

JOHN T. WILSON.

Improvement in Draw-Bar Irons for Buffers of Railway-Cars.

No. 127,819.

Patented June 11, 1872.

Fig. 1.

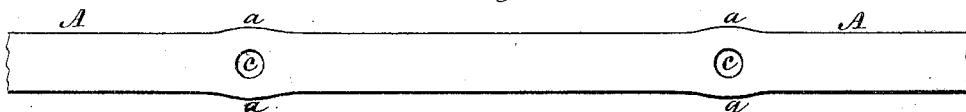


Fig. 2.

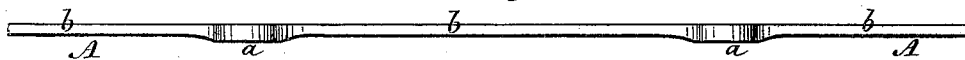
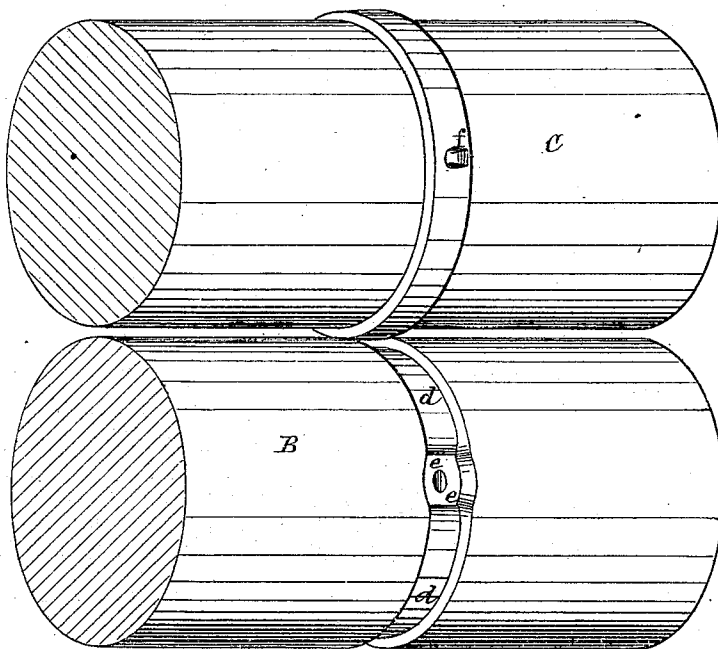


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN T. WILSON, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN DRAW-BAR IRON FOR BUFFERS OF RAILWAY CARS.

Specification forming part of Letters Patent No. 127,819, dated June 11, 1872.

To all whom it may concern:

Be it known that I, JOHN T. WILSON, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Draw-Bar Iron for the Buffers of Railway Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents a top plan of a section or piece of the draw-bar iron as it comes from the rolls. Fig. 2 represents an edge view of the same. Fig. 3 represents, on a reduced scale, a portion of the rolls by which the bar or series of blanks are rolled out and punched.

My invention consists in rolling out and punching draw-bar iron for buffers for railroad cars, as will be hereinafter explained, so that to complete the draw-bar, it is only necessary to cut off a certain portion of the rolled and punched bar and to bend it into an U or other form, thus avoiding swedging and upsetting.

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

A represents a portion of the rolled and punched bar as it appears after it has made its last pass through between the rolls. The swelled portions *a* are thicker, as seen in Fig. 2, than the other portions *b*, so as to compensate for the hole *c* punched in or through said swelled portion.

To work up this rolled and punched bar into draw-bars it is cut up into such suitable lengths as may be required, and bent into the desired form. The draw-bars are thus made of uniform size and finish without upsetting or drawing down upon an anvil or forging it.

The rolls for the first passing through of the bar are of the usual form or construction. But for the last passing through, the rolls and guides, or dies or grooves, are differently constructed, so as to make the thick and swelled portions thereon at regulated distances, and to punch the holes in such swelled and thickened surfaces or portions at the same time.

In the last guide *d* of the rolls there is a flat place, *e*, in the under roll B, that makes the thick place *a*, Fig. 2, in the bar, and in the upper roll C there is a stationary punch, *f*, which strikes the bar just in the center of the thick part *a*, and swells it edgewise into the guides at the sides, which guides at that place are cut out or enlarged to allow the bar to bulge. There is, of course, a hole or recess in the lower roll to allow the punch *f* to pass through the bar and into the whole. The punch *f* at its point is made of a wedge-form, so that in striking the bar when it comes around it cuts it through lengthwise. The base of the punch being round, gives a corresponding shape to the hole *c*. Making the punch of this wedge-form at its point and round at its base, it swells or forces the metal edgewise without removing any of the metal from the bar or punching it out, and causes the guide or die to be filled, and so give shape to that part of the bar.

The rolls are so geared that the flat place *e* in the under one, B, and the punch *f* in the upper one, C, shall always come together at the same time and place.

Different lengths of draw-bars, for differing buffers, may be made from one and the same bar, by cutting them off alternately longer and shorter from said bar.

In some cases it may not be necessary to thicken the bar at the swelled portion, but only to spread out the metal edgewise by the punch, leaving it as strong there as at other points of the bar. This, however, depends upon the strength of bar required, and that regulates the size.

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

The within-described draw-bar iron for the buffers of railway cars, when swelled and punched by passing it through between rolls, substantially such as described and represented.

JOHN T. WILSON.

Witnesses:

A. B. STOUGHTON,
EDMUND MASSON.