

(No Model.)

H. L. CUMMING.
SIDE HILL PLOW.

No. 496,398.

Patented May 2, 1893.

Fig. 1.

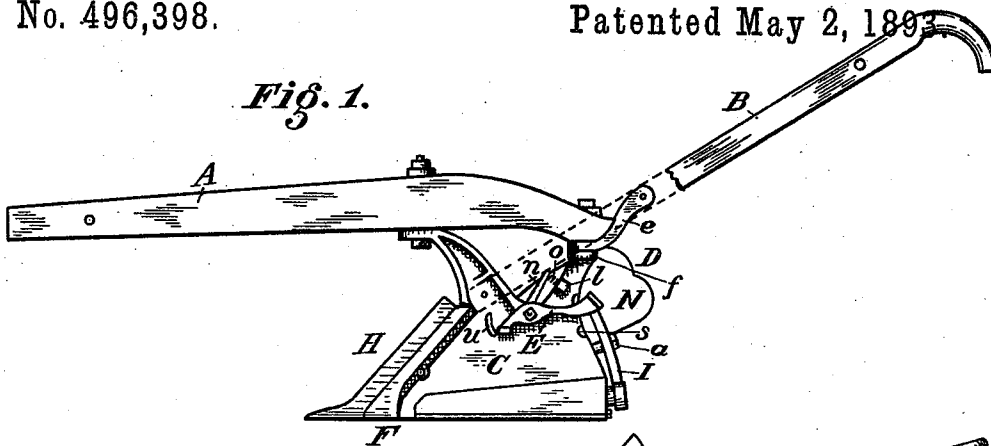


Fig. 2.

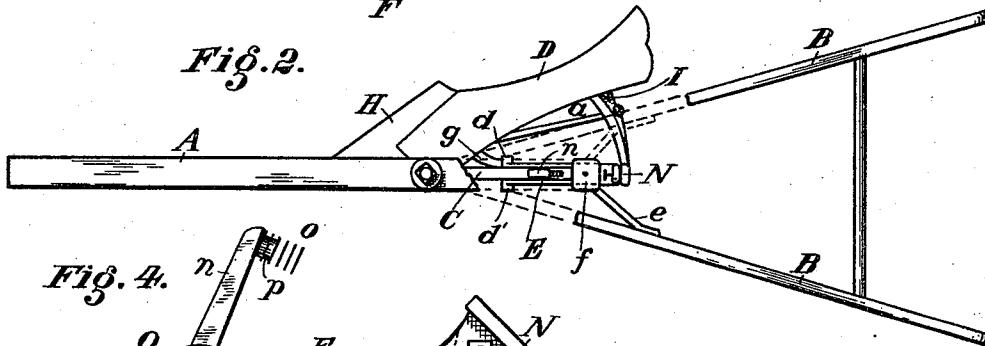


Fig. 4.

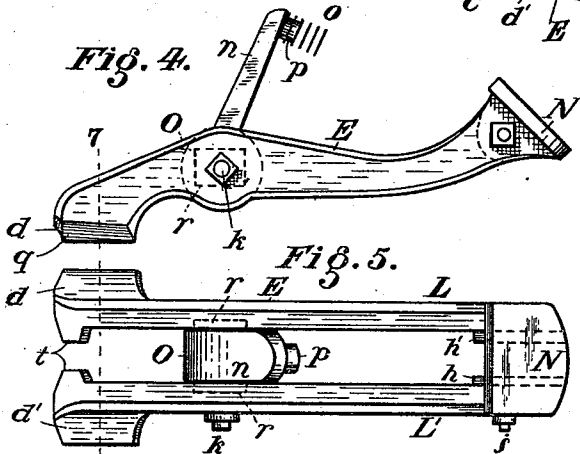


Fig. 5.

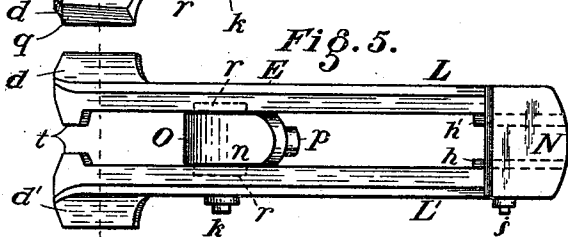


Fig. 3.

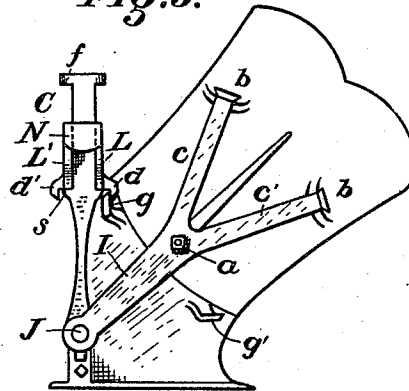


Fig. 6.

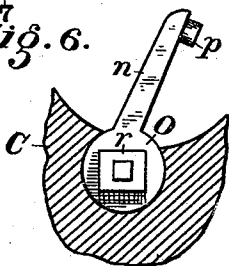
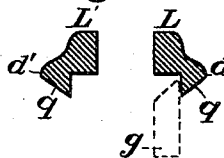


Fig. 7.



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SIDE-HILL PLOW.

SPECIFICATION forming part of Letters Patent No. 496,398, dated May 2, 1893.

Application filed September 12, 1892. Serial No. 445,592. (No model.)

To all whom it may concern:

Be it known that I, HENRY L. CUMMING, a citizen of the United States, residing at Castile, in the county of Wyoming, in the State of New York, have invented certain Improvements in Side-Hill Plows, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to certain improvements in the construction of side-hill plows, which improvements are fully described and illustrated in the following specification and the accompanying drawings,—the novel features thereof being specified in the claims annexed to the said specification.

