

(No Model.)

P. SCHENDZELOS.  
HAND CORN PLANTER.

No. 517,487.

Patented Apr. 3, 1894.

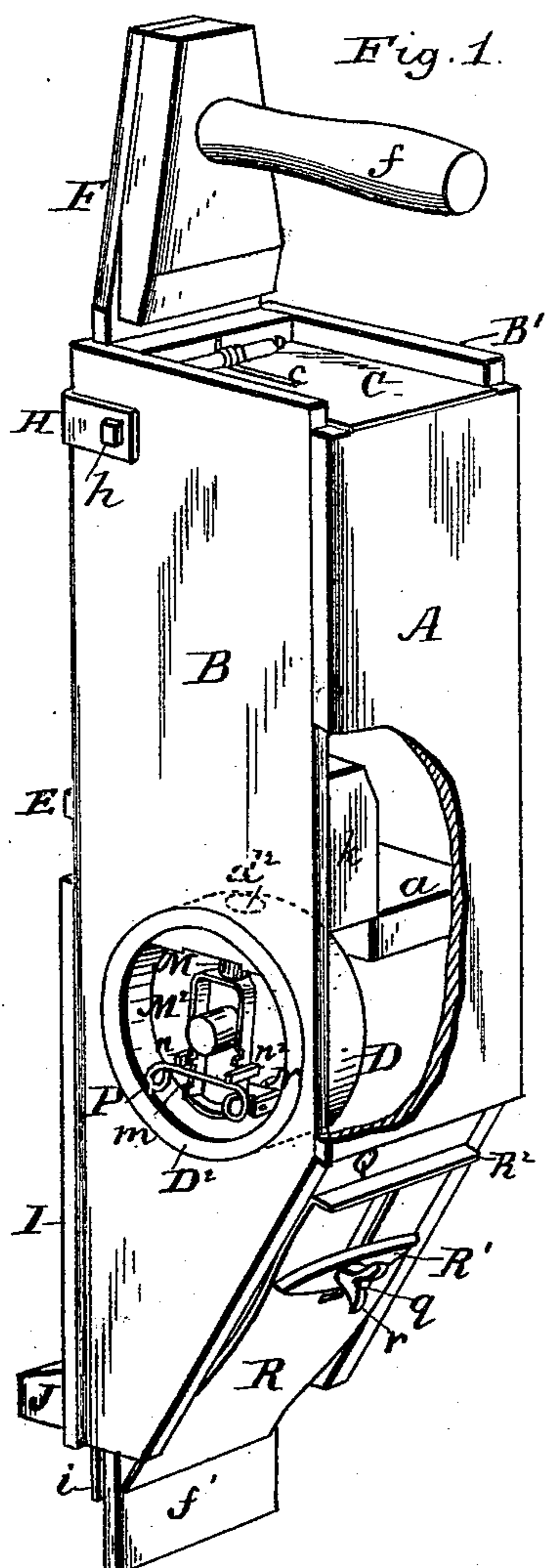


Fig. 1.

