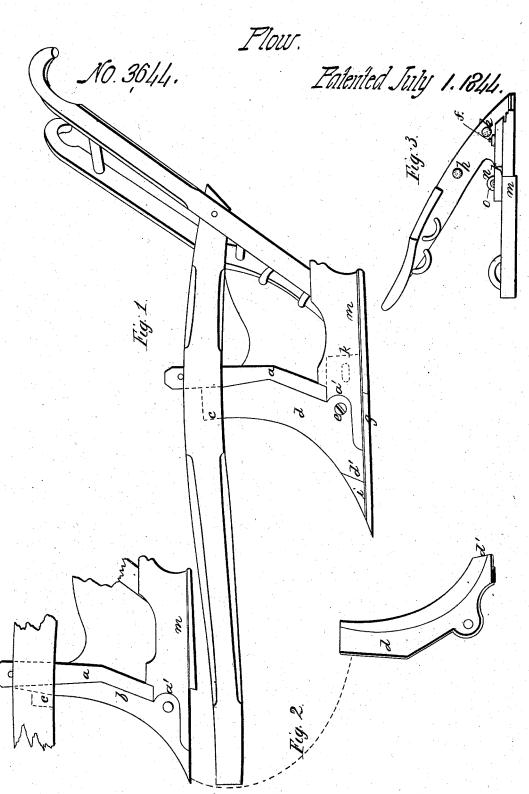
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UNITED STATES PATENT OFFICE.

JONATHAN MOOERS, OF HAZLETON, PENNSYLVANIA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 3,644, dated July 1, 1844.

To all whom it may concern:

Be it known that I, JONATHAN MOOERS, of Hazleton, in the county of Luzerue and State of Pennsylvania, have invented a new and useful Improvement in Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification, in which-

Figure 1 is a side elevation of the landside of the plow; Fig. 2, same side with cutter detached; Fig. 3, plan of bottom of the plow with

the share removed.

The nature of my invention consists in connecting the cutter firmly to the plow, and in such a manner as to be easily detached, the cutter being made so as to be easily and cheaply renewed when worn out, and also in the connection of the landside with the mold-board.

The mold-board of my plow is similar to many in common use. The sheth a, which is cast with it, has a rabbet or recess, b, on its front edge on the landside, as shown in Fig. 2. The outline of this rabbet runs down from the beam, nearly perpendicular from the beam, a little inclining back about one-third the distance to the share. It then inclines forward till it reaches a point a little below the landside, at a', which has a semicircular recess backward, and then extends forward and down to the share in a curved line. All this is clearly shown in Figs. 1 and 2. In the beam there is a mortise on the under side, directly over this recess, which is designated by a dotted line, c. This mortise extends about half through the beam, and adjoining it behind. The mortise for the sheth is cut through the beam in the usual way for the staple on the sheth, which projects through the beam and is keyed on the top.

The cutter d is a thin flat casting, the back edge of which is formed to fit the recess in the The front edge is curved in a line parallel to the front edge of the mold-board, and at the lower front corner, d', is cut off nearly perpendicular, a little projecting at its lower corner. This curved front edge of the

cutter is chamfered off from the mold-board to a sharp edge on the landside. The upper end of it enters the mortise c in the beam, and a bolt, e, passes through the semicircular projection near the bottom, and is fastened with a

nut, f, inside. (Shown at Fig. 3.)

The share g is a flat plate of triangular form, the edge view of which is seen in Fig. 1. It extends through to the mold-board, beyond which it projects in a cutting-edge. It is bolted to it by bolts passing through holes in the moldboard at hh, Fig. 3. The mold-board and landside are recessed a little to form a bed for it, and when put together they are all flush below from the straight front lower corner, d', of the cutter, where it joins the curve. The space is filled with a triangular pin, i, which is joined to the share and laps up over it, thus confining and protecting and fastening the front corner of the cutter.

The mold-board has a short projection cast on it in a line with the landside, extending back from the sheth, which forms a short or false landside. This is represented at k, Fig. 3, and by dotted lines in Fig. 1. To the outside of this false landside a landside, m, is fastened by means of a loop, n, which projects through from the landside m, and a wooden key, o, is driven in and unites them, at the same time allowing a little elasticity in the con-

nection.

The advantages of the above-described construction of cutter and manner of attaching it are that a thin plate can be used that is cheaply renewed, and which is firmly sustained by the mold-board, sheth, and beam, the edge only projecting beyond the front of the mold-board.

What I claim as my invention, and desire to

secure by Letters Patent, is-

The cutter d, constructed and arranged as herein described, in combination with the sheth and beam, as above set forth.

JONATHAN MOOERS.

Witnesses:

W. THOMPSON. J. J. GREENOUGH.