

A. C. KENT.
CORN-PLANTER.

No. 173,020.

Patented Feb. 1, 1876.

Fig 1.

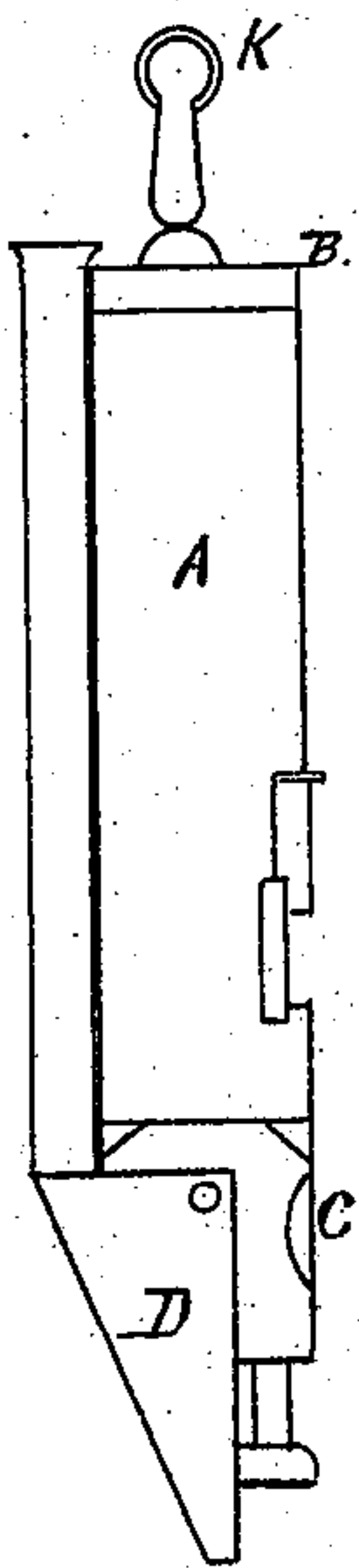


Fig 2.

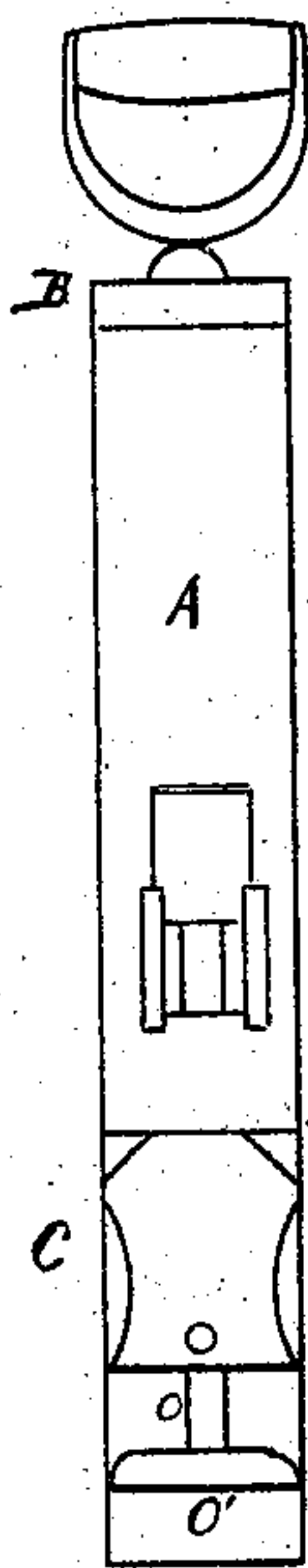


Fig 3.

