

(No Model.)

J. E. RANSOME.
PLOWSHARE.

No. 421,971.

Patented Feb. 25, 1890.

Fig. 2.

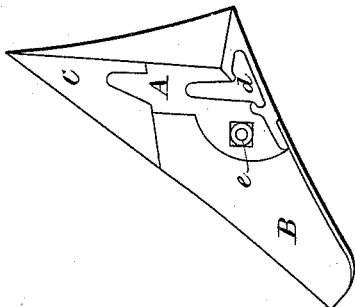


Fig. 5.

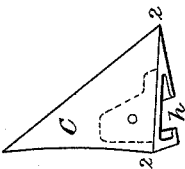


Fig. 4.

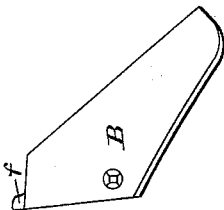


Fig. 3.

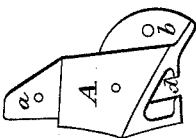


Fig. 1.

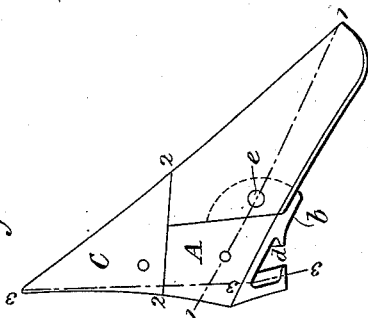


Fig. 8.



Fig. 7.



Fig. 6.



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UNITED STATES PATENT OFFICE.

JAMES EDWARD RANSOME, OF IPSWICH, COUNTY OF SUFFOLK, ENGLAND.

PLOWSHARE.

SPECIFICATION forming part of Letters Patent No. 421,971, dated February 25, 1890.

Application filed May 15, 1889. Serial No. 310,866. (No model.) Patented in England December 5, 1885, No. 14,967, and January 20, 1888, No. 921.

To all whom it may concern:

Be it known that I, JAMES EDWARD RANSOME, engineer, a subject of the Queen of Great Britain, residing at the Orwell Works, Ipswich, in the county of Suffolk, England, have invented certain new and useful Improvements in Plowshares, (for which I have obtained Letters Patent in Great Britain, No. 14,967, dated December 5, 1885, and No. 921, dated January 20, 1888,) of which the following is a specification.

According to my invention I make a plowshare—that is to say, the portion of the plow which cuts the bottom of the furrow—in three parts in place of in one or two, as has heretofore been the practice. By this means the wearing parts are reduced in size. The construction I prefer to adopt is shown in the drawings.

Figure 1 is a plan of the share made in three pieces A, B, and C. Fig. 2 is an under side view of the same. Fig. 3 is a plan of the part A, which I call the "box-piece," although it is not necessarily of a box-like form. Fig. 4 is a plan of the part B, which I call the "wing-piece." Fig. 5 is a plan of the part C or point. Figs. 6, 7, and 8 are sections taken on the lines 1 1, 2 2, and 3 3, respectively, Fig. 1. In these sections the parts behind the plane of section are omitted for the sake of clearness.

The socket *d* of the box A fits onto the nose or fore part of the frame of the plow D, the box being held in place on the frame either by a tension-rod or by a pin or bolt passing through the upper part of the box and through the nose. On the wing side of the box A is formed a projection or ledge *b*, on the top of which the wing-piece B rests, and is secured thereto by a bolt *e*. On the point of the wing-piece a projection *f* is made, which fits into a corresponding recess in the point C, which locks the two parts together. If preferred, the projection can be made on the point C and the recess in the wing-piece B. The socket *h* of the point C fits onto a smaller nose *a* on the front part of the box A of the share, and is secured to the nose *a* by a pin or otherwise and holds the fore part of the wing, both vertically and laterally, firmly in its place, so that only one bolt *e* is required

to secure the wing, while the cutting-edges and upper surfaces are thereby kept in their proper positions. It will be seen from the sections, Figs. 6, 7, and 8, that the upper surfaces of the point, wing, and box form one continuous curve with the mold-board E.

The fore end of the breast, or of the breast and cutter, when the latter is used, abut directly up to the rear of the box-piece and wing.

The upper part of the box-piece is sharp to form a cutting-edge. In plows which have a cutter the latter may be formed separately from or be made in one piece with the box-piece.

I am aware that plows have been provided with movable points and wing-pieces, and I am also aware that in such plows the breast or front portion of the body of the plow is made in a separate piece; but I lay no claim to such arrangements.

In some plows a cutter is provided in front of the breast. So far as my invention is concerned such a cutter may be considered as a part of the breast.

What I claim is—

1. A plowshare made in three parts—namely, a point and a wing-piece, with an intermediate or box piece occupying the angle between them, the wing-piece being of such a form that its rear abuts directly against the front of the breast, while the rear of the intermediate or box piece also abuts directly against the front of the breast of the plow.

2. A plowshare made in three parts—namely, a point and a wing-piece, with an intermediate or box piece occupying the angle between them, the wing-piece being of such a form that its rear abuts directly against the front of the breast, while the intermediate or box piece is made in one with and forms a prolongation of the cutter.

3. A plowshare made in three parts—namely, a point and a wing-piece, with an intermediate or box piece occupying the angle between them, and the point extending in front both of the box-piece and wing, the wing-piece coming above and being fixed to a projection on the box-piece, and the point having in it a recess which receives projections on the box-piece and wing.

4. A plowshare made in three parts—namely, a point, a wing-piece, and an intermediate or box piece occupying the angle between them, the said box-piece having a nose in
5 front and a projection or ledge on one side, the said point projecting beyond the box-piece on one side and having a socket which receives the nose of the box-piece, and the said wing-piece supported by the projection

or ledge of the box-piece and abutting in front upon the hinder part of the point.

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