

No. 775,424.

PATENTED NOV. 22, 1904.

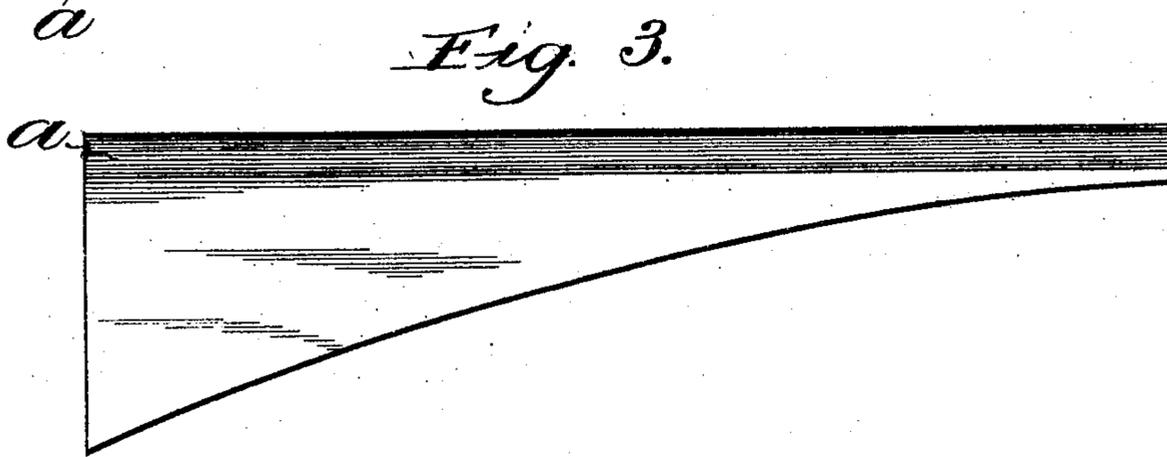
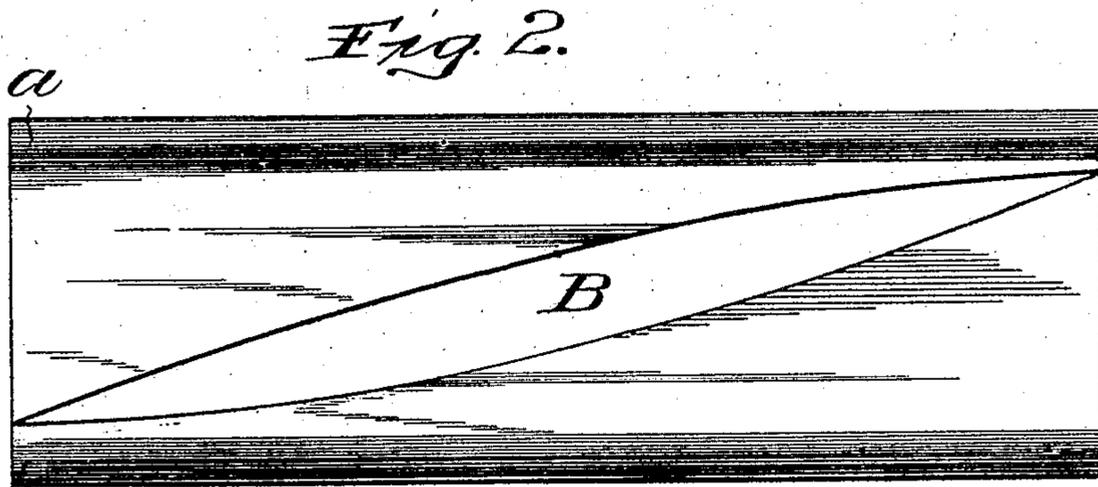
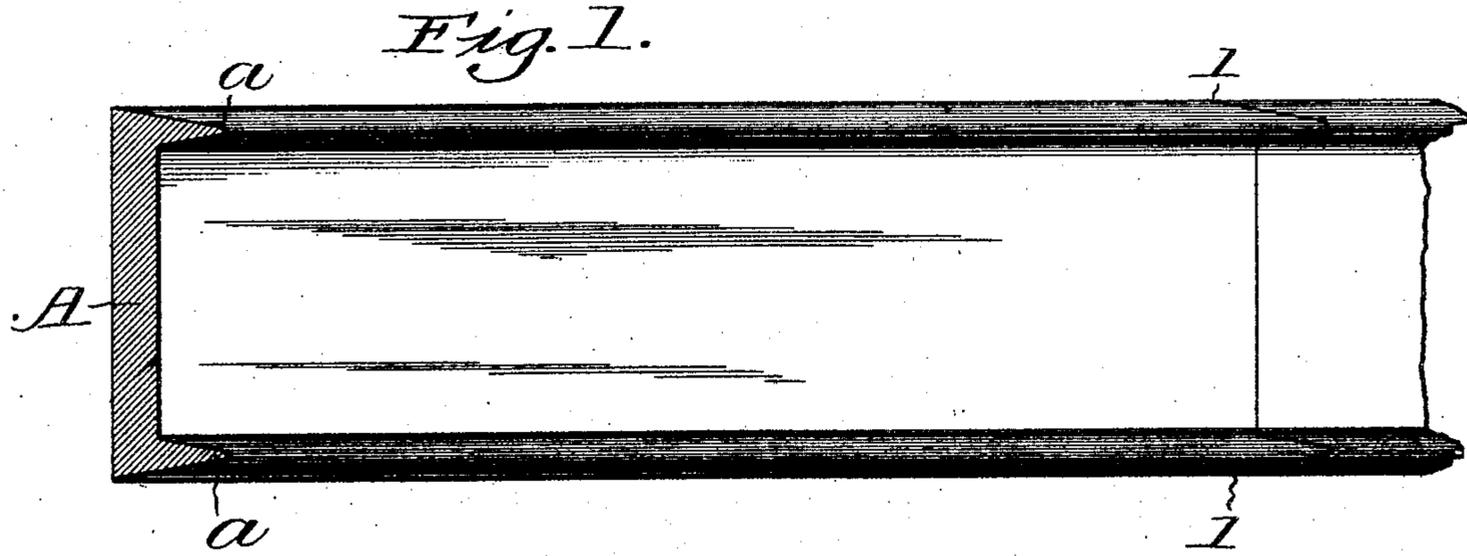
J. B. JARMIN.

