C. A. CODDING.

Eaves-Trough.

No. 168,231. Patented Sept. 28, 1875.

Fig. 1.

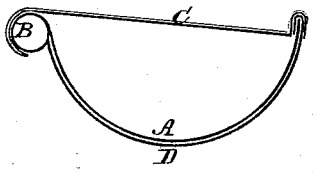
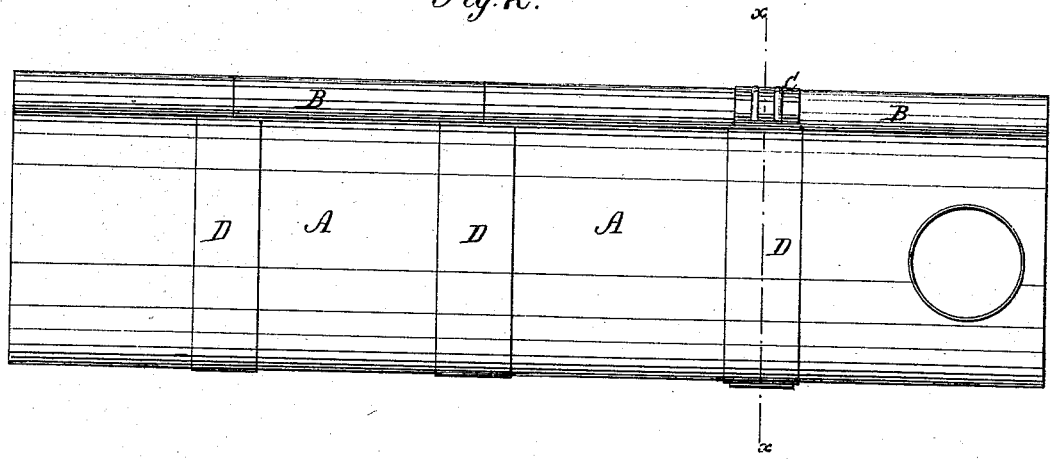


Fig. 2.



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CHARLES A. CODDING, OF DOWAGIAC, MICHIGAN.

IMPROVEMENT IN EAVES-TROUGHS.

Specification forming part of Letters Patent No. **168,231**, dated September 28, 1875; application filed September 7, 1875.

To all whom it may concern:

Be it known that I, CHARLES A. CODDING, of Dowagiac, in the county of Cass and State of Michigan, have invented a new and Improved Eaves-Trough; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a transverse section through line *x x;* Fig. 2, an inverted plan.

The invention relates to certain improvements in the half-round eaves-troughs attached to the lower edges of the roofs of houses for the purpose of conducting away the water. As ordinarily constructed, said troughs are composed of sections of sheet metal lapped and soldered together and bent in semi-cylindrical shape, one of the edges being headed or bent around so as to form a continuous tube, to impart stiffness to the trough. The sections thus fastened together are very liable to come apart, and the trough become useless for the purpose intended.

My invention consists of a band of metal soldered upon the transverse lap-seam, and fastened at one end beneath the stiffening-tube, and bent over the edge of the trough and soldered at the other. It also consists in a brace-bar, one end of which is bent around and soldered to the tube, and the other soldered to the opposite side of the trough, to brace and hold the sides of the trough the proper distance apart.

In the drawing, A A represent sections of the sheet metal forming the eaves-trough, which are lapped at the ends, soldered, and bent into a half-round or semi-cylindrical shape. B is the continuous bead or tube formed upon one side of the trough by bending the metal into a tubular or cylindrical form. Said tube or bead serves to stiffen the trough in longitudinal direction, and also affords an attachment to which my brace and band are fastened. C is said brace, which consists of a strip of sheet metal fluted longitudinally to give it stiffness, and fastened at one end by being bent around and soldered to the tube, and at the other by being bent over and soldered to the other side of the trough. D is a band of sheet metal, which is made to correspond to the bottom of the trough, and is fastened upon the lap-seam of the sections of the trough by means of solder, one end being held and fastened between the tube and the side of the trough, and the other end bent over and fastened to the top of the side of the trough.

By means of this band the strength of the trough is very greatly increased and the ordinary weak lap-seam made the strongest part of the trough. The mode of attaching the brace-bar also secures great advantage in that its bend around the tube serves to assist the solder in holding it in position.

Having thus described my invention, what I claim as new is—

1. The combination, with the sections of metal forming the trough, of the bands D, soldered upon the lap-seams and fastened at one end beneath the tube or bead, and bent at the other over the side of the trough, as and for the purpose described.

2. The combination, with the sides of the trough, of the brace C, bent over and soldered to the side of the trough at one end, and bent around and soldered to the tube or bead at the other, for the purpose described.

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Witnesses:

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