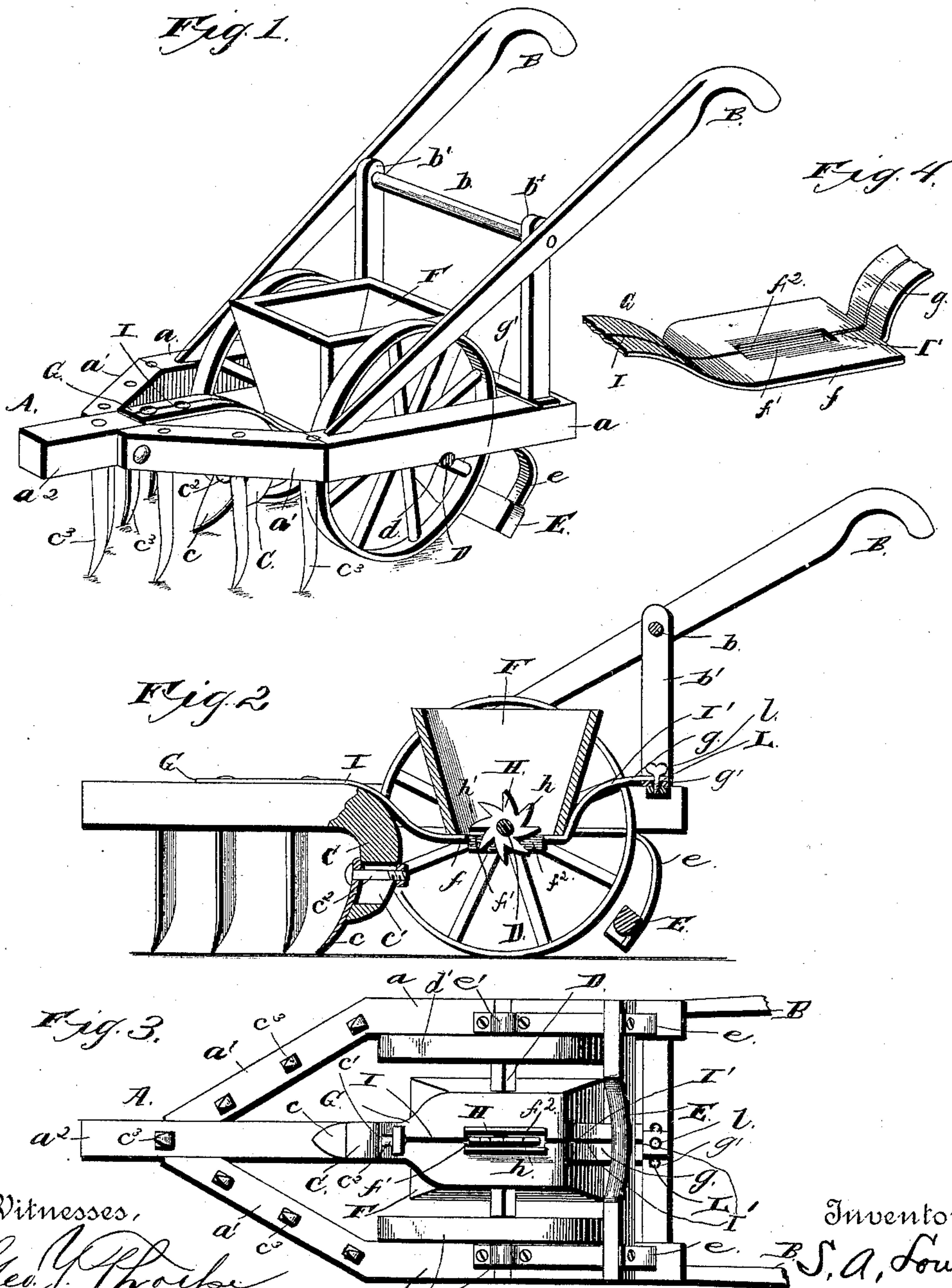


(No Model.)

S. A. LOWE.
PLANTER.

No. 396,884.

Patented Jan. 29, 1889.



Witnesses,

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UNITED STATES PATENT OFFICE.

STEPHEN ALONZO LOWE, OF MARION STATION, MISSISSIPPI.

PLANTER.

SPECIFICATION forming part of Letters Patent No. 396,884, dated January 29, 1889.

Application filed June 29, 1888. Serial No. 278,563. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN ALONZO LOWE, a citizen of the United States, residing at Marion Station, in the county of Lauderdale and State of Mississippi, have invented a new and useful Improvement in Planters, of which the following is a specification.

The invention relates to improvements in planters; and it consists in the construction and combination of parts hereinafter described, illustrated in the accompanying drawings, and pointed out in the appended claims.

