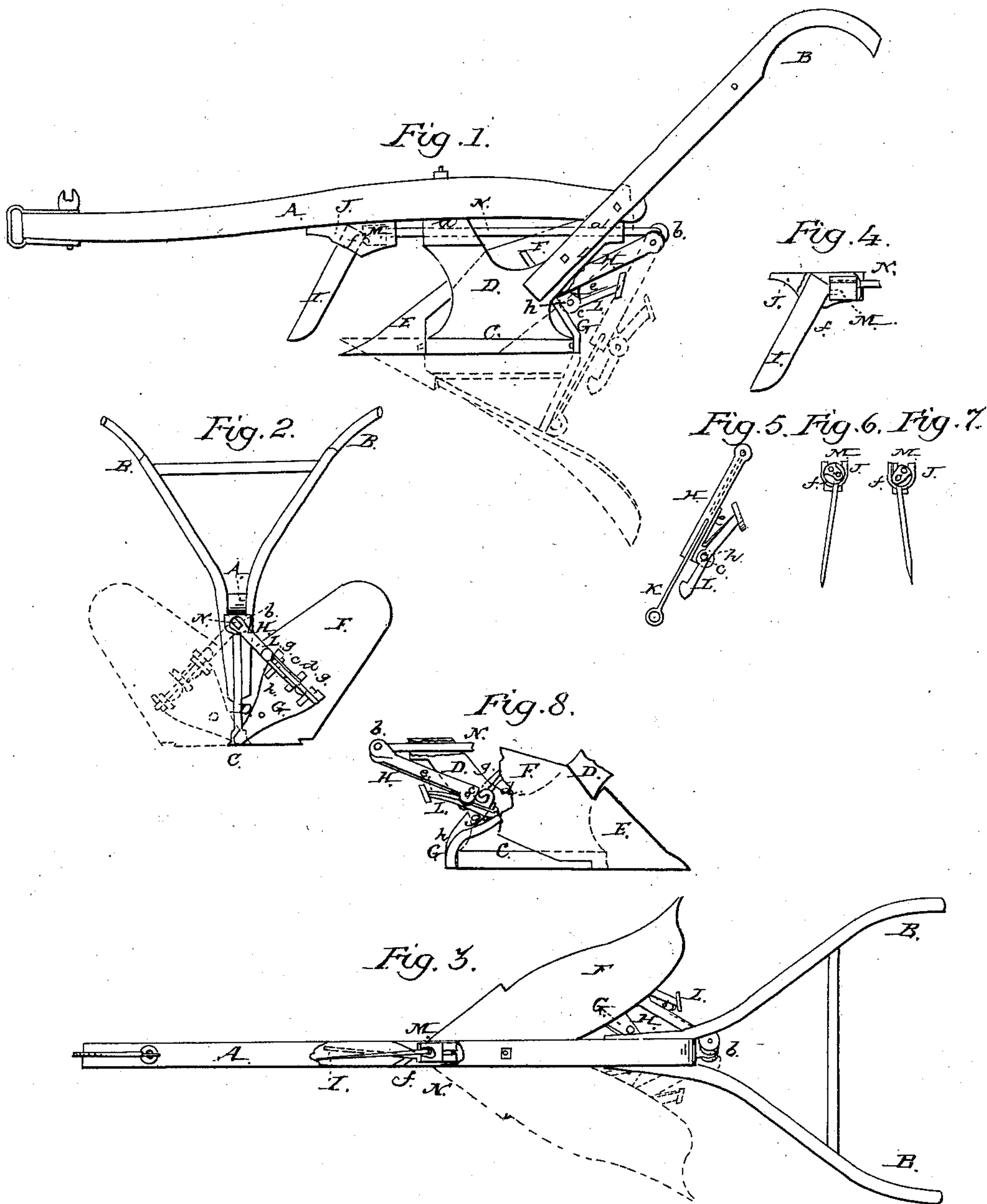


C. M. LUFKIN.

Side-Hill Plow.

No. 55,684.

Patented June 19, 1866.



