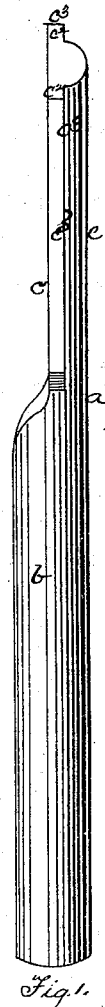
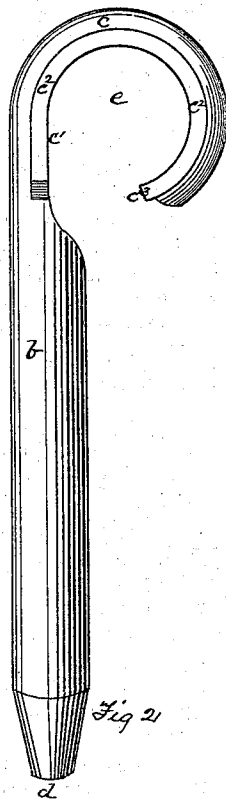


D. B. OLIVER.

Blanks for Draw-Bolts.

No. 136,757.

Patented March 11, 1873.



WITNESSES
J. A. White-
W. S. Purviance

INVENTOR
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His attys

UNITED STATES PATENT OFFICE.

DAVID B. OLIVER, OF McCURE TOWNSHIP, ALLEGHENY COUNTY, PA.

IMPROVEMENT IN BLANKS FOR DRAW-BOLTS.

Specification forming part of Letters Patent No. 136,757, dated March 11, 1873.

To all whom it may concern:

Be it known that I, DAVID B. OLIVER, of McClure township, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improved Blank for Draw-Bolt; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a view of my improved blank for draw-bolt, and Fig. 2 is a view of a finished draw-bolt.

Like letters of reference indicate like parts in each.

My invention consists in a rolled draw-bolt blank, one end of which is flattened on the side which is to be bent to form the eye.

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

The blank *a*, consisting of the body *b*, for forming the bolt proper, and end *c*, flattened on one side as at *c'*, and widened or drawn out as at *c''*, for forming the eye, is produced in rolls having grooves of proper shape. The groove in the roll which produces or forms the bevel *c'*, is reduced in depth and changed in form where the bevel is made. The part of

this groove which forms the round part *t* of the bolt *a* is round, while the portion which forms the eye part *c* is shallow, and spreads out laterally beyond the width of the round part *b*, and has square sides, so as to form the square shoulders *c''* of the blank. The swell in the roll, which produces the bevel or flat *c* draws or spreads the iron so as to form the broad end *c''*. The flat side *c'* is intended to form the inner side of the eye of the finished draw-bolt. The bar of iron from which the blank *a* is made is passed through the rolls before mentioned, and forms a series of connected blanks, which are cut apart, pointed as at *d*, Fig. 2, and bent so as to form the eye *e*, when it is ready for use.

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

A rolled blank for a draw-bolt having a flattened end, such flat being formed wholly or chiefly upon one side of and parallel to the axial line of the draw-bolt, substantially as described.

In testimony whereof I, the said DAVID B. OLIVER, have hereunto set my hand.

DAVID B. OLIVER.

Witnesses:

A. S. NICHOLSON,
THOS. B. KERR.