MANUFACTURE OF LANDSIDES FOR PLOWSHARES.

APPLICATION FILED FEB. 10, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

*Oliver L. Plumbtree*

*Robert F. Veir*

Inventor:

*James B. Jarmin*  
by *Raymond W. Barnette*  
Attys.

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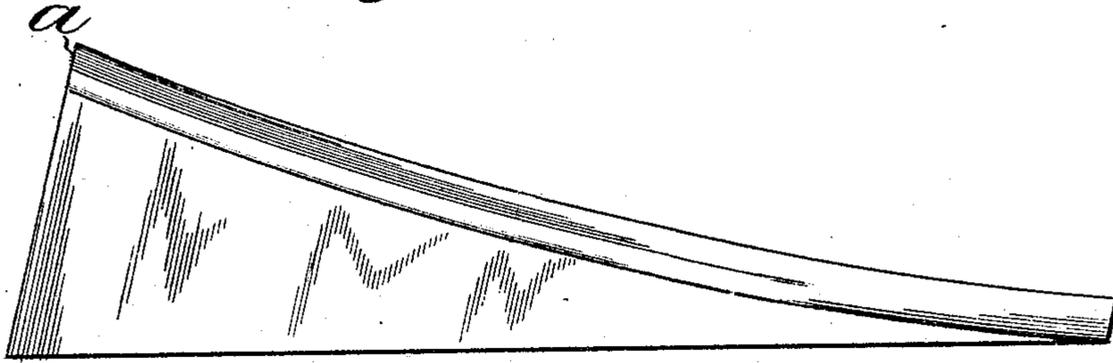
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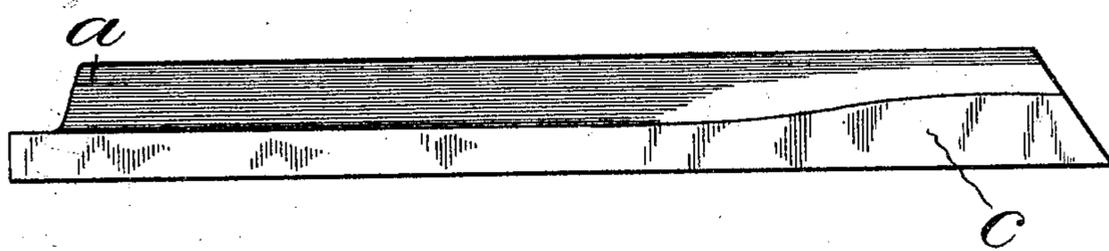
NO MODEL.

