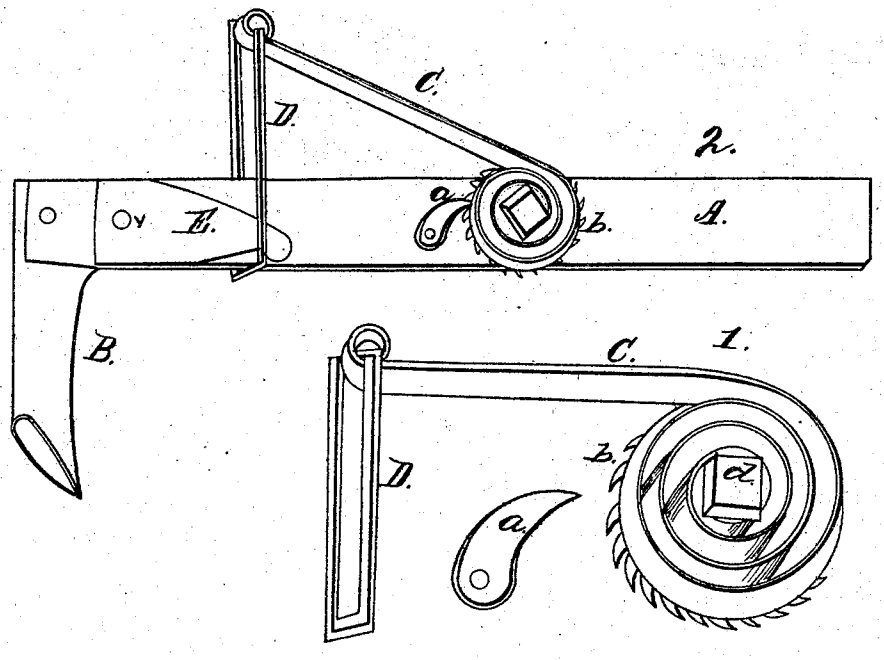
M. BOYER.
SEED DRILL.

No. 22,915. Patented Feb. 8, 1859.



UNITED STATES PATENT OFFICE.

MICHAEL BOYER, OF GERMANTOWN, OHIO, ASSIGNOR TO CHAS. S. ROHNER AND WM. GUNCKEL, OF SAME PLACE.

IMPROVEMENT IN SEED-DRILLS.

Specification forming part of Letters Patent No. **22,915**, dated February 8, 1859.

To all whom it may concern:

Be it known that I, MICHAEL BOYER, of Germantown, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Adjustable Discharge-Spouts for Seed-Drills; 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, and to the letters of reference marked thereon.

The nature of my invention consists in the arrangement of the several parts, as will be described.

In the annexed drawings, A represents a drag-bar, to which is pivoted the discharge-spout B at *x*.

C represents a coil-spring, one end of which is attached to a screw, *d*, said spring passing through and being attached to a ratchet-wheel, *b*, and also to the drag-bar. The other end of the spring C is provided with a loop or catch which holds one end of a link. (Marked D.) The other end of the said link passes over an arm, E, of the discharge-spout.

a represents a ratchet which catches in the ratchet-wheel *b*, said ratchet being secured to the drag-bar at proper distance from the ratchet-wheel.

The screw *d* serves to attach the spring and ratchet-wheel to the drag-bar, and the ratchet and ratchet-wheel serve to regulate the tension of the spring C.

The object of this invention is to enable the discharge-spouts of seeding-machines to pass over firm obstructions without injury to themselves or the machine. When one of these spouts is drawn back by any obstacle in the passage of the machine the spring is acted upon, and the moment the point of the spout passes the obstacle the spring draws the spout forward to its proper position. The tension of the spring is always sufficiently great to keep the spout in position so long as the machine is in ground which is free from obstructions.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

Arranging the spring C, ratchet-wheel *b*, ratchet *a*, link D, drag-bar A, arm E, and discharge-spout B, substantially in the manner and for the purpose herein specified.

MICHAEL BOYER. [L. S.]

Witnesses:

THOMAS RETRAM,

WM. F. LONG.