

W. H. Henderson,

Soldering Clamp.

N^o 28,369.

Patented May 22, 1860.

Fig. 3

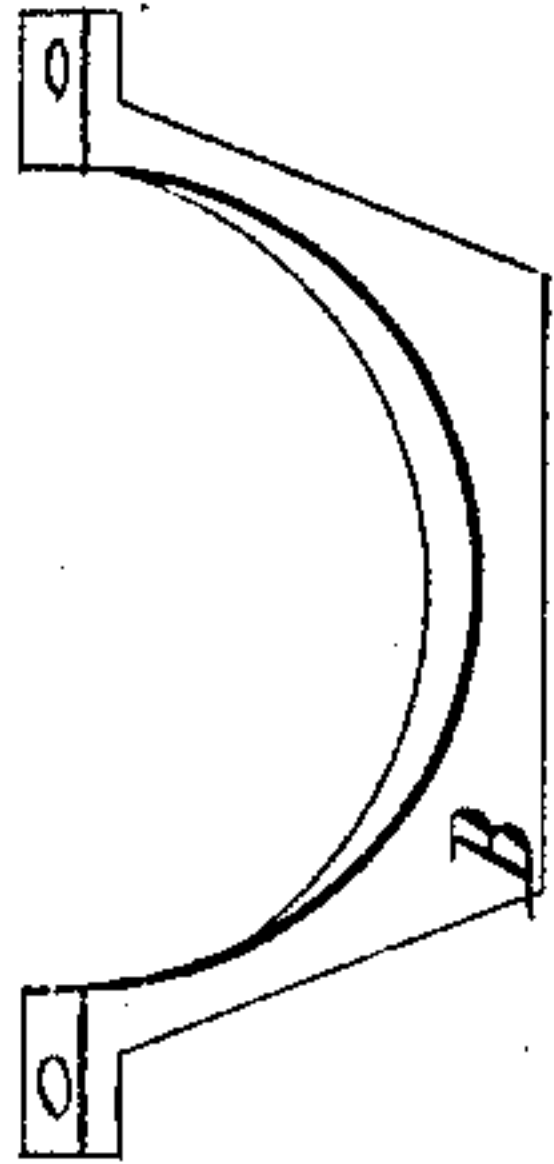


