No. 633,780. Patented Sept. 26, 1899.

A. K. BECKWITH.

METHOD OF MANUFACTURING RINGS FOR STOVES.

(Application filed June 15, 1897.)

(No Model.)

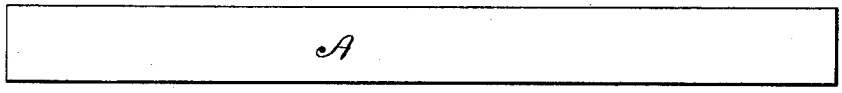


Fig. 1

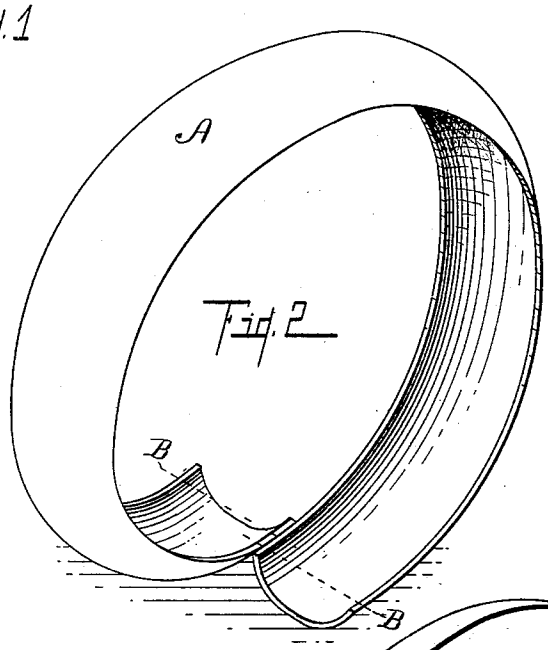


Fig. 2

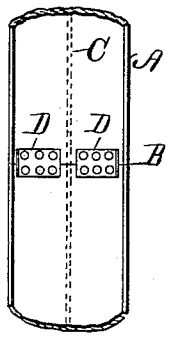


Fig. 3

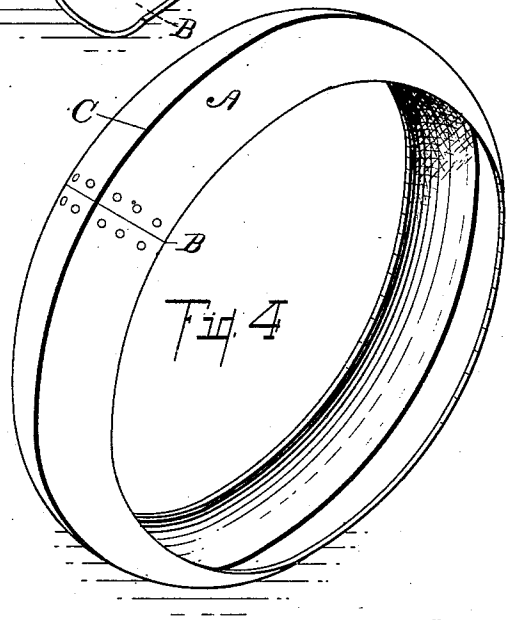


Fig. 4

Witnesses.

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ARTHUR K. BECKWITH, OF DOWAGIAC, MICHIGAN.

METHOD OF MANUFACTURING RINGS FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 633,780, dated September 26, 1899.

Application filed June 15, 1897. Serial No. 640,899. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR K. BECKWITH, a citizen of the United States, residing at the city of Dowagiac, in the county of Cass and State of Michigan, have invented a certain new and Improved Method of Manufacturing Rings for Stoves, of which the following is a specification.

My invention relates to improvements in the method of manufacturing ornamental stove-rings of sheet metal. The rings referred to are used on heating-stoves as a sort of fender or ornament and are usually nickeled and polished. When these rings have been produced of sheet metal heretofore, it has been by either stamping them out of a single sheet or by the use of dies stamping a ring of the sheet metal so that it has been forced to the form desired. These methods are expensive and involve a waste of material, and by these methods it is always necessary to provide a separate set of dies for each size of ring produced.

The objects of my invention are to provide a method or means of producing sheet metal rings economically from strips of flat sheet metal which shall be true and perfect rings and that involve no strain on the parts to which they are connected or the joints between the ends of the ring.

Further objects will definitely appear in the detailed description to follow.

I accomplish these objects of my invention in the manner indicated in the following specification, pointed out in the claim, and by the method illustrated in the accompanying drawings, in which—

Figure 1 represents a plain blank of sheet metal from which the rings are produced. Fig. 2 indicates the first stage of the manufacture, in which the sheet metal has been formed into a concavo-convex ring with symmetrical sides. Fig. 3 is a detail view of the joint between the ends of the ring after the ends have been squared and joined together. Fig. 4 indicates a pair of the completed rings, showing their relation as they are cut apart.

In the drawings similar letters of reference refer to similar parts throughout the several views.

To carry out my method of manufacturing, a straight strip of metal A is taken and either carried through forming-rolls or beaten by hand into a regular curve, which is convex on the outside and concave on the inside, the opposite sides of the same being symmetrical parts. When the metal plate has been rolled into a ring, as indicated in Fig. 2, the ends thereof are cut square off by suitable means and brought opposite each other, so that they are secured together by fastening-plates D D, one for each half of the ring, leaving open space between them at the center. When the ring is thus formed, the symmetrical halves are cut apart, preferably by a cutting-roll from the outside, which leaves the exterior smooth. They can be sawed or cut apart by cold-chisel or any other way. When the rings are thus separated, they are polished and plated, or enameled or finished in any way proper to be placed upon the finished stove.

Owing to the fact that the halves of the ring are symmetrical before it is cut apart the strain is equal on both sides, and the rings are thus easily made therefrom, when if an attempt were made to form one of the rings alone, without making the halves thereof symmetrical, it would be found to be a practical impossibility to control the direction of the curve of the metal and produce a perfect ring. It will be readily seen and understood that it is practical and easy and cheap to produce rings by the method I have here pointed out and defined. The method of fastening the ends together is immaterial. The size of the rings is controlled by the curvature given, which is easily varied by means well known.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The method of manufacturing ornamental rings for stoves consisting in rolling a flat strip of metal into a ring the cross-section of which is a curve and exactly symmetrical each side of the center; joining the ends of said ring by suitable means; and then cutting the ring into two symmetrical halves on the center line of its periphery to form a pair of stove-rings as specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

ARTHUR K. BECKWITH. [L. S.]

Witnesses:

T. W. CLYBORNE,

LENA LARZELERE.