

W. Caldwell.
Corn Planter.

N^o 92,159.

Patented Jul. 6, 1869.

Fig. 1.

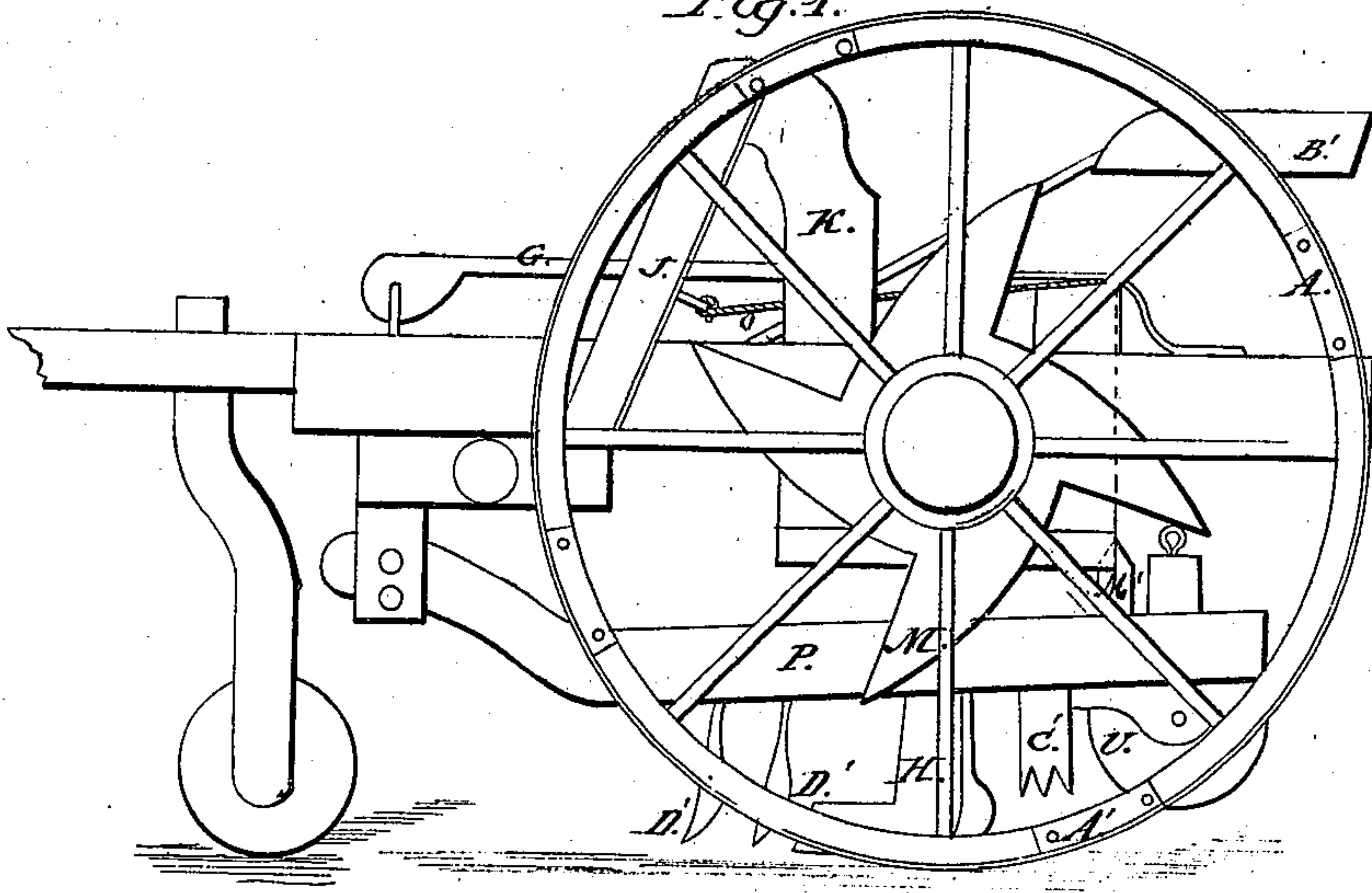
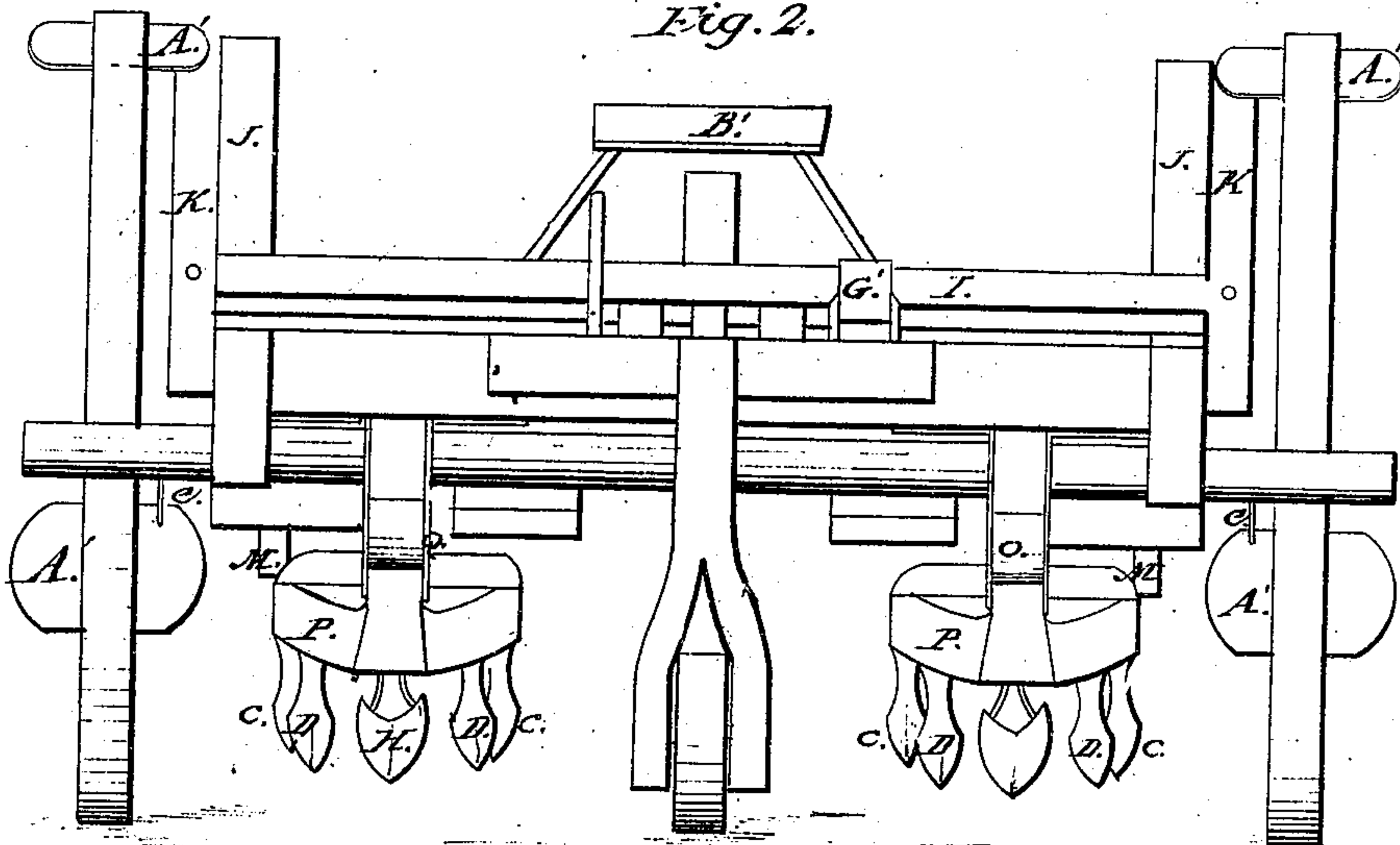


Fig. 2.



