

G. W. REAM.

Plow.

No. 108,730.

Patented Oct. 25, 1870.

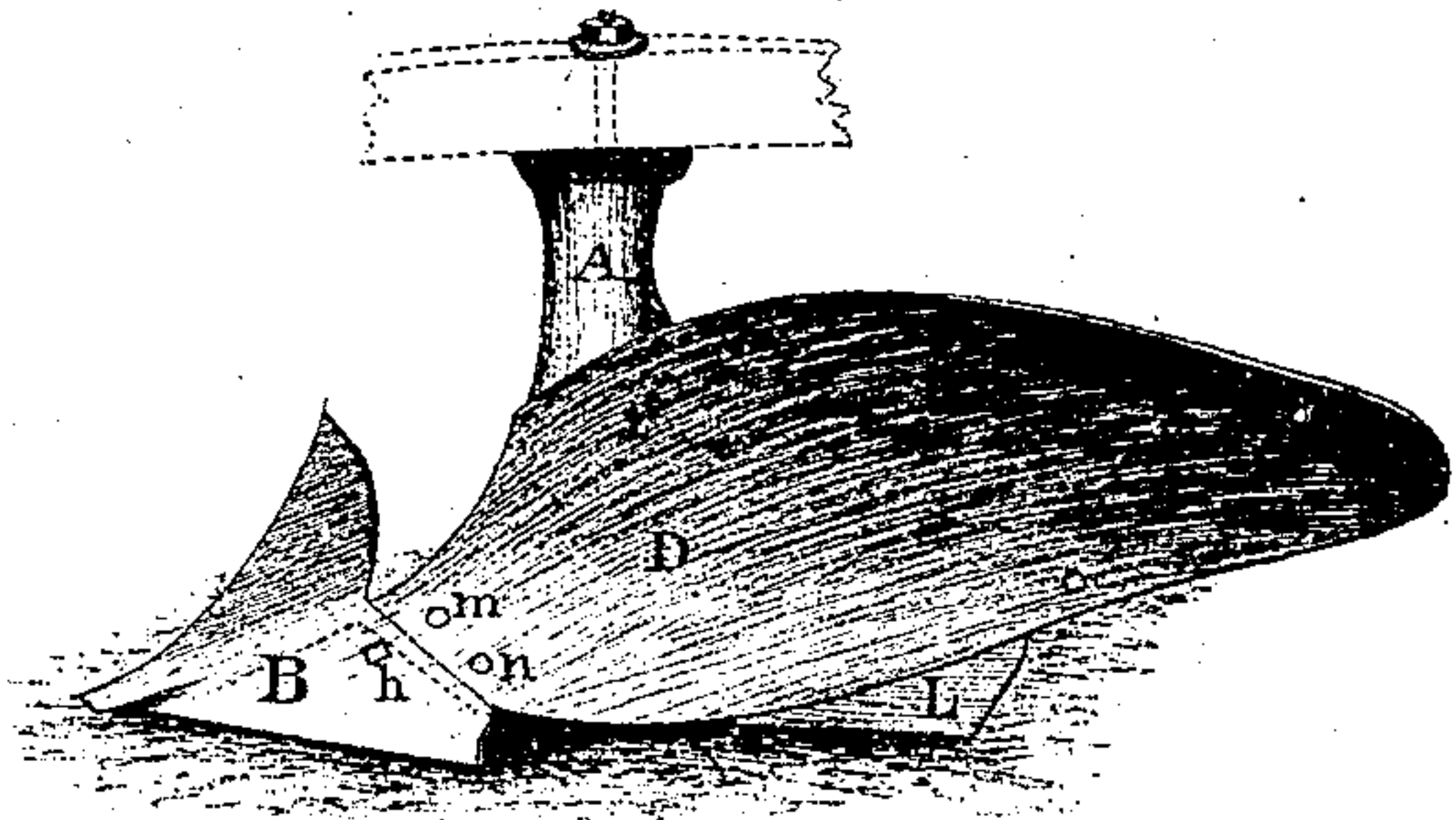


Fig. 1.

