W. T. MERSEREAU.

Manufacture of Metal Rings.

No. 218,128. Patented Aug. 5, 1879.

FIG 1

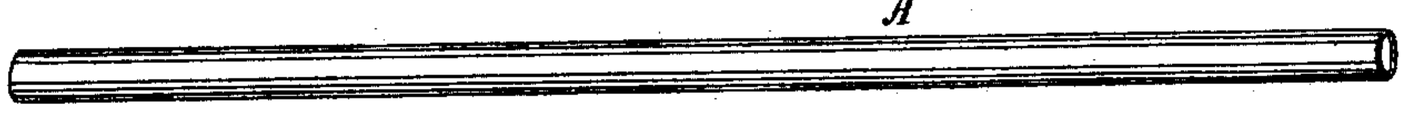


FIG 2

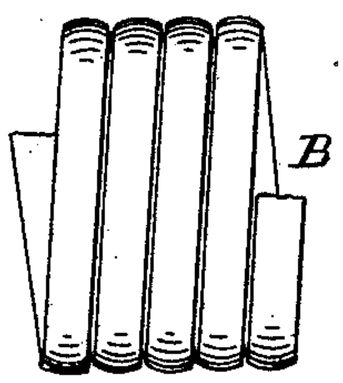


FIG 3

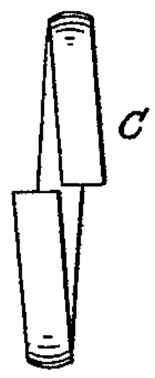


FIG 5

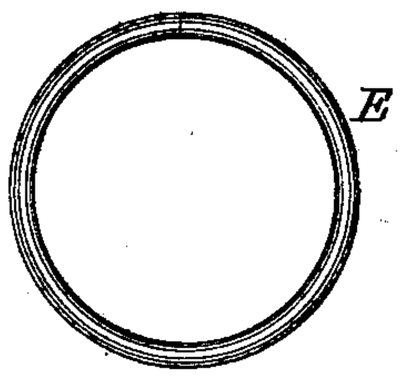
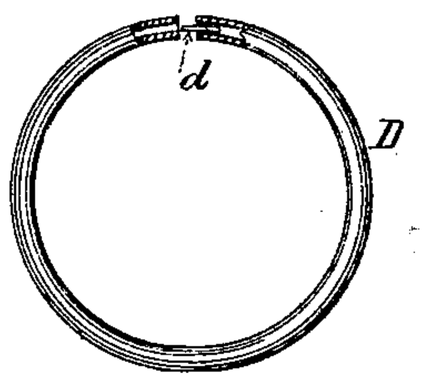


FIG 4



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM T. MERSEREAU, OF ORANGE, NEW JERSEY.

IMPROVEMENT IN THE MANUFACTURE OF METAL RINGS.

Specification forming part of Letters Patent No. **218,128**, dated August 5, 1879; application filed May 15, 1879.

To all whom it may concern:

Be it known that I, WILLIAM T. MERSEREAU, of Orange, Essex county, New Jersey, have invented, made, and applied to use Improvements in the Manufacture of Metal Rings for Curtains and other Purposes; and that the following is a full, clear, and correct description of my invention, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a view of the metal drawn into the oval tubular form. Fig. 2 is a view of the same rolled in the spiral form. Fig. 3 is a view of one of the rings cut from the spiral form. Fig. 4 is a view of the ring with the tongue inserted. Fig. 5 is a view of the ring completed, the ends being closed.

In the drawings like parts of the invention are pointed out by the same letters of reference.

The nature of the present invention consists in improvements, as more fully hereinafter set forth, in the manufacture of metal rings for curtains and other purposes; the object of the invention being the production of metal rings expeditiously, and at a low cost to the consumer.

Heretofore metal rings have been formed by using a solid or brazed tube, which has been filled with sand, or some like material, so that when the rings are formed upon a mandrel of the proper size the tube will not buckle or lose its form during this process, after which the rings formed are sawed apart, the sand or other filling material is emptied out, and the joint is brazed or hand-soldered; or they have been made by sinking the two parts in a die, and then soldering or spinning the two parts together; or a single shell is made of depth equal to half the diameter of the ring, and is then closed over with a die.

To enable those skilled in the arts to make and use my invention, I will describe the same.

I first form from sheet metal, by drawing the same, the oval tubular strip designated as A and shown in Fig. 1 of the drawings. This oval tubular strip is then run through grooved shaping-rollers, and by this operation is bent into the spiral form B. (Shown in Fig. 2 of the drawings.) From this spiral form B sufficient of the same to form a ring is sawed off or separated, as shown at C, Fig. 3. Into one of the open ends of this sawed-off or separated portion, as at D, Fig. 4, of the drawings, I then insert the tongue-piece *d* and a small piece of soft solder, and spring the opposite portion of the ring into position, so that the tongue enters into it.

In this position the ring is inserted in a fire, (or subjected to the action of heat sufficient for the purpose,) the solder is melted, and the ends of the rings are closed, and a ring, as shown at E, Fig. 5, is formed.

It will be observed that by following the process described the manufacture of metal rings is expedited and the cost is greatly reduced.

Having now set forth my invention, what I claim as new is—

1. The within-described process for the manufacture of metal rings, which consists in first drawing the metal into the oval tubular form, then bending the same into a spiral form, separating from the same the metal to form the ring, inserting the tongue-piece and soft solder within the ends of the same, and finally uniting the ends by subjecting the ring to heat, substantially as and for the purpose set forth.

2. As a new and improved article of manufacture, a metal ring the ends of which are closed by a tongue-piece and soft solder, substantially as and for the purposes set forth.

WILLIAM T. MERSEREAU.

In presence of—
GEORGE W. HOLT,
WILLIAM V. H. HICKS.