(No Model.)

# T. B. BEESON.

## ROOFING TONGS.

No. 343,422. Patented June 8, 1886.

Fig. 1.

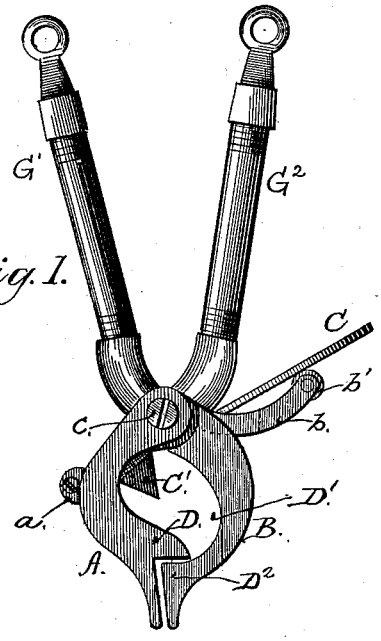



Fig. 2.

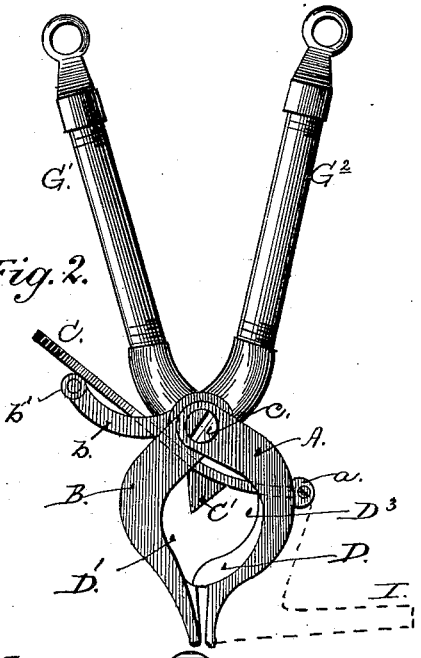



Fig 3.

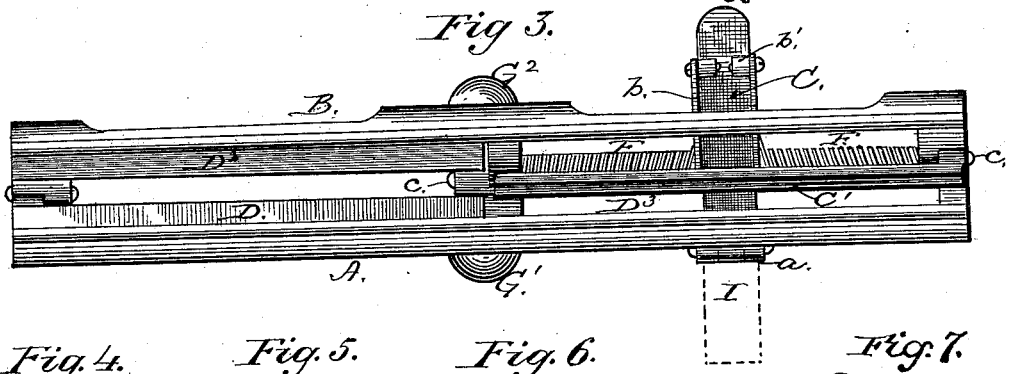



Fig. 4.

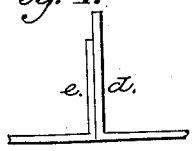



Fig. 5.

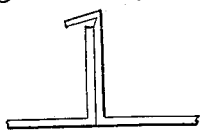


Fig. 6.

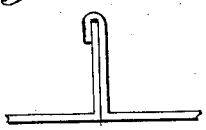


Fig. 7.

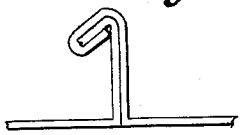
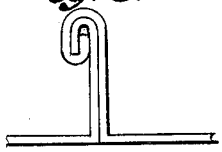


Fig. 8.



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# UNITED STATES PATENT OFFICE.

THOMAS BABB BEESON, OF WILMINGTON, DELAWARE.

## ROOFING-TONGS.

SPECIFICATION forming part of Letters Patent No. 343,422, dated June 8, 1886.

