F. A. HAWKINS.

Hand Corn-Planters.

No. 134,884. Patented Jan. 14, 1873.

Fig. 2.

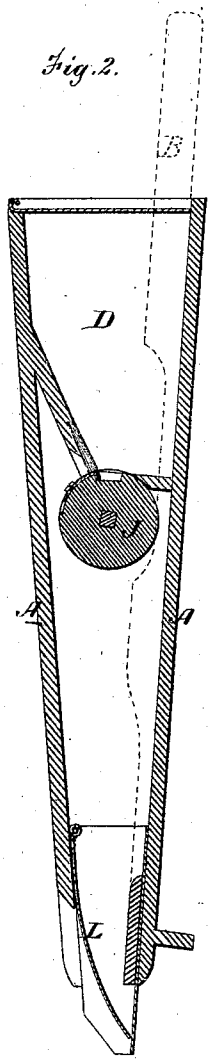
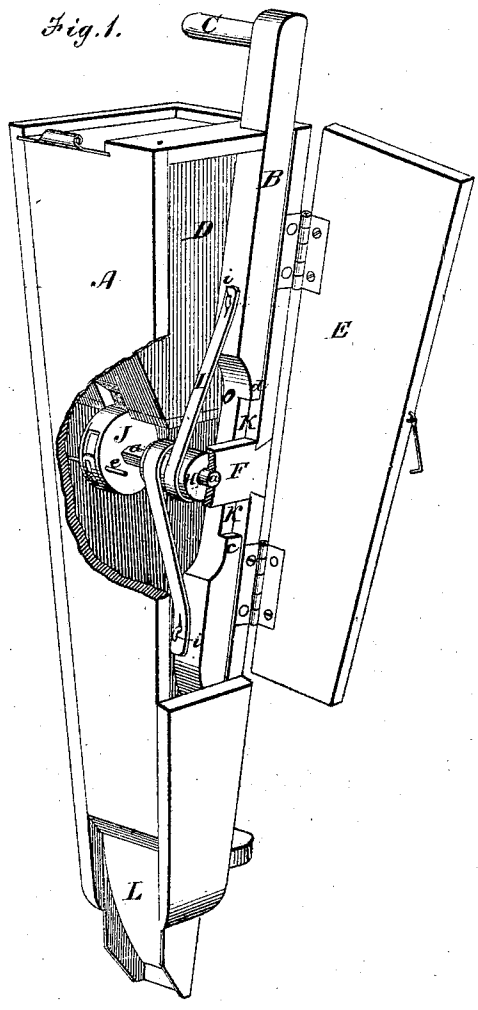


Fig. 1.



Witnesses.
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Inventor.
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Hill & Seaward.

UNITED STATES PATENT OFFICE.

FRANK A. HAWKINS, OF NOBLESVILLE, INDIANA.

IMPROVEMENT IN HAND CORN-PLANTERS.

Specification forming part of Letters Patent No. **134,884**, dated January 14, 1873.

To all whom it may concern:

Be it known that I, FRANK A. HAWKINS, of Noblesville, in the county of Hamilton and State of Indiana, have invented a new and Improved Hand Corn-Planter; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a perspective view with the door open and side of the box broken away to expose the feed-wheel, and Fig. 2 is a longitudinal section.

Similar letters of reference in the accompanying drawing indicate the same parts.

My invention consists in the employment of a plunger operating in the inner side and one corner of a case, and provided with recesses, stops, and a strap, in combination with a drum and feed-wheel having stop-wires, as hereinafter more fully set forth.

A is the case aforesaid, and B the plunger, the same being placed against the inner side of the case, and also against the door side of the case, or in the corner between the said two sides. Hence the major part of the planter is on the opposite side of the plunger from the operator, and consequently out of his way, the inner side, by which I mean the side next the operator, hanging nearly perpendicular. The placing of the plunger in the corner also allows its handle C to be extended over the grain-box D parallel with the inner side of the case, so that said handle is in all its parts as near the operator as possible, and, therefore, most convenient for his use. E is the door of the case. F is a cross-bar, placed next the door, dovetailed at its ends into the edges of the side pieces, and made easily removable. In this bar is mounted one of the journals of the shaft *a*, the other end of which is mounted on the opposite side of the case. This shaft bears the drum H, around which passes the strap I that is fastened at its ends to the plunger, and consequently causes the drum and shaft to turn when the plunger is in motion. The fastening of the strap to the plunger is effected by means of hooks *i* passing through slots in the ends of the strap, so that the latter can be easily detached. The shaft *a* is square beyond the drum H, and on the square part is loosely placed the feed-wheel J, which has the ordinary pocket in its periphery, and enters the notch in the bottom of the grain-box, and vibrates back and forth as the plunger reciprocates. The plunger has a recess, K, cut in the side next to the cross-bar F, which recess is made of such length that when its lower stop *c* strikes the cross-bar the pocket of the feed-wheel is within the grain-box D, and feeding therefrom; and when the upper stop *d* strikes the cross-bar the feed-wheel J has dropped the seed upon the spring L and the lower end of the plunger has come down and forced the seed past said spring into the ground in the usual way. The feed-wheel is also provided with stop-wires *e*, projecting from each side, which strike the bottom of the grain-box at the same instant that the stop *c* strikes the cross-bar F, thereby distributing the jar of the plunger.

It will be seen that all the working parts are entirely accessible. On opening the door E the cross-bar F can be taken out, the strap I thrown off, and the shaft *a* with the drum H slipped out of the feed-wheel, which can be removed separately. The replacement of the parts is as quickly effected.

All the parts are entirely secured from the weather by the case, so that the planter can be left in the field the year round and the works keep dry. The materials throughout are such as every farmer has by him at all times.

The friction of the working parts is so small that on pulling upward on the plunger it rises independently of the case, which latter does not begin to move upward until the stop *c* strikes the cross-bar. This is an advantage possessed by no other planter, notwithstanding all others are heavier than mine.

It is an objection to some hand-planters that the bottom of the plunger passes too far below the bottom of the spring, and consequently packs the earth too hard around the seed. My plunger passes below the spring but about one-quarter of an inch, and hence does

not pack the earth. The length of its throw is also at least one-half less than that of the plunger of any other planter.

Having thus described my invention, what I claim is—

The plunger B, operating against the inner side and one corner of the case A, and provided with the recesses K O, stops *c d*, and strap I, in combination with the drum H and feed-wheel J having stop-wires *e e*, all constructed and operated in the manner and for the purpose set forth.

FRANK A. HAWKINS.

Witnesses:

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