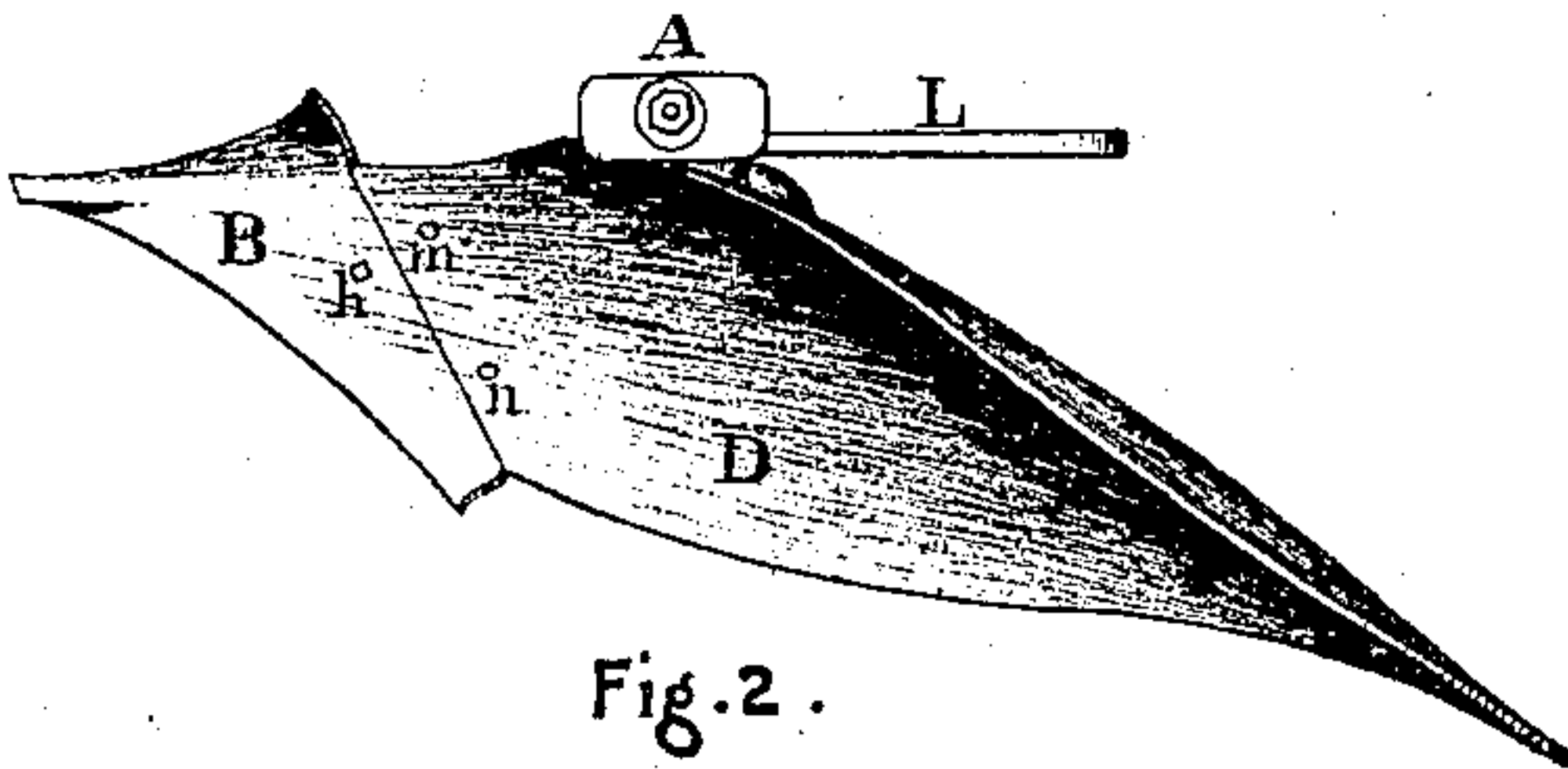


Fig. 2.

