2 Sheets—Sheet 1.

S. PAGE.

Corn-Planter.

No. 213,241. Patented Mar. 11, 1879.

Fig. 1.

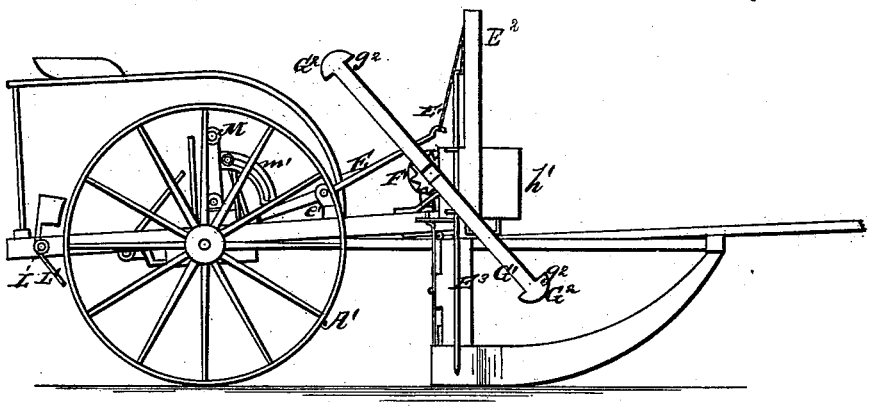
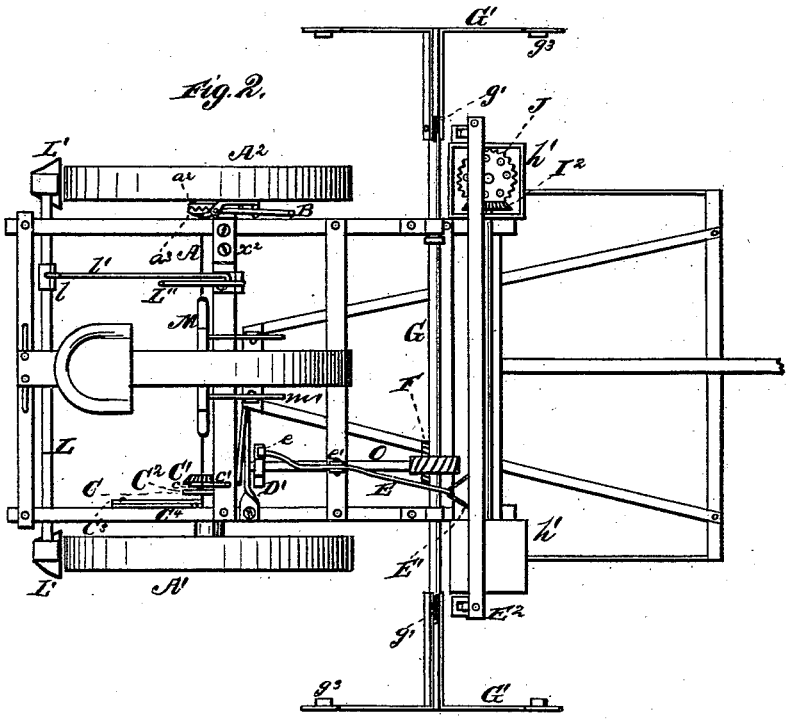


Fig. 2.



WITNESSES

Robert Everett.

H. Clay Smith.

INVENTOR.

Samuel Page.

By Gilmore, Smith & Co.

ATTORNEYS.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

2 Sheets—Sheet 2.

S. PAGE.

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Fig. 3.

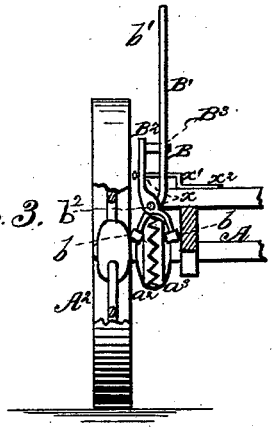


Fig. 4.

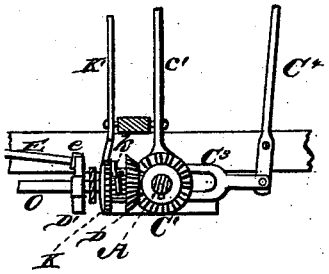


Fig. 5.

