N. A. PALMER.

HAND CORN-PLANTER.

No. 193,129. Patented July 17, 1877.

Fig. 1.

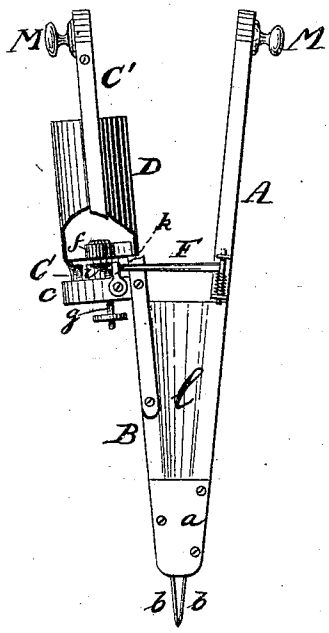


Fig. 2

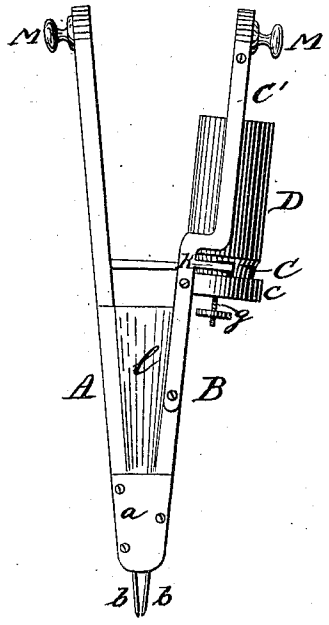


Fig. 3.

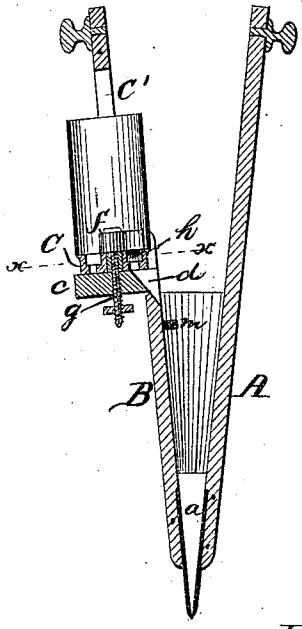
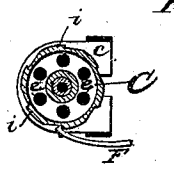


Fig. 4.



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UNITED STATES PATENT OFFICE.

NORMAN A. PALMER, OF WAGRAM, OHIO.

IMPROVEMENT IN HAND CORN-PLANTERS.

Specification forming part of Letters Patent No. **193,129**, dated July 17, 1877; application filed June 4, 1877.

To all whom it may concern:

Be it known that I, NORMAN A. PALMER, of Wagram, in the county of Licking and State of Ohio, have invented certain new and useful Improvements in Hand Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which is appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figures 1 and 2 are side elevations taken from different sides. Fig. 3 is a longitudinal vertical section; and Fig. 4 is a cross-section on the line *x x* in Fig. 3.

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

This invention relates to that class of hand corn-planters in which the seed box or hopper is secured upon one of two legs, pivoted together, the seeding mechanism being operated by the motion of the said legs in alternately bringing them together and apart; and it consists in the construction and combination of parts, which I shall now proceed more fully to describe.

In the drawing, A B are the two legs of my improved planter. The former has at the lower end laterally-projecting metal plates *a a*, between which the latter is pivoted in the usual manner, so as to leave a space between the legs, in order to allow the seed to drop freely. Both of the legs have at the ends sharp blades *b b*, which enter the ground and prepare the opening for the seed.

The leg B is somewhat shorter than A, and it has at its upper end a bracket, *c*, upon which the seed-slide, which is in the shape of a wheel or disk, is pivoted. It also has two upward projecting bent metal straps, C′, between which the seed box or hopper D is secured. The bottom of this is formed by the seed-wheel C, which, as before stated, is pivoted upon bracket *c*, upon which it rotates horizontally. The feed-wheel C has a circumferential series of perforations, *e e*, which form the seed-cups, and bracket *c* has a cut or groove, *d*, forming a channel, through which the seed can drop, as the seed-cups pass over it, down between legs A B. A bracket, *f*, from which the pivot-pin *g* of the feed-wheel C (which is removable) extends in a downward direction, is secured upon the inside of hopper D. Bracket *f* has a brush, *h*, to brush the surplus corn off the seed-cups as the seed-wheel rotates.

The seed-wheel C has on its edge a series of ratchets, *i i*—one for each seed-cup—and it is operated by a spring-catch, F, arranged upon the side of leg A, and kept in place by a small bail or guide, *k*, secured upon the side of bracket *c*. A spring-pawl, K, extends laterally from the metal strap C′ on the opposite side, which, engaging with the ratchets in the feed-wheel, prevents backward movement.

The legs A B have side pieces *l l* of cloth, leather, or similar flexible material, as usual in planters of this class to form a closed channel for the grain to drop through, and one of the legs, B, has upon the inside two set-screws, *m*, which are properly adjusted, so as to prevent the upper ends of the legs from coming closer together than is necessary to operate the seeding mechanism. Handles M M, by which legs A B may be conveniently operated, are secured to their upper ends in any suitable manner.

From the foregoing description, and by reference to the drawings hereto annexed, the operation of my invention and the advantages resulting from it will be readily understood by any one skilled in the art to which it appertains.

The feed wheel or disk C which takes the place of the reciprocating slide usually employed in planters of this class is more certain in its action, and less liable to become clogged up. Being detachable, it admits of the insertion of another wheel with feed-cups of a different size, thus enabling the quantity of grain sown in each hill to be regulated beforehand.

The general construction of my improved planter is simple, durable, and cheap, and the arrangement of the hopper and operating mechanism between the bent straps C′ C′ projecting upward from the short leg B presents the several advantages of enabling it to be easily taken apart for cleaning or repairing it, and of enabling the legs A B to be closed together, as far as desired, at each operation,

thus making the operation of the seeding device certain each time.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a hand corn-planter, constructed substantially as described, the pivoted legs A B, the latter shorter than the former, and having upward-projecting bent straps C′ C′, between which the hopper D and feed-wheel C are arranged, the latter operating by spring-catch F, substantially as described, for the purpose herein shown and specified.

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

NORMAN A. PALMER.

Witnesses:

B. W. GRIMM,

H. L. BEEM.