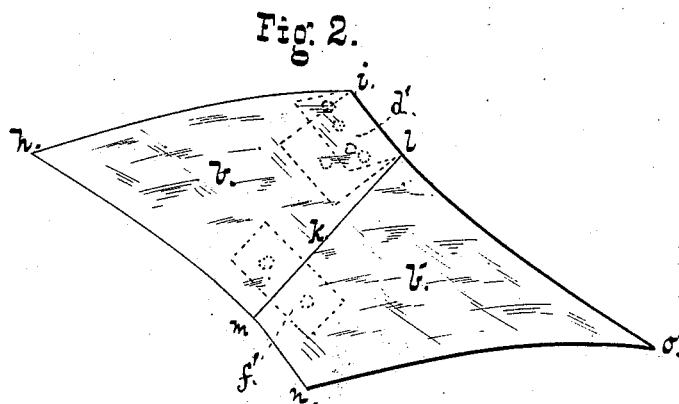
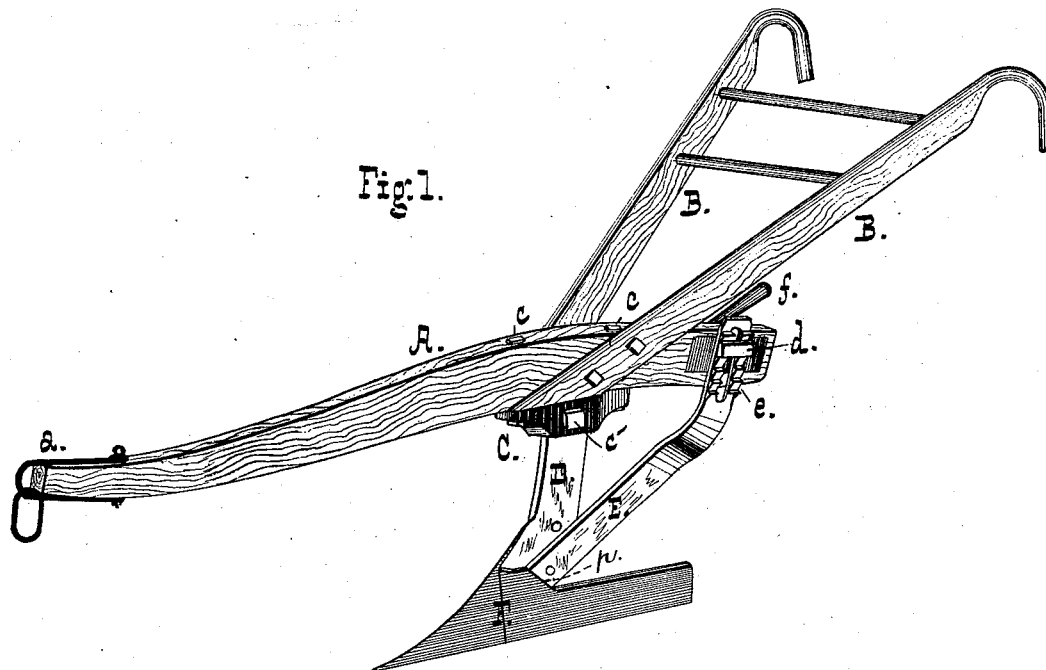


L. E. WOODWARD.  
Plow.

No. 221,136.

Patented Oct. 28, 1879.



Witnesses,  
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# UNITED STATES PATENT OFFICE.

LEWIS E. WOODWARD, OF WACO, TEXAS.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **221,136**, dated October 23, 1879; application filed July 1, 1879.

### *To all whom it may concern:*

Be it known that I, LEWIS E. WOODWARD, of Waco, McLennan county, State of Texas, have invented certain new and useful Improvements in Plows; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the plow; Fig. 2, a side elevation of share and mold-board.

My invention relates to plows; and it consists in certain features that are made the subject of the claim.

A is the beam, having the clevis *a* and handles B of the usual construction. On the under side of the beam is secured, by means of bolts *c c*, a metallic socket, C, in which the plow-standard D is pivoted upon a bolt, *c'*.

The mold-board *b* and share *b'* are secured together by a plate, *f'*, bolted to each, and an angle-piece, *d'*, of steel, is similarly attached to the mold-board, as shown in dotted lines, Fig. 2.

The bolts which fasten the angle-piece to the standard pass through it, Fig. 1, and the lower one also passes through the brace E.

F is the land-side, properly secured and having a step, *p*, on its upper side, against which the end of the brace E abuts, relieving the bolt of strain.

The brace is slightly bent, as shown, so as to pass up on one side of the beam, where it is slotted longitudinally, the sides of the slot being ratcheted.

A T-headed bolt, *d*, engages with the ratchet and is tightened by a handle, *f*, threaded onto its opposite end. This construction readily admits of the colter being more or less inclined, while the disposition of parts is such that strain is equalized and distributed.

The peculiar construction of the share and mold-board is shown in Fig. 2. I have found in practice that the ordinary flaring mold-board, extending three or four inches over the vertical plane of the outer point of the share, is unnecessary and undesirable, increasing the draft without being productive of any good result.

The construction about to be described has been found to attain the best results in point of cleanness of furrow, lightness of draft, and facility afforded in constructing the plow.

I make the cutting-edge *n o* of the share equal in length to the upper edge *h i* of the mold-board, and practically parallel therewith. The sides *h m* and *l o* are also equal, as are the sides *i l* and *m n*. As a result the point *h* lies in the same vertical plane with the point *n*, when the parts are secured to the standard.

As to the curve of the share and mold-board, a horizontal section through any part of either is nearly a straight line, while a vertical section parallel to the beam is an arc of a circle.

The parts may be readily separated when it is desired to sharpen or renew the share.

What I claim is—

The combination, in a plow, of the land-side F, having a step or offset, *p*, against which the brace E abuts, and the standard D, pivoted in a socket, C, the mold-board standard and brace being bolted together, as described, whereby the parts are braced so as to mutually resist strain, as set forth.

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Witnesses:

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