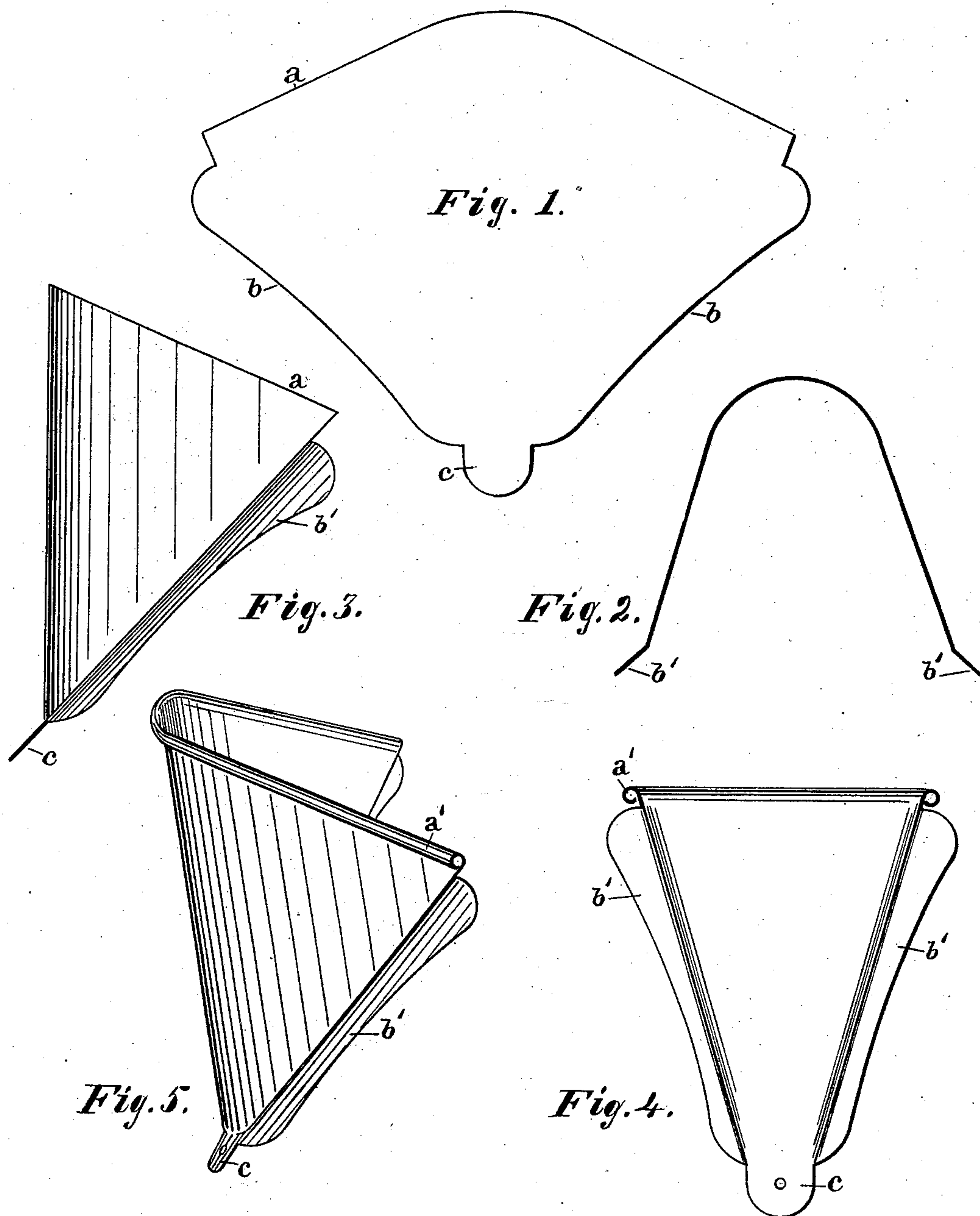


(No Model.)

G. W. KNAPP.
LIP FOR COFFEE BOILERS.

No. 281,522.

Patented July 17, 1883.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE W. KNAPP, OF BALTIMORE, MARYLAND.

LIP FOR COFFEE-BOILERS.

SPECIFICATION forming part of Letters Patent No. 281,522, dated July 17, 1883.

Application filed April 3, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. KNAPP, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Lips for Coffee-Boilers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain improvements in manufacturing lips for coffee-boilers and similar vessels, which will first be described, and then designated in the claims.

In the drawings hereto annexed, Figure 1 is a view of the flat blank. Fig. 2 is a top view of the lip as it appears at the second stage, showing the conventional shape. Fig. 3 is a side view of the same. Fig. 4 is a rear view of the finished lip. Fig. 5 is a perspective view of the finished article.

The object of my invention is to produce a better and cheaper lip for coffee-boilers, the finished article having the requisite shape, ready for attachment to the boiler, and provided with a hollow coil at its curved top edge. Heretofore these lips have been made with either a turned-over top edge filled with a wire, or a flat turned-down or hemmed edge. The usual method of manufacture has been to first cut out the blank; then, while the blank is flat, to either turn the top edge over a wire or turn the top edge flat. Next, the flat blank is bent or formed to the conventional curved shape, and finally is flanged to fit the boiler. By pursuing this method of turning the top edge before forming the flat blank to the required curved shape, it is impracticable to have a hollow coiled edge, such as I aim to produce. As heretofore made, where the top edge is wired, there is the objection of additional cost to the article, and where the top edge is hemmed or merely turned flat the curved lip, before being attached to the boiler, is easily sprung out of shape, and although at first formed with the requisite curve, it has a constant tendency to spread open, approximating the flat. These objections are overcome by my improvement, which will now be described.

In Fig. 1, which shows the flat blank, the letter *a* designates the top edge of the lip,

which is subsequently formed into a hollow coil, *a'*, as in Figs. 4 and 5. *b* designates the edges, which are subsequently bent to form the flanges *b'*, which fit and are attached to the boiler. *c* is a point at the lowermost extremity of the lip, which is sometimes provided with a hole, as shown, for a rivet.

This lip is made by the following-described improved method: First, the flat blank shown in Fig. 1 is cut out. Then by suitable means the flat blank is formed to the conventional curved-lip shape, and while held by the means which forms it the final step is taken—to wit, forming the curved top edge into a hollow coil. As the forming of the hollow coil at the curved top edge is the last step in the operation, the metal at this point is not afterward disturbed, as is the case by the old method, where the curved top edge is wired or hemmed while the blank is flat. The result by my improvement is that the metal at the curved hollow coiled edge is never split or cracked. Again, as the forming of the curved hollow coiled edge is the last step, and as it is formed while the lip has exactly the desired curve, it results that said coiled edge serves to prevent the curved lip from spreading open, and retains it to the exact shape.

Having described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The improved method of making lips for coffee-boilers, consisting of first cutting a flat blank, then by suitable means forming the flat blank to the conventional curved-lip shape, and, while held by the means which forms it to the said shape, lastly forming the curved top edge into a hollow coil, as set forth.

2. As an improved article, a lip for coffee-boilers and similar vessels, having the shape requisite for attachment to the vessel, and provided with a hollow coil at its curved top edge, as set forth.

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

GEORGE W. KNAPP.

Witnesses:

JNO. T. MADDOX,
CHAS. B. MANN.