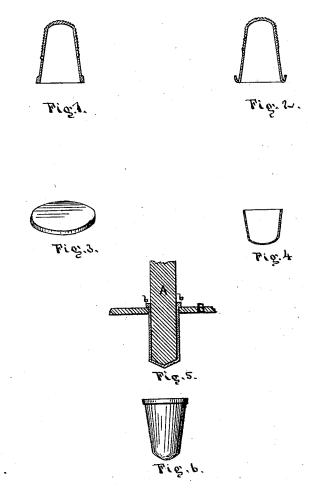
# E. B. TOWLE. THIMBLE.

No. 110,879.

Patented Jan. 10, 1871.



# Anited States Patent Office.

# EDWARD B. TOWLE, OF NEWBURYPORT, MASSACHUSETTS.

Letters Patent No. 110,879, dated January 10, 1871.

#### IMPROVEMENT IN THIMBLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

I, EDWARD B. TOWLE, of Newburyport, in the county of Essex and State of Massachusetts, have invented a certain new and useful improved Solid-Edge Thimble, of which the following is a complete specification.

## Nature and Object of the Invention.

The nature of my invention consists in so making a sheet-metal thimble that the solid edge shall be of solid metal instead of the usual folded or doubled edge, the object being to construct a thimble that is much more durable than one made in the ordinary manner.

# Description of the Drawing.

Figure 1 shows a section of a thimble having a solid edge as made by my process.

Figure 2 shows a section of a thimble having a double edge as usually made.

Figure 3 represents the blank from which the thimble is struck.

Figure 4 represents the thimble after it has undergone the first or swaging.

Figure 5 represents the thimble after it has undergone the second or drawing process, the mandrel being still within the thimble and the thimble being still within the draw-plate.

Figure 6 represents the thimble after having undergone the third or shaping process.

### General Description.

The blank, fig. 3, is first made from any suitable metal, and of the size suitable for the thimble to be made. It is then swaged in the usual manner into the form shown in fig. 4.

After being made in the form represented in fig. 4, it is placed on a mandrel, A, and forced through the draw-plate B, which operation causes an accumulation of metal to form as shown by b b, which, when the thimble is completed, becomes the reinforced or thickened edge.

The shaping of the thimble is completed by stamping the thimble into a die, from which it takes the form represented in fig. 6.

In the common thimble the reinforced edge is made by doubling the edge back onto itself. This method makes an incomplete article, as the doubled edge, in turning, is apt to be so much cut as to separate the folded part and leave it free to come off after a little wear.

I claim as my invention-

As a new article of manufacture, a thimble struck out of sheet metal, with a solid edge or rim, substantially as described and for the purpose set forth:

EDWARD B. TOWLE.

Witnesses:

FRANK G. PARKER, FRANK H. NUTTER.