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C. & C. S. HINES.

EAVES TROUGH.

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Patented Nov. 19, 1912.

1,044,886.

Fig. 1.

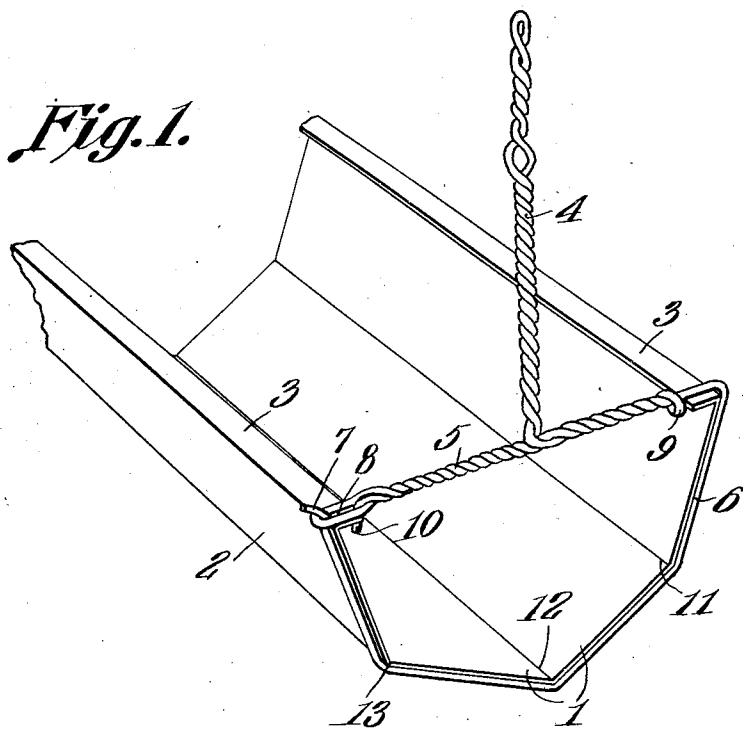
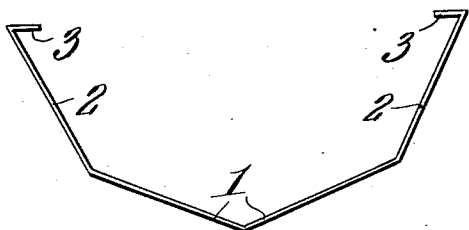


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHRISTIAN HINES AND CHARLES S. HINES, OF NAPOLEON, OHIO.

EAVES-TROUGH.

1,044,886.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed November 21, 1910. Serial No. 593,513.

To all whom it may concern:

Be it known that we, CHRISTIAN HINES and CHARLES S. HINES, citizens of the United States, residing at Napoleon, in the county of Henry, State of Ohio, have invented a new and useful Eaves-Trough, of which the following is a specification.

This invention relates to eaves troughs, and has for its object to provide a trough of this character wherein the sediment is prevented from collecting in the bottom thereof and is carried away by the action of the water.

A further object is to provide a novel eaves trough and hanger therefor, the hanger being bent from wire and engaging the eaves trough in a novel manner.

With the above and other objects in view this invention is embodied in the novel arrangement and construction of parts as hereinafter described, the invention being illustrated in the accompanying drawings, wherein:—

Figure 1 is a fragmental perspective of the eaves trough constructed in accordance with the present invention and showing the hanger applied thereto. Fig. 2 is an end elevation of the trough.

Referring in detail to the drawings, the trough is formed from a length of sheet metal of suitable character, bent longitudinally to form the bottom 1 which is bent at an obtuse angle, the sides 2 which are at an obtuse angle to the bottom, and the edges 3 of which are intumed to form flanges 3. In contour the trough is semi-octagonal.

The water in running into the trough from the roof usually carries with it soot and other foreign matter, and thus upon the water falling upon each side of the bottom and in running into the corner formed by the obtuse angle, the sediment is washed into the said corner and agitated or kept in suspension whereby the water in traveling along the said corner carries away the sediment. In this manner the trough is kept free from sediment and the life thereof is lengthened to a material extent.

The trough is provided with the intumed edges or flanges 3 for the purpose of strengthening the same and also for the attachment of the hanger which is bent from a length of wire to form a twisted double strand lateral brace 5 fitting between the flanges and having an eye 8 at one end

thereof resting upon the corresponding flange and projecting slightly beyond the trough and a catch 10 at the said end abutting against the corresponding flange 3 and engaging thereinunder, and at the other end the said brace has a similar catch 9 abutting against and engaging in under the other flange 3 thereby retaining the brace in position. From the latter end of the brace a stand 6 passes over the corresponding flange and encircles the outer side of the trough and has its free end passed through the projecting end of the eye 8 and bent outward as designated at 7; and from the central portion of the brace 5 the wire is formed into a twisted suspending arm 4 upstanding therefrom. Following the wire from end to end, one end of the wire is formed into the catch 9 and the wire then extends to the arm 4, then to the upper end thereof and back to the lower end of the said arm, then to the other end of the brace 5 to be looped to form the eye 8 and adjacent the said eye is doubled and twisted to form the catch 10, and then the wire extends to the other end of the brace 5, the other end of the wire being free and forming the trough-encircling strand 6. The brace 5 prevents the sides 2 of the trough from being pressed inwardly and the strand 6 locks the sides of the trough from being distended or otherwise distorted.

In applying the hanger to the trough the brace 5 is inserted therein in a diagonal position and then swung to a transverse position to bring the catches 9 and 10 in under the flanges 3, and the strand 6 is then passed around the trough and engaged with the eye 8. The arm 4 of the hanger is secured to the eave of the roof in any convenient manner, thereby suspending the trough from the eave. The brace 5 in being locked to the flanges 3 by the catches 9 and 10 is also prevented from releasing the trough should the strand 6 become accidentally disengaged from the eye 8. It will therefore be seen that the particular form of bottom of the trough prevents the accumulation of sediment in a trough and that novel combination is provided between the specific form of trough having the intumed edges and the specific hanger.

What is claimed as new is:—

A wire hanger for attachment to and combination with an eaves trough havin

inturned flanges, comprising a brace adapted to fit between the flanges and having catches at the ends thereof to engage under the flanges so as to necessitate the swinging of the brace relative to the trough to engage and disengage the catches and having an eye at one end to rest upon the corresponding flange and project beyond the trough, a strand extending from the other end of the brace to pass over the other flange and encircle the trough with its free end

engageable through the eye, and a suspending arm upstanding from the brace.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

CHRISTIAN HINES.
CHARLES S. HINES.

Witnesses:

OLIVER HIGGINS,
E. A. HETTEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
