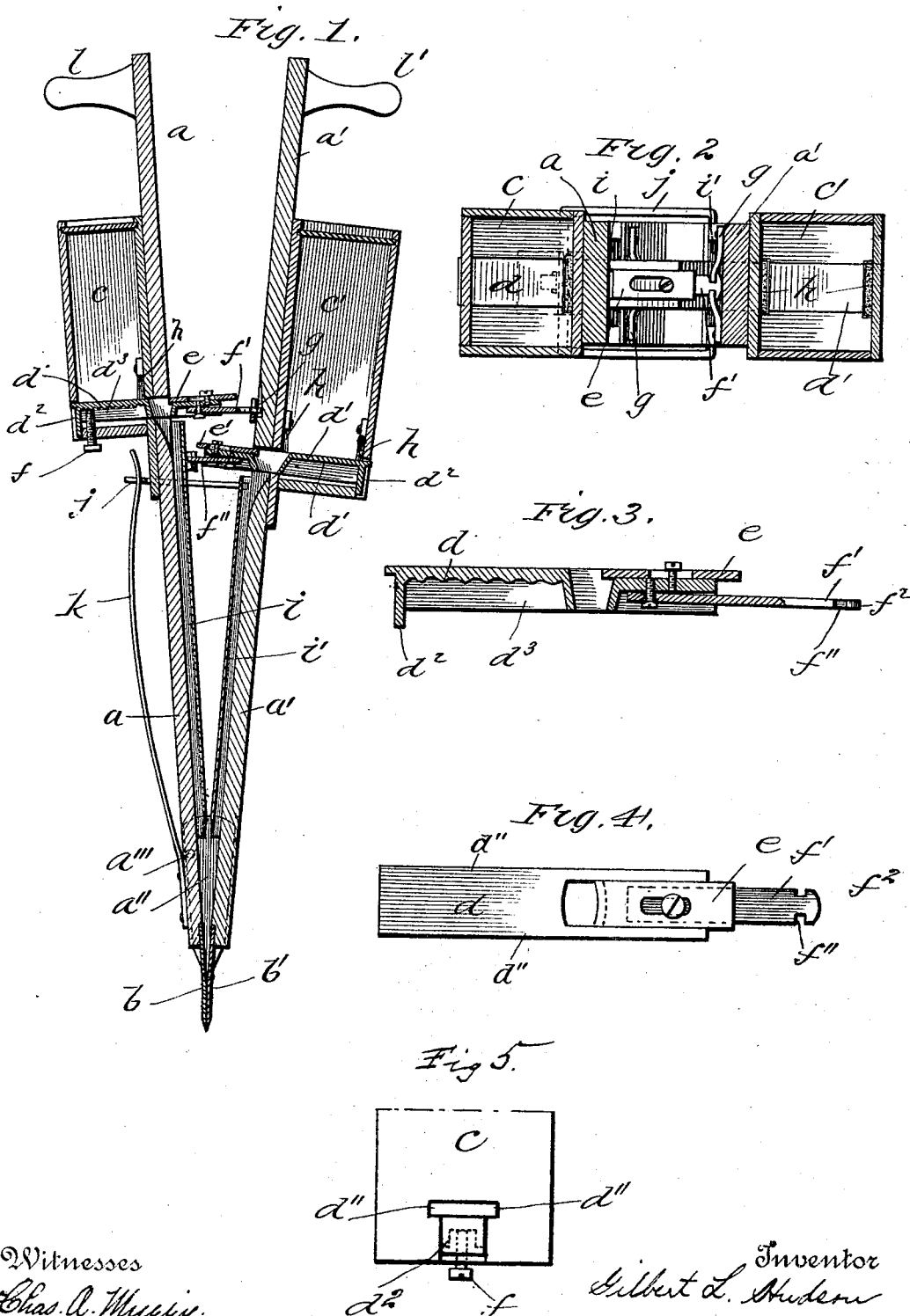


(No Model.)

G. L. HUDSON.
HAND CORN PLANTER.

No. 516,537.

Patented Mar. 13, 1894.



UNITED STATES PATENT OFFICE.

GILBERT L. HUDSON, OF ROMEO, MICHIGAN.

HAND CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 516,537, dated March 13, 1894.

Application filed July 26, 1893. Serial No. 481,536. (No model.)

To all whom it may concern:

Be it known that I, GILBERT L. HUDSON, a citizen of the United States, residing at Romeo, in the county of Macomb and State of Michigan, have invented certain new and useful Improvements in Hand Corn-Planters, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to a new and improved seed-planter and fertilizer distributor, and it has for its object to provide improved means for dropping the seed and fertilizer into the hole made in the earth by the lower end of the device and the invention consists of the novel combination and arrangement of parts hereinafter described and particularly pointed out in the claim appended.

