J. REICH.

PLOW.

No. 189,496. Patented April 10, 1877.

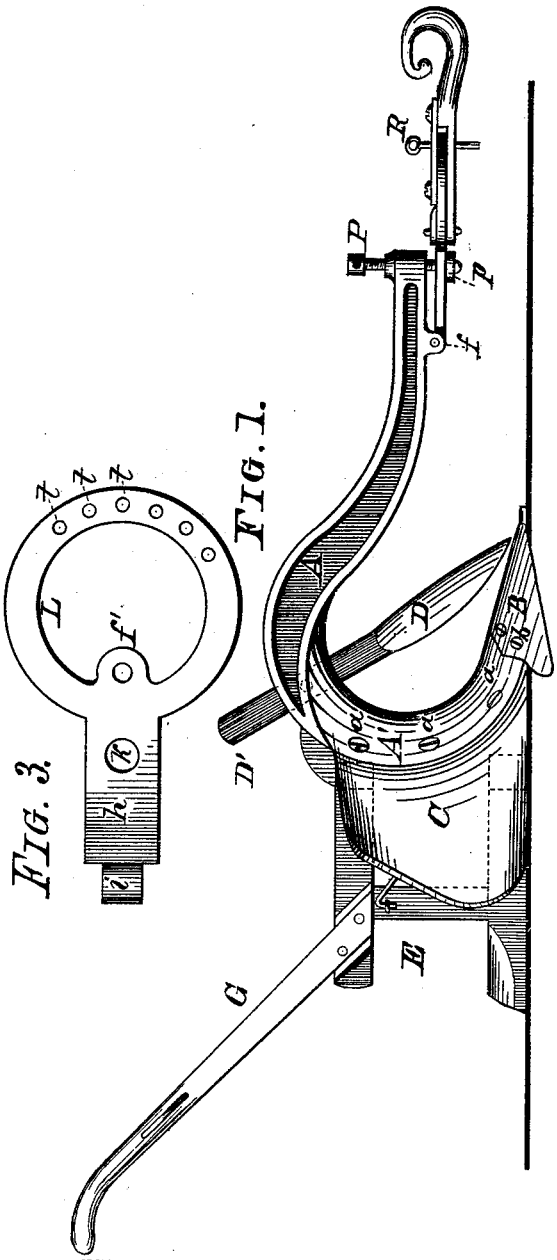

FIG. 1.

FIG. 3.

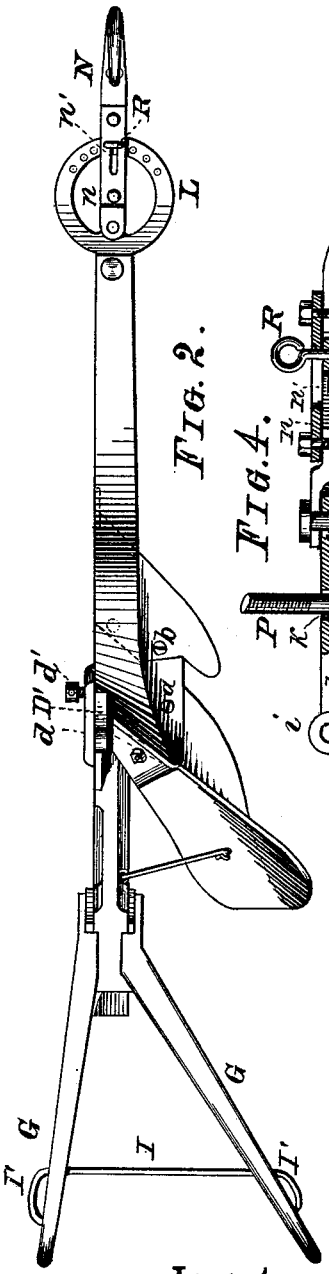

FIG. 2.

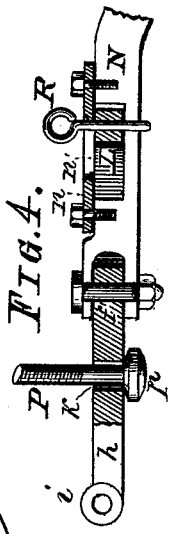

FIG. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN REICH, OF BUFFALO, NEW YORK.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **189,496**, dated April 10, 1877; application filed February 26, 1877.

