDY.