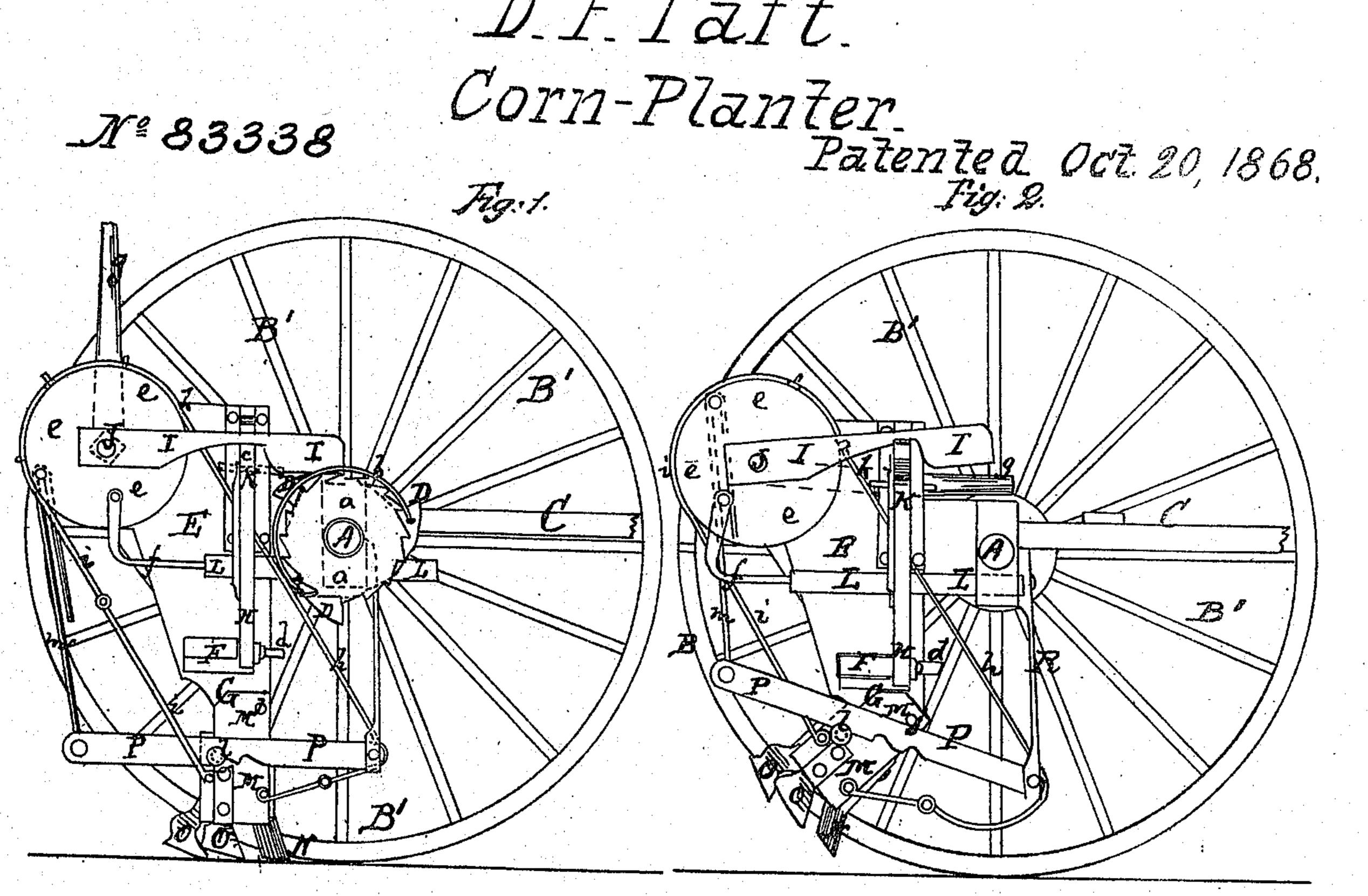
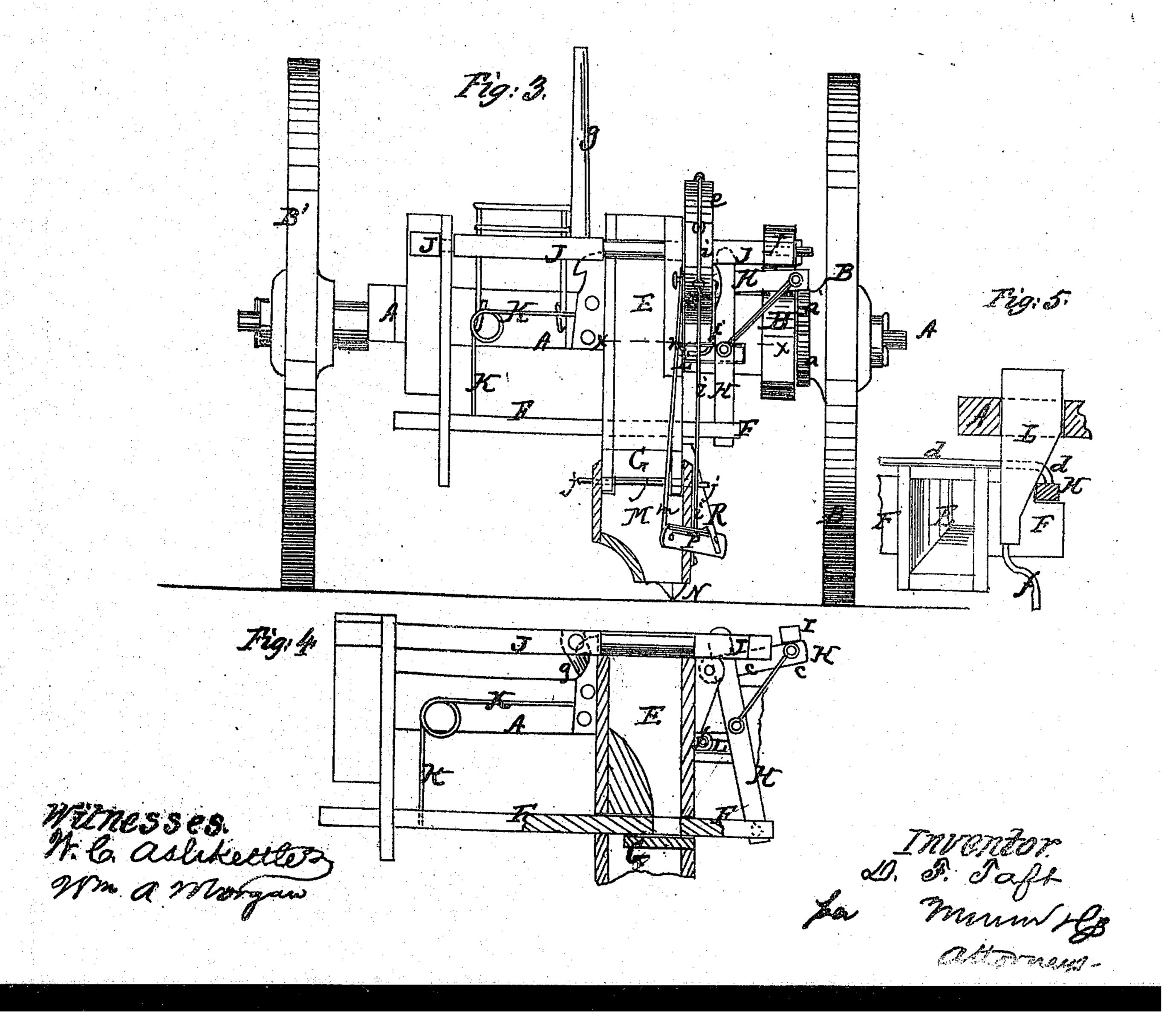
D.F. Taft.