Witnesses:

Lucius O. Davis  
Frank E. Davis

Inventor:

C. M. Lufkin

# UNITED STATES PATENT OFFICE.

C. M. LUFKIN, OF CLAREMONT, NEW HAMPSHIRE.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 55,684, dated June 19, 1866.

*To all whom it may concern:*

Be it known that I, C. M. LUFKIN, of Claremont, in the county of Sullivan and State of New Hampshire, have invented certain new and useful Improvements in Plows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of my invention. Fig. 2 is a back view of the same. Fig. 3 is a plan or top view of the same. Fig. 4 is a detached side view of the cutter and device by which it is operated. Fig. 5 is a detached side view of the extension-rod and latch. Figs. 6 and 7 are corresponding detached back views of the cutter, showing the device by which it is operated. Fig. 8 is a side sectional view of the device by which the mold-board and cutter are retained in working position.

This invention consists in attaching an independent cutter to the plow-beam and connecting the cutter with the mold-board in such a manner that the cutter will be shifted from side to side in line with the landside, and also held in working position by shifting the mold-board, as hereinafter fully shown and described, the plow being of the kind which is commonly termed a "side hill" or "reversible" plow.

The object of this invention is to obtain a self-adjusting cutter which will always be adjusted in proper position with the share as the mold-board is turned or adjusted from one side of the beam to the other.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the beam of the plow, B B the handles, and C the landside, which is connected and secured by the standard D D to the beam A.

E represents the share of the plow, and F the mold-board. These parts may be of the ordinary form of those generally used on reversible plows.

The back part of the share E is pivoted to the front end of the landside C, and the inner side of the mold-board F has a V-shaped brace, G, attached to it, which is pivoted to the back

end of the landside C. By this arrangement the mold-board F may be turned around underneath the landside C, so as to be adjusted to either side of the beam A, as may be required. The mold-board and cutter I are retained in proper position by a latch, L, which catches alternately on the catches *g g* on the brace G. The latch L is attached to a tube, H, by means of a fulcrum, *e*, in small uprights *h*, and is kept in proper position by a V-shaped spring, *e*, and in the said tube is inserted a slide-rod, K, forming an extension-rod, being connected with the brace G by means of a swivel, *d*, and also connected with a shaft, N, by a pivot, *b*; and when the plow is reversed the slide-rod K is extended longitudinally in the tube H, serving the twofold purpose of guiding the latch L to the catches *g g* and of partially rotating the shaft N, which extends from the pivot *b* along under the beam A, through the standard D D, which forms bearings *a a* for said shaft.

On the forward end of the shaft N is an eccentric, M, with which the cutter I is connected by means of a pivot, *f*, on the said cutter.

The eccentric M is so fitted in the socket J that when the shaft N is partially rotated by means of reversing the plow the cutter I is oscillated laterally into proper position in line, or nearly so, with the landside C, and there permanently retained, and oscillated into its corresponding position, as shown in Figs. 6 and 7, by again readjusting the mold-board to the opposite side.

The cutter I is so fitted to the socket J, which is attached to the beam A, as only to admit of sufficient movement to allow the said cutter to oscillate into proper position, being retained permanently against the walls of the said socket by the eccentric M.

When it is desired to reverse the plow the operator depresses the latch L by means of the foot, raises the handles B B, giving them a proper lateral movement, by which the mold-board and cutter are easily reversed and fastened in proper position.

I do not claim a reversible mold-board applied to a plow, for that is an old and well-known device; but

I do claim as new and desire to secure by Letters Patent—



1. A cutter, I, of any convenient form, operated and connected by an eccentric, M, shaft N, tube H, and slide-rod K, to the mold-board F in such a manner as to admit of the oscillation of the cutter by the adjustment of the mold-board, as herein set forth.

2. A tube, H, slide-rod K, latch L, spring *e*, and catches *g g*, operating and arranged substantially as and for the purpose herein set forth.

3. The pivot *f* on the cutter I, in connection with the eccentric M and socket J, all constructed, arranged, and operating substantially as and for the purpose specified.

C. M. LUFKIN.

Witnesses:

LUCINA O. DAVIS,  
FRANK E. DAVIS.