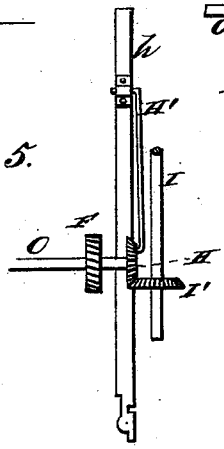


Fig. 6.

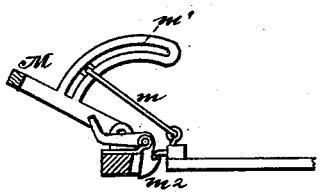
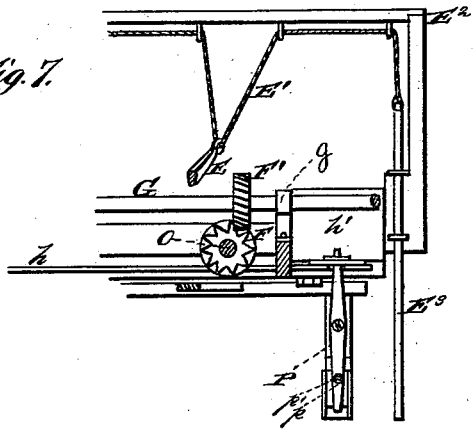


Fig. 7.



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Robt Everett.
Helay Smith

INVENTOR.
Samuel Page.
By Gilmore, Smith & Co.
ATTORNEYS.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE

SAMUEL PAGE, OF PARDEE, KANSAS.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **213,241**, dated March 11, 1879; application filed November 23, 1878.

To all whom it may concern:

Be it known that I, SAMUEL PAGE, of Pardee, in the county of Atchison and State of Kansas, 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 side elevation of my corn-planter. Fig. 2 is a top-plan view of the same, and Figs. 3, 4, 5, 6, and 7 are detail views.

My invention relates to a corn or other seed planter, adapted for two horses, having the usual riding-wheels, peculiar construction, and gearing, and forming a self dropper and marker, and also a drill and rotary drop, the novelty of which consists in the construction and arrangement of parts, as will be more fully hereinafter set forth, and pointed out in the claims.

Referring to the drawings, A represents the axle, upon which is hung the two sulky-wheels, one of which, A^1, is rigid with the shaft or axle, and the other, A^2, is loosely hung thereon. On the wheel A^2, and rigid therewith, is a toothed disk or equivalent cog-wheel, a^2, and rigid with the axle A is a correspondingly-toothed disk, a^3. The loose wheel A^2 has a longitudinal play on the axle, and the disks a^2 a^3 may be thrown in and out of gear by a double-pivoted lever B. This lever consists of the part B^1, having elongation or handle b^1, and on its lower extremity a friction roll or pulley, b, and it is pivoted with a shorter lever, B^2, at b^2, which also has a friction-pulley, b. A screw-plug, B^3, between the handles of this shear-like clutch, serves to allow the same to be adjusted to compensate for the wear of the friction-pulleys b. These parts B^1 B^2 B^3 b b^1 b^2 form an adjustable friction-clutch lever, B, pivoted at x upon an arm, x^1, on a plate, x^2, upon the frame, and it serves to throw the disks a^2 a^3 in and out of gear at will, the handle b^1 being in reach of the driver.

This portion of my invention is important as allowing the operator to prevent loss of power consequent upon the wheel A^1 slipping along the surface of the ground without operating the gears. He can, by throwing the disks a^2 a^3 in gear, secure the power of the wheel A^2 upon the axle A.

Upon the axle A is hung a sleeve, C, capable of longitudinal movement on the axle, but not of rotary, so that it revolves with the axle, and formed in one piece with it is a beveled gear, C^1, and a collar, C^2, having a circumferential recess, c, between such collar and gear, and in that recess operates a pivoted forked lever, c', adapted to throw the gear C^1 in and out of mesh with a bevel-gear, D, hung on a shaft, O, suitably journaled in the frame at right angles with the axle A. A wedge-shaped forked lever, C^3, is pivoted to the frame, the forks embracing the axle A, and, wedging between the outer surface of the collar C^2 and the inner surface of the frame, serves to lock the gears C^1 and D together. When it is desired to throw the said gear out of mesh, the handle C^4 of the forked lever C^3 is pressed forward, which withdraws the wedge-shaped fork; then the lever c' is forced inward, and the sleeve C passes outward on the axle, and the disconnection is completed.