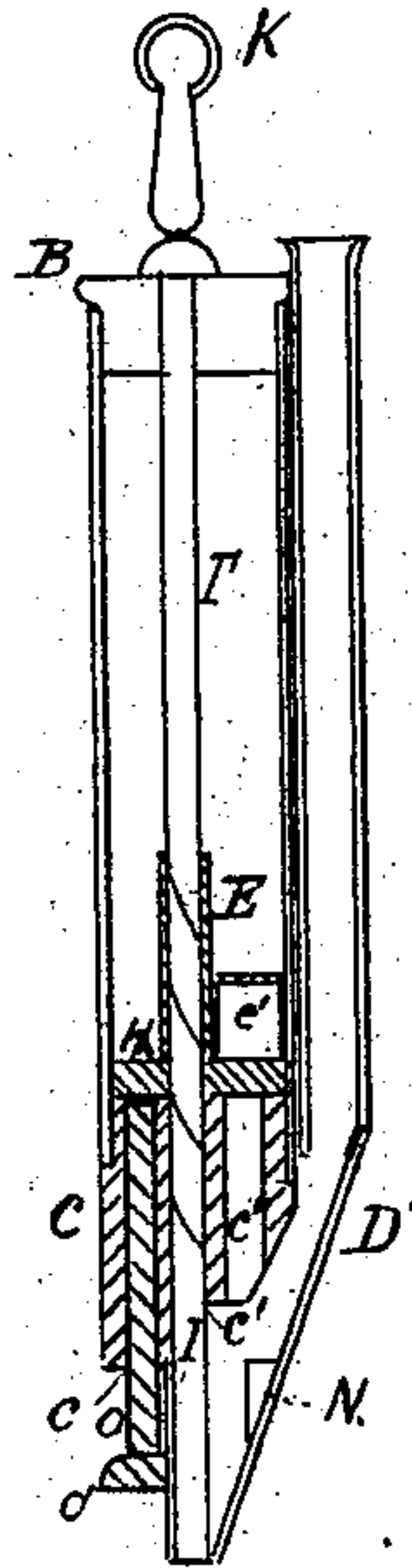


Fig 4.

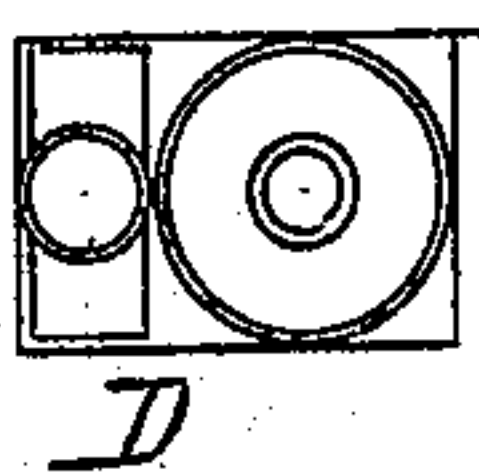


Fig 5.

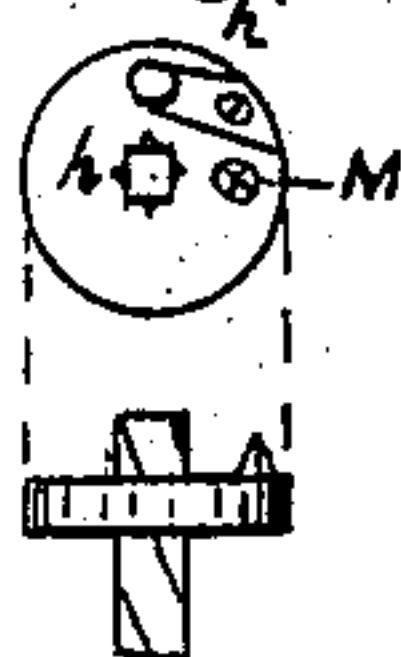
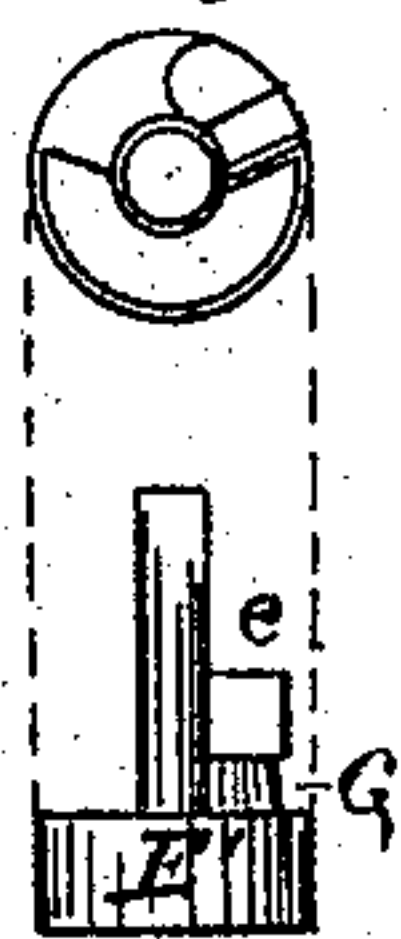