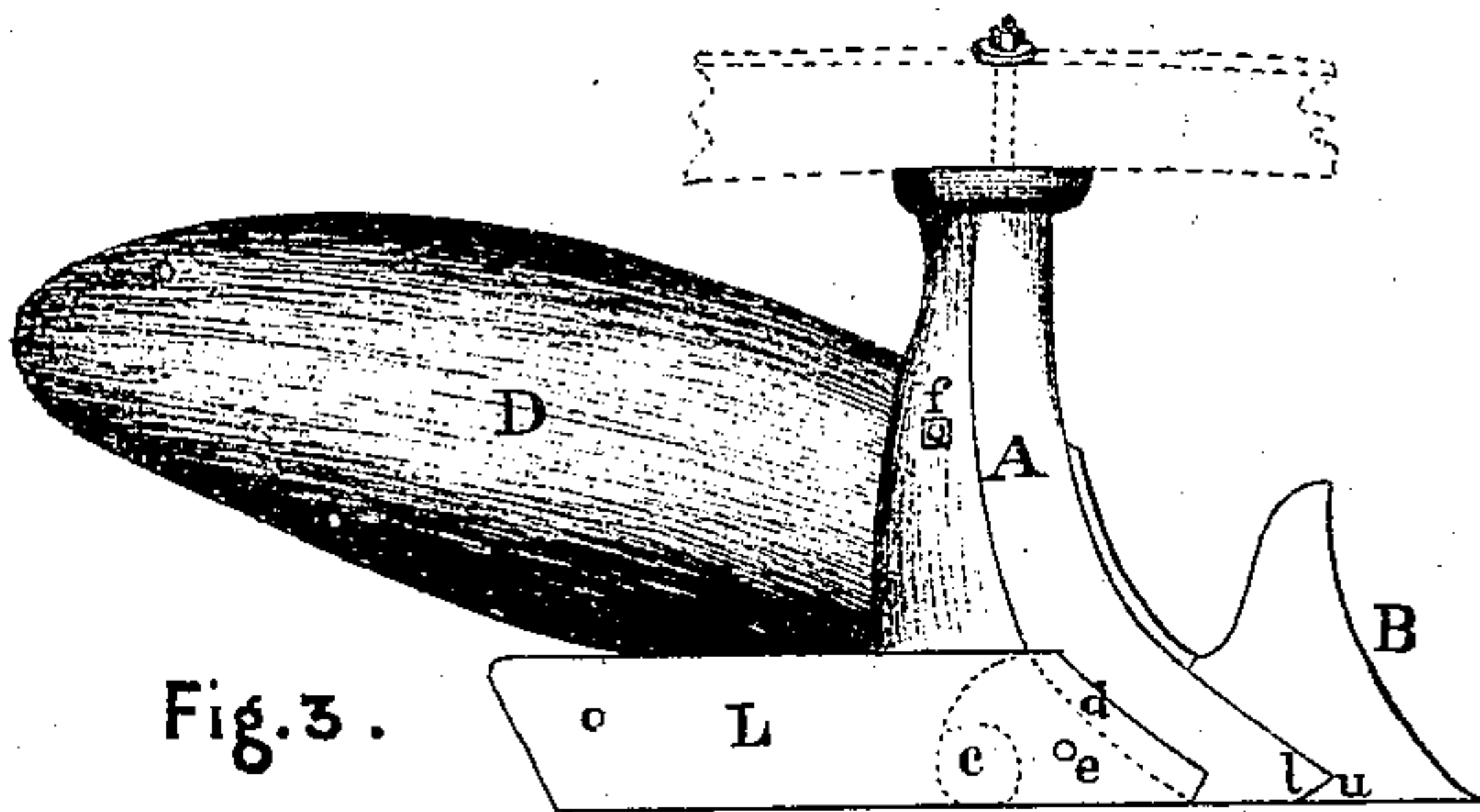


Fig. 3.