Upon the shaft O, and rigid therewith, is hung a two-armed cam, D′, upon which rides a pulley, e, journaled in one end of a lever, E, pivoted to the frame at e', and to the other end of this lever are ropes E^1, or the like, passing through certain eyes or pulleys in an upright frame, E^2, and to each outer end of the rope is secured a drop-marker, E^3. The cam operates upon the lever, which, acting as a rock-shaft, raises and depresses the drop-markers to mark the hill of corn, and the markers may be adjusted to suit by means of the cords.

Upon and rigid with the shaft O is a screw-gear F, which meshes with a corresponding screw-gear, F′, upon a shaft, G, which is suitably journaled in standards g on the frame. Upon each end of this shaft G are adjustable markers, composed of spring-arms G^1, with marking extremities G^2. Wedges g^1 force the arms outward, or close together, as the large ends of the wedges are placed out or in. The marking extremities G^2 are composed of a semi-circular plate, g^2, which marks the width of the row, and a transverse plate, g^3, which marks the distances between the hills in the row.

Upon the shaft O is a bevel-gear, H, carrying a pitman, h', which connects it with a feed-slide, h, operating under both hoppers h' h'. Upon a shaft, I, is a bevel-gear, I^1, which meshes with the gear H, and upon each end of the shaft I are bevel-gears I^2 I^2, which mesh with perforated toothed disks J within the hoppers.

Upon the shaft O, and rigid therewith, is a toothed wheel, K, upon which operates a hand-lever, K′, having spring-pawl k. When it is desired to plant the hills closer, the operator, by means of this hand-lever, revolves the bar O, and consequently quickens the vibrations of the feed-bar and planting mechanism.

L represents a rotating bar, loosely journaled in the rear of the frame, and having upon each end, rigid therewith, a brake-scraper, L′. A standard, l, on the rod is loosely connected with a link, l', and this link l' is connected to a lever, L″, in such a manner that a backward movement of the lever throws the scraper against the wheels, while an opposite movement of the lever engages the wheel and brake. This engagement of the brake causes the wheels to slide partially, and this slows the vibrations of the feed-bar, and consequently plants farther apart.

The runner-frame at its rear end is provided with two links, m, which work in segmental slots m^1 in a treadle-lever, M, situate near the driver's seat. A treadle-hook, m^2, or other similar suitable device, serves in connection therewith, as shown. By means of the treadle-lever M the runners may be forced into or elevated from the ground at will, the hook m^2 holding it up when elevated.

P represents a vibrating lever, pivoted near its center to the rear side of the leg of the shoe, its upper end being connected to the vibrating feed-bar, and its lower end oscillating in the shoe. An aperture, p, receives a pin, p', of a divider, and serves to vibrate such divider, as shown.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the loose wheel A^2, having toothed disk a^2 and the corresponding disk a^3, with the double clutch B, having friction-rollers b, as set forth.

2. The clutch composed of the disks a^2 a^3, lever B b^1, and the lever B^2, pivoted together at b^2, the adjustable screw-plug B^3, the arm x^1, and friction-pulleys b b, constructed and adapted to serve in combination with the disks a^2 a^3, as set forth.

3. The shaft O, having gear D and cam D′, in combination with the lever E, having friction-roll e, the ropes E^1, drop-markers E^3, and gear C^1, as specified, for the purpose set forth.

4. The markers G G^1 G^2, having semicircular plate g^2 and transverse plate g^3, rendered adjustable by wedges g^1, and operated by the screw-gears F F, as specified.

5. The treadle-lever M, having segmental slot m^1, links m, and hook m^2, in combination with the runner-frame, as and for the purpose set forth.

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

SAMUEL PAGE.

Witnesses:
Mrs. MARY A. ALLEN,
MARY BROCKMAN.