To all whom it may concern:

Be it known that I, JOHN REICH, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements on Plows; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to improvements on plows; and it consists in the arrangement of parts and details of construction, as hereinafter first fully described, and then pointed out in the claims.

In the drawings hereinbefore mentioned, Figure 1 is a longitudinal side elevation. Fig. 2 is a plan. Fig. 3 is a plan of the pivoted disk, and Fig. 4 a section through the pivoted open disk and clevis of my improved plow.

Like letters of reference indicate corresponding parts in all the figures.

A is the usual cast-iron plow-beam, to the curved rear end of which are attached the plow-point B, mold-board C, colter D, and guide-frame E. This beam is provided, in about the center of the circular curve, with a recess, into which the shank D′ of the colter D loosely fits, a cap, *d*, Fig. 2, being secured to the beam by screws, or directly cast thereon, to retain said colter in place, while a set-screw, *d′*, passing through said cap, serves for adjustment of said colter D. The rear part of the beam A is of an L-shaped transverse section, so as to form a flange, A′, to which is secured the mold-board C by means of the screws *a*, the said mold-board being provided with lugs on its back, so as to bring its face flush with said flange, and thus to present a perfectly smooth and even surface to the soil to be operated upon. This mold-board may be produced, in the process of casting, of either steel or iron, the former being preferable, on account of its ductility combined with hardness, and in the present advanced state of the art of producing steel castings from patterns this kind of mold-boards is preferable to chilled cast-iron ones. To the extreme end of the curved beam A is secured the plow-point B by means of the screws *b*. This point is also preferably cast of steel, so that it can be readily sharpened, and the end of the beam A is recessed for the reception of said point B, in order to bring the same flush and even with the surface of the flange. To the body A′ is furthermore attached the frame E, to the upper beam of which are secured the handles G. These handles are braced by the rod I passing through said handles, and having on both its extremities the eyes I′, which latter serve to hold the reins. Near the front end of the beam A are provided lugs *f*, forming a double eye, to which is pivoted a circular open disk, L, having a lug, *f′*, projecting into the opening, to which is attached the clevis N. This circular disk has a shank, *h*, terminating in an eye, *i*, by means of which, and a bolt passing through it and the double eye *f*, it is pivoted to the beam A. The shank *h* has an aperture, K, through which passes the adjusting-screw P, which has its thread engaging with a nut on the front end of the beam A, and its lower end provided with a collar, *p*, below the shank *h*, to hold the clevis at any desired elevation, and it may be raised or lowered by turning said screw P in the proper direction. To the lug *f′* is pivoted the clevis N, which has a cap, *n*, to hold it in position, said cap being provided with a slot-hole, *n′*, for the passage of the bolt R, arranged to engage with any one of the apertures *t* in the disk L.

By means of this bolt the clevis N may be adjusted laterally, and locked in any position, so as to enable the plow to be used along fences, stumps, and other obstructions in the field, the handles G being likewise so attached to the frame E as to project but little over the land-side of the plow.

Having thus fully described my invention, I desire to secure to me by Letters Patent of the United States—

1. In a plow, the combination of the following elements: the curved beam A, having socket for the colter, and having the standard A′, L-shaped in cross-section, one member forming the front portion of the mold-board, and supporting the rear wing thereof, the land-side and frame secured to the other member of the standard, forming a support for the handles, substantially as shown and described.

2. The combination, with the plow-beam A, having the lugs *f* on its forward end, of the adjusting-screw P and the pivoted open disk L, as described.

3. The combination, with the plow-beam A, having the lugs *f*, of the adjusting-screw P, the pivoted open disk L, and the clevis N, as stated.

In testimony that I claim the foregoing as my invention I have hereto set my hand and affixed my seal in the presence of two subscribing witnesses.

JOHN REICH. [L. S.]

Attest:

MICHAEL J. STARK,
FRANK HIRSCH.