Fig. 2

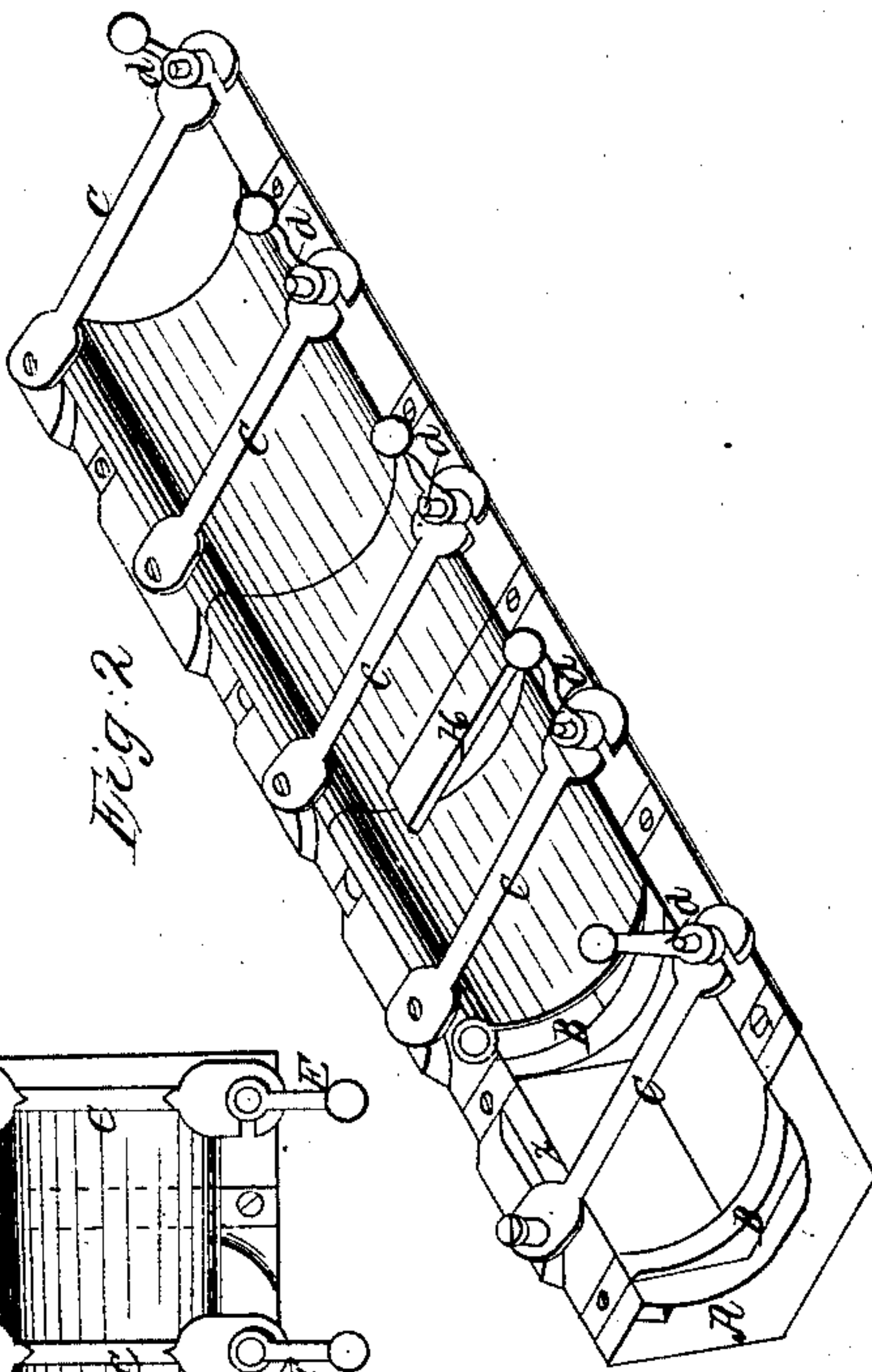
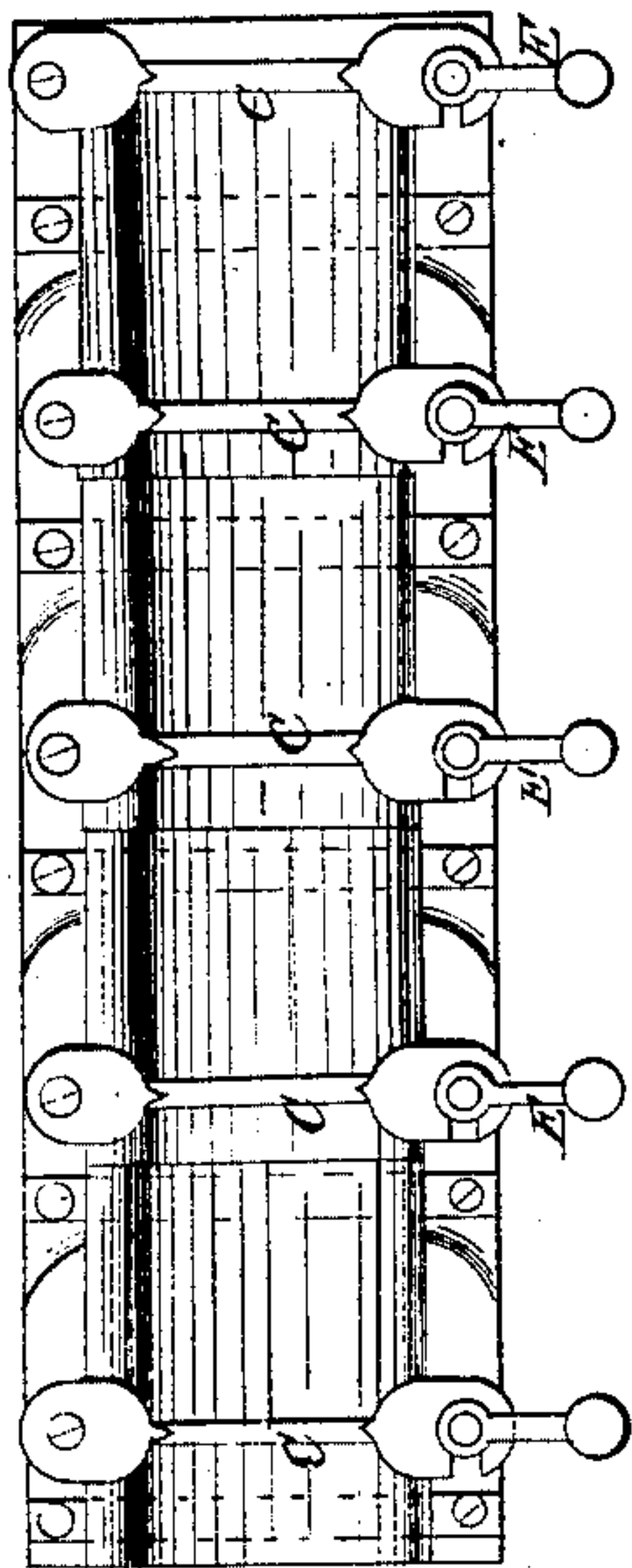


