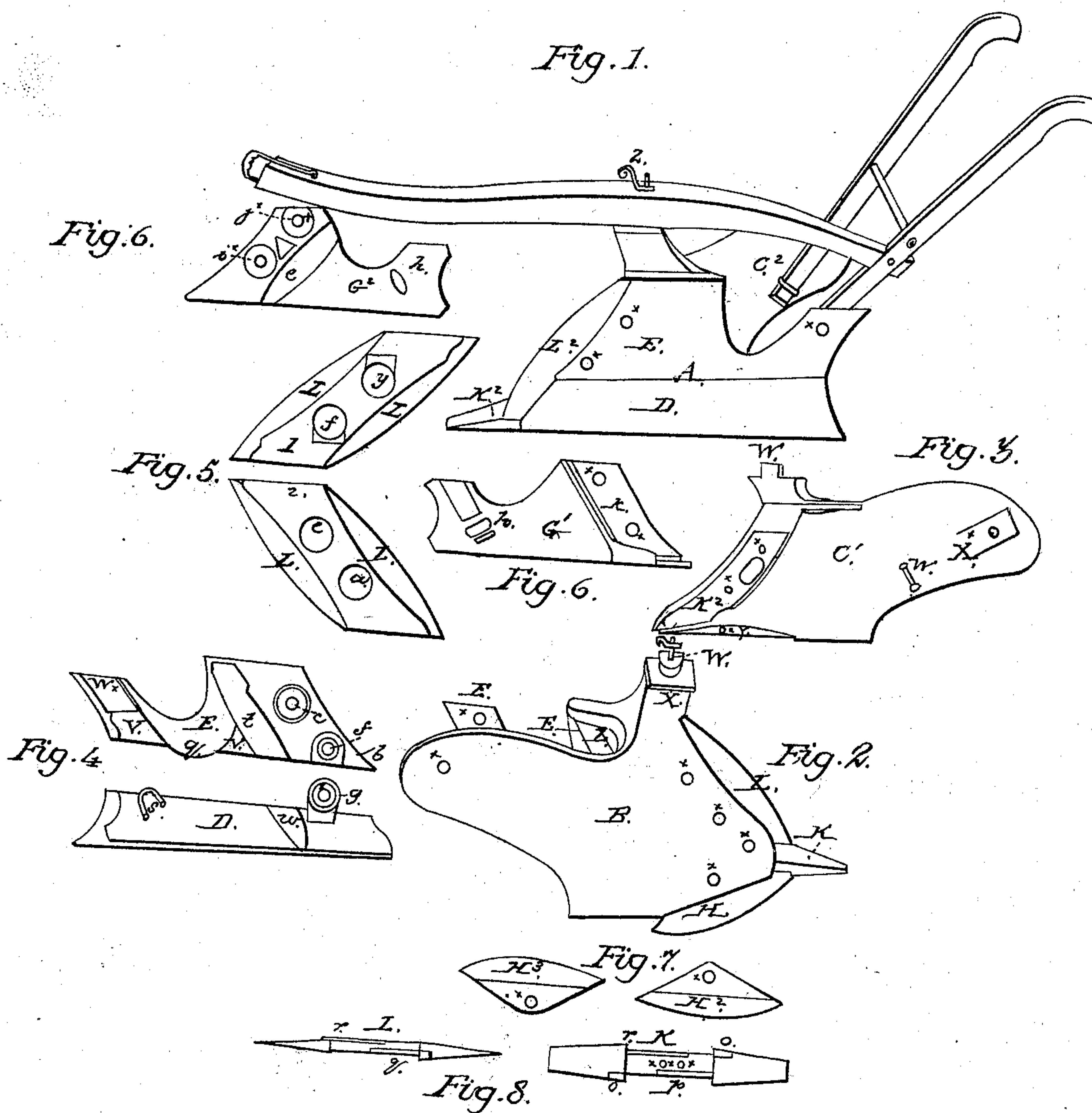


J. B. MOORE.

Plow.

No. 3,352.

Patented Nov. 24. 1843





# UNITED STATES PATENT OFFICE.

JAMES B. MOORE, OF WILMINGTON, DELAWARE.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 3,352, dated November 24, 1843.

*To all whom it may concern:*

Be it known that I, JAMES B. MOORE, of Wilmington, in the county of New Castle and State of Delaware, have invented a new and useful Improvement in the Construction of Self-Sharpening Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which forms a part of this specification, in which—

Figure 1 is a perspective view of the plow; Fig. 2, mold-board detached from beam and handles; Fig. 3, inside of mold-board; Fig. 4, inside of upper plate of landside; Fig. 5, cutter or colter, showing both sides; Figs. 6 and 6', both sides of inside plate of the landside; Fig. 7, the shear detached; Fig. 8, double point.

The nature of my invention consists in the peculiar construction of the landside and cutter and the adaptation of the other parts thereto.