Application filed November 21, 1885. Serial No. 183,528. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS BABB BEESON, a citizen of the United States, residing at Wilmington, in the county of New Castle and State of Delaware, have invented certain new and useful Improvements in Roofing-Tongs or Double Seamers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in roofing-tongs or double seamers for bending the edges of metallic plates or sheets of tin together; and the improvements consist, essentially, of the novel details of construction and general arrangement of parts, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents an end elevation of my improved tongs; Fig. 2, a similar view taken from the opposite end; Fig. 3, a bottom plan view thereof; Fig. 4, an end view of two upright sheets of metal; Fig. 5, a similar view with the high edge of one plate partly bent or lapped over the upper edge of the opposite plate; Fig. 6, a similar view showing the high edge of one plate bent closely down over the edge of the adjoining plate; Fig. 7, a similar view showing the upper edges of both plates partly bent or doubled seamed together, and Fig. 8 a similar view showing the plates finished for roofing or other purposes.

Similar letters of reference occurring on the several figures indicate like parts.

In carrying out my invention the tongs are composed of the two jaws A and B, pivoted together and adapted to be opened and closed by means of the handles $G' G^2$ in a manner well known. The jaw A is provided upon its inner side with a tapering shoulder, D, extending half-way the length of said jaw, while the opposite jaw, B, is provided with a shoulder, $D^2$, and with a V-shaped lower end terminating in a curved recess, D′, extending an equal distance along its length, for the reception therein of the shoulder D, as fully shown in Fig. 1. The inner face of the jaw A at the opposite end of the tongs is also provided with a curved recess, $D^3$, extending half the length of said jaw, while the opposite portion of the jaw B has its inner edge tapering downwardly and slightly outward, as shown. Upon the upper outer edge of the jaw A at this end of the tongs are provided lugs or projections *a*, between which is pivoted one end of the treadle C, which is provided with a downwardly-projecting V-shaped flange, C′, adapted to move within the curved recess D′ of the jaw B, and to impinge upon the slanting edge of said jaw during the operation of seaming the edges of the plates of sheet metal. The outer free end of this treadle C is adapted to be held in a raised position by means of a curved arm or lever, *b*, the outer end of which, carrying a frictional roller, *b′*, engages with the under surface of said treadle C, while its inner end works upon a transversely-arranged rod, *c*, upon which is secured a coiled spring or springs, F, which engage with said arm or lever *b′* to hold the treadle C in a raised position when not in use.

The operation of my invention is as follows: Tongs No. 1, which represent the system of tongs which leave the metal with the highest or longest standing edge, known in the art as "first-seamers," and represented by Figs. 1, 2, and 3, are placed in position to operate the sheet metal, and the action of bending down the top edge, *d*—the edge as represented by Fig. 4—leaves the sheet metal for this first operation, as represented by Fig. 5. The operator closes the tongs by operating the handles thereof, and thereby closes the jaws A and B and forms the first turn, as shown by Fig. 5. This turn is made by one-half of the length of the tongs, and is brought to this form by the projection of jaw A, which overlaps the projection H of jaw B. The operator now releases the grip he has upon the sheet metal and passes his tongs along until he takes in all the sheet metal that the length of tongs will admit of, and again he closes the tongs, bending the sheet metal, as shown in Fig. 5, and after this operation is performed the operator continues to hold the jaws A and B together, and he kicks down the treadle C, which causes the projection C′ to force down, bend, and close down the edge of the sheet metal from the form of Fig. 5, and by this last act of closing causes the edge to be closed, as shown in Fig. 6. He repeats the operation along the seam as far as desired, and then, by the operation of a de-

vice known to the art as "No. 2" or "second tongs," closes down the shorter seam, as shown. The No. 2 tongs here used are of the same design and invention as here specified. The final operation of tongs No. 2 leaves the edges of the sheet metal as indicated by Fig. 7.

I propose to make these tongs of suitably-strong metal properly braced. It may be corrugated or ribbed to insure sufficient strength, and at the same time lightness of construction. A foot-rest, I, may be placed on jaw A, and is shown in dotted lines in Fig. 2. By placing this on the tongs they will stand alone.

Having thus described the construction and operation of my invention, what I claim as mine, and desire to secure by Letters Patent of the United States, is as follows:

1. The herein-described roofing-tongs, consisting of the jaws A B, provided with the treadle C, having V-shaped flange C′, said jaws A and B having the shoulders D and $D^2$ and recesses D′ and $D^3$, substantially as and for the purpose specified.

2. In roofing-tongs, the jaws A and B, provided with the treadle C, having the closing jaw or flange C′, provided with the spring-lever *b*, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS BABB BEESON.

Witnesses:
MARY A. BEESON,
THOMAS R. LALLY.