Fig. 1



Witnesses:
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UNITED STATES PATENT OFFICE.

WM. H. HENDERSON, OF FRANKLIN, INDIANA.

IMPROVED MACHINE FOR MAKING RAIN-TROUGHS.

Specification forming part of Letters Patent No. 28,369, dated May 22, 1860.

To all whom it may concern:

Be it known that I, WILLIAM H. HENDERSON, of Franklin, in the county of Johnson and State of Indiana, have invented certain new and useful Improvements in Machines for Making Gutters or Eaves-Troughs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in constructing and arranging this machine substantially in the manner hereinafter set forth.

In the annexed drawings, Figure 1 represents a plan view of the machine. Fig. 2 is a perspective view. Fig. 3 is a cross-section.

In the figures, A is the box which constitutes the body of the machine. This box is a longitudinal wooden or metallic trough made in the shape which it is desired to have the gutter made in.

B B represent metallic braces or supporters, which are placed at short distances apart within the box to keep it in proper position, and from yielding.

C C represent a series of levers, which are pivoted to one side of the box, and which lie across the said box, their other ends being provided with slots, into which pass the screws *d d d*.

E E E represent nuts with handles or cranks, which pass over the screws *d d d*, and which bear upon and confine down the ends of the levers C C.

In using this machine for making gutters the metal of which the gutter is made is cut into sheets of proper size and one edge turned,

as represented in Fig. 2, the roll of the metal being confined between the end of the lever C and a shoulder made in the box. (Seen at *x*.) The other end of the lever being pressed down, it presses upon the other edge of the metal and forces it down in proper shape into the box. The levers are then made to embrace the screws *d d d*, and the nuts being screwed down the sheets of the metal are held in proper position for having the joints between them soldered. The braces H may be soldered in at the same time and the gutter made almost complete without changing its position or removing it from the box A. By this arrangement the gutter is held so that the operator can use his left hand for holding the brace H while soldering it in, and he can at the same time solder almost around the bead on the front side without changing the position of the gutter.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The employment of the box A, and the curved metallic braces and supporters B B, when the same are used, substantially as and for the purpose herein specified.

2. In connection with the box A the employment of the levers C C C, screws *d d d*, and nuts E E E, when the same are used for the purpose of holding the gutter in proper position for soldering the joints and the braces in the gutter, substantially as herein set forth.

WILLIAM H. HENDERSON.

Witnesses:

SAMUEL C. OYLER,
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