Fig 6.



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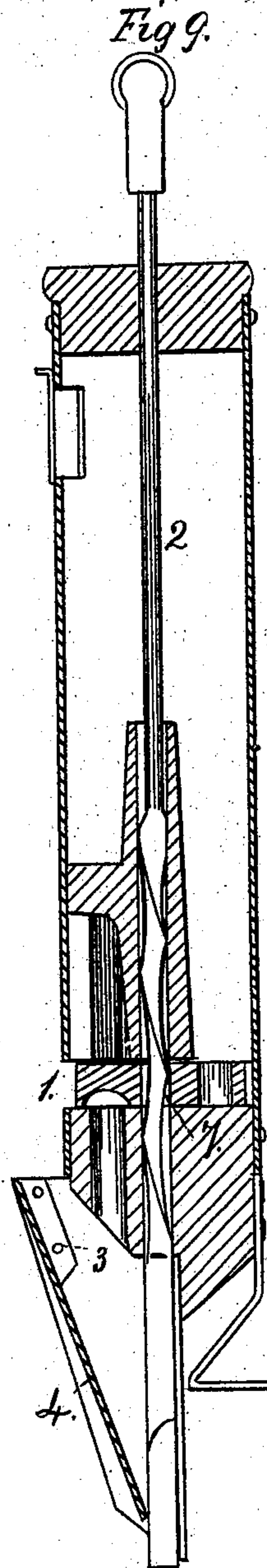
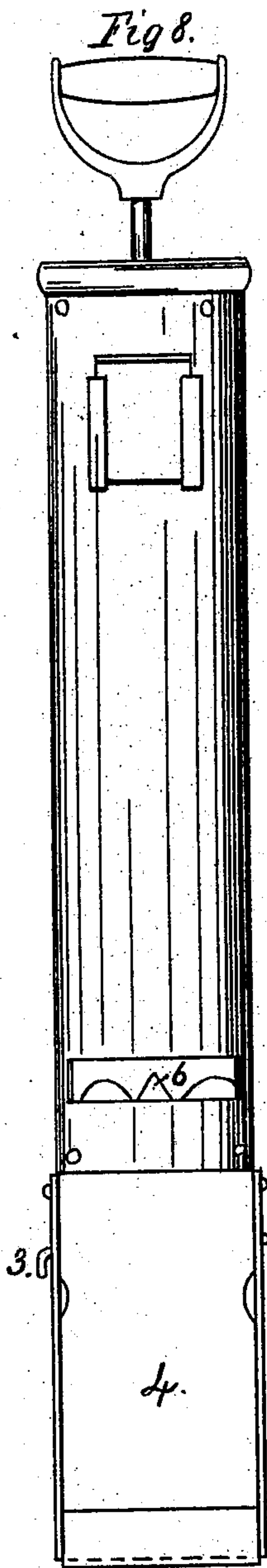
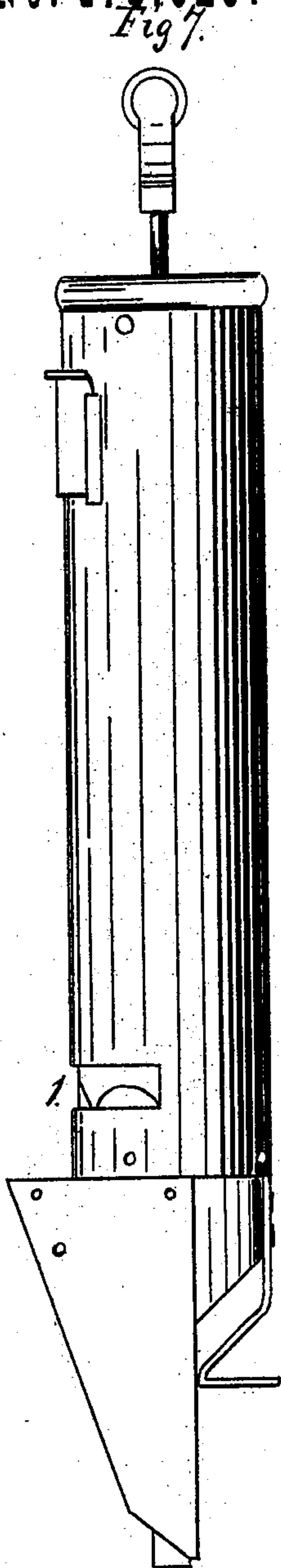
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WITNESSES:

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UNITED STATES PATENT OFFICE.

ARTHUR C. KENT, OF JANESVILLE, WISCONSIN.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **173,020**, dated February 1, 1876; application filed October 18, 1875.

To all whom it may concern:

Be it known that I, ARTHUR C. KENT, of Janesville, county of Rock and State of Wisconsin, have invented an Improved Hand Corn-Planter.

The following description, taken in connection with the accompanying plate of drawings hereinafter referred to, forms a full and exact specification, wherein are set forth the nature and principles of the invention, by which the same may be distinguished from others of a similar class, together with such parts thereof as are claimed as new and are desired to be secured by Letters Patent of the United States.

My invention relates to that class of planters known as hand corn-planters; and the nature thereof consists in certain improvements in the details of the construction of the same, hereinafter shown and described.

In the accompanying plate of drawings, Figure 1 is a side elevation of an improved hand corn-planter, for which Letters Patent were granted to me on the 2d day of April, 1872. Fig. 2 is a front elevation of the same. Fig. 3 is a vertical central section. Fig. 4 is a cross-section. Fig. 5 shows a plan of the edge of the dropper, and Fig. 6 gives like views of the dropper-casing.

In the said drawings, A represents a cylindrical hopper, constructed, preferably, of sheet metal, and having its upper and lower ends closed by means of wooden blocks B and C, respectively. The lower block C is provided with three longitudinal openings, *e*, *e'*, and *e''*, and has attached upon one of its sides a bill, D, of usual form, the inclined portion or movable side of which, D', is formed of spring metal, and secured at its upper end only, so as to allow its lower end to be freely pressed outward. Attached to and extending upward from the upper end of the block C is a short cylinder of sheet metal, E, having about one-half of its upper end inclosed, as shown in Fig. 6, and provided with a central tube, F, which extends vertically upward from the cover E'. A portion, *e*, of the cover E' is raised and inclosed upon its sides and rear, so as to form a space, *e'*, in front of which is secured a brush, G, the bristles of which extend downwardly to or slightly below the cover E'. Resting upon the upper end of the block, and within the

casing E, is a circular metal disk, H, which corresponds in diameter to the interior of the latter, and is provided with a square central opening, *h*. The sides of the opening *h* are slightly winding, so as to cause them to conform to the faces of a twisted rod, I, that passes upward through the opening *e'* of the block C, and through said opening *h*, and is connected with a round rod or pipe, I', that extends through the block B, and is provided upon its upper end with a handle, K.

