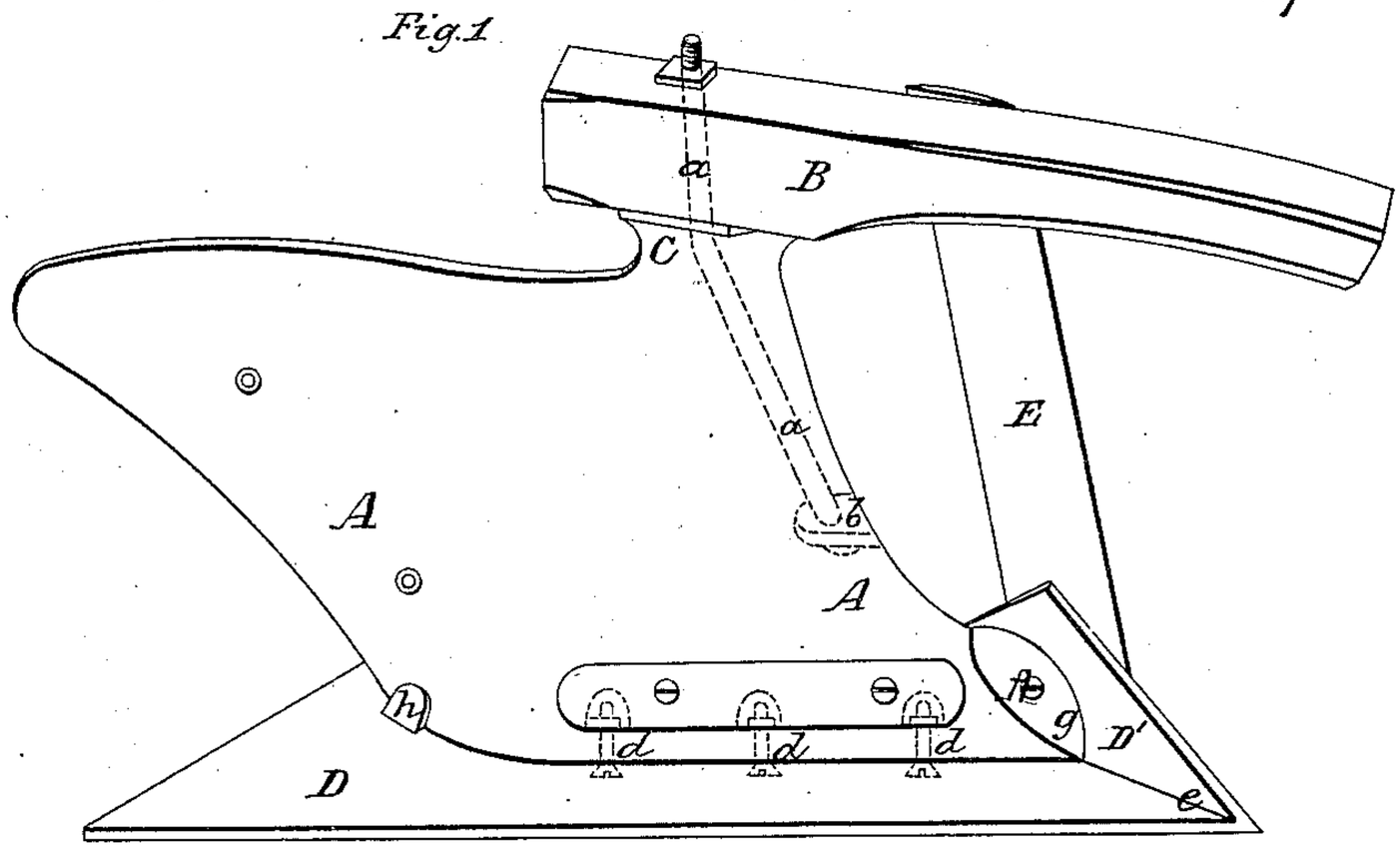
J. Dutcher,

Plow,

No. 1,360, Patented Oct. 9. 1839.

