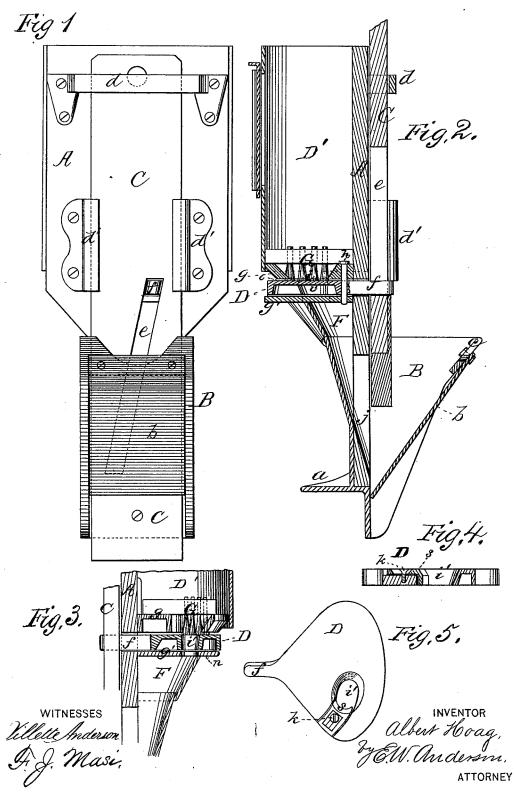
A. HOAG. Hand Corn and Bean Planter.

No. 204,574.

Patented June 4, 1878.



UNITED STATES PATENT OFFICE,

ALBERT HOAG, OF GRAND ISLE, VERMONT.

IMPROVEMENT IN HAND CORN AND BEAN PLANTER.

Specification forming part of Letters Patent No. 204,574, dated June 4, 1878; application filed May 4, 1878.

To all whom it may concern:

Be it known that I, ALBERT HOAG, of Grand Isle, in the county of Grand Isle and State of Vermont, have invented a new and valuable Improvement in Hand Corn and Bean Planter; 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 view of my improved hand-planter. Fig. 2 is a longitudinal vertical section thereof;

and Figs. 3, 4, and 5 are details.

This invention has relation to improvements in hand corn and bean planters; and the nature of the invention consists in the combination of parts, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates the back board of my improved handplanter, having at its lower end a chamber, B, of triangular form. This chamber is open at top, and has near its lower end a horizontal stop-flange, a. One of its sides is formed by a metallic plate, b, rigidly secured at its upper end to a brace, c, connecting the end walls of the said chamber, its lower end being free and in contact with the back plate of the same.

D' indicates the seed-hopper, the bottom of which is formed by a dished plate, g. The front wall of this hopper terminates at the

said plate.

C indicates a metal-shod plunger working in guides d d' upon the back board, and provided at its upper end with a suitable handle. Plunger C is provided with an oblique slot, e, in which is engaged the stem f of a valve, D, projecting through a transverse slot in the back board A. This valve D is arranged between two metallic plates, g g', and it oscillates on a pin, h, extending through registering perforations in the said plate and valve. The space between these two plates g g' is not inclosed by a lateral wall, so that the valve D may be inserted therein and removed therefrom without passing it through the seedhopper, and said valve is readily accessible for the purpose of adjusting the slide s.

The upper plate g is dished, as before stated, upon its upper face, and has an opening, i, in its middle portion, through which the grain

flows to a seed-cup, i', in the valve D. The plate g' has no opening corresponding to the seed-cup i of the upper plate g, but is broken away at one end, n, above a funnel, F, secured to the back board, so that when the cup i' is brought over this funnel, by actuating the plunger C, its contents are discharged into the said funnel, and, passing down it, are discharged from the hopper D', through an opening, j, in the back board, into the chamber B below the plunger, which is required to be raised to throw the seed-cup i' in line with the funnel aforesaid.

The valve has an adjusting-slide, s, and screw k, by means of which the capacity of the seed-cup i' is increased or diminished. As the valve is operated by raising the plunger, any superfluous grains therein are swept out by means of a brush, G, secured to plate g in line with the funnel F, and the said valve is thereby prevented from becoming jammed between the plates g g' aforesaid.

It will be observed that plate g' serves as a bottom to the seed cup i', and also as a

bearing for the valve.

In order to diminish the friction of the valve D upon plate g', it is hollowed out upon its under side, a few ribs being retained to keep it level.

t level.
The grain, having fallen through the funnel

F into the chamber B, is expelled therefrom into the ground by thrusting the plunger down, thus flexing the plate b and causing the heel thereof to be buried in the ground.

The top of the chamber is open in order that the operator may see that the grain has fallen through the funnel into the chamber.

What I claim as new, and desire to secure

by Letters Patent, is-

The combination, with the seed-chamber D', provided with the dished bottom plate g, having an opening, i, therein, of the valve-supporting plate g', arranged below the said plate g, the oscillating valve D, fitting snugly between said plates, and having a stem, f, and the plunger C, having the oblique slot e, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

ALBERT HOAG.

Witnesses:

A. H. W. Jackson, M. B. Coney.