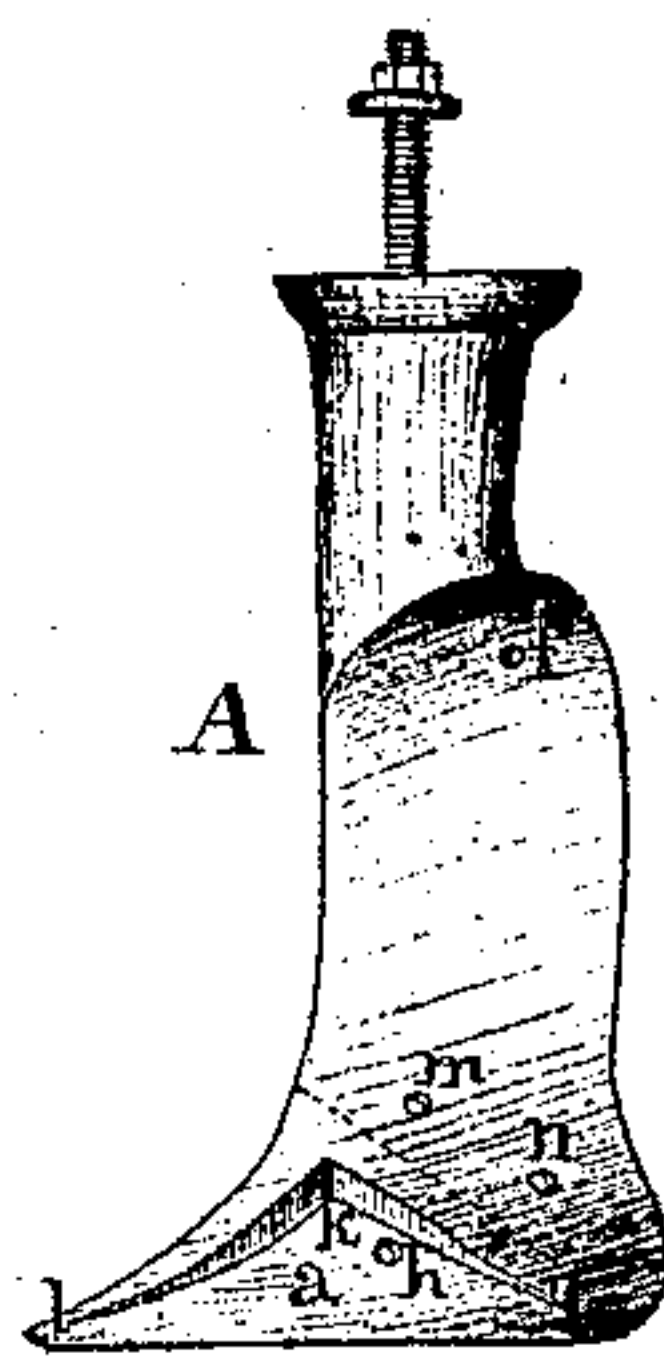


Fig. 4.

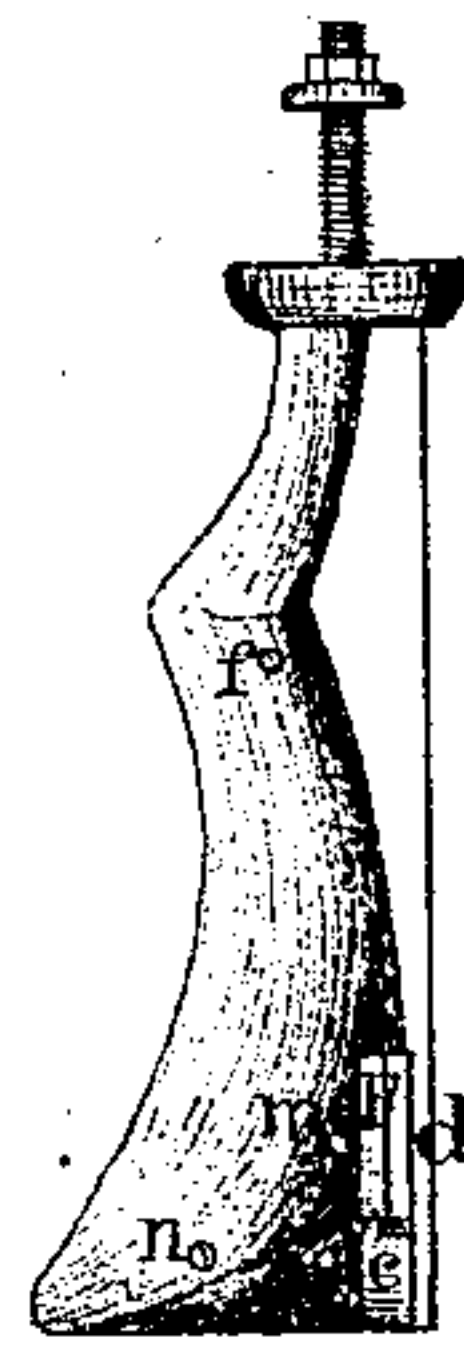


Fig. 5.

