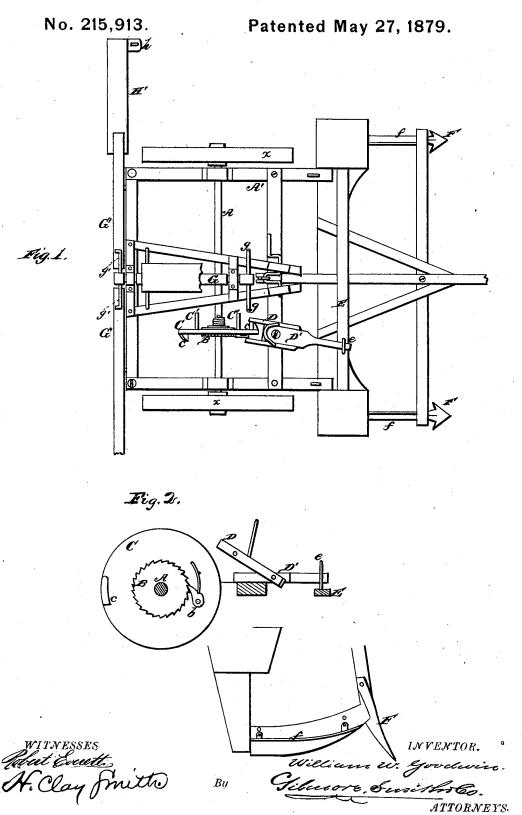
W. W. GOODWIN. Corn-Planter.



UNITED STATES PATENT OFFICE.

WILLIAM W. GOODWIN, OF CRESTON, IOWA.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 215.913, dated May 27, 1879; application filed December 28, 1878.

To all whom it may concern:

Be it known that I, WILLIAM W. GOODWIN, of Creston, in the county of Union and State of Iowa, have invented a new and valuable Improvement in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a top plan of my corn-planter, and Fig.

2 is a detail view of the same.

My invention relates to a corn or seed planter; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth, and pointed out in the claims.

In carrying out my invention I employ a driving-shaft, rigid with the running-wheels, on which I hang a hand-wheel having cams on opposite sides, which operate to vibrate the feed-bar as said cams engage alternately with a hinged jaw.

When the machine is backed, the abrupt ends of the cams operate to raise the hinged jaw out of connection, and the vibrations of

the feed-bar cease.

A rack-wheel rigid on the driving-shaft acts in connection with a spring-pawl on the handwheel, and serves to force the hand-wheel to revolve with it in one direction, while the pawl rides idly over the ratchets in the other. Arms upon the hand-wheel allow the driver to turn said wheel in the reverse direction, to arrange the hills to suit.

A rock-shaft is provided at the front with foot-levers and at the rear with arms, which operate pivoted levers, to which are attached hinged arms having marking-blocks. By this arrangement the driver may readily mark upon the side, as a guide to drive by, and change from one side to the other by simply using his feet, as when one marker is down the other

is up.

Referring to the drawings, A represents the driving-shaft, rigid with the wheels x x, and journaled in the frame A' of a corn-planter. Upon this shaft A, and rigid therewith, is a ratchet-wheel, B, which engages a springpawl, b, upon a hand-wheel, C, having cams cupon opposite sides, and arms C', as shown. I

When the wheels x and driving-shaft A revolve in a forward direction, the spring-pawl b engages the ratchet-wheel B, and causes the hand-wheel to revolve in the same direction. In such case the inclined sides of the cams coperate upon a hinged jaw, D, alternately. This jaw is hinged to a pivoted arm, D', the forward end of which operates in a staple, e, upon the feed-bar E. In backing, the abrupt or radial ends of these cams e act upon the hinged jaw and raise it out of engagement.

In turning at the ends of the rows, the revolutions of the running-wheels vary, and when starting again to plant, the hills do not come in line with the previously-planted hills. In such case the driver grasps the arms C', and turns the hand-wheel C backward a proper dis-

tance, as is obvious.

The shoe F is of ordinary construction, except that it is provided with a removable adjustable foot, f, as shown.

G represents a rock-shaft, journaled in the frame, having on its forward end foot-levers g g, and on the rear end arms g' g', which operate pivoted levers G' G', having hinged

markers H', with feet h.

I am aware that a forked arm operated by a wheel having cams upon opposite sides has been employed to work the feed slide in a corn-planter, as shown in Patent No. 139,205, May 20, 1873, and also that a seed-wheel has been provided with a pawl and ratchet-wheel, as shown in Patent No. 86,386, February 2, 1869, neither of which constructions are broadly claimed herein.

What I claim as new, and desire to secure

by Letters Patent, is-

1. The driving-shaft A, ratchet-wheel B, and spring-pawl b, in combination with the handwheel \dot{C} , having cams c and arms C', and with the hinged jaw D, arm D', and feed-bar, as and for the purpose set forth.

2. The rock-shaft G, having foot-levers g g and arms g' g', in combination with pivoted levers G' G' and hinged markers H' h, as and

for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WM. W. GOODWIN.

Witnesses:

A. D. McCandless, J. C. HARTMAN,