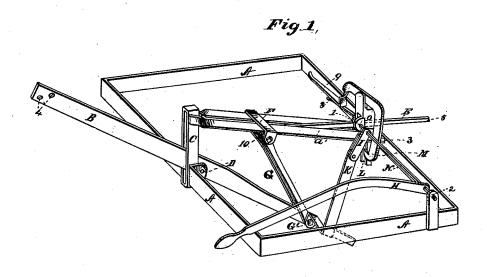
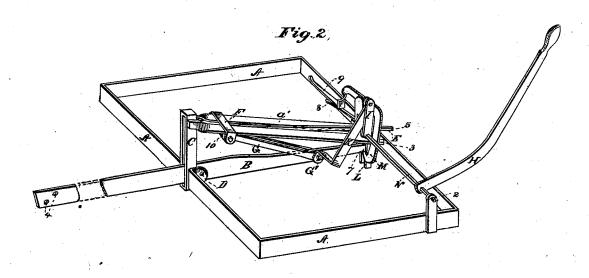
A. H. GALE. SULKY-PLOWS.

No. 193,941.

Patented Aug. 7, 1877.





Witnesses.
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Inventor.
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UNITED STATES PATENT OFFICE.

ANSEL HAYES GALE, OF FREEPORT, ILLINOIS.

IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. 193,941, dated August 7, 1877; application filed June 20, 1877.

To all whom it may concern:

Be it known that I, ANSEL HAYES GALE, of the city of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Sulky-Plows; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon.

The drawings are perspective views of a sulky-plow without the wheels and plow-bottom attached, these it being deemed unnecessary to show.

Figure 1 represents the plow when unlatched or unlocked. Fig. 2 represents the plow when latched or locked.

AAAA represent an iron frame, to the sides of which cast axles may be attached. B

represents beam of plow, to which the plowbottom may be attached at 4. C represents an arch attached to the back part of the frame through which the beam passes. Drepresents a bolt or pivot, upon which the beam turns. E represents the draw-rod, to which power may be attached at the end marked 5. Frepresents a sliding clasp encompassing the two inclined bars attached to arch C, and to the front end of frame at 3; said clasp also, by a bolt, supports two friction-rollers, 10, underneath said inclined bars. There is also attached to the bolt in said clasp, and between said friction-rollers, the draw-rod E, and also the two bars G, connected with the beam by a bolt at G', thus forming a half toggle-joint, whereby the front end of said beam is pressed or borne down by pulling upon the draw-rod E at the end 5, thereby raising the hind end of said beam, and lifting the plow-bottom out of the ground whenever desired. N represents a shaft, with hand-lever H and fork I attached. Said shaft is made to turn upon its bearings at 1 and 2 by moving said lever H

backward and forward. K represents a bar attached to the fork I and to the beam at G', by which the plow-bottom may be raised or lowered by operating said hand-lever H, and thus enabling the operator to force the beam to a lock or latch. L represents a guide directing the beam to its proper position when passing up and down, and also supporting it when locked as against any side pressure. M represents a latch fastened or attached to the top of guide L, and passing to the right over and down under the inclined bars and drawrod E, so as to clasp the beam at the point marked 7 by the use of a spring, 8, causing said latch to hold the beam in a horizontal and rigid position, being locked or latched. The same may be unlocked or unlatched by the operator placing his foot upon the latch at 9 and pressing down, when the plow-bottom may be raised either by the hand-lever H or by power attached to the draw-rod E at 5.

By the combination above described the action of the shaft N forces the plow-beam to a lock, and by this device the plow-bottom is forced into the ground.

Having thus described my invention, the following is what I claim as new and desire to secure by Letters Patent:

1. The combination of the plow-beam B, pivoted bars G, sliding draft-bar E, and framebars A, substantially as described and shown.

2. The combination of plow-beam B, bars G, guide L, latch M, spring 8, and draft-bar E, substantially as shown and described.

3. The sliding clamp F, carrying the draft-bar E, pivoted connecting-bars G, rock-shaft N, with arm I, lever H, and bar K, in combination with plow-beam B and frame-bars A, substantially as shown and described. ANSEL HAYES GALE.

DAVID H. SUNDERLAND, JOHN H. BRADSHAW.