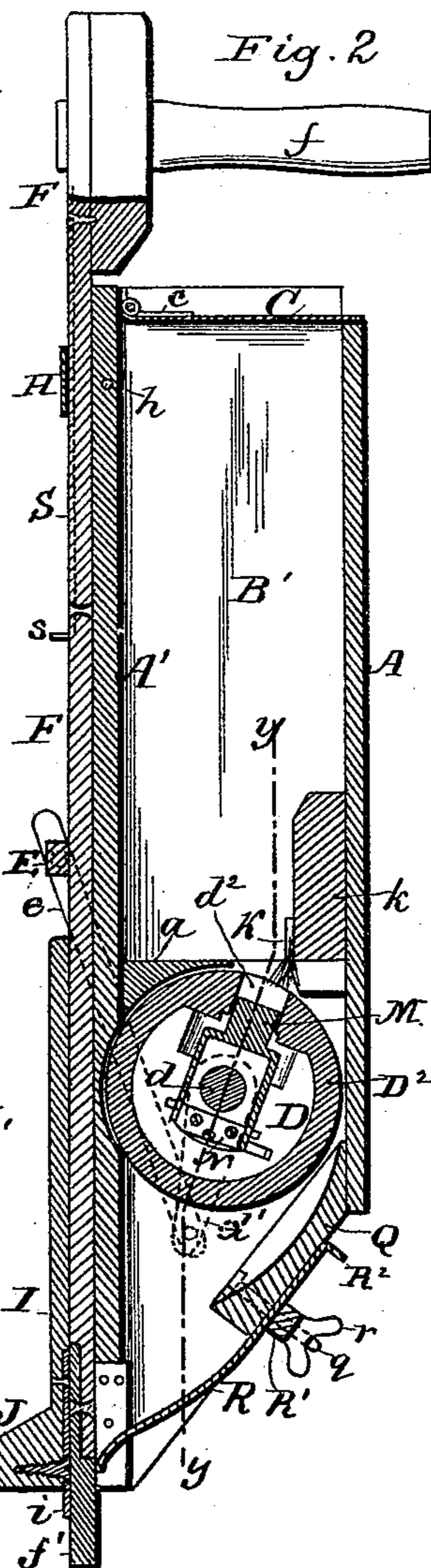


Fig. 2.

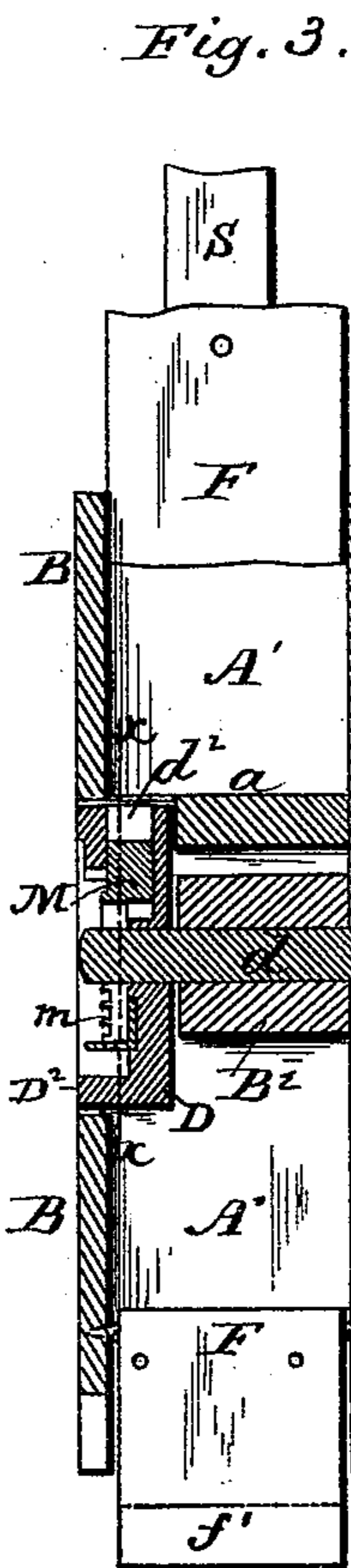


Fig. 3.

Fig. 4.

