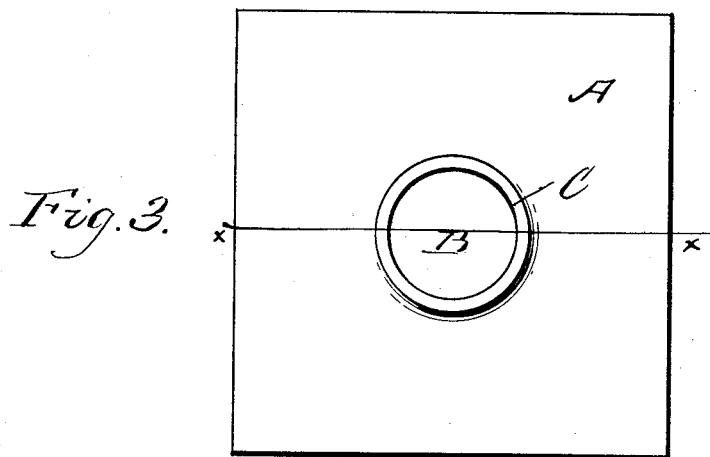
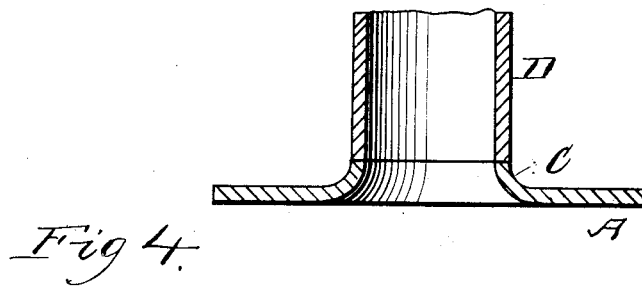
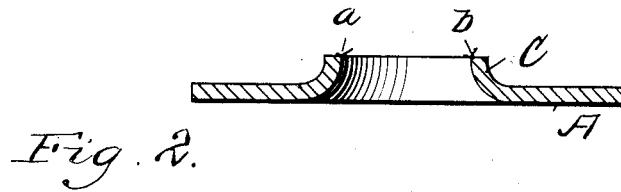


T. E. MURRAY.
METHOD OF FLANGING THE END OF A METAL TUBE.
APPLICATION FILED NOV. 29, 1916.

1,219,135.

Patented Mar. 13, 1917.



Inventor
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By his Attorney
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UNITED STATES PATENT OFFICE.

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METHOD OF FLANGING THE END OF A METAL TUBE.

1,219,135.

Specification of Letters Patent.

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Application filed November 29, 1916. Serial No. 134,003.

To all whom it may concern:

Be it known that I, THOMAS E. MURRAY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Methods of Flanging the End of a Metal Tube, of which the following is a specification.

The invention is a method of flanging the end of a metal tube, the said method consisting in the several steps performed in the order set forth in the claim.

In the accompanying drawings—

Figure 1 is a section of the metal flange plate before the rib is formed around the opening. Fig. 2 is a section after the rib is formed, on the line x, x of Fig. 3. Fig. 3 is a plan view of the flange plate. Fig. 4 is a longitudinal section of the tube and of the flange plate welded thereto.

Similar letters of reference indicate like parts.

A is a plate of metal from which the flange is to be made. I form in said plate a circular opening B, Fig. 1. Either coincidentally with the formation of said opening or

immediately afterward, I strike up the edge of said opening to form a circular rib C. The diameter across said rib between the points a, b is to be equal to the diameter of the tube D to be flanged, so that the tube may be seated upon said rib and register therewith. I then place the butt end of the tube D upon said rib, as shown in Fig. 4, and cause an electric welding current to pass through the joint between said tube and said rib, thus homogeneously uniting the same.

I claim:

The method of flanging the end of a metal tube, which consists in making a circular opening in a metal plate and bending the edge of said opening to form a circular rib registering with the butt end of said tube, placing the said tube end in contact with said rib and electrically welding said tube and rib at said joint.

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

THOMAS E. MURRAY.

Witnesses:

GERTRUDE T. PORTER,
MAY T. MCGARRY.