J. GOGEL.

REVERSIBLE PLOW.

No. 190,678. Patented May 15, 1877.

Fig. 1.

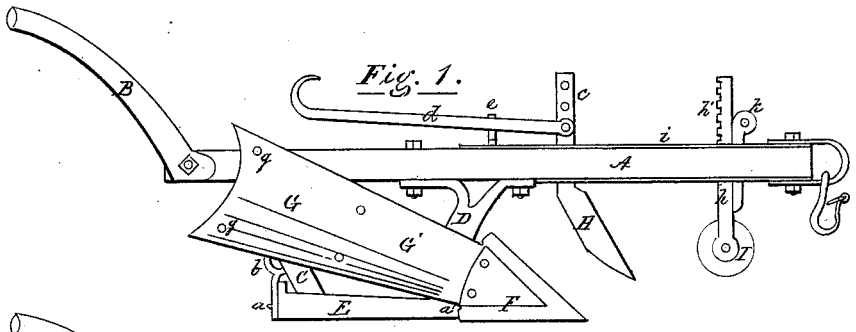


Fig. 2.

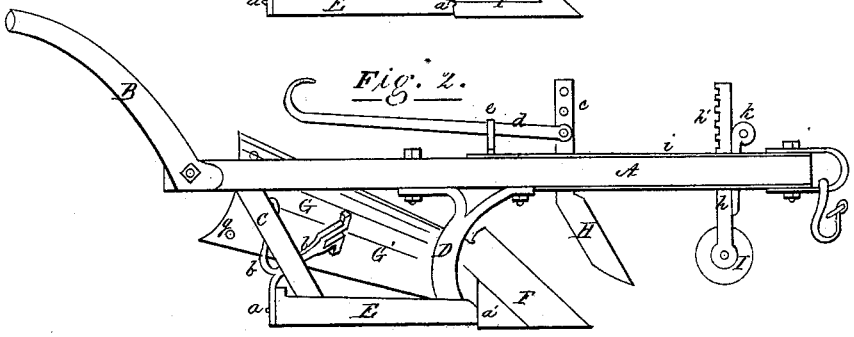
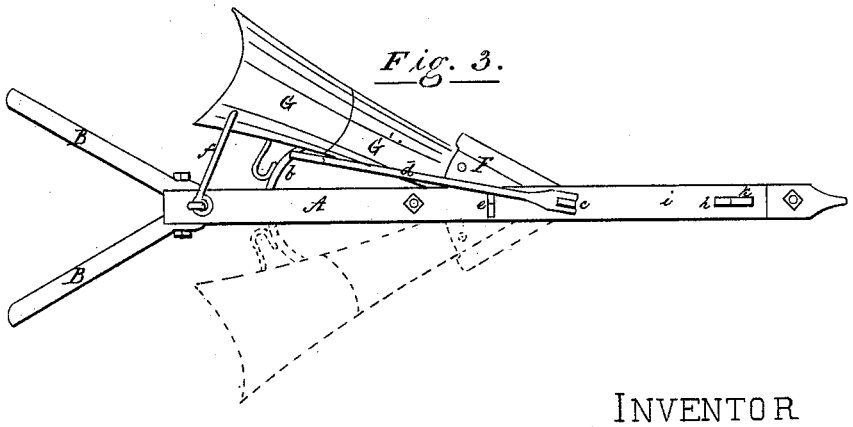


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN GOGEL, OF TOLEDO, OHIO.

IMPROVEMENT IN REVERSIBLE PLOWS.

Specification forming part of Letters Patent No. **190,678**, dated May 15, 1877; application filed March 3, 1877.

To all whom it may concern:

Be it known that I, JOHN GOGEL, of Toledo, in Lucas county, in the State of Ohio, have invented an Improved Reversible or Hill-Side Plow, of which the following is a specification:

This invention consists in a novel means of adjusting the colter to adapt it to the position of the share and mold-board on the right or left side of the beam.

Referring to the accompanying drawing, Figure 1 represents a side elevation of a plow embracing my improvements, and showing the share and mold-board to the right of the beam. Fig. 2 represents the same with the mold-board and share to the left; and Fig. 3 is a top view of the same, with the mold-board and share to the left in full lines, and to the right in dotted lines.

The same letters of reference occurring on the several figures indicate like parts.

A represents the beam, and B the handles, of the plow, as usually constructed. To the under side of said beam is connected, by means of braces C and D, a shoe, E. To this shoe are pivoted the share F and mold-board G G′, as at *a a′*, and on which points they turn in unison to bring them to the right or left of the beam, as desired. The share F, being made of steel, may be thin, and consequently light, so as to cut its way easily through the earth. The portion G of the mold-board is made of sheet or plate iron, and is also light, while the intermediate portion G′ is of cast-iron, and to which the two extremities are bolted and braced by irons *b*, to give them the necessary rigidity.

The shank *c* of the colter H passes freely and vertically through an aperture in the beam A, and is held in place in a fixed position, to the right or left, by the lever *d*, resting on the left or right of the inverted V-shaped standard *e*, erected on the beam, so that on reversing the share and mold-board the rear end of the lever *d* may be raised and passed to the opposite side of the standard *e*, to bring the colter into proper position, relatively, to the share, when it will be retained in such position by the lever resting against the incline of the standard *e*, while the share and mold-board are retained in position on the right or left by the hook *f*, connected with the beam A, and engaging with one of the holes *g* in the upper end of the mold-board.

The land-wheel I is connected with a stem, *h*, which is notched on its rear side at *h′*, to engage with the metal plate *i* on the beam A, and is securely held in position at any desired height by the wedge-shaped key *k*, passing through the beam in front of and against the said stem *h*.

A plow thus constructed is light to handle, easy of draft, and readily reversible, and adjustable for deep or shallow plowing.

What is here claimed as new, and desired to be secured by Letters Patent, is—

The combination of the lever *d*, hinged to the colter, with the angular standard *e*, for adjusting the colter to the right or left of the beam, as described.

JOHN GOGEL.

Witnesses:

EDW. KOLB,

W. MORRIS SMITH.