K. Frazer,

Hollow Metal Ring.

No. 60,712. Patented Jan. 1, 1867.

Fig. 1.

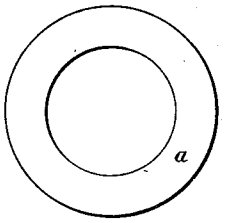


Fig. 2.

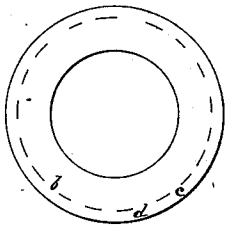


Fig. 3.

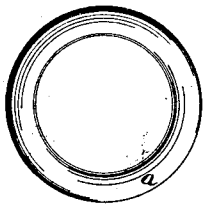


Fig. 4.

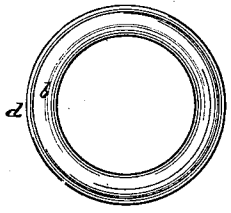


Fig. 5.

Fig. 6.

Fig 7.

Fig. 8.

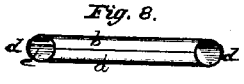
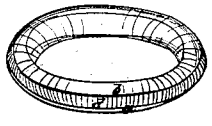


Fig. 9.



Witnesses:

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United States Patent Office.

KASSON FRAZER, OF SYRACUSE, NEW YORK.

Letters Patent No. 60,712, *dated January* 1, 1867.

IMPROVED HOLLOW RING.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, KASSON FRAZER, of Syracuse, in the county of Onondaga, and State of New York, have invented an improved Hollow Metal Ring, for saddlers', harness-makers', and other uses; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figures 1 and 2 representing the two blank annular pieces of sheet metal from which the two sides of the hollow ring are formed.

Figures 3 and 4, views of the same, respectively, after being stamped or swaged into semicircular form, ready to be put together to form the ring.

Figures 5 and 6, cross-sections of the same.

Figure 7, a diametrical section of the two parts when simply put together.

Figure 8, a similar section thereof, after the parts are lapped and secured inseparably together.

Figure 9, a view, in perspective, of the ring complete.

Like letters designate corresponding parts in all of the figures.

The object of this invention is to furnish light and strong rings, to be furnished to the trade, for uses indicated above, and wherever these qualities are desirable. The article, as a new manufacture, consists in a hollow metal ring, made of two parts or sides, held together by a self-sustaining lap joint, formed substantially as herein specified.

Two blanks, *a b*, of sheet metal, of any kind suitable to the purpose, are first cut into annular form, as shown, and of the proper dimensions to produce the size of the ring required. One blank is of the size nearly or exactly to form one-half of the ring; and the other blank, *b*, in addition to that size, sufficient to complete the form of the ring, has an extension, *d*, on the outer edge, of a width sufficient to form the overlapped joint which unites the two parts together. The two blanks are then stamped or swaged into a semicircular form, (in cross-section,) or nearly so, in respect to the blank *a*, and the main part of the blank *b;* while the lap portion *d* is bent outward somewhat, forming a shoulder, *e*, where it connects with the main part, and leaving its outer edge open wide enough to admit the outer edge, *c*, of the piece *a*, which goes under the said lap *d*, and which may be bent inward a little for the purpose, and thus enable the projection of the lap *d* to be less prominent than it otherwise would be. The forms given to the parts are clearly shown in figs. 3, 4, 5, and 6. The part *a* is then slipped into the part *b*, as represented in fig. 7, the outer edge, *c*, entering within the lap *d*, till it touches the shoulder thereof, and the inner edges of the two parts are brought close together. The open edge of the lap *d* is then closed down over the part *a* by bending or swaging, as shown in fig. 8, and since this edge is thus brought round toward the side of the ring into a smaller circle than the edge *c* of the part *a*, the latter cannot be drawn therefrom, and the two parts are securely held together, thereby composing a firm and strong ring. The shoulder of the lap keeps the two parts from compressing together. This single lap at the outer edge is sufficient for strength and security, and is generally preferable; but the lap might be made at the inner edges of the parts, or at both outer and inner edges. The parts may be soldered also, but this is not at all necessary. The rings may be tinned, japanned, plated, or otherwise finished, as desired.

What I claim as my invention, and desire to secure by Letters Patent, as a new article of manufacture, is—

A hollow metal ring, composed of two parts, held together by a self-sustaining lap joint, substantially as and for the purposes herein specified.

KASSON FRAZER.

Witnesses:

N. B. SMITH,

C. W. SMITH.