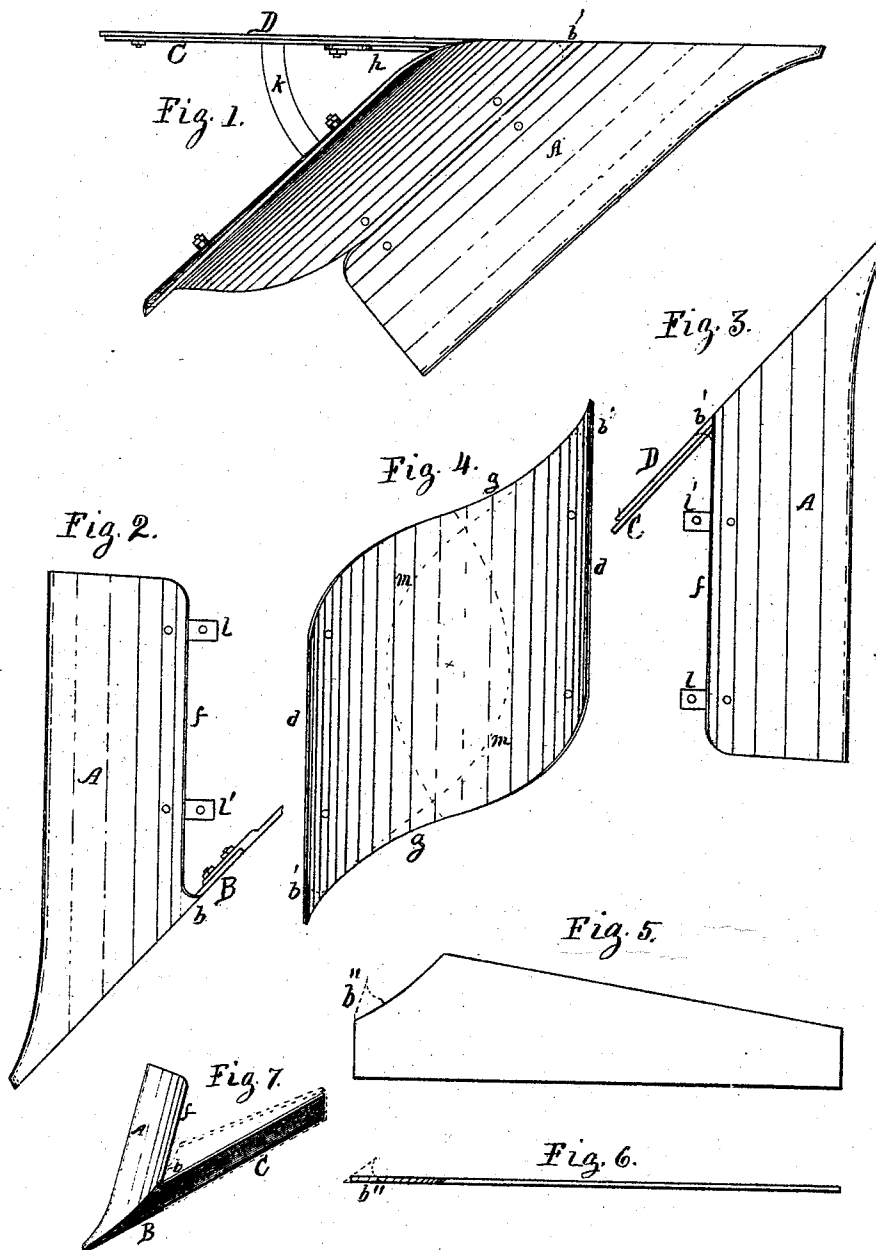


A. HALL.

PLOW.

No. 171,477.

Patented Dec. 28, 1875.



Attest,
J. E. Behel
A. Q. Behel

INVENTOR.
Asa Hall.
Per Jacob Behel.
Atty.

UNITED STATES PATENT OFFICE.

ASA HALL, OF ROCKFORD, ILLINOIS, ASSIGNOR TO HIMSELF, JOHN G. ELLIOTT, AND EDWARD D. HALL, OF SAME PLACE.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 171,477, dated December 23, 1875; application filed September 13, 1875.

