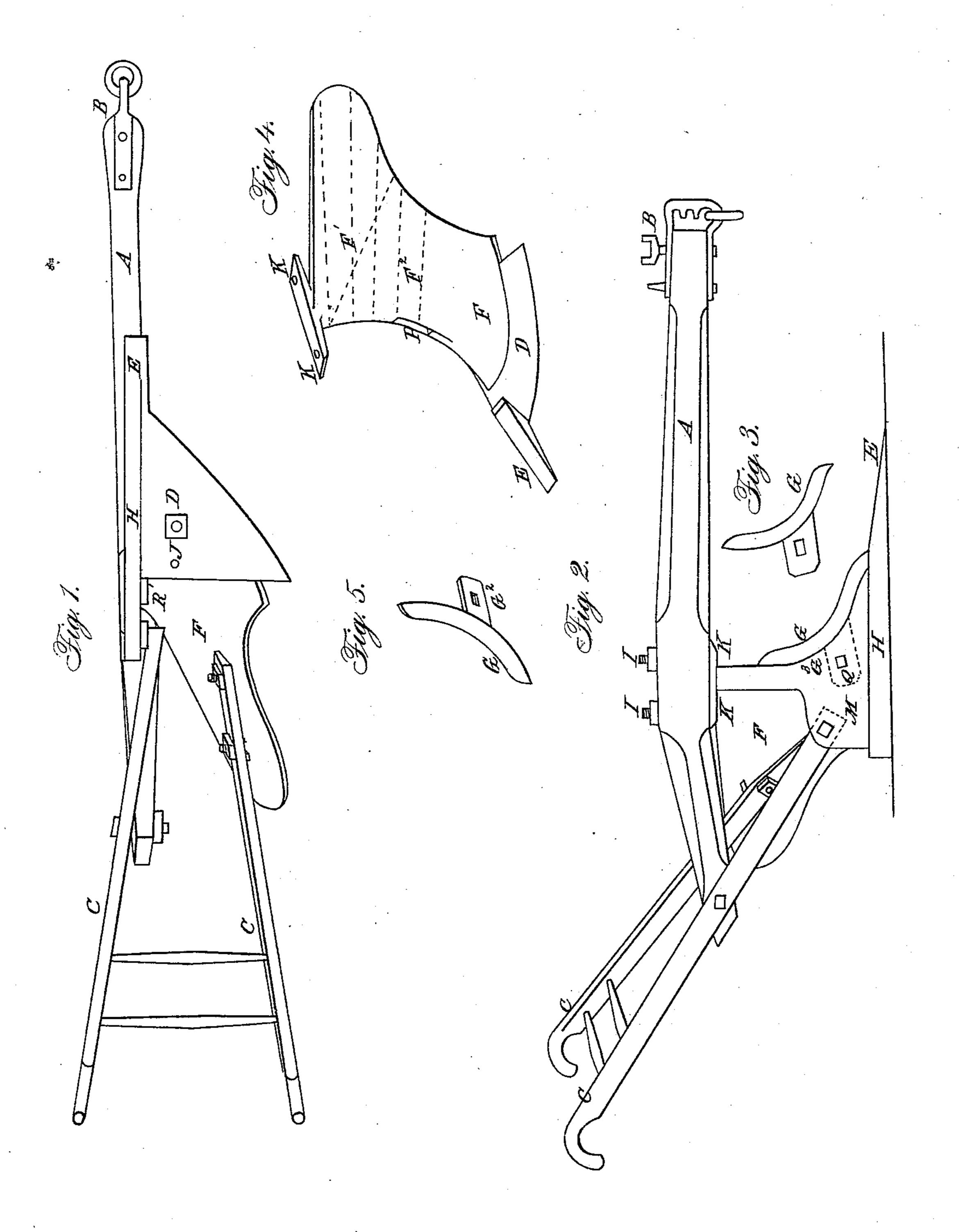
No. 3,034.

Patented Apr. 6. 1843.



## United States Patent Office.

WM. OGLE, OF FREDERICK, MARYLAND.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 3,034, dated April 6, 1843.

To all whom it may concern:

Be it known that I, WILLIAM OGLE, of the city of Frederick, in the county of Frederick and State of Maryland, have invented a new and useful Improvement in Plows, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a view of the plow turned upside down; Fig. 2, a side view of the plow; Fig. 3, the landside of the cutter; Fig. 4, the mold-board, share, and point; Fig. 5, the mold-board side of the cutter.

Similar letters in the several figures refer to corresponding parts.

The beam A, clevis B, handles C, share D,

and point E are made in the usual manner.

The improvement is in the mold-board F, cutter G and land-bar H, and fastenings I and

K of the standard.

The cutter G is made concave on the cuttingedge and convex on the side next the moldboard, and corresponding with the front thereof, and shaped on the sides to correspond with the curvature of the mold-board and the face of the landside, extending from the land-bar nearly to the under side of the beam, having a tenon, G<sup>2</sup>, projecting from the rear or convex side of the cutter, which enters a corresponding mortise, P, in the front part of the mold-board, in which it is secured by a wedge or key, Q, or other suitable fastening, inserted horizontally through the landside and the aforesaid tenon. Several cutters of the aforesaid form and construction are cast with each plow in order to change them as they wear. The face of the cutter next the land is made to extend beyond the face of the landside, for the purpose of reducing the friction which is experienced in the use of plows in which the whole face of the landside rubs against the land. The aforesaid extension of the cutter beyond the face of the landside may be one-eighth or

two-eighths of an inch, more or less, as may be required, or until it is in the same vertical plane with the landside of the land-bar H. The projection referred to is indicated by the shading at G<sup>3</sup>. It is effected in the casting of the cutter, which is made of sufficient size to produce the required projection.

Flanges K are formed on the upper end of the standard, which fits against the under side of the beam for the admission of two vertical screw-bolts, I, which pass through said flanges and the beam, having nuts on the upper ends of said bolts, screwed down firmly upon the

upper side of the beam.

A shoulder, R, is cast on the inside of the land bar, rgainst which the rear side of the share D is placed or abuts, and which removes the strain from the vertical bolt J, passing through the share and mold-board, caused by the resistance in passing through the sward.

The curvature of the mold-board F is such as to turn the sward with the least resistance, and it is made narrower across the middle, at F<sup>2</sup>, than at the top or bottom, for the purpose of reducing the friction of the mold-board in passing through the sward.

The landside M is made shorter and deeper than in oth r plows, and the lower end of the handle next the landside is bolted to the tail end of it in a position more elevated than is usual, so to be above the surface of the ground.

What I claim as my invention, and which I desire to secure by Letters Patent, is—

1. The manner of constructing and securing the cutter, as described.

2. Extending the landside face of the cutter beyond the face of the landside to reduce friction, as described.

WILLIAM OGLE.

Witnesses:

EDMUND MAHER, A. E. Johnson.