Figure 1 of the drawings represents a perspective view of a planter embodying the invention. Fig. 2 represents a central vertical longitudinal section thereof. Fig. 3 represents a reversed plan of the machine. Fig. 4 is a detail perspective view of the bottom of the hopper with the front and rear spring-plates attached.

Referring to the drawings by letter, A designates the frame of the machine, composed of the parallel main side rails, *a a*, the frontwardly-converging rails *a'*, and the tongue *a²*, secured between the front ends of the said converging rails.

B B are handles, with their front ends secured to the forward portions of the main side rails, *a*, and connected by the transverse bar *b*, which passes through openings in the standards *b'*, that rise from the rear ends of the rails *a*, as shown.

The rear end, C, of the tongue curves downward in front of the hopper, (hereinafter described,) and has attached to its front the furrow-opening share *c*, of suitable construction. The said curved end is provided with a longitudinal slot, *c'*, through which the bolt *c²*, standing rearward from the share C and engaged by a nut behind the tongue, passes.

c³ c³ are cultivator blades or teeth depending from the rails *a'*, to which their shanks are secured. These teeth have their points turned inward and throw the soil toward the tongue in front of the furrow-opener or share *c*.

D is the axle journaled in bearing-notches *d* in the lower edges of the side rails, *a*, and turning with the wheels *d' d'*, attached to the axle on the inner side of the said rails.

E is the coverer-bar, made concave centrally on its lower edge, and having its ends

secured to the rear ends of the metallic spring-arms *e*, the front ends of which are secured to the lower surfaces of the side rails, *a*, and are bent outward at *e'* to complete the bearings *e²* for the axle, the upper portions of said bearings being formed by the notches *d*.

F is the hopper having a metallic bottom or floor, *f*, provided with a central longitudinal slot, *f'*, having depending edges *f²*.

G is a spring-plate having its front end secured to the tongue and its rear end secured to the front portion of said bottom. *g* is a similar spring-plate, with its front end secured to the rear portion of the bottom *f* and its rear end attached to the central part of a spring-plate, *g'*, that extends between the ends of the side rails, *a*.

If desired, the spring-plates G *g* may be made integral with the bottom *f*. This construction is preferable, and is shown in the drawings; but it is not a necessary construction.

H is a feed-wheel secured on the axle, with its edge projecting downward through the slot *f'*, the said edge having formed upon it the stirring and feeding teeth *h*, the front edges, *h'*, of which are convex and the rear edges thereof straight and radial to said wheel.

It is evident that as the machine progresses the feed-wheel H will turn in the slot *f'* and throw the seed or grain into the furrow formed by the share *c*, which furrow will be closed by the coverer-bar E.

I is a slit or slot running through the spring-plate G, from near the front end thereof, and extending into the front end of the slot *f'* in the bottom of the hopper, and I' is a similar slot extending from the rear end of the slot *f'* to the end of the spring-plate *g*.

L is a slot in the spring-plate *g'* at right angles to the slot I' of the spring-plate G at the rear end of the latter, and *l* is a set-screw passing through both slots L and I' and engaging a nut below the spring-plate *g'*. By these means the legs of the spring-plate *g* on each side of the slot I' can be adjusted farther apart or nearer together to widen or narrow the feed-slot *f'* of the hopper.

Having described my invention, I claim—

1. In a planter, the combination, with the main frame and tongue secured between the

front side rails thereof, of the hopper, the spring-plate G, connecting the bottom of the hopper and the tongue, the spring-plate g' , connecting the rear ends of the side rails of
5 the main frame, and the spring-plate g , connecting the middle of the plate g' and the bottom of the hopper, substantially as specified.

2. In a planter, the combination, with the main frame having bearing - notches in its
10 side rails, of the axle resting in said notches, and the spring-arms of the coverer-bar secured to said side rails and completing the axle-bearings, substantially as specified.

3. The herein-described planter comprising
15 the main frame, the tongue having a downwardly-curved and slotted rear end, the furrow-opener adjustably attached to said rear end, the axle, the wheels on the inner side of the side rails of the main frame, the hopper
20 supported by springs upon the main frame and provided with a longitudinal feed-slot in its bottom, and the feed-wheel secured to the

axle and having the spring-arms of said bar completing the bearings for the axle, substantially as specified. 25

4. In a planter, the combination, with the main frame and tongue, of the hopper having a bottom provided with a longitudinal feed-slot, I' , the spring-plate G, connecting the tongue and hopper and provided with a slot, I, running into the slot f' , the spring-plate g , provided with a slot, I' , running from the slot f' to
30 and out of the rear end of the said spring-plate, the transverse spring-plate g' , provided with the slot L, and the set-screw l , engaging a nut
35 below said spring-plate g .

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

STEPHEN ALONZO LOWE.

Witnesses:

G. HENDERSON,
W. H. CURTIS.