J. M. & W. C. WALLIS.

HAND CORN PLANTER.

No. 36,815. Patented Oct. 28, 1862.

Fig. 1.

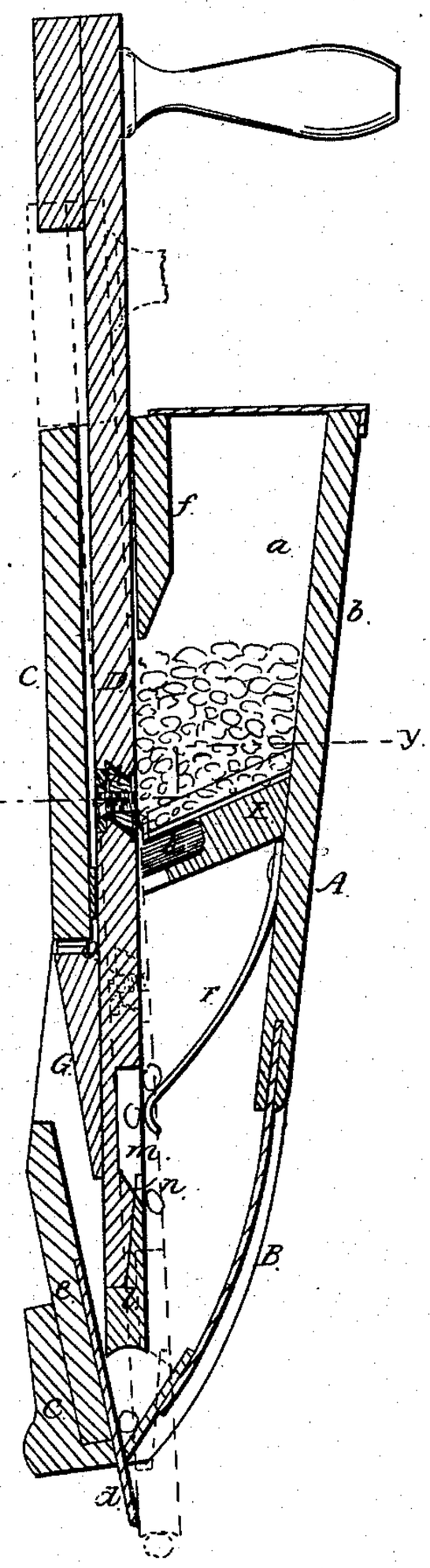
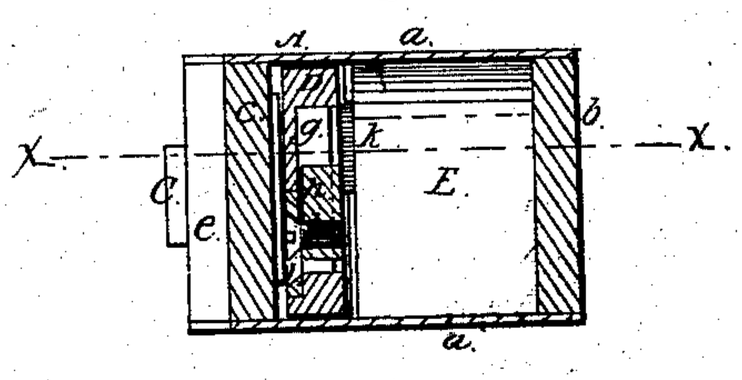


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES M. WALLIS AND W. C. WALLIS, OF MILTON, IOWA.

IMPROVEMENT IN HAND CORN-PLANTERS.

Specification forming part of Letters Patent No. **36,815**, dated October 28, 1862.

To all whom it may concern:

Be it known that we, J. M. WALLIS and W. C. WALLIS, both of Milton, in the county of Van Buren and State of Iowa, have invented a new and Improved Hand Corn-Planter; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of our invention, taken in the line *x x*, Fig. 2; Fig. 2, a horizontal section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to an improved corn-planter of that class which are designed for manual operation; and it consists in a novel arrangement of a plunger provided with a seed-cell, and used in connection with a cut-off or partition, spring-plates, and a stop, arranged in such a manner that the device may be operated and the seed measured, dropped, and planted with the greatest facility.

