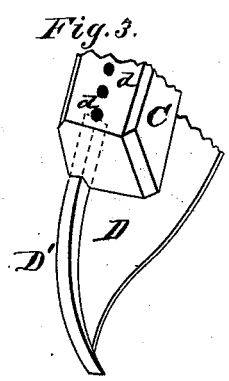
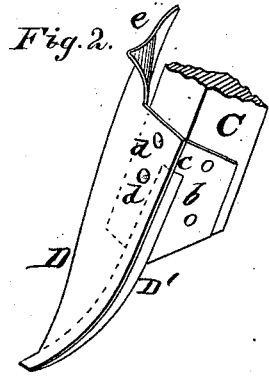
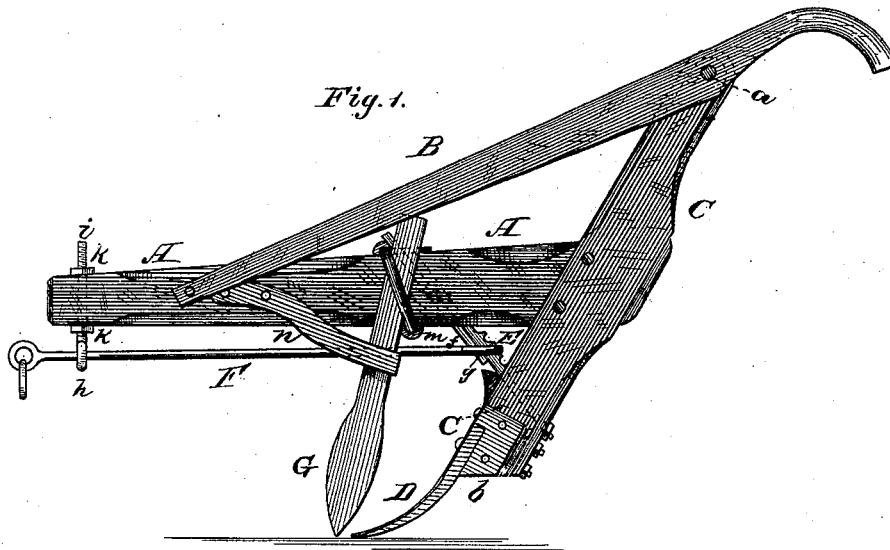


J. & M. RICH.  
Plow.

No. 196,934

Patented Nov. 6, 1877.



WITNESSES  
*Henry N. Miller*  
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# UNITED STATES PATENT OFFICE.

JASON RICH AND MOSES RICH, OF HASTINGS, MICHIGAN.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **196,934**, dated November 6, 1877; application filed September 12, 1877.

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

Be it known that we, JASON RICH and MOSES RICH, of Hastings, in the county of Barry, and in the State of Michigan, have invented certain new and useful Improvements in Plows; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to plows, having for its object to improve the durability of the same, and to provide a plow which will be simple in construction, easily manipulated, and not liable to get out of repair.

It may be observed that in devices of this kind the parts, after being used, are not readily adjusted and held securely in their place, owing to the wear of the parts by which the adjustment is made; and to this end this invention is especially calculated to remedy all the faults heretofore existing in this class of implements; and this invention consists in the construction and combination of parts, as will be hereinafter more fully described.

In the annexed drawing, Figure 1 represents a side elevation of a device embodying our invention. Fig. 2 represents a perspective front view of the mold-board and a part of the standard, and Fig. 3 a rear view of the same.

A represents the plow-beam; B, the braces and handles; C, the standard, the braces and handles being secured or connected by a cross-brace, *a*.

To the lower portion of the standard, upon the land-side part, is secured a plate, *b*, being flush with the inner portion of the standard, and having a forward-projecting lip, *c*. This plate serves to protect the inner portion of the standard, and serves to lock the mold-board D firmly in position with the assistance of the bolts *d*.

The mold-board D is of peculiar construction, being of a regular curve to the extent of the width of the standard, and then curving outward and backward its entire length until at a point near the top, where it curves sharply upward and forward, as shown at *e*; the effect of this upward and forward curve being

to catch the earth when the plow is thrown out of the ground by roots, stones, or other obstructions, and thus have a tendency to bring the point back into the ground after such obstruction is passed.

The mold-board D is provided with a rib, *D'*, on its back, along the land-side edge, and extending nearly to the top of the same. This rib forms the point to the mold-board, and serves as a brace to strengthen the same. The standard C is cut out so that a portion of this rib fits in the same, and a shoulder is formed in said standard, against which the rib bears. The projecting part *c* of the plate *b* also projects over the upper end of said rib.

Between the plow-beam and the standard is a notched brace, E, passing through both the plow-beam and standard, and secured in place by means of a key, *f*, passing through the plow-beam and a recess in the brace E. This part E serves not only as a brace, but as a means of adjustment to the draft-rod F, by which means the draft is easily and speedily regulated at will. This draft-rod F has a loop, *g*, at its rear end, which may be raised or lowered upon the notched brace E.

The said draft-rod passes through an eye, *h*, of a rod, *i*, which passes through the forward end of the plow-beam, and which may be adjusted up or down by means of the nuts *k k*, one of which is upon the upper and the other upon the lower side of the beam.

G represents the colter, which is held in position by means of the staple *m* and brace *n*, said staple passing around the beam and the upper portion of the colter, while the brace *n* incloses the colter about midway at one end, and is securely attached to the beam at the other, by which means the colter may be adjusted at will and held securely in position.

It will thus be seen that by this invention the draft can be regulated at will, either from the front or rear of the draft-rod; the colter can be easily and quickly adjusted; and that if the plow is thrown out of the ground, the peculiar formation of the mold-board assists in bringing the same back to its proper position.

Having thus fully described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The mold-board D, having a forward

curve upon the inside, a backward curve upon the outside, and the sharp curve *e* upon the upper part, substantially as described.

2. In combination with the beam A and standard C, the notched brace E, passing diagonally through the beam and standard, the key *f*, and the draft-rod F, all constructed substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 31st day of August, 1877.

JASON RICH.  
MOSES RICH.

Witnesses:  
FRED SWEET,  
CHAS. SWEET.