

S. R. WILMOT.

Mode of Making Sheet-Metal Rings.

No. 164,892.

Patented June 22, 1875.

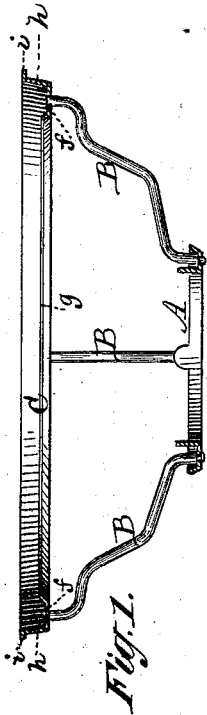
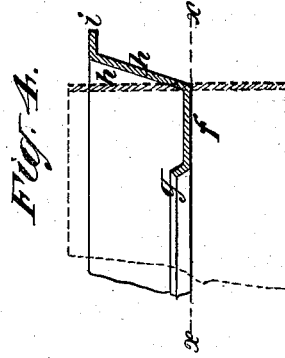


Fig. 2.



Witnesses  
John Becker  
Fred Haynes

S. R. Wilmot  
by his Attorneys  
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# UNITED STATES PATENT OFFICE.

SAMUEL R. WILMOT, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE  
WILMOT MANUFACTURING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN MODES OF MAKING SHEET-METAL RINGS.

Specification forming part of Letters Patent No. **164,892**, dated June 22, 1875; application filed  
April 10, 1875.

*To all whom it may concern:*

Be it known that I, SAMUEL R. WILMOT, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented an Improvement in the Manufacture of Metallic Rings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification.

My invention relates to an improved process for manufacturing metallic rings, which is particularly intended for making the rings of lamp-shade holders, but which may be also applicable to the manufacture of rings for other purposes.

In the ordinary method of making rings for lamp-shade holders, the blank is cut out from sheet metal in flat annular form, and the edges are turned up by drawing or stamping in dies. This commonly involves a waste of all the metal cut from the corners of a square outside of the ring, and all that cut from the inside of the ring, which waste amounts to about four-fifths of the metal employed in the manufacture, and can generally only be utilized by remelting.

The object of my invention is to avoid the waste of material referred to; and it consists in a novel method of making the ring, by first cutting from the sheet a strip of metal, and bringing the ends thereof together to form a hoop, and then pressing or stamping the said hoop in suitable dies to give it the desired shape, whereby the whole of the metal is utilized.

In the accompanying drawing, Figure 1 is a vertical section of a lamp-shade holder, in which the shade-supporting ring is constructed according to my invention. Fig. 2 represents the strip as cut from the sheet. Fig. 3 represents the strip with its ends secured together to form a hoop. Fig. 4 is a profile sectional view of the ring.

In Fig. 1, A represents the collar, B the arms,

and C the shade-supporting ring, of a lamp-shade holder. In the ordinary method the blank for the ring C is cut from the sheet in flat annular form, as before described.

In making the ring according to my invention, I first cut from the sheet a strip of metal, D, of the shape shown in Fig. 2, and then secure the ends thereof together, by soldering or otherwise, to form a hoop, E, as shown in Fig. 3. This hoop is then placed in a suitable die or dies, and is pressed, stamped, or drawn into the shape shown in Fig. 4, by which process the portion of the hoop below the line *xx* is gathered inward, and contracted to form the shade-supporting flange, *f*, and the extreme inner edge is turned up to form a stiffening-rim, *g*, while the portion above the line *xx* is slightly expanded and turned outward, to form a conical receptacle, *h*, for the shade, and the extreme upper edge is turned outward to form an upper stiffening flange, *i*, thus making a shade-supporting ring of the usual shape. By cutting the blanks from the sheets in strips the entire sheet of metal is utilized, and there is no waste of material whatever.

Although the invention is shown herein as applied to the manufacture of rings for lamp-shade holders, it will be seen that the process need not be confined to such particular use, but is applicable to the making of rings for various purposes.

What I claim as new, and desire to secure by Letters Patent, is—

The within-described mode of forming rings for supporting lamp-shades, the same consisting in first bringing the strip into the form of a hoop, and then subjecting said hoop to pressure in a die of the desired shape, as herein shown and described, for the purpose specified.

SAMUEL R. WILMOT.

Witnesses:

GEO. A. STAPLES,  
ISAAC C. FOWLER.