In the accompanying drawings representing a side-hill-plow embodying my improvements,—Figure 1 is a side elevation. Fig. 2 is a plan view. Fig. 3 is a rear elevation of the mold-board and standard. Fig. 4 is a side view of the latch detached. Fig. 5 is a plan view of the same. Fig. 6 is a sectional view of a portion of the plow standard, showing the manner of pivoting the latch thereto. Fig. 7 is a section on line 7—7 Figs. 4 and 5.

A side-hill plow containing my improvements, is represented in the accompanying drawings, in which A is the beam, B B the handles, C the standard, and D the mold-board. The plow is constructed so that the mold-board may be shifted from one side of the standard to the other, for the purpose of throwing the furrow to the right or the left-hand, as may be desired. The mold-board is pivoted to the standard, and the double latch E is arranged to engage with suitable lugs or projections on the inner side of the mold-board to secure it in position on either side of the standard. The latch is operated by the plowman, who depresses its rear end by his foot, disengaging it from the lug on the mold-board, which is then shifted to the other side of the standard by lifting on the handles, after which the mold-board automatically engages itself with the standard on the side to which it has been shifted.

Proceeding to a detailed description of the construction of the plow, the beam, handles and standard are of any usual or ordinary construction, except as the standard is provided with a circular recess in which the latch is pivoted, and a hole or socket for the spring

which operates the latch. The mold-board also is of the usual construction, being provided with the removable point H, and pivoted to the front of the standard, on a pin F, Fig. 1, and at the rear supported by an arm I, which turns on a projection J, Fig. 3, on the standard, and is secured to the mold-board by the rod *a*. The outer end of the arm I is bifurcated, or divided into the arms *c c'*, Fig. 3, which are provided with the feet *b*, engaging in tapering or dovetailed recesses formed in lugs on the inner side of the mold-board. The rod *a* is bent or hooked at its forward end, and it engages with a hooked lug or projection on the mold-board, while at its rear end it is provided with a nut which fastens it to the mold-board, and secures the attachment of the mold-board to the standard. The handles are attached to the standard at their forward ends, and in rear of the standard are supported by the curved brace *e*, which is fastened to the rear portion *f* of the standard by the same bolt which secures the rear end of the beam.

The latch F consists of two arms, L L', arranged on each side of the standard, and connected together so as to vibrate simultaneously to engage the hooks *d d'* at their forward ends with one of the lugs *g g'* on the mold-board. At their rear ends the arms L L' are fastened to the foot-piece N, which is located immediately behind the standard where it may be conveniently operated by the plowman. In the construction shown the foot-piece N is provided with the ribs *h, h'*, Fig. 5, to which the arms are fastened by the bolt *i*, but any other suitable arrangement may be adopted.

The pivot of the latch is formed by the circular boss O, Fig. 6, arranged to turn within a recess in the standard, as indicated in Fig. 6. The arms are attached to the boss by the bolt *k*. The boss is provided on each end with lugs or projections, *r*, Fig. 6, which fit corresponding recesses in the inner sides of the arms, so that the latter are compelled to turn with the boss. The lug *r* is shown in the accompanying drawings, as rectangular in shape, but any suitable form may be adopted. An arm *n* attached to the boss O bears at its outer end against a spiral spring *o*, seated in a socket *l* in the standard. The arm *n* car-

ries a projection *p* which enters the outer end of the spring *o*, and prevents it from being displaced. Any other suitable kind of a spring may however be employed. The spring operates to keep the forward end of the latch depressed to its lowest position so that it is always ready to engage with one of the lugs *g g'* on the mold-board,—these lugs being provided with inclined surfaces which strike against the beveled sides *q*, Fig. 4, of the hooks on the latch, and cause the hooks to swing upward so that the lugs may pass under them. The spring then forces the hooks down, engaging outside one of the lugs so as to secure the mold-board in place on either side of the standard, as may be desired. Suitable stops, *s*, are formed on the standard to limit the swinging movement of the latch.

In Fig. 5 I have represented at *t*, two lugs which project inward from the forward ends of the latch-levers, and bear against the standard, which is ribbed around its upper edges to secure strength. The lugs *t* prevent the lateral displacement of the latch, and reduce the friction against the standard. In front of the latch, a projection *u*, Fig. 1, forms a guard to protect the latch from injury from stones or dirt while the plow is in use. It will be understood that the latch vibrates in the vertical plane, the arms *L L'* swinging up and

down on each side of the standard while the boss *O* turns in the circular recess to which it is fitted.

My improvement is cheap in construction and durable and efficient in practical operation, as I have demonstrated by extended trial.

I claim—

1. The combination, in a side-hill plow, of the standard *C*, pivoted mold-board *D*, provided with lugs *g g'*, and the pivoted double-latch *E*, having foot-piece *N* and beveled hooks *d d'*, substantially as described.

2. The combination in a side-hill plow, of the standard *C*, pivoted mold-board *D*, provided with lugs *g g'*, and the double-latch *E*, having foot-piece *N* beveled hooks *d d'*, and boss *O* arranged to turn in a recess in the standard substantially as described.

3. The combination, in a side-hill plow, of the standard *C*, pivoted mold-board *D*, provided with lugs *g g'*, and the double-latch *E*, having foot-piece *N*, beveled hooks *d d'*, and boss *O*, arranged to turn in a recess in the standard, and provided with arm *n* and spring *o*, substantially as described.

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Witnesses:

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