Fig. 1



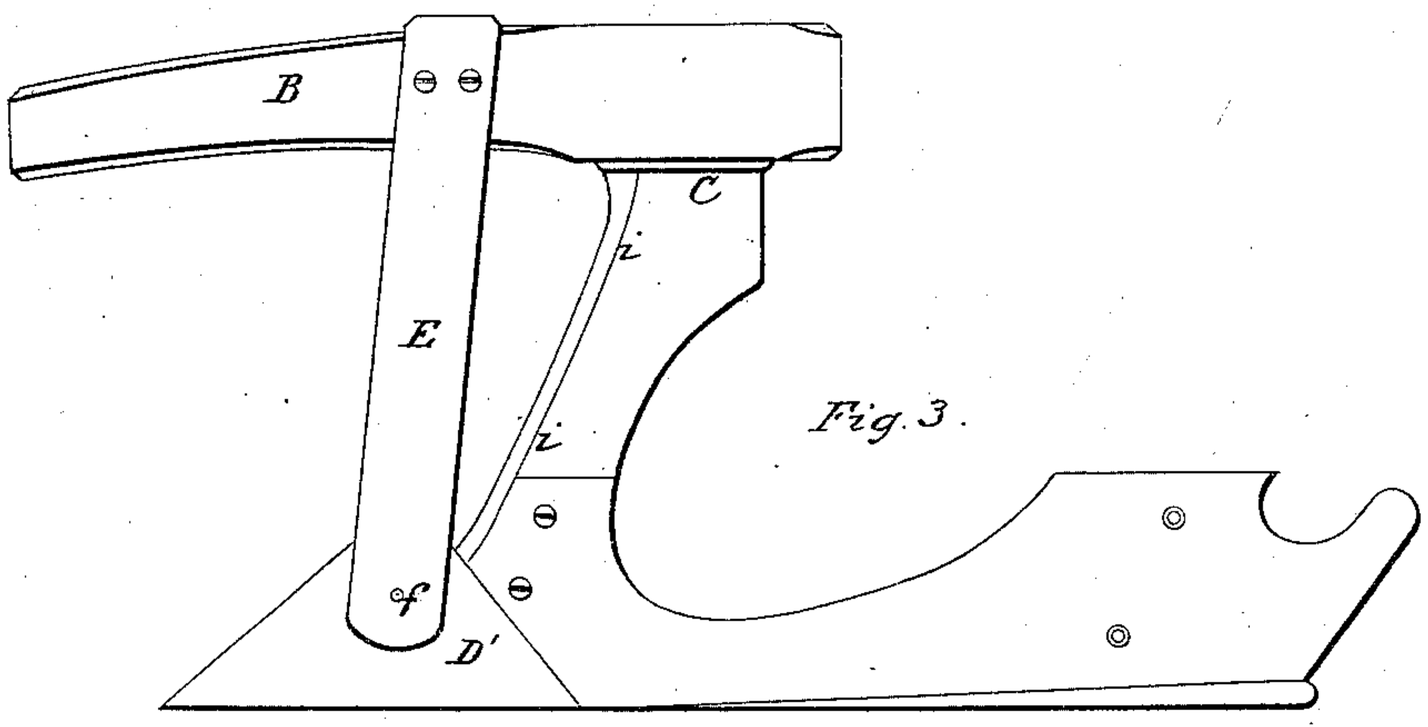
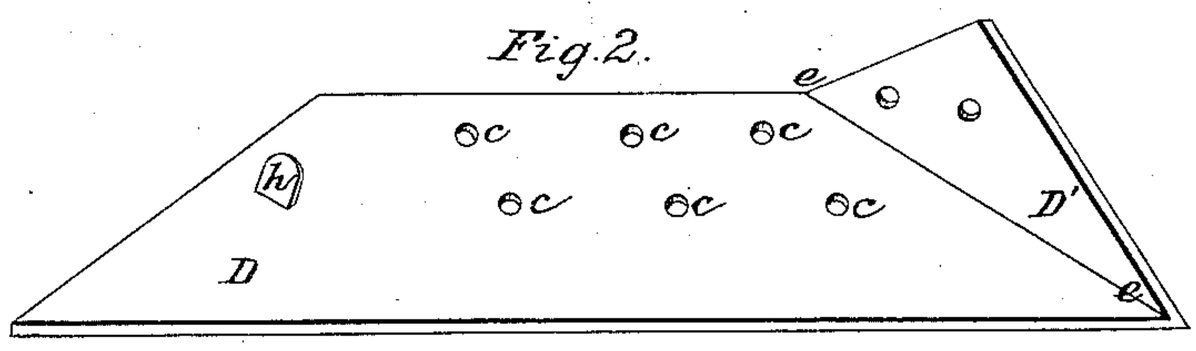


Fig. 3.

