

W. J. LEWIS.

Manufacture of Bolster-Plates.

No. 141,227.

Patented July 29, 1873.

Fig. 1.

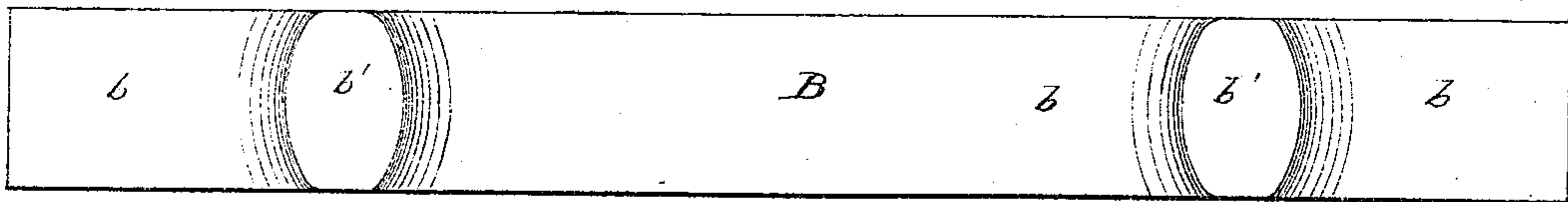


Fig. 2.

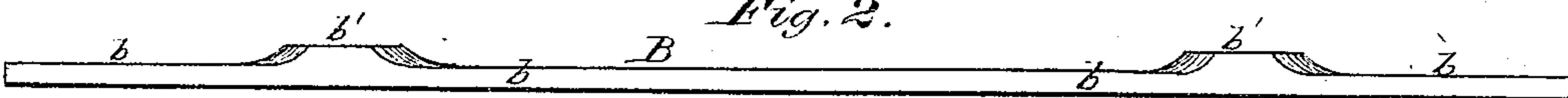


Fig. 3.

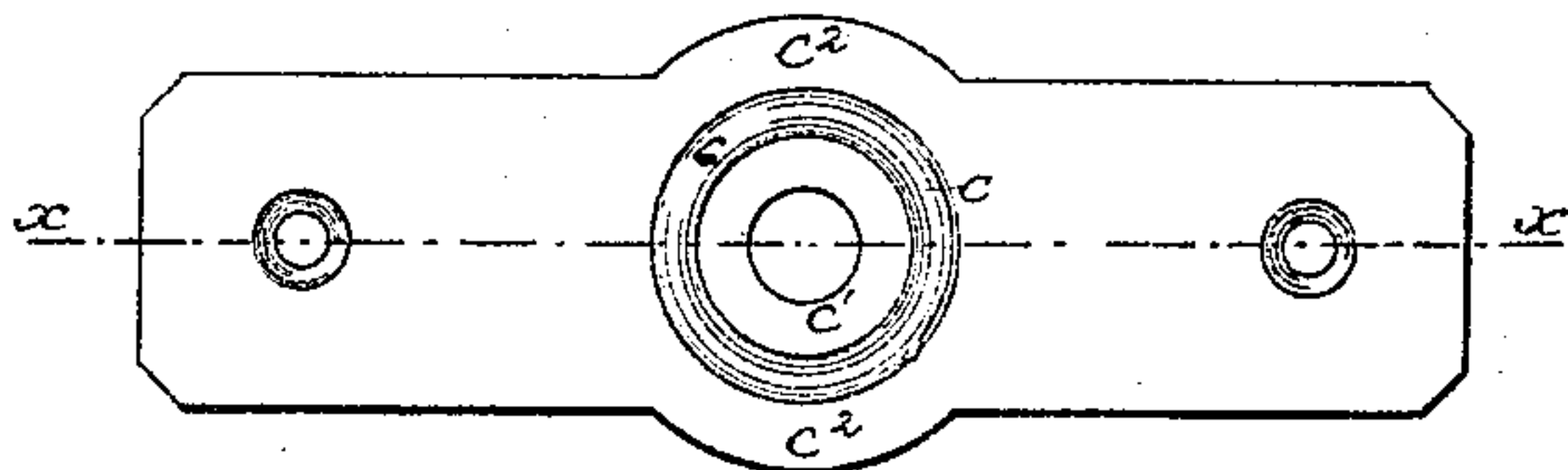


Fig. 4.



Fig. 5.

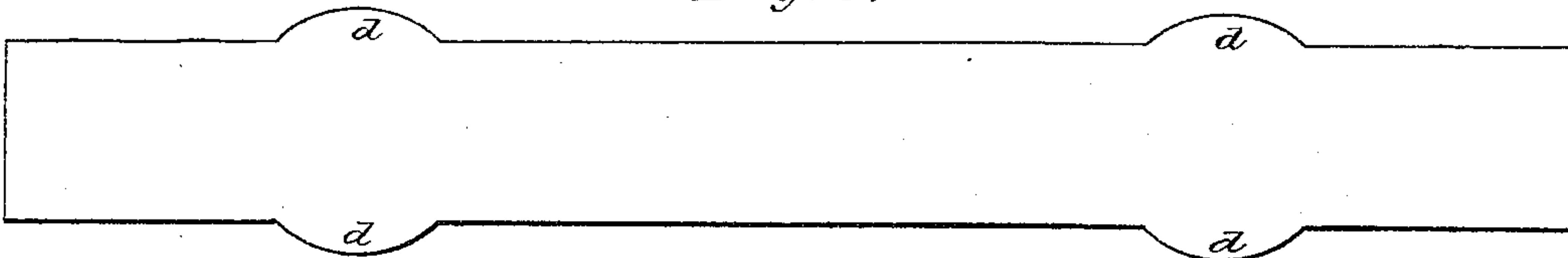


Fig. 6.

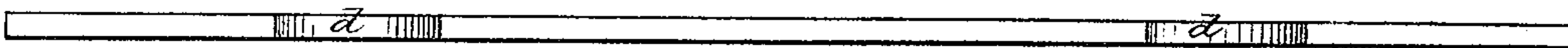


Fig. 7.