As thus arranged it will be seen that by moving the rod upward or downward a rotary motion will be given to the disk, the direction and extent of which will be determined by the turn of the screw-faces of the rod.

The disk H, thus constructed and operated, forms the dropper of the device, and is provided with a circular opening, *h'*, which corresponds in size and radial position with the opening *e''* of the block C, and is so arranged that when the rod I is depressed said opening *h'* shall occupy a position just outside of the cover E' upon the side opposite to the brush G, and when said rod is raised said opening shall pass beneath said brush and coincide with said opening *e''*. If, now, grain be supplied to the hopper, and the rod I be moved alternately up and down, the opening within the dropper will alternately fill with grain, and discharge the same into the opening in the block, and through the same into the bill. In order that the grain that falls into the bill may be forced therefrom into the ground, a plunger, I, having a width equal to the space between the sides of said bill, and a thickness of about one-half of an inch, is secured to or upon the lower end of the rod I', and works with the same, and upon its downward stroke carries with it the grain that was dropped into the bill at the termination of the upper stroke. In practice it has been found that the weight of the grain would frequently cause it to become wedged at its lower end, so as to prevent the openings within the dropper from becoming filled. To remedy this difficulty a conical stud, M, is provided upon the face of the dropper, and, as the latter rotates, operates both horizontally and vertically, and effectually agitates and loosens the grain, it being desirable that the grain as it drops into the

bill should be so spread as to cause each grain to occupy a separate place with the ground. A Λ -shaped ledge, N, is secured upon the inner face of the inclined side of said bill with its sloping sides placed at a right angle to the line of the lower portion of the space. As thus arranged the grain is divided and thrown in opposite directions toward the sides of the bill, and when at rest within the lower end of the same is found to be disposed at regular intervals. In order that the depth at which the grain is to be planted may be regulated at will a rod, O, is fitted within the opening *c* of the block C, and held in vertical position by means of a set-screw, *o*. Attached to the lower end of the rod O is a foot, O', which has sufficient horizontal dimensions to enable it, when resting upon the ground, to arrest the downward motion of the whole device, so that by adjusting upward or downward the gage thus formed, a greater or less depth of penetration will be secured for the bill.

My present invention, which consists of certain improvements upon the planter above described, is illustrated in Figs. 7, 8, and 9, Fig. 7 being a front elevation of that part of the implement to which my improvement is applied, and Fig. 8 is a side elevation of the dropper. Fig. 9 is a sectional elevation.

In the said drawings, 1 designates an elongated aperture of sufficient size to allow of the disk or dropper being removed with facility. By means of this aperture dust and chaff, which accumulate about the disk, may be readily removed, and difficulties occasioned by friction and clogging obviated. Hitherto, in order to clean the disk, it was necessary to take the implement entirely apart.

To change the disk or dropper the handle is

unscrewed and detached from the rod 2. The rod 3, which holds the plate 4, is then withdrawn, which allows the said plate to swing outward, and the plunger 2 to slip out. The disk or dropper may be removed with facility through the aperture 1, after the said rod 2 has been detached from the implement, and another planting, a smaller or larger number of kernels, be substituted therefor. In introducing a new disk, the same should be turned until the notch 6 is opposite the arrow marked upon the casing, and held in that position firmly until the twisted part of the rod enters the central aperture 7.

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

1. As an improvement upon the hand corn-planter for which Letters Patent have heretofore been granted to me, the combination of the cylindrical hopper provided with an elongated aperture, the detachable handle, the reciprocating plunger, and the removable oscillating dropper, all relatively arranged as described.

2. I also claim the detachable handle, the reciprocating plunger, the cylindrical hopper provided with an elongated aperture, the removable oscillating disk, the plate 4, and the rod 3, which holds said plate, all combined and relatively arranged, as described.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of September, 1875.

A. C. KENT.

Witnesses:

JOHN WINANS,
H. McELROY.