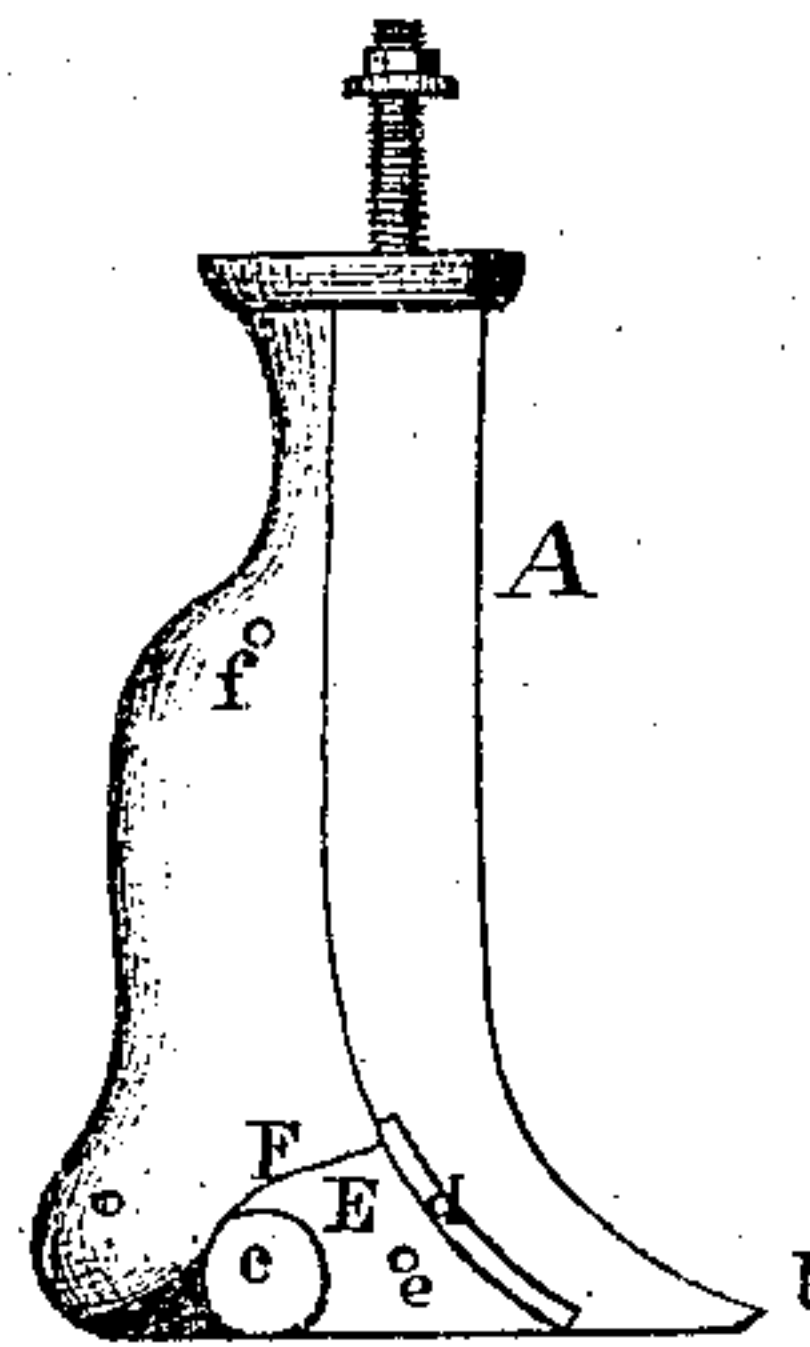
