

L. B. GUSMAN.
 MANUFACTURE OF HINGES.

No. 190,850.

Patented May 15, 1877.

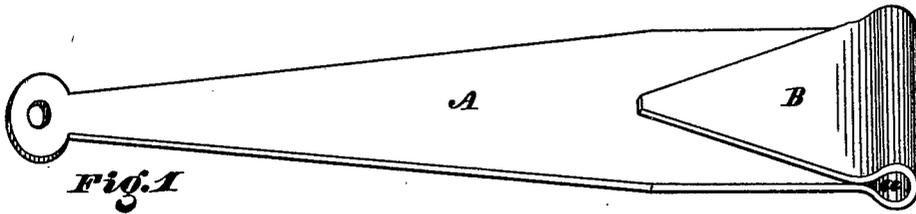


Fig. 1

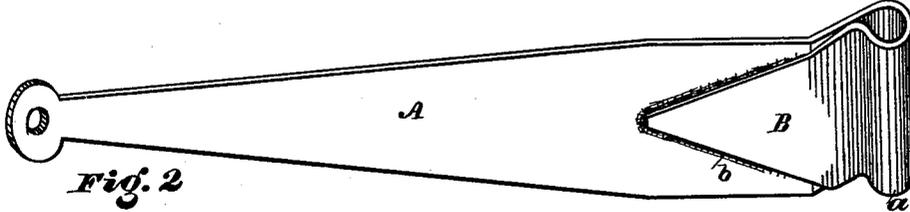


Fig. 2

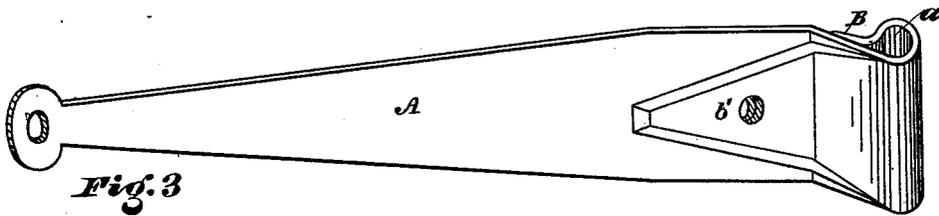


Fig. 3

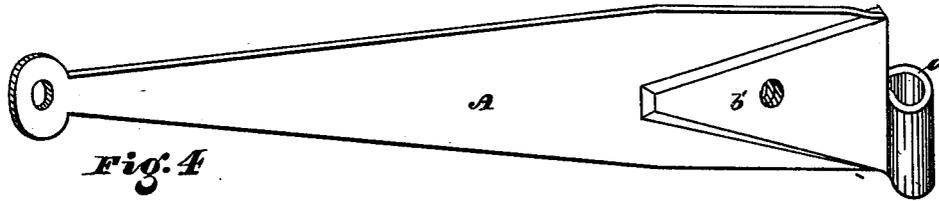


Fig. 4

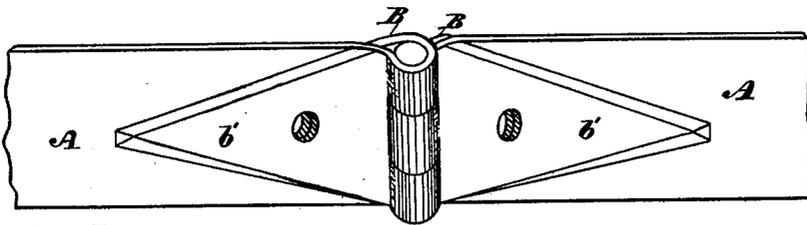


Fig. 5



Fig. 6

Witnesses

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UNITED STATES PATENT OFFICE

LEWIS B. GUSMAN, OF UPPER DUBLIN, ASSIGNOR OF ONE-HALF HIS RIGHT
TO CHAUNCEY E. BURK, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN THE MANUFACTURE OF HINGES.

Specification forming part of Letters Patent No. **190,850**, dated May 15, 1877; application filed
April 10, 1877.

To all whom it may concern:

Be it known that I, LEWIS B. GUSMAN, of Upper Dublin, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Hinges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a perspective, showing the inner side of the hinge before the lap is pressed or stamped into the leaf or strap. Fig. 2 is a perspective, showing the inner side of the hinge after said operation has been performed. Figs. 3, 4, and 5 are perspectives, showing face views of the hinge. Fig. 6 is a vertical transverse section of my improvement.

My invention has for its object to provide an improved method of making wrought-iron hinges of all descriptions, so as to combine economy of manufacture with perfection of construction.

My improvements have special reference to the method of uniting or associating the end of the lap which forms the eye with the strap or leaf of the hinge.

Heretofore, in making wrought-iron hinges, it has been customary to bend the bar or plate from which the article is made to form an eye, the lapped end being secured to the strap or leaf by welding.

My improvement dispenses with welding and substitutes stamping therefor, whereby the strap or leaf is indented or struck up to receive the end of the lap, or the lap is pressed into the strap or leaf, the outer side of said strap or leaf being thus elevated and strengthened by the formation of a rib or ridge, while its inner side is perfectly flat, and adapted to rest evenly and truly against a gate, shutter, or other article to which it is applied.

Referring to the accompanying drawing, A

designates a flat bar or plate of wrought-iron, having one of its ends, B, bent or lapped to form an eye, *a*. The bar or plate thus bent is placed in dies of suitable construction, which press the lap into the strap or leaf, stamping or indenting the bar A to form a cavity or recess, *b*, in which the lapped ends B rest, the outer side of said strap or leaf, owing to the indentation or stamping described, having a corresponding rib or elevation, *b'*, giving strength and finish to the article, while the inner side is perfectly flat.

The bending to form the eye and the stamping in the dies to produce the cavity in the strap and press the lap therein are both done at one heating.

This method of construction is not restricted to any special form of hinge, but is applicable to all metal hinges in which the eye or socket is formed by bending or lapping one end of the bar or plate from which the article is made.

I have described my improvements as specially intended for wrought-iron hinges; but it is obvious that the same may be applied to hinges of brass or other metal which may be bent and stamped.

What I claim is—

1. The improvement in the art of manufacturing hinges, consisting in stamping or pressing the lap or end bent to form the eye into the strap or leaf, substantially as shown and described.

2. As a new article of manufacture, a metal hinge having a cavity or recess formed in the strap or leaf, and the lap or end bent to form the eye pressed therein, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of March, 1877.

LEWIS B. GUSMAN.

Witnesses:

GEO. C. SHELMERDINE,
M. DANL. CONNOLLY.