DANIEL F. TAFT, OF NEW BEDFORD, MASSACHUSETTS.

Letters Patent No. 83,338, dated October 20, 1868.

improvement in corn-planters.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Danier F. Taft, of New Bedford, in the county of Bristol, and State of Massachusetts, have invented a new and improved Corn-Planter; 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 make and use the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figures 1 and 2 are side elevations, partly in section, of my improved corn-planter.

Figure 3 is a rear elevation, partly in section, of the same.

Figure 4 is a detail rear elevation, partly in section, of the seed-box and its appendages.

Figure 5 is a detail horizontal section of the same, taken on the plane of the line x x, fig. 3.

Similar letters of reference indicate corresponding parts.

This invention relates to a new seed-planter, which is provided with a flexible or jointed spout, so that the marking and covering-shovels, attached to the lower end of the spout, can be easily raised out of the ground whenever obstructions are in their way, or when the machine is not to be put in operation.

The invention also consists in the use of a new device for operating the slide in the seed-box, and for throwing the same out of gear.

Also, in the construction of the mechanism for throwing the lower end of the spout in or out of gear, and in the application of a spring, for allowing the marker and other shovels, when in gear, to yield to small obstructions that may project from the ground.

A, in the drawing, represents the axle of my improved seed-planter.

On the ends of this axle are hung the two wheels, B', and from it project the shafts C C.

