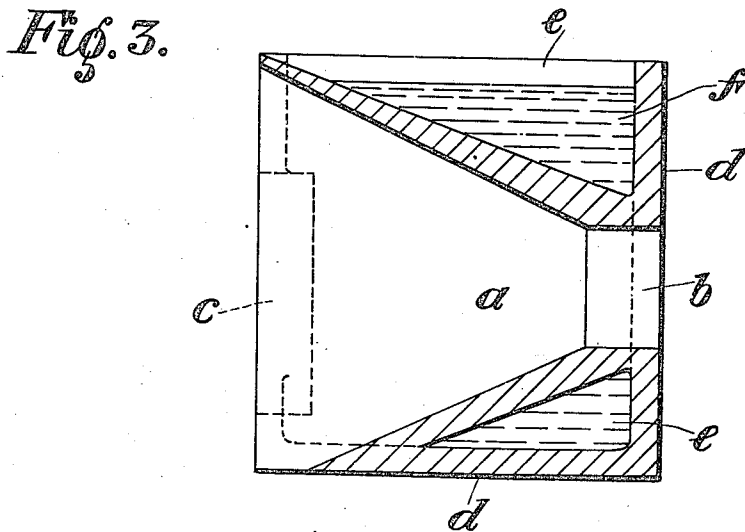
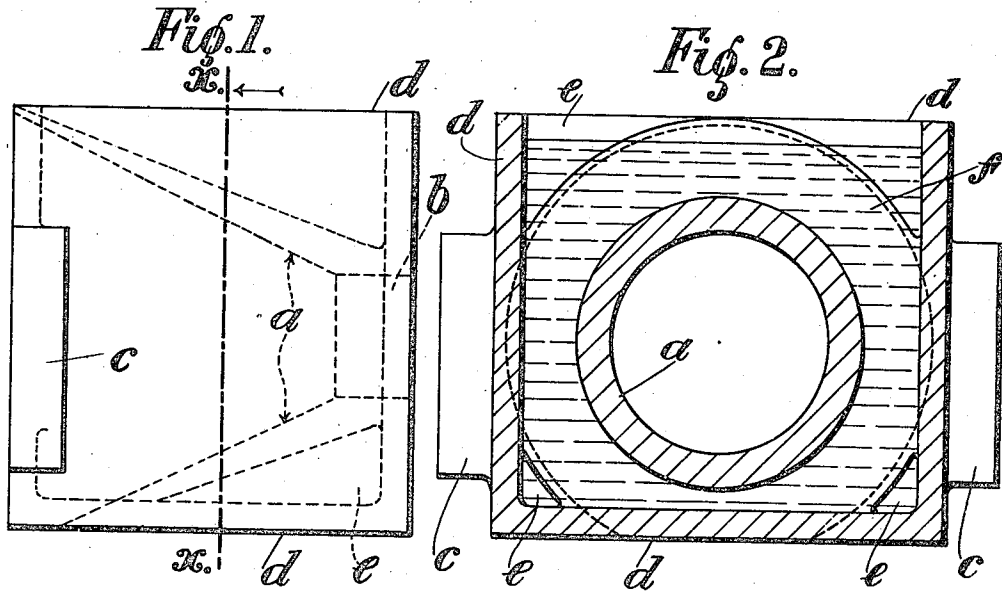


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CLOSING DIE OR BELL FOR WELDED TUBES.
APPLICATION FILED SEPT. 30, 1919.

1,353,721.

Patented Sept. 21, 1920.



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UNITED STATES PATENT OFFICE.

DOUGLAS WHIMSTER CHISHOLM, OF GARNKIRK, SCOTLAND.

CLOSING DIE OR BELL FOR WELDED TUBES.

1,353,721.

Specification of Letters Patent.

Patented Sept. 21, 1920.

Application filed September 30, 1919. Serial No. 327,452.

To all whom it may concern:

Be it known that I, DOUGLAS WHIMSTER CHISHOLM, of Woodhead, Garnkirk, Lanarkshire, Scotland, a subject of the King of Great Britain, have invented a certain new and useful Improved Closing Die or Bell for Welded Tubes, of which the following is a specification.

This invention relates to closing dies or bells for use in the manufacture of butt welded and lap welded tubes.

Under this invention the die or bell is provided with an open casing, or trough, or the like so made and arranged that, when the bell is dipped into the water tank for cooling purposes in the usual way, the casing or trough becomes wholly or partially filled with water and then when the bell is fitted in the usual frame and a heated skelp or strip drawn through it the water keeps the bell cool.

In order that the invention may be clearly understood I have hereunto appended an explanatory sheet of drawings whereon I have shown, by way of example, one mode of constructing the improved die or bell.

Figure 1 is a side elevation of the bell.

Fig. 2 is a cross section taken on the line $x-x$ Fig. 1, and looking in the direction of the arrow.

Fig. 3 is a longitudinal section.

The improved bell, as shown, is made, as usual, with a conic bell part a , bore b , and lugs c , and cast in one with the bell part are side, bottom and back walls d which constitute an open trough or casing of rectangular shape as shown. Owing to the conic bell part being smaller than the trough a space e is left around the bell.

When the bell is dipped into the water

tank as usual the space e is filled, more or less, and, when the bell is dropped into place in the usual frame or housing on the draw bench the water f in the space keeps the bell cool and prevents it being burned.

The lugs c form extensions on the side walls of the trough.

Having now fully described my invention what I claim and desire to secure by Letters Patent is:—

1. A closing die or bell for use in the manufacture of butt welded and lap welded tubes having, integral therewith, an open trough or casing for the reception of water for cooling purposes.

2. A closing die or bell for use in the manufacture of butt welded and lap welded tubes having walls integral with the die or bell and which constitute an open casing or trough for the reception of water, substantially as described.

3. A closing die or bell for use in the manufacture of butt welded and lap welded tubes having a rectangular upstanding wall which constitutes an open casing or trough for the reception of water, substantially as described.

4. A closing die or bell for use in the manufacture of butt welded and lap welded tubes having a rectangular upstanding wall springing from the sides and back of the die or bell and which constitutes an open casing or trough for the reception of water, substantially as described.

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

DOUGLAS WHIMSTER CHISHOLM.

Witnesses:

MARY GREEN,
CLARA McHAFFIE.