20 In the drawings:—Figure 1 is a vertical sectional view of the device; Fig. 2 a horizontal sectional view; Fig. 3 a longitudinal sectional view of the seed-slide; Fig. 4 a plan view thereof; and Fig. 5 a detail view of a portion of the seed-hopper.

25 Referring to the parts by letter, *a a'* designate the bars carrying the operating mechanism, said bars being pivoted together a short distance from their lower ends, by means of the side plates *a''* and the pivots *a'''*, in the usual manner; *b b'* the usual plates carried by the bars *a, a'* at their lower ends for opening the ground; *c* the seed-hopper mounted on the outer side of the bar *a*, and *c'* the fertilizer hopper mounted on the outer side of bar *a'*; *d d'* respectively the seed-dropping and fertilizer-distributing slides, mounted to slide horizontally through the respective hoppers, each of said slides being provided with a discharge opening; *d''* indicates 40 lateral flanges formed on the longitudinal edges of the slides, said flanges sliding through grooves formed in the inner and outer walls of the hoppers as the slides move back and forth; *d³* a depending flange formed on the outer end of each of the slides and adapted to engage the outer edge of the bottom of the hopper to limit the inward movement of the slide; *d³* depending guide flanges formed along the longitudinal edges of the slides; *f* 50 a screw extending up through the bottom of the seed-hopper near the outer end thereof, the upper end of the screw bearing on the

transversely-corrugated under side of slide *d*, said depending sides *d³* serving to guide it over the end of said screw as shown. An adjustable plate *e* is mounted in a groove in each of the slides, to regulate the size of the discharge opening therein. *f' f''* designate the links which connect the respective slides to the bars *a a'*, the slide of one hopper being connected to the inner side of the bar carrying the other hopper; said links being loosely connected to the respective slides and removably connected to the bars, the removable connection between the links and bars being each formed by means of a head *f²* (formed on the link by notches *f'''*) which engages a vertical slot formed in a bar *g* carried by the opposite main-bar, the head *f²* of the link being confined between said bar *g* and the main-bar, as clearly shown in Fig. 2 of the drawings. *h h* are brushes mounted in the hoppers, their lower edges bearing on the respective upper surface of the slides, thereby cleaning them before they pass out of the hoppers, the hopper *c'* being preferably provided with two brushes to clean its slide as it passes both forward and backward. *i i'* designate respectively seed-passages or chutes formed on the inner sides of the bars *a a'*, the discharge openings in the slides being adapted to communicate with these chutes when the slides are in their innermost position; said chutes opening at their lower ends between the side plates *a''*. *j* designates a bail or bridle pivoted on the bar *a'* and encircling the other bar; a strong leaf spring *k* engages the free end of said bail and forces the bars *a a'* apart at their upper ends and normally holds the plates *b b'* close together. Handles *l l'* are secured to upper ends of the bars *a a'* to be grasped when forcing the plates *b''* into the ground.

The operation is as follows: The seed and fertilizer are placed in the hopper, and the device is operated in the usual manner. As shown, the slide *d'* feeding the fertilizer is below the slide *d* feeding the seed, which will cause the seed to be planted on top of the fertilizer. As the device is operated in planting, the slides *d, d'* move through the hopper in a position parallel with the bottom of the hopper and the flanges *d''*, acting as guides, retain the slides in their working position,

thus causing the slides to fit accurately the openings in the hoppers through which they work, which will prevent waste of seed and fertilizer. The links $f' f''$ are loosely connected to the slides and pivotally connected to the bars $a a'$ to permit the slides to follow the varying inclined positions of the hoppers; and the slide d is agitated while passing through its hopper by means of the screw f bearing on the corrugations on the under side of the slide, which agitation facilitates the discharge of seed into the seed chute. If the slides should become injured they may be readily removed by detaching the links $f' f''$ from the plates g and then forcing the slides outwardly through the hoppers.

Having thus fully described my invention, what I claim is—

In a combined hand corn-planter and fertilizer distributor, the combination of the two bars pivoted together at their lower ends and

provided with conducting chutes along their adjacent faces, a hopper mounted on the outer side of each of said bars, a dropping slide working through each of the hoppers and bars and provided with a variable opening, each of said slides being provided with a lip d^2 at its outer end and depending side-flanges along its edges, a link loosely connected to the under side of each slide between its flanges and pivotally and removably connected to the opposite bar, this latter connecting means consisting of a notched plate on the bar adapted to engage the notched head of one of the links, and means for agitating one of the slides, as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

GILBERT L. HUDSON.

Witnesses:

WM. L. DICKEN,
H. W. DICKEN.