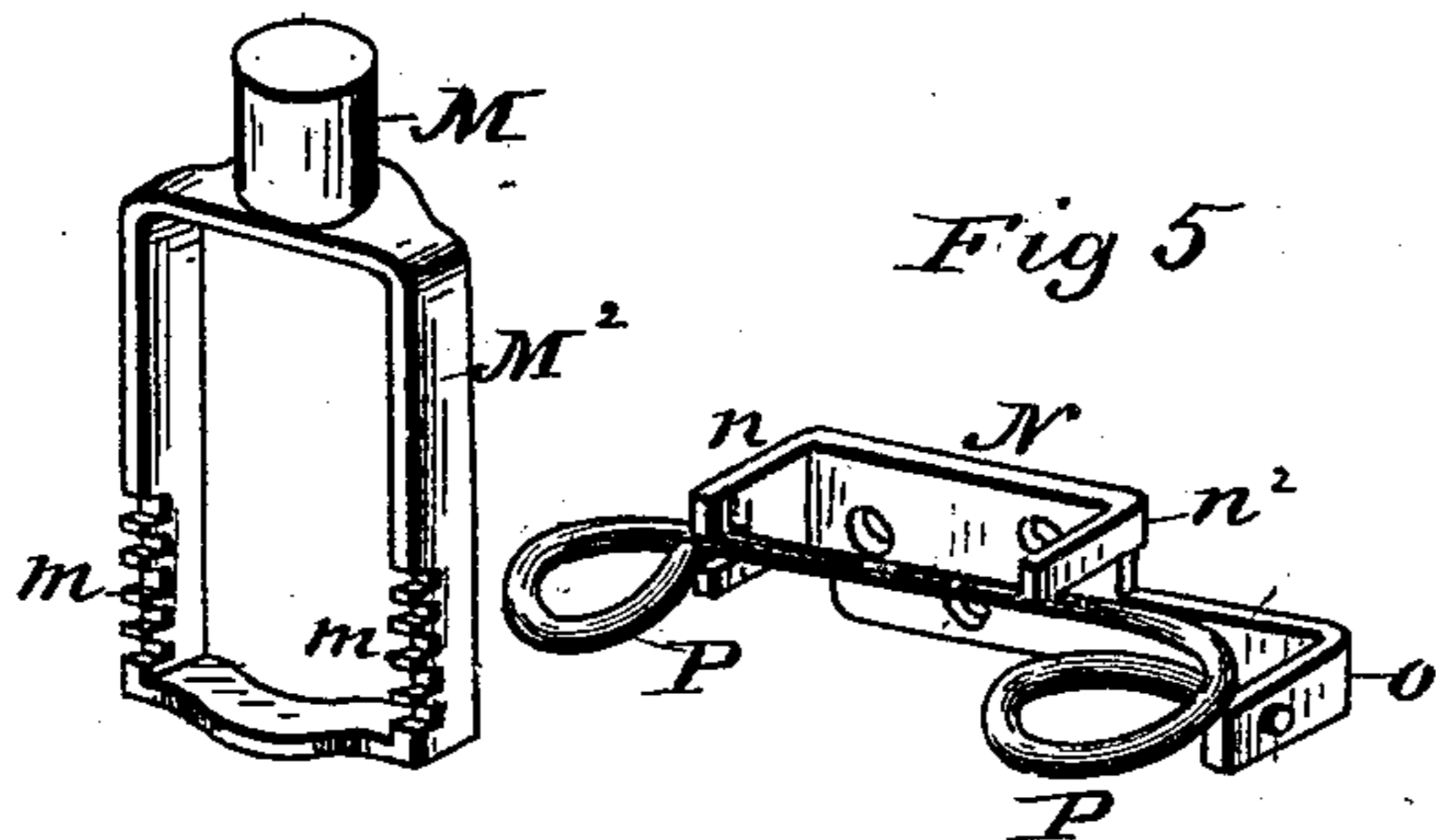


Fig 5

WITNESSES

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# UNITED STATES PATENT OFFICE.

PAUL SCHENDZELOS, OF DUELM, MINNESOTA.

## HAND CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 517,487, dated April 3, 1894.

Application filed June 12, 1893. Serial No. 477,273. (No model.)

*To all whom it may concern:*

Be it known that I, PAUL SCHENDZELOS, a citizen of the United States, residing at Duelm, in the county of Benton, State of Minnesota, have invented certain new and useful Improvements in Hand Corn-Planters, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to hand corn planters, and the objects of my improvement are to simplify their construction, cheapen their cost, and improve their operation; and also to provide improved means to readily adjust the depth of the pocket in the seed disk or dropper; means to readily adjust the dirt guard, and a self closing cover to the hopper. I accomplish these objects by the mechanism illustrated in the accompanying drawings in which—

Figure 1 is a perspective view of my improved planter with one side broken away to show a portion of the interior. Fig. 2 is a vertical section through the seed disk of the machine on line *xx* of Fig. 3. Fig. 3 is a vertical section of the machine on line *yy* of Fig. 2, the upper part of the machine being shown broken away. Fig. 4 is an enlarged perspective view of the pocket adjusting bottom and its frame. Fig. 5 is a perspective view of the guide-plate for said frame and its retaining spring.

Referring to the drawings by letters, A is the front, A' the rear or back and B B' the sides of a rectangular upright box which forms the frame of the machine. In the upper part of this structure, is a seed-hopper or reservoir, of which a partition *a*, forms the bottom, and said reservoir is provided with a cover C. This cover fits between the sides B B', it is hinged to the back A' and when closed its outer end rests on top of the front A. A spring *c* is coiled around the pintle of the hinge, and one of its ends bears against the back piece A' while the other end bears against the cover C, whereby said cover is kept normally closed and permanently secured to the device. The bottom *a* of the hopper is cut away to accommodate a seed dropping disk D, which is mounted on a shaft *d* journaled in the sides B B' and in a bearing block B<sup>2</sup> secured to the rear side A'. The

disk D is thicker than the side B, but its outer face is flush with the outer surface of the side B. Said disk extends sufficiently far inside to permit its seed pocket to register with an opening formed in the bottom *a* of the hopper. The shaft *d* extends beyond the side B' and has at its outer end a crank arm *d'* to which is connected one end of a pitman or link *e*, which, at its opposite end, is mounted on a stud *e*<sup>2</sup> projecting from one end of a block E secured on the face of a slide F. This slide or plunger is fitted between the sides B B', and rests against the back A' of the hopper. It is provided near its upper end with a handle *f*, and at its lower end with a metal tip *f'* properly secured thereto by rivets as shown in Fig. 3. The slide-way for the plunger is completed, and its displacement at the top prevented, by a metal strap H passing across its face near its top, said strap being bent at each end to partly embrace the sides B B', and is secured by a bolt *h* passing through its ends, through the two sides B B' and the back A', thereby also firmly securing together the parts of the frame of the machine. A board I secured to the edges of the sides B B' near the bottom, forms the outside of the plunger slide-way. Said board at its lower end has a metal face *i* on one side, and a block J on its outer face as usual.

