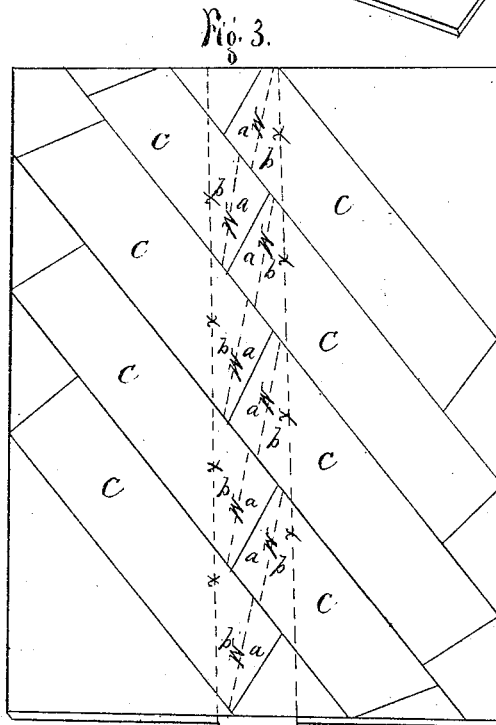
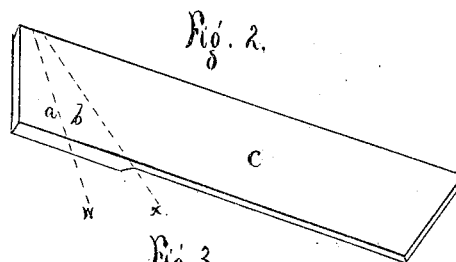
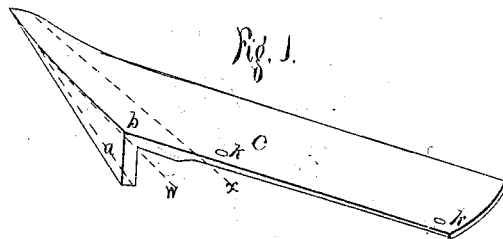


J. Lane,

Manf. Flow Shares.

No. 106838,

Patented Aug. 30. 1870.



Witnesses.

Julius A. Lane
Charley Anderson

Inventor.

John Lane

UNITED STATES PATENT OFFICE.

JOHN LANE, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF, CHARLES H. HAPGOOD, W. B. YOUNG, AND GEORGE H. LAUGHTON, OF SAME PLACE.

IMPROVEMENT IN THE MANUFACTURE OF PLOWSHARES.

Specification forming part of Letters Patent No. **106,838**, dated August 30, 1870.

I, JOHN LANE, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Plowshares, of which the following is a specification:

My invention consists in making a plowshare having a thick turn-down flange, a thick forward end, and a thin body or main portion, made in one piece without a weld by first making a share-blank having a thick end and afterward bending a portion of the thick end thereof for the turn-down flange.

Referring to the drawing, Figure 1 gives a view of my improved plowshare. Fig. 2 gives a view of the share-blank from which I make my improved share. Fig. 3 gives a view of a plate of wrought metal, having a longitudinal thick center, which illustrates my approved method of making the share-blank.

Like letters in the different figures refer to like parts.

a is the turn-down flange. *b* is the thick end of the share, and *c* is the body or main portion of the share. Dotted line *x* shows the meeting line of the thick (*b*) and the thin (*c*) portions of the share. Dotted line *v* shows the place on the thick end where the bend is made in forming the turn-down flange.

The share-blank is cut from the metal plate in such a manner that the flange and the thick portion of the share is from the thick portion of the plate, while the thin portion of the share is from the thin portion of the plate. Wrought-metal plate having a longitudinal thick margin or having thick places in it may be used in place of the plate shown in Fig. 3.

The share is made by heating the blank to

a working heat and placing it in a press or under a drop-hammer, having proper prepared dies, which bend the flange *a* to the position shown in Fig. 1, and otherwise give a proper form to the share.

The cutting-edge of the share may be sharpened either before or after the share is formed to shape.

The land-side bar of the plow extends under the share by the side of the turn-down flange *a*, giving support to the point of the share, while bolts at *K K* secure and hold the share in proper position on the plow.

The point and forward end of the share receives the brunt of wear, and when thin wears out quick, and is very liable to bend or break when meeting obstruction in plowing.

My improved share being extra thick at the point and forward end, and stiffened by the thick turn-down flange, is strong and lasting.

I am aware that plowshares having a thick forward end welded to a land-side bar have been made and used. Such I do not claim; and I do not claim, broadly, a plowshare having a flange.

Having thus set forth my invention, I claim—

A plowshare having a thick flange, *a*, a thick end, *b*, and a thin body, *c*, when made in one piece without a weld, substantially in the manner and for the purpose set forth.

JOHN LANE.

Witnesses:

C. H. HAPGOOD,
JULIUS A. LANE.