To all whom it may concern:

Be it known that I, ASA HALL, of the city of Rockford, State of Illinois, have invented certain Improvements in Plows, of which the following is a specification:

In the use of plows it is found that the mold-boards are unequally worn, the forward lower portion, forming the shin, being worn through, while the rear upward portion shows but little wear. To render the plow more serviceable in this and other respects, which I now proceed to describe, forms the subject-matter of this patent.

In the drawings, Figure 1 is a plan view of a plow embodying my invention. Figs. 2 and 3 represent similar views of the share and a portion of the land-side. Fig. 4 is a face view of the mold-board. Figs. 5 and 6 represent the rear land-side. Fig. 7 is an isometrical view from the point of the share and land-side.

In the figures, A is the share, which is welded onto the upper edge of the short land-side B, which was previously welded onto the land-side of the inner land-side bar C. Fig. 5 is a side and Fig. 6 an edge view of the rear land-side, which is fitted in place and secured by bolts, as at D, Figs. 1 and 3. *k* is a brace secured to the land-side and share, and forms the lug *l*, which, with lug *l'*, are provided with holes to receive the bolts to hold the mold-board in place. *h* is a standard secured to the inside of the land-side, the upper end of which is fitted to receive the beam.

All of the above, together with the necessary handles secured in place, are substantially the same as found in plows now in common use.

Fig. 4 represents a mold-board made reversible, having its radial opposite sides at all points equidistant from a common center, and its radial opposite sides bounded by lines in every particular practically the same, and is curved in such a manner that its opposite halves, from a right line cutting its common center, will be substantially identical, and is of such form that its opposite edges *d* are made to form a practical joint with the edge *f* of the share A, whether it be straight or curved, and its opposite edges *g* are made to form a

shin line with the face of the land-side, and the bolt-holes radially opposite each other are equidistant from the common center. The curved dotted lines *m* are designed to represent nearly the line of the greatest wear on the mold-board, which is greatest at the forward end, and diminishes as it curves upward and rearward. When the mold-boards are made of wrought or rolled material, as plates of steel, I prefer to cut the blank forms from plate-bars of proper width to make a mold-board, so that the edges *d* will coincide with the edges of the plate. The curved lines *g*, forming the ends of the mold-board, are such that when so cut there will be little or no waste of material. The blanks are then formed of proper curve, punched or bored, and fitted, tempered, and polished, as it is usual to prepare such work, the processes of which are well known, and need not be described here.

The object of this part of my invention is to produce a plow provided with a mold-board of such configuration, and fitted in such a manner, that after having rendered service nearly equal to the plow of the present, and being well worn, the mold-board may be reversed, placing the rear end forward, and the upper edge downward, and which can be secured in place and made ready for use without the aid of a mechanic, and, so far as respects the mold-board, will be fitted to render additional service nearly equal to a new plow.

In the construction of plows I also use cast-steel and cast-iron, in which case I prefer to make the share A and short land-side B in one piece, with the shin portion of the share curved, as at *b*, Fig. 2, and also the ends of the mold-board curved, as in dotted lines *b*, Fig. 4, and made to fit the curved share. The share may also be made of plate material, and curved, as at *b*; but I prefer to make the curved portion *b* on the land-side, in which case I cut the land-side blank, Fig. 5, with the portion *b'*, (seen in dotted lines,) which, being heated and bent, as seen in dotted lines *b''*, Fig. 6, which is then fitted onto the inner land-side bar C, as at D, and in dotted lines in Fig. 7, in such a manner that the straight side of the portion *b'* will fit the straight side

of the share, and its curved side receive the curved ends of the mold-board.

In constructing plows as above described, I am enabled to combine plate and cast material in many different combinations required for the different soils in different localities, such as plate-steel, cast-steel, cast-iron, &c., in all the different parts of the plow.

I am aware of the use of reversible mold-boards, but that they have been made in one piece with the share. I therefore do not claim to be the first to construct a plow with a reversible mold-board in its broadest sense; but

I claim as my invention—

In combination with a plowshare, a plow mold-board constructed substantially as described, with its opposite edges *d* fitted to the edge *f* of share A, and its opposite edges *g* made to form a shin line with the face of the land-side, and made reversible, as described, for the purpose of greater durability.

ASA HALL.

Witnesses:

H. H. PALMER,
J. G. ELLIOTT.