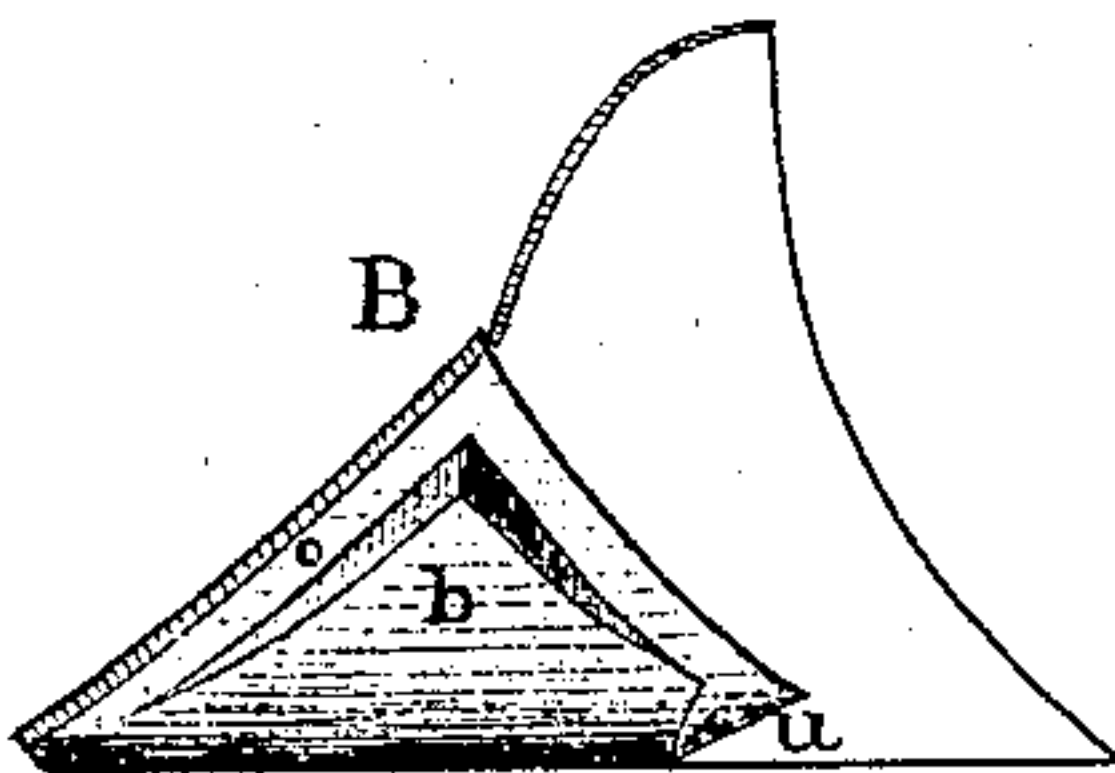
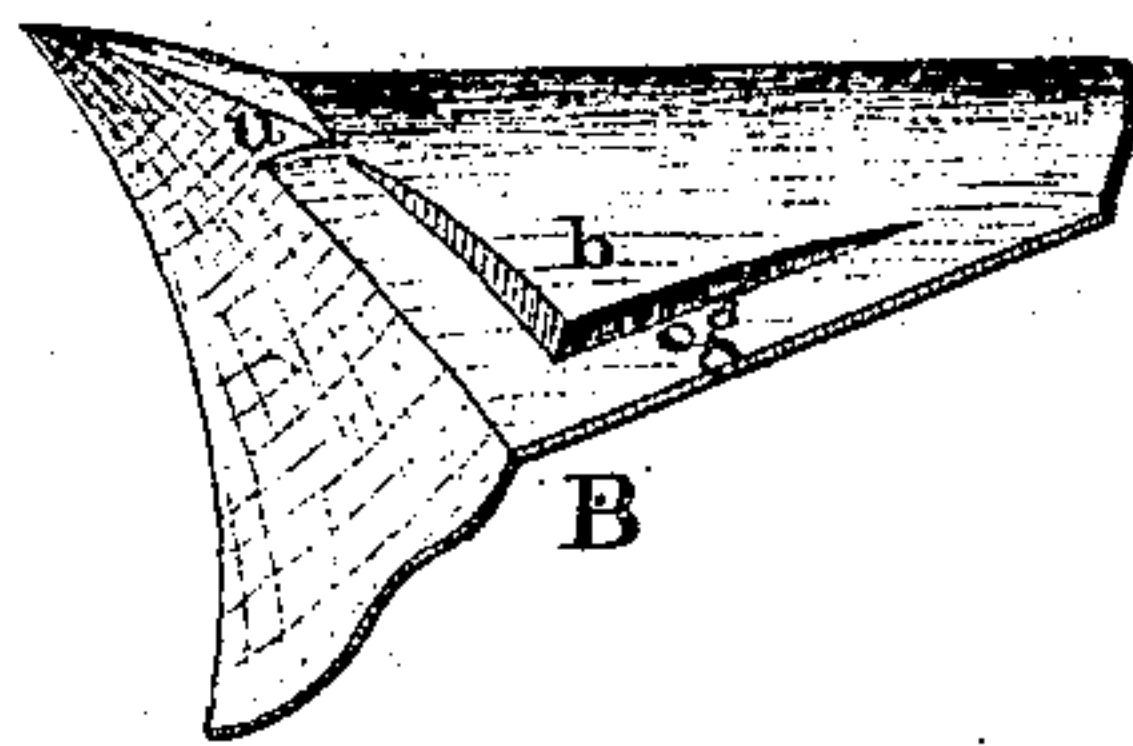