On the hub of the wheel B is secured a ratchet-wheel, a, into the teeth of which a spring-pawl, b, catches. This spring-pawl is secured to the side of a cam, D, which turns loose on the axle A, and which, when the machine moves forward, is carried around with the wheel B by means of the pawl, but when the machine backs up, the pawl slips on the ratchet-wheel, and then the cam does not turn. As by this cam the slide of the seed-box is operated, as will be hereinafter more fully described, it follows that, when the machine moves forward, the said slide is operated, but not when the machine is moved backward.

To the nont or rear side of the axle A are fastened a suitable number of hoppers or seed-boxes, E. The same are of suitable construction, shape, and interior arrangement.

F is the perforated slide, which moves back and forth through the seed-boxes, to carry the required quantity of seed from the hopper to the spout G, which forms the downward continuation of the hopper. This slide F is connected, by a pivot, or by a rod, d, (fig. 5,) with the lower end of the vertical arm of an L-shaped lever, H, as in figs. 3 and 4, said lever being, at its corner, pivoted to the side of the seed-box, or to some device projecting from the axle.

To the upper horizontal arm c of the lever H is fastened a lever, I, which is, at its rear end, pivoted to a rock-shaft, J, that has its bearings in projections from the axle or seed-boxes. The front end of the lever I rests upon the edge of the cam D, as is clearly shown in fig. 1.

Thus, as the cam D, which has one or more projecting portions, is revolved by means of the wheel B, it causes the front end of the lever I to be alternately raised and lowered, and thus imparts oscillating motion to the said lever. As the levers I and H are connected, the latter will also be oscillated, and will impart reciprocating motion to the slide F, so as to cause the seed to be dropped into the spout. A spring, K, which works either directly on the slide or on the lever H or I, causes the end of I to fall after it was raised by the cam, so that, by the joint action of the cam D and spring K, the desired motion is imparted to the slide.

On the shaft J is mounted a disk or crank, e, which is, by means of a rod, f, connected with a sliding wedge, L, that fits between the upright arm of the lever H and the seed-box, or some stationary part of the machine.

When the shaft J is turned, by means of a handle, g, with which it is provided, it draws the wedge back, with its broad portion between the lever H and the box, so as to bring the said lever into the position shown in fig. 4; that is, so as to throw the end of the lever I off the cam D, and to thereby bring the slide out of gear.

M represents the lower part of the dropping spout. The same is, by means of a pin, j, pivoted to the upper part, G, so that it can swing backward and forward on the same. The swinging part M carries the marking-shovel N and the covering-shovels O O, as shown.

By means of two cords, h and i, the front and rear sides of the swinging spout M are connected with the disk e, so that in turning the shaft J one way, the front cord h may be stretched, to bring the spout into working position, as in fig. 1, while by turning the shaft J the other way, i. e., swinging its handle, g, forward, the rear cord i will be pulled, so as to swing the spout M back, and its shovels out of the ground, as in fig. 2.

By the arrangement of this swinging spout, the apparatus can be brought out of gear, to allow it to be conveyed from place to place without danger of having the shovels come into the ground, and without necessitating the whole seed-boxes and their appendages to be swung up.

It will be noticed that the same motion of the shaft J which serves to elevate the spout M also raises the lever I off the cam D, and therefore the whole movement is thrown out of gear by one motion of the shaft J.

On the side of the swinging spout M is arranged a projecting pin, l, which fits into a notch formed in the lower edge of a bar, P, which is, at the front end, secured to a spring, R, suspended from the axle A, while its rear end is, by means of a rod, m, connected with the disk e. The spout is, by means of this pin and bar, locked in position; intil the bar is, by the turning of the axle J, raised off the pin; but still, if one of the shovels should strike against a stone or root, the spring R will allow the whole spout M and its appendages to yield to the obstacle, and to swing back.

The spout is thus, even when in working position,

made flexible, as set forth.

Having thus described my invention,

What I claim as new, and desire to secure by Letters

Patent, is-

1. The rock-shaft J, levers g, I, and disk e, in combination with the cords h i, section M, angular lever H, and cam L, attached by a rod to the disk e, all operating as described, whereby the partial rotation of the

rock-shaft throws the seeding-device out of gear and folds back the discharge-spout simultaneously, substantially as herein shown and described.

2. The hinged section M of the jointed spout, in combination with the pin *l*, notched bar P, and spring R, all made and operating so that the section will be yielding, even if in the working position, as set forth.

3. The cam D, levers I, H, and spring K, all operating as set forth, so as to move the seed-slide F back and forth, the cam being connected with a revolving ratchet-wheel, a, by means of a pawl, b, so that it will be out of gear when the machine moves backward, as specified.

4. The wedge L, connected with a crank or disk on the rock-shaft J, substantially as described, and operating so as to throw the lever I off the cam D when the machine is to cease dropping seed, as set forth.

DANIEL F. TAFT.

Witnesses:

WM. F. MCNAMARA, ALEX. F. ROBERTS.