

A. SANBORN.

Plows.

No. 133,802.

Patented Dec. 10, 1872.

Fig. 1.

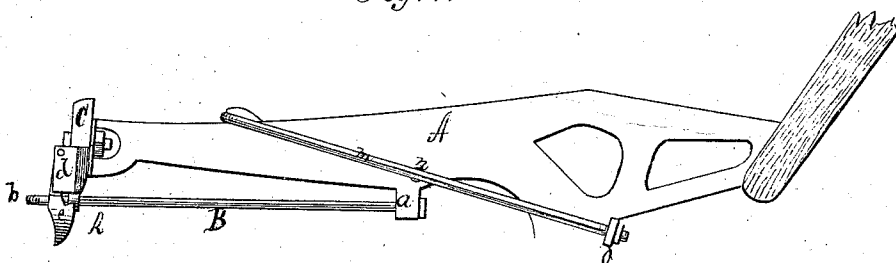


Fig. 2.

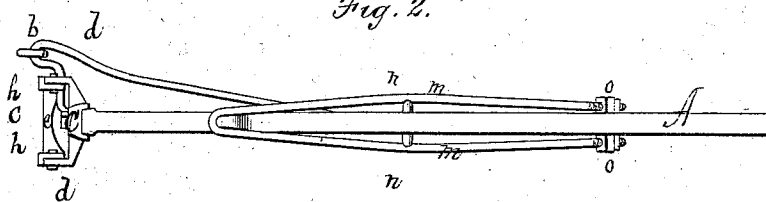
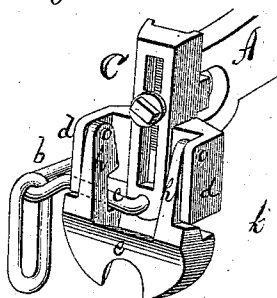


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

AUGUSTUS SANBORN, OF ST. JOHNSBURY, VERMONT.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 133,802, dated December 10, 1872.

To all whom it may concern:

Be it known that I, AUGUSTUS SANBORN, of St. Johnsbury, in the county of Caledonia and State of Vermont, have invented a new and useful Improvement in Plows; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side elevation; Fig. 2 is a top view; and Fig. 3 is a perspective view of the latch.

Similar letters of reference in the accompanying drawing denote the same parts.

This invention relates to that class of plows denominated "swivel," in which the share and mold-board can be shifted from one side of the beam to the other so as to enable the plow to be run back and forth along the same side of the land. The invention further relates to that species of swivel-plows which are drawn by one horse and employ "side draft"—that is, a draft attachment which can be placed at the opposite side of the beam from the mold-board so as to enable the horse to walk in the furrow while the plow cuts into the land. The invention has for its object to improve the construction of one-horse swivel-plows in such manner that the draft attachment can be automatically locked to the beam after swinging from one side to the other and also automatically released from the beam prior to such swinging. To this end the invention consists in a gravitating-latch combined with the plow-beam and swinging draft-rod in such manner as automatically to lock the rod to the beam after swinging and automatically release the rod from the beam before swinging, all of which I will now proceed to describe.

In the drawing, A is the beam, from the under side of which, at a convenient point, a lug, *a*, projects, through which passes loosely the draft-rod B, whose rear end is held in place by said lug. The rod B slants away from the beam from its rear end forward, and at its front end has an eye, *b*, which serves as a draft attachment. An arm, *c*, extends from the eye *b* toward the beam, which arm is pivoted at its inner end either in the extremity

of the beam or in an adjustable plate, C, attached to such extremity. Hence the rod B can be swung from one side of the beam A to the other and carry the eye *b* to the required position at either side of the beam. The plate C has lugs *d* placed at a suitable distance apart, to the inner sides of which are pivoted the inner ends of arms *h*, which are connected at their outer ends by a cross-plate, *e*, which thus hangs between the lugs *d* just in front of the arm *c*, which, when hanging vertically, occupies a groove in the rear side of the plate *e*. The plate *e* is made tapering from top to bottom, and has shoulders *k* at its upper end, which shoulders form one side of grooves in the arms *h*. Suppose the arm *c* to be hanging vertical. By drawing it to either side the arm moves the plate *e* forward, and when the arm is raised to a horizontal position the shoulder *k* on that side of the plate slips under the arm and holds it with the eye *b* in the right position for the draft. When the plow has been drawn to the end of a furrow, and the mold-board has consequently to be shifted to the other side of the beam, the plow being raised by its handles to effect this movement, the latch *e* swings forward by its own weight and releases the arm *c*. Then the horse turns and draws the arm around to the other side of the beam, and, the plow being restored to a level, the latch *e* swings backward by its own weight and locks the arm *c*. A double truss-rod, *m m*, passes over the top of the beam near its front end, and runs thence back, at each side of the latter, over studs *n* extending from the beam to the lugs *o* on the standard, sufficiently low to give the rod *m* a bracing position.

Having thus described my invention, what I claim is—

In combination with a plow and swinging draft-rod, a gravitating-latch operating automatically, as described, to release the draft-rod prior to swinging and retain it after swinging.

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Witnesses:

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