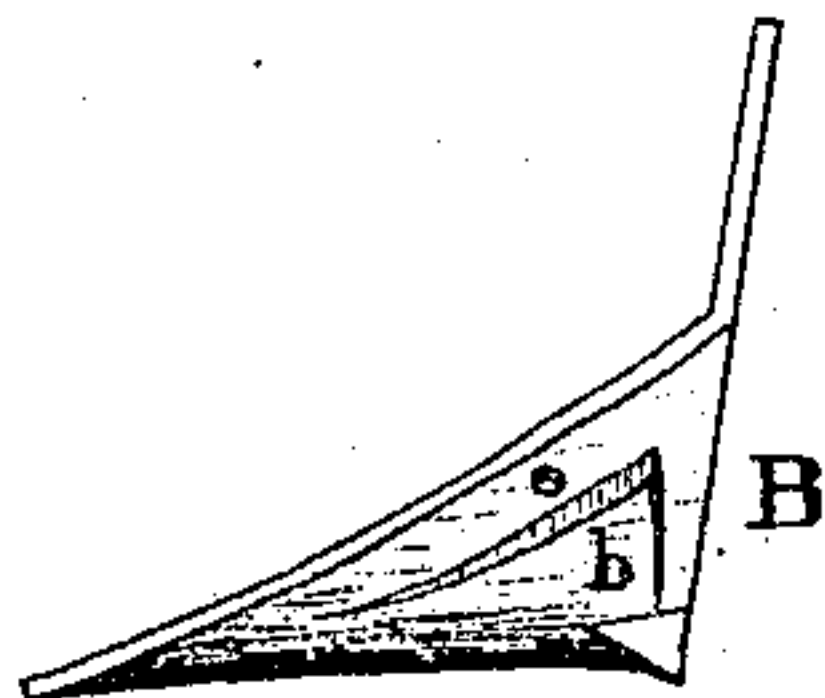