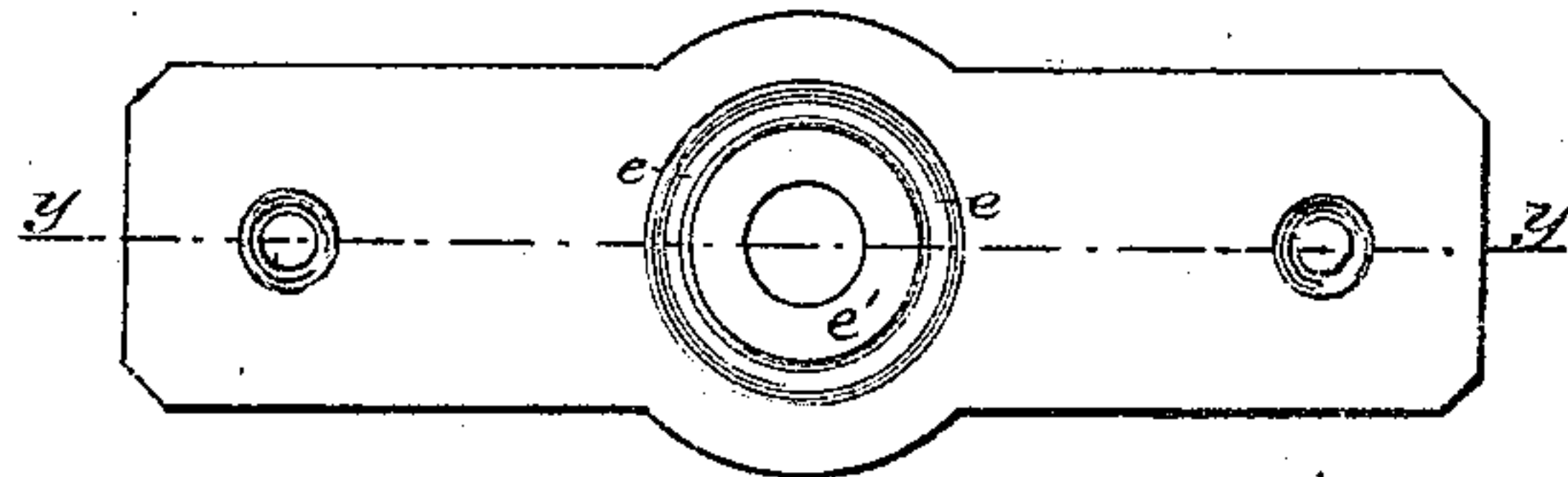


Fig. 8.



Witnesses:

F. W. Kutter, Jr.
Geo. O. Stokes.

Inventor:

William J. Lewis
by Bakerwell, Christy & Kerr
his Attys.

UNITED STATES PATENT OFFICE.

WILLIAM J. LEWIS, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN THE MANUFACTURE OF BOLSTER-PLATES.

Specification forming part of Letters Patent No. **141,227**, dated July 29, 1873; application filed May 19, 1873.

To all whom it may concern:

Be it known that I, WILLIAM J. LEWIS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Manufacture of Bolster Plates and Blanks; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan or face view of the first form of bar as rolled into blanks. Fig. 2 is an edge view thereof. Fig. 3 is a face view of the male bolster-plate as stamped from one of the blanks of Fig. 1. Fig. 4 is a sectional view thereof, in the line *x x* of Fig. 3. Fig. 5 is a plan or face view of the second form of the bar as rolled into blanks from the bar of Fig. 1. Fig. 6 is an edge view thereof. Fig. 7 is a face view of the female bolster-plate as stamped from one of the blanks of Fig. 5; and Fig. 8 is a sectional view thereof, in the line *y y* of Fig. 7.

Like letters of reference indicate like parts in each.

My improvement relates to the manufacture of bolster-plates of wagons and other vehicles, in the manner substantially as hereinafter set forth and claimed.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same.

In suitably-grooved rolls the blanks *B* are rolled out, preferably in continuous bars, with the strap parts *b* of suitable length and width for the attachment, by bolts or otherwise, of the plates to the bolster or hounds or other desired part of the vehicle. I also roll thereon, at suitable intervals, raised parts *b'*, of about the vertical height of the male ring *c* desired in the bolster-plate, and preferably a little shorter in the direction of the length of the bar than the diameter of the ring. Then,

by means of properly-shaped dies, I stamp or swage the raised part *b'* into the form shown in Fig. 3. The depression thus made in the central part *c'* forces a portion of the metal radially outward in all directions, so as to widen the blank at that point, as at *c''*, and also so as to lengthen the raised part *b'* in the direction of the length of the blank or bar, and provide metal at the proper point for the corresponding parts of the ring *c* without waste. For making the female bolster-plate I pass the blanks of Fig. 1 through a pair of rolls, so as to roll down the raised parts *b'*, and widen the blanks at those points, as shown at *d*. Then, by suitably-shaped dies, I stamp or swage into the parts *d* a sunken ring, *e*, of the same size and form as the raised ring *c* of the male plate. The parts *c'* *e'* and the bolt-holes for attaching them being punched, and the blanks cut apart, (all which may be done before or after stamping or at the same time,) the plates are ready for sale or use.

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

1. The method hereinbefore described of making male bolster-plates—viz., first, rolling a raised part, *b'*, on the blank, and, second, stamping down the metal in the center of such raised part, so as to widen the blank and spread out the metal to form the ring, substantially as set forth.

2. The method herein described of making female bolster-plates—viz., first, rolling a raised part, *b'*; second, widening the bar by rolling it down; and, third, stamping therein the depressed ring, substantially as described.

In testimony whereof I, the said WILLIAM J. LEWIS, have hereunto set my hand.

WILLIAM J. LEWIS.

Witnesses:

A. S. NICHOLSON,
G. H. CHRISTY.