

J. S. HARTZELL.

PLOW.

No. 181,842.

Patented Sept. 5, 1876.

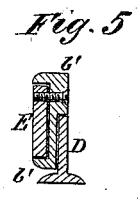
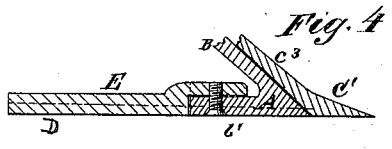
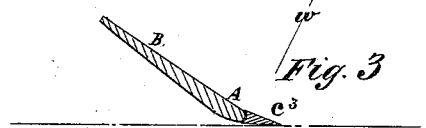
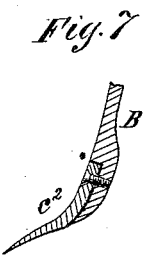
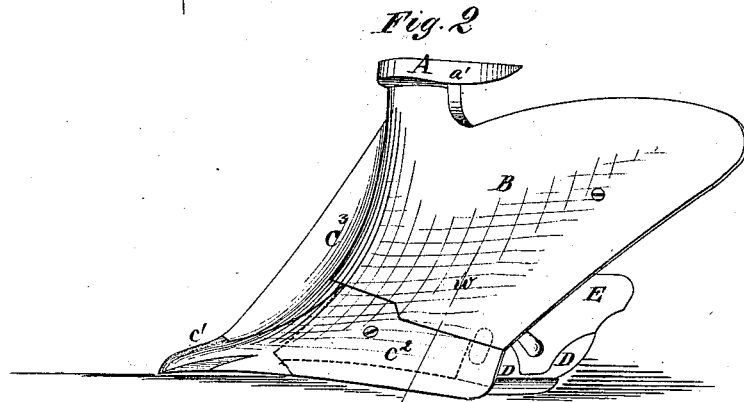
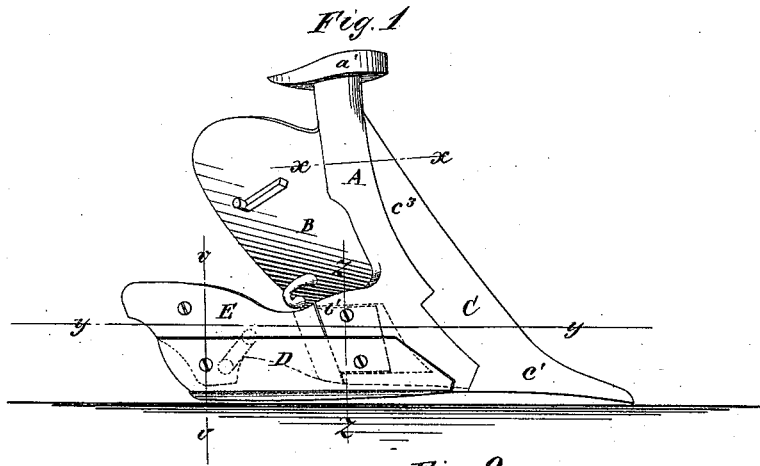


Fig. 6



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UNITED STATES PATENT OFFICE

JUDSON S. HARTZELL, OF ADDISON, PENNSYLVANIA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 181,842, dated September 5, 1876; application filed May 9, 1876.

To all whom it may concern:

Be it known that I, JUDSON S. HARTZELL, of Addison, in the county of Somerset and State of Pennsylvania, have invented a new and useful Improvement in Plows, of which the following is a specification:

Figure 1 is a view of the land-side side of my improved plow. Fig. 2 is a view of the mold-board side of my improved plow. Fig. 3 is a detail horizontal section taken through the line *x x*, Fig. 1. Fig. 4 is a detail horizontal section taken through the line *y y*, Fig. 1. Fig. 5 is a detail vertical section taken through the line *z z*, Fig. 1. Fig. 6 is a detail vertical section taken through the line *v v*, Fig. 1. Fig. 7 is a detail section taken through the line *w w*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved plow, which shall be so constructed that the parts most subject to wear can be readily detached when worn, and replaced with new ones, and when in use will be held firmly to their places.

The invention relates to the construction of the standard mold-board and land-side, as hereinafter described.

A represents the standard, which is formed solid with the mold-board B, and upon the upper end of which is formed a head, *a'*, wide enough to have a firm bearing upon the under side of the plow-beam, and projecting upon the mold-board side far enough to have a hole formed in it to receive the bolt, by which it is secured to said beam. In the lower part of the mold-board B is formed a recess in the upper edge or shoulder, of which is formed an offset, as shown in Fig. 2, to form a seat for the upper edge of the shear *C*² to assist in

resisting the draft strain. The point *C*¹, the shear *C*², and the colter *C*³ are all formed in one piece. The rear edge of the upper part of the colter *C*³ has a longitudinal groove formed in it to rest and fit upon the forward edge of the standard and mold-board, as shown in Fig. 3. The lower sides of the point *C*¹ and shear *C*² are concaved, as shown in Figs. 1 and 7, to make them self-sharpening. Upon the rear side of the lower part of the mold-board and standard is formed a flange, *b'*, which serves as a part of the land-side, and also as a support for the parts of the land-side to be bolted to.

The land-side is made in two parts, D E. The upper part E is made with an offset upon its forward end to underlap the flange *b'*, and with an offset in its lower part to underlap the lower part D. The forward end of the lower part D fits into a recess in the outer side of the lower part of the flange *b'*. The parts D E are bolted to each other, and to the flange *b'*.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The flange *b'* formed upon the standard and mold-board A B, and recessed upon its inner and outer sides to receive the parts of the land-side, substantially as herein shown and described.

2. The land-side, made in two parts, D E, constructed and combined with each other and with the flange *b'*, substantially as herein shown and described.

JUDSON S. HARTZELL.

Witnesses:

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