S. P. M. TASKER.

Machines for Making Metal-Tubes.

No. 157,654. Patented Dec. 8, 1874.

FIG. 5

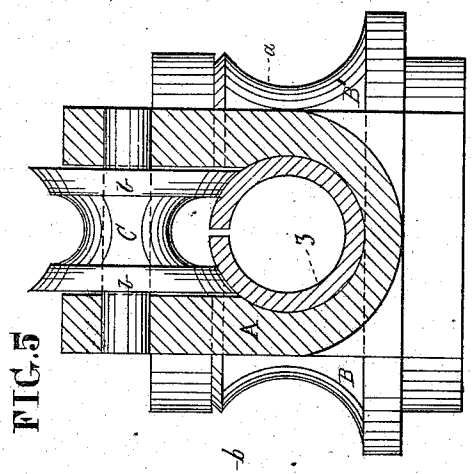


FIG. 4

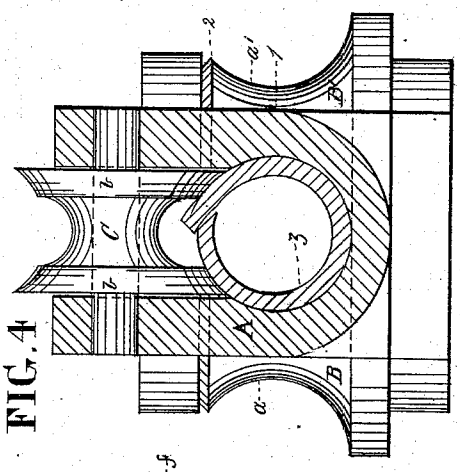


FIG. 1

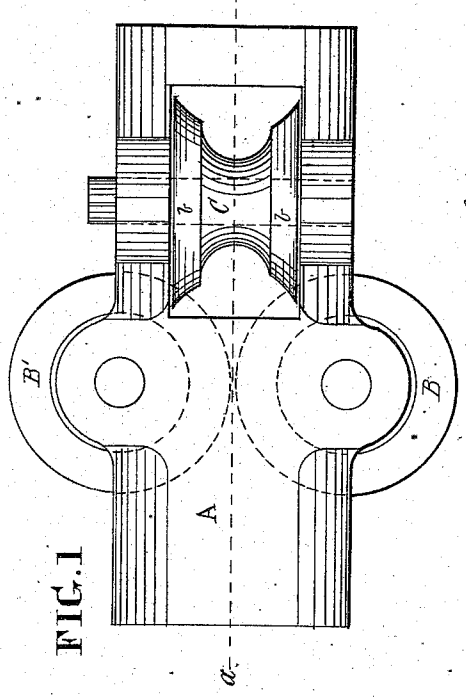


FIG. 2

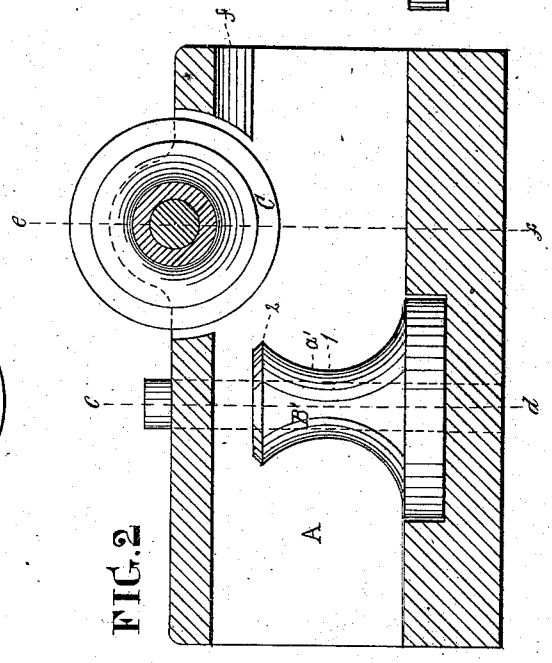
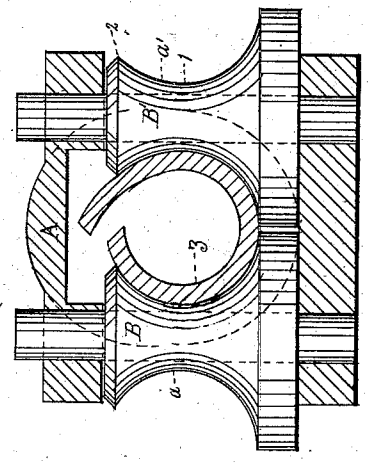


FIG. 3



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Stephen P. M. Tasker
By His Attorney
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UNITED STATES PATENT OFFICE.

STEPHEN P. M. TASKER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IH MACHINES FOR MAKING METAL TUBES.

Specification forming part of Letters Patent No. **157,654**, dated December 8, 1874; application filed October 17, 1874.

CASE B.

To all whom it may concern:

Be it known that I, STEPHEN P. M. TASKER, of the city and county of Philadelphia, in the State of Pennsylvania, have invented an Improvement in Machines for Manufacturing Metal Tubes, of which the following is a specification:

My invention relates to the combination of peculiarly-shaped rolls for bending the main portion of the skelp, a flanged roll for bending down its edges, and a hollow guide with a groove for the free passage of the edges of the skelp, as hereinafter fully described.

In the accompanying drawings, Figure 1 is a plan view of the hollow guide A and grooved rolls B B′ and C. Fig. 2 is a vertical longitudinal section at the line *a b* of Fig. 1. Fig. 3 is a cross-section at the line *c d*, looking to the left. Fig. 4 is a cross-section at the line *c d*, looking to the left. Fig. 5 is a cross-section as applied for making butt-joint tubes.

Like letters of reference in all the figures indicate the same parts.

A is a hollow guide, with which the bending-rolls B B′ and C are connected, for bending the skelp *z*, the mandrel being omitted. The guide A may be provided with a bell-shaped mouth, like that shown in my application, A, or any other suitable means, for guiding the skelp to the bending rolls. The front end of the guide, as far as the rolls B and B′, is of U shape, to correspond with the shape of the skelp that is passed into it. The curve *a* of the roll B is concentric throughout its whole extent; but the curve *a′* in the roll B′ is only one-half the height of the circle, the remaining portion of the curve from the point 1 to the point 2 receding from the center, so that the edge of the skelp on that side, when both edges are brought into the proper position for welding, shall overlap the other edge. And the hollow guide A is of such construction as to correspond with the rolls. The guide is cut away at the top to form a recess, *f*, for the free passage of the edges of the skelp, as shown also in case A, above mentioned. Beyond the rolls B and B′, and at right angles thereto, is the grooved roll C, whose beveled flanges *b b* press the edges of the skelp downward, to bring them nearer together for welding. One or more sets of rolls, constructed and arranged after the manner of the rolls B B′ and C, may be in advance of the same for bringing the edges of the skelp into proper position for welding the upper parts, the curves of the rolls B B′, and the flanges of the roll C, being of course constructed to suit the shape the edges of the skelp have to assume. As these addititional rolls are a duplication of the rolls B B′ and C, a particular description thereof is deemed unnecessary.

In a machine for making butt-joint tubes, the curvatures of the rolls B and B′ are equal, and the vertical sides of the guide A are also equal. The cross-section of such machine is shown in Fig. 5.

What I claim as my invention is—

The combination, substantially as described, and shown in Figs. 2 and 3 of the drawing, of the bending-rolls B B′, guide A, provided with the groove *f*, for the free passage of the edges of the skelp and double flanged roll C, as set forth.

STEPHEN P. M. TASKER.

Witnesses:

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