

C. A. CODDING.

CLAMPS FOR SOLDERING EAVES-TROUGHS.

No. 173,588.

Patented Feb. 15, 1876.

Fig. 1.

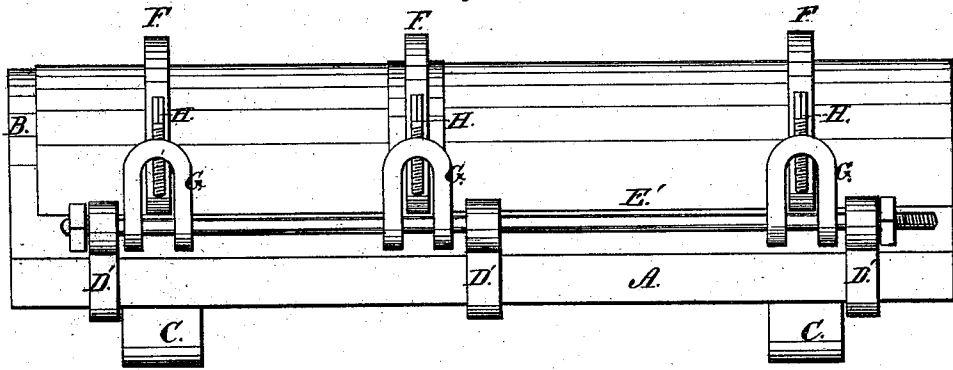


Fig. 2.

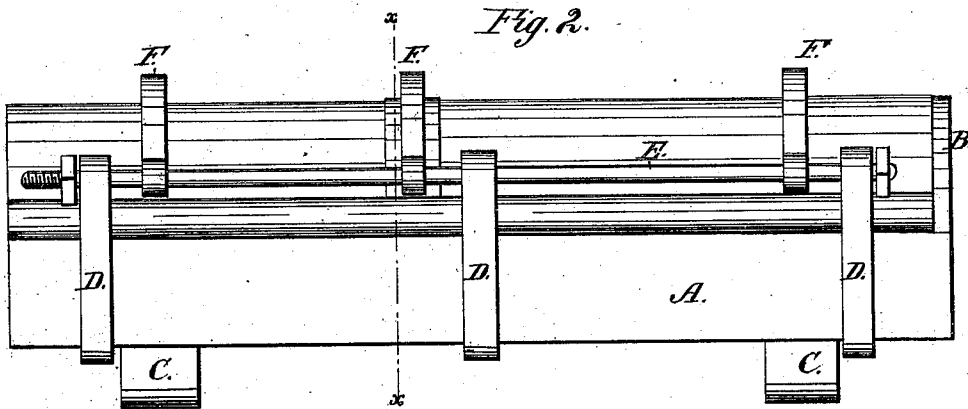
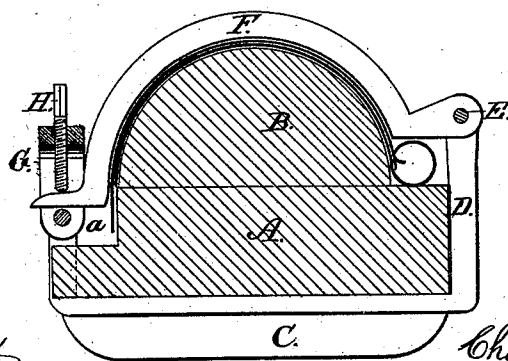


Fig. 3.



WITNESSES:

W. W. Hollingsworth

John C. Kemmer

INVENTOR:

Chas. A. Coddington

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES A. CODDING, OF DOWAGIAC, MICHIGAN.

IMPROVEMENT IN CLAMPS FOR SOLDERING EAVES-TROUGHS.

Specification forming part of Letters Patent No. **173,588**, dated February 15, 1876; application filed January 3, 1876.

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 Machine; 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 front elevation; Fig. 2, a rear elevation; Fig. 3, a transverse section through line *x x*.

The invention relates to certain improvements in machines for making eaves-trough. It consists of a platform placed upon rests or rockers, upon which platform is firmly attached a half cylinder. On each edge of the half cylinder is arranged a set of standards, through which rods run for the support of the former-levers and their gripe attachments. These levers are made in a semi-cylindrical form, one end having a shank, through which a hole is made, for attachment to and lateral adjustability on the supporting-rod. The under side of this shank also bears upon the bead or tube of the trough, forcing it down to the platform. The other end of these levers has a shank, the upper side of which is beveled, upon which beveled face bears a set-screw or bolt in the U-shaped gripe attachment, which latter are pivoted upon a supporting-rod, and made laterally adjustable.

In the drawing, A represents the platform, rabbeted at *a*, provided with the half cylinder B, and mounted upon rockers C. D are the rear standards, which support rod E, and D' are the front standards, which support rod E'. F are the former-levers, pivoted through their shanks to the rear rod E, and made laterally-adjustable thereon to suit the interval of the joints. G are the U-shaped gripe attachments, pivoted upon rods E', and made laterally-adjustable thereon to suit the adjustment of the former-levers. H are set-screws, passing through the gripe attachments and bearing upon the beveled ends or shanks of the former-lever, so as to give a variable amount of pressure.

The semi-cylindrical part of the levers forces the eaves-trough while it is being soldered tightly down upon the half cylinder on the platform, and also holds the band tightly to the convex part of the eaves-trough while it (the band) is being soldered to the trough. The principle part of the gripe attachment is made in the form of an inverted U, with a hole through each of the lower ends, through which passes the supporting-rod. In the bow or upper part of the same is a set-screw or bolt, the object of which is to increase or decrease the pressure upon the end of the lever having the beveled shank.

The edge of the platform upon which the gripe attachments are placed is rabbeted, so as to allow that portion of the band which is lapped upon the inside of the trough to extend down while the band is being soldered onto the trough.

The machine is used in the following manner: The levers and their gripe attachments are swung on their supporting-rods away from the half cylinder, which is placed upon the platform. The machine is then ready for reception of the sections of stock composing the trough, which is prepared in the usual manner—that is, by being cut the desired width, then formed to a half cylinder. After this it is beaded, or the tube formed on one edge. The ends of the tubes are then slipped together, and the sections of the trough placed upon the half cylinder. The band, after being properly prepared, is placed upon the seam to be soldered. The levers are then swung over onto the trough and the band, the gripe attachments are slipped over the beveled ends of the levers, forcing them (the levers) tightly over the trough and band. The trough is then in position to be soldered, which is effected to best advantage by tilting the whole device upon the rockers, so as to bring the different portions of the seam within convenient reach of the soldering-iron.

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

1. The gripe attachments G, having set-

screws H, in combination with the former-levers, having beveled ends, as and for the purpose described.

2. The combination, with the platform and half cylinders, of the standards D D', supporting-rods E E', laterally-adjustable former-levers E, and laterally-adjustable gripe attachments G, having set-screws H, as and for the purpose specified.

The above specification of my invention signed by me this 27th day of December, 1875.

CHARLES A. CODDING.

Witnesses:

T. H. ROSS,

C. J. GREENLEAF.