Fig. 2.



UNITED STATES PATENT OFFICE.

JOSIAH DUTCHER, OF NEW YORK, N. Y.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **1,360,** dated October 9, 1839.

To all whom it may concern:

Be it known that I, JOSIAH DUTCHER, of the city of New York, in the State of New York, have invented certain Improvements in the Manner of Constructing the Plow, by means of which it is particularly adapted to the plowing of prairie lands, its share being so formed and fixed as readily to cut and break up the stiff matted sward of such lands; but my said improvements are applicable also to other plows.

In the accompanying drawings Figure 1 is a front view of my plow, A A being the face of the mold-board, which is connected to the beam B by a bolt and screw-nut, said bolt, which is represented by the dotted line *a a*, passing up in the angle formed by the union of the mold-board with the landside, and through the flanged neck C, its head bearing below, and being sustained by a jog or stay, *b*, cast with the mold-board for that purpose. In this, as well as its general construction, this plow does not differ from many others. D D is the share of my plow, which I usually make of sheet-steel, of the kind used for mill-saw plates; but it may be made of sheet-iron or of malleable cast-iron, which, however, will necessarily be less durable than the sheet-steel.

Fig. 2 is a separate view of the share, which, it will be seen, is made of such width as to pass to a considerable distance back under the sole of the plow. The object of this is to afford an opportunity of shifting the share forward when it may become necessary from its having become worn on its fore edge. It is represented as having two rows of bolt-holes, *c c c*, to admit of its being thus shifted. These bolt-holes are countersunk to allow the heads of the bolts to be flush with the under side of the share. The nuts by which the bolts are secured are situated in a recess cast in the face of the mold-board, as shown at *d d*, Fig. 1, where the bolts are shown by dotted lines, passing through holes in the mold-board, leading into said recess. A plate of metal is cast so as to fit into the recess, covering the screw-nuts, and rendering the face of the mold-board perfect in that part. This plate is fixed in place by screws, or otherwise. The front end of the plate forming the share is to be bent up at right angles with its general plane, as shown at D′, the line *e e*, in which the bending takes place, being such that the portion D′ shall be in the plane and constitute a part of the landside of the plow. The front edge of the part D′ thus co-operates with and may be said to constitute a part of the colter E. The colter is secured at its upper end to the beam of the plow, and at its lower end a bolt, *f*, passes through it, through the part D′ of the share, and through a flange or projecting piece, *g*, cast onto the mold-board for that purpose. To keep the share the more firmly in its place a projecting piece or stop, *h*, rising from the face of it, bears against the heel of the mold-board, as shown in Fig. 1, and the line of the heel against which it bears being parallel with the plane of the landside, its bearing is not disturbed by the shifting of the share forward.

Fig. 3 shows the landside of the plow, of which the elevated portion D′ of the share forms a part, as is there distinctly represented. The construction of this part does not otherwise differ from that of some other plows. The line *i i* is that of a rabbet cast in the mold-board to receive the plate or plates constituting the landside, which are secured in place by screws and nuts in the ordinary way.

Having thus fully described my improvement in the plow, what I claim as my invention, and desire to secure by Letters Patent, is—

1. The manner in which I construct the share—that is to say, the forming it of a wide flat plate, with two or more rows of holes for attaching it to the mold-board, for the purpose of shifting it forward as it wears, and with the fore end of said plate turned up, as described, so as to form a cutting-edge, while its plane coincides with and forms a part of the mold-board.

2. The manner of sustaining the front part of the share by placing its vertical portion between the colter and the flange cast upon the mold-board, and by passing a bolt through the whole, as set forth.

3. In combination therewith, the projecting piece or stop *h*, bearing against the heel of the plow, for the purpose of sustaining the back end of the share, as herein made known.

JOSIAH DUTCHER.

Witnesses:

THOS. P. JONES,

GEORGE WEST.