To enable those skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents a box, the two opposite sides *a a* of which may be of sheet metal, secured to the other side pieces *b c*, which may be of wood, by screws or nails. The side piece *b* does not extend down to the lower ends of the side pieces *a a*, and it has a curved metal plate, B, secured to its lower end, the elasticity of which has a tendency to keep its lower end in contact with a metal plate, *d*, which is attached to the inner surface of a wooden strip, *e*, secured between the lower parts of the sides *a a*, opposite to plate B, as shown in Fig. 1. The plate *d* projects some distance below the strip *e*, and to the back side or outer surface of the latter a gage, C, is attached, which regulates the depth of the penetration of plate *d* into the earth. This gage is simply a wooden block secured by screws to the strip *e* at a greater or less height, as may be desired. The strip *e* is not in line with the side *c* of the box; it inclines farther outward, as shown in Fig. 1.

D is a plunger, which is fitted in the box A, and is allowed to slide freely up and down therein between the side *c* and a guide, *f*, in the upper part of box A. This plunger D has a recess, *g*, made in its surface, in which a slide, *h*, is fitted and adjusted at any point by a screw, *i*, which passes through a slot, *j*, in the plunger. This recess *g* is of oblong form, extending horizontally nearly across the plunger D, and has its lower edge inclined.

E is an inclined partition in the box A, having a brush, *k*, at one end, which bears against the inner surface of the plunger D. The space in the box A above the partition E is the seed-hopper. In the box A, below the partition E, there is a curved elastic plate, F, the lower end of which bears against the inner surface of the plunger D. The lower end of the plunger D may be shod with metal, as shown at *l*. In the inner surface of the plunger D there is made a recess, *m*, which has an inclined bottom, *n*, as shown in Fig. 1.

The operation is as follows: When the plunger D is drawn upward, the recess *g*, the capacity of which is regulated by adjusting slide *h*, will become filled with seed, and as the plunger is forced down the recess *g* will pass below the brush *k*, and the seed will then fall from the recess into the space between the partition E and the elastic plate F, the latter serving as a bottom for said space and retaining the seed. When the plunger is again drawn up for the recess *g* to be filled, the seed previously discharged and retained by the plate F will escape through the recess *m* into the space below F, said recess arriving at the lower end of F when the recess *g* passes into the seed-hopper. When the plunger is again depressed the recess *m* passes below F before the recess *g* passes below the brush *k*, and hence the plate F retains the seed until the recess *m* again rises to liberate it. At each descent of the plunger after being once moved down and up, the seed in the lower space on plate B is forced into the earth, the plunger forcing outward said plate, which, by its elasticity, returns to its original position each time the plunger rises. The case A is adjusted over the spots where the seed is to be deposited, and the plunger D operated by hand. The whole arrangement is extremely simple and efficient.

In order to limit the upward movement of the plunger D, a stop, G, is attached to the outer surface of the plunger, which comes in contact with the lower edge of the side *c;* and in order to avoid concussions a spring, *o*, is attached to the upper end of G, as shown in

Fig. 1, which spring breaks the force of the blow and prevents any disarrangement of the working parts.

We do not claim separately any of the parts herein shown and described; but

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

1. The plunger D, provided with the recesses *g m*, in combination with the partitions E, provided with the cut-off brush *k*, and the elastic plates F B and fixed plate *d*, all arranged relatively with each other and within the box A, to operate as and for the purpose herein set forth.

2. The stop G, attached to the plunger D, and provided with the spring *o*, when arranged relatively with the side *c* of the box A, and used in combination with the elastic plates F B, inclined partitions F brush *k*, and fixed plate *d*, as and for the purpose set forth.

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Witnesses:
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