(No Model.)

J. GREEN.

MANUFACTURE OF DRAW BARS.

No. 456,699. Patented July 28, 1891.

Fig. 1.

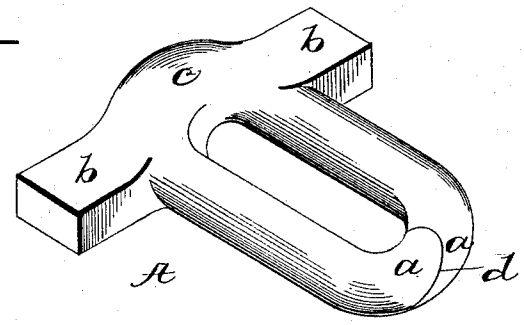


Fig. 2.

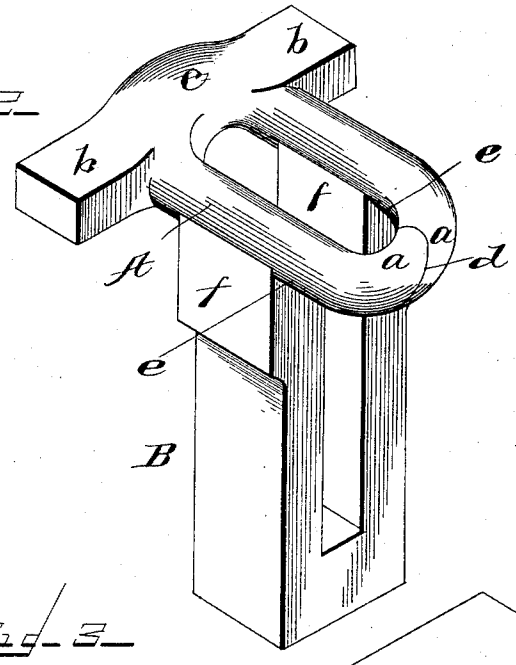
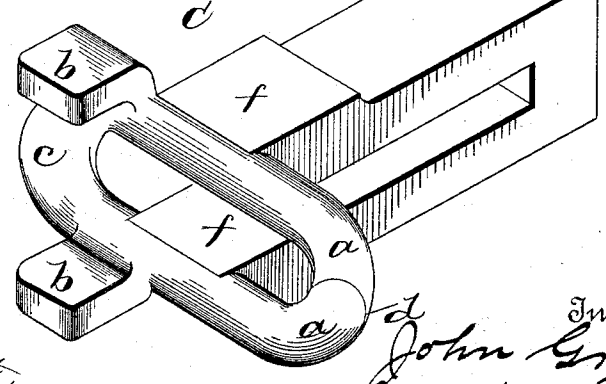


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN GREEN, OF RENOVO, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO WILLIAM L. HOLMAN AND JOHN McCORD, BOTH OF SAME PLACE.

MANUFACTURE OF DRAW-BARS.

SPECIFICATION forming part of Letters Patent No. 456,699, dated July 28, 1891.

Application filed May 18, 1891. Serial No. 393,214. (No specimens.)

To all whom it may concern:

Be it known that I, JOHN GREEN, a citizen of the United States, residing at Renovo, in the county of Clinton and State of Pennsylvania, have invented certain new and useful Improvements in the Manufacture of Draw-Bars; 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 appertains to make and use the same.

My invention relates to the manufacture of draw-bars, and has especial reference to that class known as the "master car-builder's type," and has for its object certain improvements, whereby the draw-bars may be made in shops that are not provided with heavy machinery for forging them out of billets.

The invention will be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which form part of this specification, Figure 1 is a perspective of the blank for the head of a draw-bar; Fig. 2, a similar view showing the blank for the head in position to weld it to the body-blank; and Fig. 3, a like view of the two blanks welded together and the lugs of the head bent forward.

Reference being had to the drawings and the letters thereon, A indicates a blank for a head, the major portion of which is made of round bar-iron bent into the shape of a link with overlapping ends *b b*, laterally-extending lugs *c c*, and a swell or thickened portion *d* to provide metal for the hood or rear wall of the head. The lap-weld of the ends *b b* may be made on an anvil, if desired, or it may be made in the shaping and forging dies.

The body-blank B is made in the usual way by bending a suitable re-enforced bar and preferably forming concave seats *e e* in the free ends thereof. The blanks A B are then heated in suitable fires or furnaces, the blank A laid upon an anvil, the blank B placed over it, with the concavities *e e* over the round sides of the blank B and welded thereto. The lugs *c c* are then bent forward, as shown in Fig. 3, when the blank C is completed in a pair of suitable dies, preferably of the construction shown in Patent No. 448,612, bearing date of March 17, 1891.

The weld between the ends of the side bars of the body-blank B and the sides of the blank A made upon an anvil may be only an initial weld and may be merely a butt-weld, as is common to the art of making draw-bars, and the weld completed in the dies used for forging and shaping the lugs, fillets, and giving contour to the head of the draw-bar.

Having thus fully described my invention, what I claim is—

1. A blank for a draw-bar head, consisting of a link-like piece of metal having lugs thereon.

2. A blank for a draw-bar head, consisting of a link-like piece of metal cylindrical in cross-section, having laterally-projecting lugs, and a swell or thickened portion between the lugs.

3. A blank for a draw-bar head, consisting of a link-like piece of metal having lugs at one end and overlapping ends at the opposite end of the blank.

4. The method of manufacturing draw-bars, which consists in forging a blank for a head with lugs thereon and a body-blank separately, joining or welding the two blanks together, and finally completing the forging and shaping in suitable dies.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN GREEN.

Witnesses:
D. C. REINOHL,
L. P. WHITAKER.