A block *k* is secured to the inner face of the front board A. Said block has secured to its lower portion a brush K which bears against the periphery of the disk D and prevents the seed cup therein from being overfilled. The outer face of the disk D is hollowed out, leaving a ring D<sup>2</sup> in which is formed a seed pocket the bottom of which is a plug M, secured to a rectangular metal frame M<sup>2</sup>, the sides of which are toothed as at *m*. These sides can be made to slide between lugs *n n*<sup>2</sup> projecting from a plate N which is secured to the rimmed out face of the disk. Said plate has another lug *o*, which supports one end of a spring P while the lug *n* has a notch to receive the other end of the spring. The bottom of the seed-pocket is adjusted to vary the capacity of the pocket by raising the spring P out of the notches *m*, moving the frame M<sup>2</sup> in or out, and replacing the spring P in some of the other notches.

At the bottom of the frame of the machine is secured an inclined board Q, from which projects outwardly a screw-bolt *q* which passes through a vertically arranged slot in a seed  
 5 retainer and dirt-guard R whose upper end R<sup>2</sup> is bent outwardly to form a handle to facilitate adjustment, and whose lower end bears against the plunger F. It is held in  
 10 position with its lower end in close contact with the plunger by a thumb-nut *r* upon the bolt *q*, and an elongated washer R' under said nut. The front of the plunger adjacent to its  
 15 upper end, is faced with a metal plate S to wear against the metal strap H and the lower end of this plate is turned outward to limit the movement upward of the plunger.

The seed being placed in the hopper, and the plunger being in its lowest position, the operator, grasping the handle, places his toe  
 20 upon the block J, and with foot and hand presses the metal tip of the plunger into the ground thus making a hole into which to drop the seed. The seed pocket is now upward and is filled with seed. With his toe still  
 25 on the block J to hold the device down the operator draws the plunger up, the dirt guard closes the opening through which the plunger is raised; the seed disk is turned to its lower position dropping the seed from its pocket  
 30 and permitting it to fall to the bottom of the space between the dirt guard and the plunger. The plunger is now depressed forcing the discharged seed into the hole previously made, and turning the disk to bring the seed  
 35 pocket again to its upper position to be again filled.

It will be seen from the foregoing description that the hopper is kept automatically closed at the top; the capacity of the seed  
 40 pocket is readily regulated from the outside without the need of a screw-driver or the trouble of taking the machine apart. The dirt guard bears closely against the plunger and promptly closes the opening through  
 45 which the plunger is raised and can be read-

ily adjusted or removed and repaired; and all the rubbing parts of the machine are carefully protected against wear.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The seed-disk having a cup or hollow in its outer face, the seed pocket in the ring around such hollow, and the bottom for the seed pocket extending into such cup, in combination with the double ratchet frame upon  
 55 which the pocket bottom is mounted, and the spring pawl for engagement with the double ratchet frame and securing the ratchet frame in its different adjustments, as set forth. 60

2. In combination, the hollow disk having the seed pocket, the adjustable bottom for the pocket, the rectangular ratchet frame carrying said bottom, the plate secured to the face of the disk having guiding lugs for the ratchet  
 65 frame, and the spring pawl secured to the plate and engaging the teeth on the two arms of the ratchet frame as set forth.

3. In combination with the inclined bottom and the front of the machine, the slotted dust guard having an outwardly bent upper end, the screw projecting from the inclined bottom, the elongated washer across the dust guard and the thumb nut, substantially as described. 70 75

4. In combination, the front of the machine, the sides projecting slightly beyond the front, the plunger located between said sides, the metal strap S secured to the face of the plunger and having outwardly turned end, the  
 80 metal strap embracing the plunger and having its ends turned against the sides, and the bolt *h* passing through these ends, the sides, and the back of the hopper, as set forth.

In testimony whereof I affix my signature in presence of two witnesses. 85

PAUL SCHENDZELOS.

Witnesses:

ANDREW C. ROBERTSON,  
 HENRY PUFF.