

H. OPP.
PLOWS.

No. 190,779.

Patented May 15, 1877.

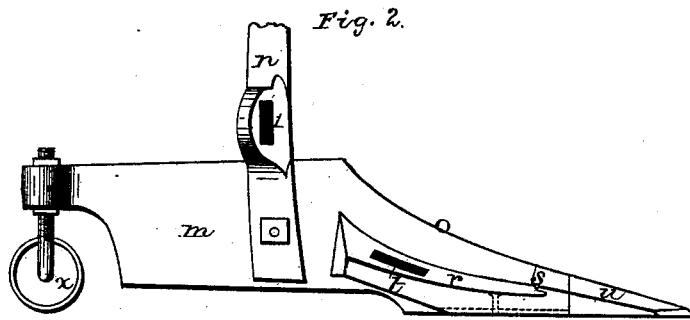
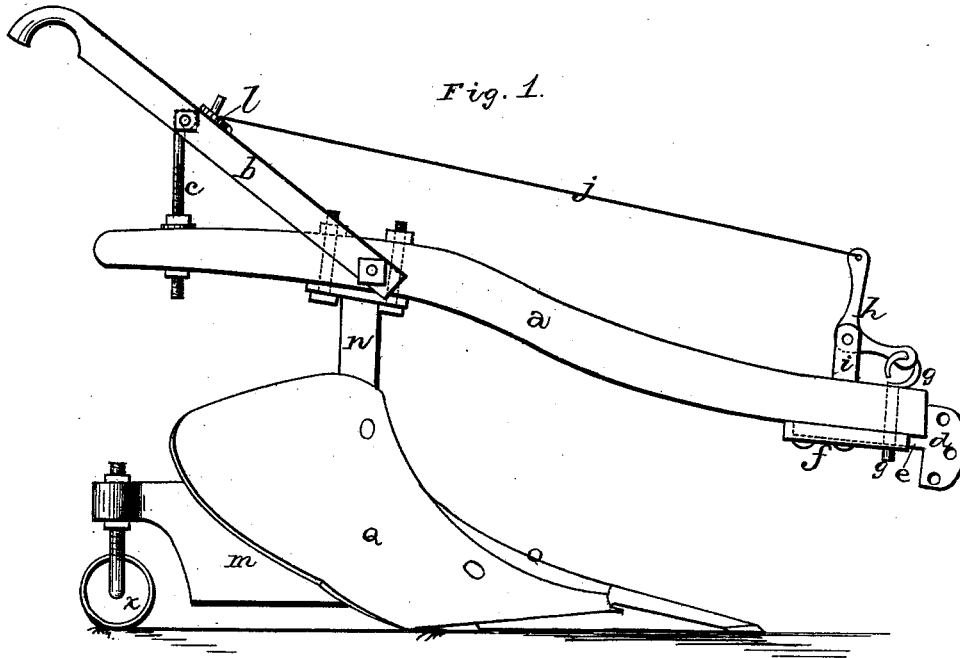


Fig. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

HENRY OPP, OF BELLEVILLE, ILLINOIS.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **190,779**, dated May 15, 1877; application filed April 12, 1877.

To all whom it may concern:

Be it known that I, HENRY OPP, of Belleville, in the county of St. Clair and State of Illinois, have invented certain new and useful Improvements in Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in plows; and it consists in the arrangement and combination of parts that will be more fully described hereinafter, whereby a simple, cheap, and effective plow is produced.

Figure 1 is a side elevation of my invention. Fig. 2 is a detail view of the land-side, and Fig. 3 is a section taken across the front end of the land-side.

a represents the beam; *b*, the handles, that are adjusted up and down by the screw-bolt *c*; and *d* is the clevis. This clevis, instead of being secured to the end of the beam in the usual manner, has a long shank, *e*, formed on its rear side, which fits in the socket *f* on the under side of the beam. The bolt *g*, that passes down through the beam and shank, and holds the clevis in position, has its upper end fastened to the rocking lever *h*, that is pivoted to the side of the upright *i*. The rear end of the lever is fastened to the long connecting-rod *j*, which extends back, and is fastened to the hand-lever *l*, that is pivoted upon the top of one of the handles *b*. By means of these levers the clevis can be loosened, and the horses thereby detached from the plow at any moment.

The standard *n* is bolted to the under side of the beam in the usual manner, and has its lower end fastened to the inside of the land-side. Just above the top of the land-side the standard is considerably enlarged, and has a slot, *l*, made through for the bolt that fast-

ens the mold-board in position to pass through. Just at this enlargement the front side of the standard is beveled away, so that the board can rest snugly against it.

The land-side *m* is cast in one solid piece, and has its outer edge *o* raised above the level of the other parts, and above the inner edge of the mold-board *Q*, so as to form a colter to cut the sod and earth. The mold-board may be made in a single piece, or two or more pieces secured together, and has its inner edge so shaped as to fit snugly upon the curved slanting portion or flange *r*, formed upon the inner edge of the land-side. The front end of the mold-board fits under and behind the shoulder *s*, so as to form no obstruction to the earth, and the mold-board is secured into the flange by a bolt, that passes down through the slot *t*.

The point *u* may either be formed as a part of the land-side, or the point may be separately formed, and have its shank held in the dovetail groove *v* in the front end of the land-side.

Only the front end of the land-side bears upon the ground, the other portions being cut away, as shown, and the rear end supported upon the wheel *x*. The front portion of the lower edge of this land-side projects a considerable distance below the rear portion, thereby enabling it to be used as a subsoil-plow.

Having thus described my invention, I claim—

The land-side *m*, having the cutting-edge *o*, flange *r*, shoulder *s*, slot *l*, and point *u*, and having its rear end supported upon the wheel *x*, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of March, 1877.

HENRY OPP.

Witnesses:

J. TRALL,

AUGUST WEISSENBORN.