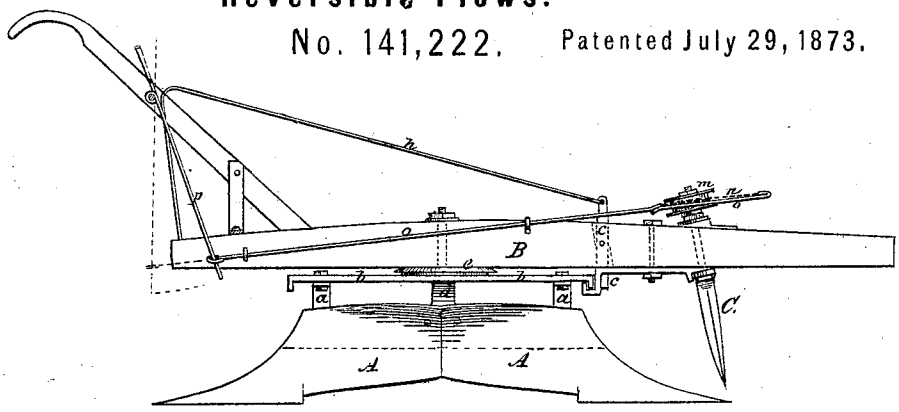
G. W. HOWE.

Reversible Plows.

No. 141,222. Patented July 29, 1873.

FIG. 1.



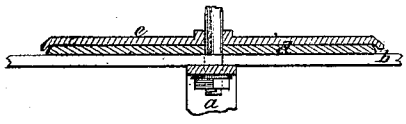


FIG. 4.

FIG. 3.

FIG. 2.

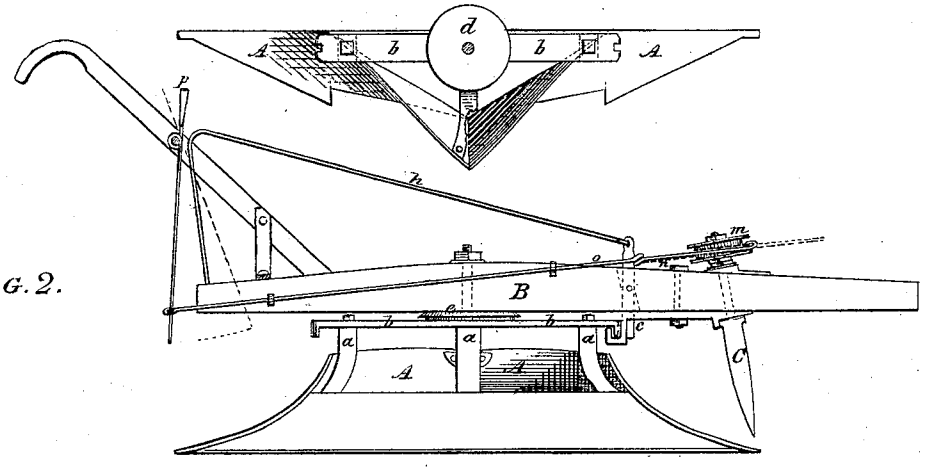


FIG. 5.

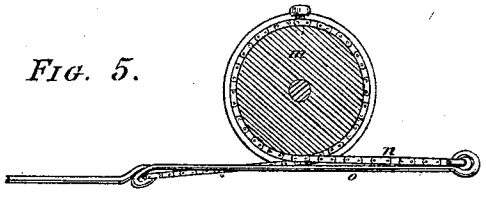
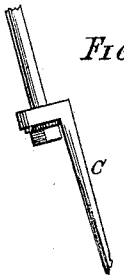


FIG. 6.



Witnesses:

Inventor.

G. W. Howe

UNITED STATES PATENT OFFICE.

GEORGE W. HOWE, OF VINELAND, NEW JERSEY.

IMPROVEMENT IN REVERSIBLE PLOWS.

Specification forming part of Letters Patent No. **141,222**, dated July 29, 1873; application filed April 17, 1873.

To all whom it may concern:

Be it known that I, GEORGE W. HOWE, of Vineland, in the county of Cumberland and State of New Jersey, have invented a new and Improved Reversible Plow; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing, which forms a part of this specification, in which—

Figure 1 is a side view showing mold-boards; Fig. 2, a side view showing land-side; Fig. 3, a top view of mold-boards, frame, and bearing-plate. Fig. 4 is a vertical section of upper and lower bearing-plates, enlarged. Fig. 5 is a longitudinal section of cylinder or drum attached to colter, showing chain which gives motion to the same. Fig. 6 shows the colter and pivot upon which it turns.

Similar letters of reference denote the same parts.

This invention belongs to that class of reversible plows which turn upon a pivot, and has for its object to improve the construction of plows of this class, as will be fully described and afterward pointed out in the claim.

The plow is constructed with double mold-board A A, placed back to back, the land-side of each being of one piece and in the same plane, and connected, by vertical standards *a a*, with a longitudinal bar, *b*, slotted at each end to receive spring-catch *c* in the center of said bar, and attached firmly to it is the lower annular bearing-plate *d*, moving within a flange upon upper plate *e*, which, in its turn, is fixed upon the under side of beam B, through which passes the bolt or pivot upon which the plow-beam turns. The spring-catch *c* is so placed that, when the plow-beam is turned to its proper place in changing direction, it will enter into a slot in the forward end of the bar *b* automatically. The rod *h* is hooked to the catch *c*, from which it passes to a point within reach of the hand of the driver, where it is bent downward to the beam and there fastened, so as to form a spring to govern the catch before named The colter C C in this improvement is forged upon or otherwise fastened to a pivot or bolt passing obliquely through proper bearings in the beam; and to the part above said beam is fitted a cylinder or drum, *m*, around which is wound a chain, belt, or other flexible material, *n*, attached at the ends to the slide-rod *o*, so that the movement of the rod shall rotate said drum through one-half of an entire circle, alternately carrying the colter from one side to the other, so as to bring it properly in position, as the plow may be changed from left to right or right to left. The rod *o* is moved back and forth by a lever, *p*, at the plow-handles.

I do not claim as new the swinging beam and handles upon a central pivot; neither do I claim the double mold-boards; but

What I do claim is—

The pivoted double-edge colter, provided with drum, chain, and slide-bar, working by lever, substantially as and for the purpose described.

G. W. HOWE.

Witnesses:
ALONZO HUGHES,
JOHN A. BASSETT.