2 SHEETS—SHEET 2.

*Fig. 4.*



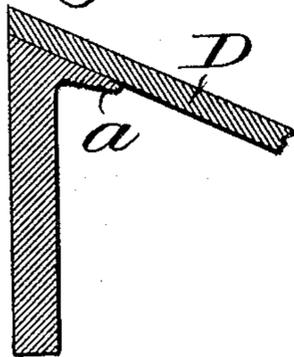
*Fig. 5.*



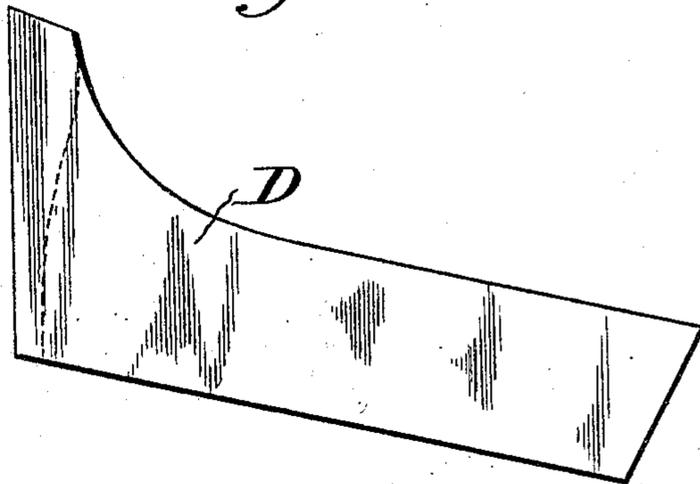
*Fig. 6.*



*Fig. 7.*



*Fig. 8.*



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

JAMES B. JARMIN, OF MADISON, WISCONSIN, ASSIGNOR TO AMERICAN PLOW COMPANY, OF MADISON, WISCONSIN, A CORPORATION OF WISCONSIN.

## MANUFACTURE OF LANDSIDES FOR PLOWSHARES.

SPECIFICATION forming part of Letters Patent No. 775,424, dated November 22, 1904.

Application filed February 10, 1904. Serial No. 193,007. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES B. JARMIN, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in the Manufacture of Landsides for Plowshares, of which the following is a specification.

My invention relates to improvements in the manufacture of landsides for plowshares.

The object of my invention is to provide a simple, effective, and inexpensive way for manufacturing a landside with a sufficiently thick and properly-formed welding edge out of a commercial form of blank in such a manner as to largely avoid waste and so as to reduce the number of operations, while at the same time producing a landside so formed as to be readily welded to the plowshare, so as to form a strong properly-reinforced joint. This and such other objects as may hereinafter appear are accomplished by the operations illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the stock from which I form my improved landsides. Fig. 2 is a plan view of the section of the stock after the first operation of my process. Fig. 3 is a plan view of a blank as first formed. Fig. 4 is a plan view of the blank after the next operation. Fig. 5 is an elevation of the blank shown in Fig. 4. Fig. 6 is an end view thereof stood on edge. Fig. 7 is a sectional view through the plowshare and landside, and Fig. 8 is a view of a plowshare with the attached edge of the landside indicate in dotted lines.

Like letters of reference indicate the same parts in the several figures of the drawings.

Referring by letter to the accompanying drawings, A indicates the stock in the form of channel-iron. This stock material I cut off into suitable lengths, as at *l l*—say each one foot long. I then by any suitable means cut or stamp out of the stock-piece an oval piece, as indicated at B in Fig. 2, thereby producing two triangular blanks of the shape shown in Fig. 3, each provided with a flange along

the outer edge thereof and curved at the inner edge thereof. Then by any suitable dies (not here shown) the blank is shaped to the form shown in Figs. 4 and 5. By this operation what was formerly the curved inner edge of the web becomes a straight edge, while the flanged edge *a* becomes curved, and the rear edge of the plowshare extends diagonally to the straight edge of the web, thereby giving the blank the typical form of a landside for a plowshare. At the same time the edge of the web is partially upset, as shown at C, Fig. 5, thereby thickening and reinforcing the toe of the landside and forcing the metal of the blank into the dies in such a manner as to give the wedge-shaped point to the landside, (shown in Fig. 5,) while at the same time the flanged edge of the landside is inclined, as more clearly shown in Figs. 6 and 7.

The landside as so formed is now ready as a commercial article to be supplied to blacksmiths and others, is shaped so as to properly fit the plowshare D without any forming, and is provided with a reinforced flanged edge, which may be readily welded to the plowshare, so as to afford a solid reinforced welded joint.

When the landside is welded to the plowshare, the edge adjoining the toe of the plowshare is still further upset and flattened out by the welding operation, as shown in Fig. 8, so as to serve the double purpose of extending the welded joint over a flanged surface and at the same time bringing the forward edges of the landside and of the plowshare to a common point of convergence.

It will thus be seen that by two simple operations, the first being the stamping or punching out of the oval section from the stock and the second being the forging in dies of the blank so formed, I am enabled to make a simple, strong, cheap, and properly-formed landside ready for attachment to the plowshare and all with a minimum waste of material.

While I have described what is in some respects the simpler operation, the details of

the process may be varied by first cutting diagonally across the stock, thus forming two triangular blanks, and then removing the surplus metal from the long side of each of such  
5 blanks.

I claim—

1. The improvement in the manufacture of landsides for plowshares which comprises punching a section out of an oblong blank of  
10 channel-iron, so as to form two substantially triangular blanks, each provided with a straight flanged edge and with a curved unflanged edge, and then forging said blanks in  
15 and curve the flanged edge to fit a plowshare,

and upsetting a portion of the unflanged edge, substantially as described.

2. The improvement in the manufacture of landsides for plowshares, which comprises cutting a blank out of flanged stock in such a  
20 manner that the blank will be provided with a straight flanged edge and with a curved unflanged edge, and then manipulating the blank so as to straighten the unflanged edge and  
25 curve the flanged edge, substantially as described.

JAMES B. JARMIN.

Witnesses:

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L. H. CORSTERSEN.