Fig. 6.



Figs. 7.



*W. Hammond*  
*Andrew Chaffin* } Witnesses.

*George W. Ream* Inventor  
*by J. Abbott* Attorney



# UNITED STATES PATENT OFFICE.

GEORGE W. REAM, OF CANTON, OHIO.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 108,720, dated October 25, 1870.

*To all whom it may concern:*

Be it known that I, GEORGE W. REAM, of Canton, Stark county, Ohio, have invented certain new and useful Improvements in Plows; and I do hereby declare that the following is a full, clear, and exact specification thereof.

The first part of my invention relates to the formation of a triangular depression in the seat for the share on the plow-standard, and to the construction of a cast-iron share having a corresponding raised piece on its under side, whereby the cast-iron share can be thickened up, so as to give it the proper strength and solidity of attachment without raising it above the level occupied by the cast-steel share, thus enabling the farmer to use either the cast-iron share or the wrought-iron or cast-steel share upon the same plow, without changing any of the other parts.

The second part of my invention relates to the formation of a depression in the landside face of the plow-standard, by which the bearing of the landside is reduced to a narrow face along its front edge, and to a small face on the rear of the plow-standard, so that, by securing the landside to the standard by bolts passing through this depressed portion of the standard, the landside is brought to a solid seat on these extreme bearing-faces, and the liability of any looseness in the fitting of said landside, by reason of any irregularities on its inner face or the face of the standard is fully obviated.

In the accompanying drawings, Figure 1 is an elevation of a portion of a plow embodying my improvements, taken from the mold-board side. Fig. 2 is a plan of the same. Fig. 3 is an elevation of the same, taken from the land side. Fig. 4 is an elevation of the plow-standard, taken from the mold-board side. Fig. 5 is a rear view of the same. Fig. 6 is an elevation of the same, taken from the land side. Fig. 7 represents a plan of the share lying flat on its furrow-face, together with side and rear views of said share.

The plow-standard A is constructed of cast-iron, in the general form shown in Figs. 4, 5, and 6, and has the mold-board D secured to it by means of the bolts *f m n*, which pass through holes in the mold-board and corresponding holes in the standard, as shown in Figs. 1, 3, and 4.

In the share-seat *a*, on the standard A, is

formed the triangular depression *k*, as shown in Fig. 4, said depression being deepest at the apex, and gradually diminishing in depth until it runs out near the lower side of the share-seat *a*, and the sides of said depression being at a short distance from and nearly parallel to the front edge of the standard, and the lower and front edge of the mold-board, as shown.

On the under face of the share B is cast the raised piece *b*, which is of the same form as that of the depression *k* in the standard A, so that, when the share B is placed on the standard A, the raised piece *c* fits in the depression *k*, as indicated in Fig. 1, the share being secured in this position by the bolt *h*, which passes through a hole in the share, and a corresponding hole in the standard A.

From this description it is seen that the pressure on the share due to the resistance of the earth in plowing, which tends to force said share up on the standard toward the mold-board, is taken up by the bearings of the raised piece *b* against the faces of the depression *k*, instead of acting against the lower edge of the mold-board, as in previous constructions, so that the flange *g* of the share B, which overlaps the face of the standard A, between the depression *k* and the mold-board D, need not be made any thicker than the mold-board D, even although said mold-board be made of cast-steel and the share of cast-iron, so that the cast-iron share B could easily be replaced by a cast-steel share of the same thickness as the mold-board D, which is supposed to be of cast-steel, without the change of any of the other parts.

The cast-steel-share need not have the raised piece *b*, but simply sit over the depression *k*, as it has sufficient strength to resist the pressure applied to it in plowing without the aid of such piece.

In order to strengthen the attachment of the share to the standard against strains tending to raise the share from the standard, or to force it from said standard in a direction toward the plowed side of the furrow, I form the hooked lip *u* on the lower and landside edge of the share B, as shown in Fig. 7. When the share is secured on the standard, this lip hooks under the point *l* of the standard, as shown in Fig. 3, thus adding materially to the stability of the share B.

The landside-arm F of the standard A is cast



with the depression E in its face, which reduces the bearings of the landside L to the narrow edge face *d*, and the small rear face, *e*, as shown in Fig. 6. The landside is secured to the standard by the bolt *e*, passing through a hole in the landside, and a corresponding hole in the depressed face E of the standard, from which it is seen that by drawing up the bolt *e* the landside L will be brought to bear firmly on the two face-seats *d* and *e*, and that this solid bearing of the landside will be effected, even in case the depressed face E and the corresponding part of the inner face of the landside L were rough, dirty, or uneven, which would not be the case were the face E brought out flush with the faces *e* and *d*, so as to give the landside a full face bearing on the standard, as has been heretofore the practice.

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

The plow-standard A, having the triangular depression *k* on its share side, and the depression E, with its narrow front bearing-face, *d*, and the small rear bearing-face, *e*, on the landside-arm F, and the cast-iron share B, with the raised piece *b* cast on its under side, when each is formed and constructed, substantially as described, and all are combined as set forth.

As evidence of the foregoing witness my hand this 15th day of April, A. D. 1870.

GEORGE W. REAM.

Witnesses:

D. HAMMOND,  
ANDREW CHOFFIN.