The construction of my plow is as follows: The mold-board is formed similar to those of some plows now in use, the front part on the inside being straight from the bottom nearly to the top, where it terminates in the usual brace, by which it is bolted to the beam. In this straight part there is a recess (see  $K^2$ , Fig. 3) from the bottom nearly two-thirds its height, and at the top of the straight part above named there is a projection,  $a$ , backward, that is rabbeted on its lower edge, into which the upper outside plate of the landside, hereinafter described, fits. The recess  $K^2$  has two holes,  $x$ , through to the face for receiving bolts to fasten the cutter and landside to it. There are two other holes below these, more plainly shown in Fig. 2, the front one of which serves to bolt the point on, by the other the share.

The share is a triangular plate, Fig. 7, the cutting-edge of which is convex. Near the angle formed by the other two sides there is a hole,  $x$ , for receiving the bolt by which it is fastened to the mold-board, and as both ends are shaped alike, it can be turned with either foremost.

The point, Fig. 8, is made double, or having a point at each, like many points now in use, that are made to turn end for end. This has two or more holes in the shank, by which it is fastened on.

The landside is composed of three plates, one

of which is shown at Figs. 6, 6'. It is straight on the lower edge, and the front edge forms an angle with it. The inner face at the front, or that which comes next to the mold-board, has a projection,  $k$ , on it that just fits the recess  $K^2$  in the mold-board, and has two holes through it corresponding with those in the mold-board. From the top of the projection  $k$  above named the plate is cut out in a curvilinear form, rising again behind, where there is a recess for the left handle, just below which there is a slot,  $h$ , through it, and under it, a rib, on which the end of the handle rests. At the lower front corner a groove is cut to receive the shank of the point. On the other side of this plate, in front, it is straight for about the same distance back as the width of the projection on the other side, and recedes from the rest of the face, but is on a line parallel with it. Behind this there is a recess,  $b$ , just the form to receive the edge of the cutter, hereinafter described. The rest of the face is straight. This forms the inside plate of the landside, to which the others are fitted.

The cutter is of a form nearly corresponding to a rhomboid, the longest sides being convex and beveled off on the mold-board side to the proper edge. Either of the edges may be placed foremost by turning the plate upside down.

The part  $l$ , that projects beyond the mold-board and landside, has a shoulder that fits against them, the shank or part connecting the two edges being made thinner, and having two large holes,  $d$  and  $e$ , Fig. 5, through it, into which bosses on the outer landside-plates fit. This is put onto the inner landside-plate above described, the cutting-edge that is turned in fitting the recess  $b$  in said plate.

The outer landside-plates, E and D, Fig. 1, the inside being shown in Fig. 4, are formed as follows: The lower one is an oblong piece, somewhat narrowest in front, from which projects up near the front end a piece,  $g$ , of a circular form, and standing a little inward about the thickness of the shank of the cutter. This boss  $g$  enters the lower hole in said cutter, and on its opposite side it has a concavity which makes it cup-formed. Through the center is a hole which comes opposite that in the mold-board. Back of the boss the inside of this pin is recessed,  $u$ , enough to receive the lower end



of the cutter L. The lower edge has a flange on it, that runs under the inner landside-plate, which flange also extends up around the back end of said plate. The upper plate, E, is straight on its lower edge and fits onto the lower one. Its front side is slightly concave, and fits closely the shoulder of the cutter L. It extends up to the projection *a* on the mold-board and fits into the rabbet on its lower edge. From this it curves down and backward a little beyond its center, and then turns upward again, the curve being somewhat elliptical. It then runs back horizontally wide enough for forming the support to the handle, from whence it curves down to the lower edge, forming an obtuse angle therewith. Near the front lower corner a circular groove, *f*, is cut out on the inner face, to admit the cup-shaped boss *g* on the lower plate, and above this is a boss, *c*<sup>x</sup>, projecting out, which, when in place, fills the upper hole in the cutter. A hole is made through the center of each of these opposite those in the mold-board, through both of which a bolt passes, having a countersunk screw on the landside at the proper distance behind the holes. There is a recess, *t*, which is a continuation of the one marked *u* in the lower plate, to receive and fit the cutter L, which is turned in, thus completely incasing every

part of the cutter except that part that is projected beyond the front edge of mold-board and landside. From the recess *t* to the recess *u* for the handle there is a curved projection, *q*, that fits over the upper edge of the inner plate, which plate rises up above the lower edge of the plate E and holds the landside firmly together.

The three plates are bound together behind by the handle in the following way: The upper plate is bolted through to it, and the lower end of the handle passes down over the inner plate and through a loop, *s*, which is cast on the lower plate, D, and passes through the slot *h* in the inner plate. The point K has a small recess on top, into which the lower point of the cutter enters.

Having thus fully described my invention, what I claim as my invention, and for which I desire Letters Patent, is—

The landside formed of three plates, constructed and arranged in the manner and for the purpose herein described, and in combination therewith the double cutter, in the manner substantially as herein set forth.

JAMES B. MOORE.

Witnesses:

JONAS P. FAIRLAMB,  
JOHN S. MARKLEY.