Inventor;
W. Caldwell

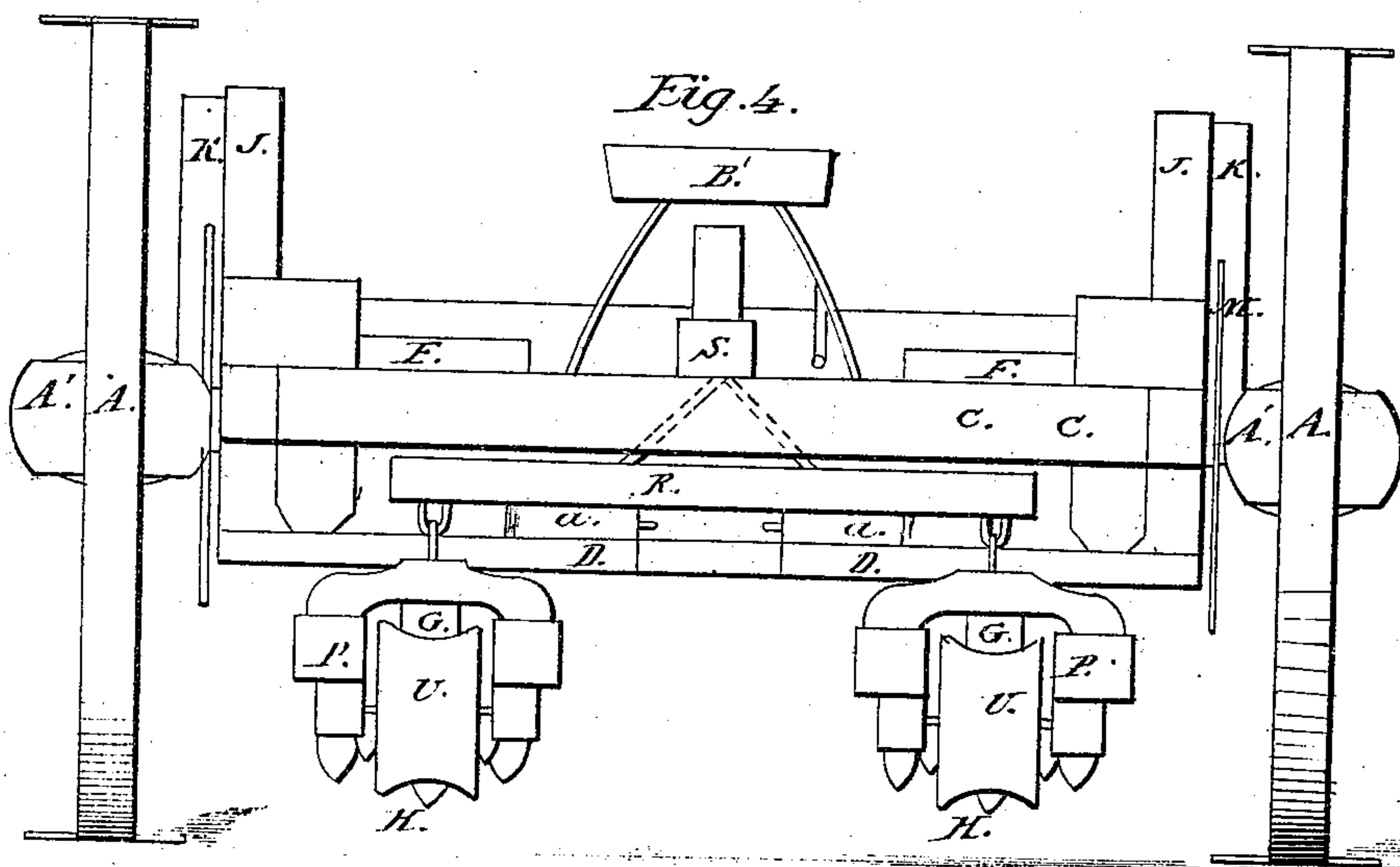
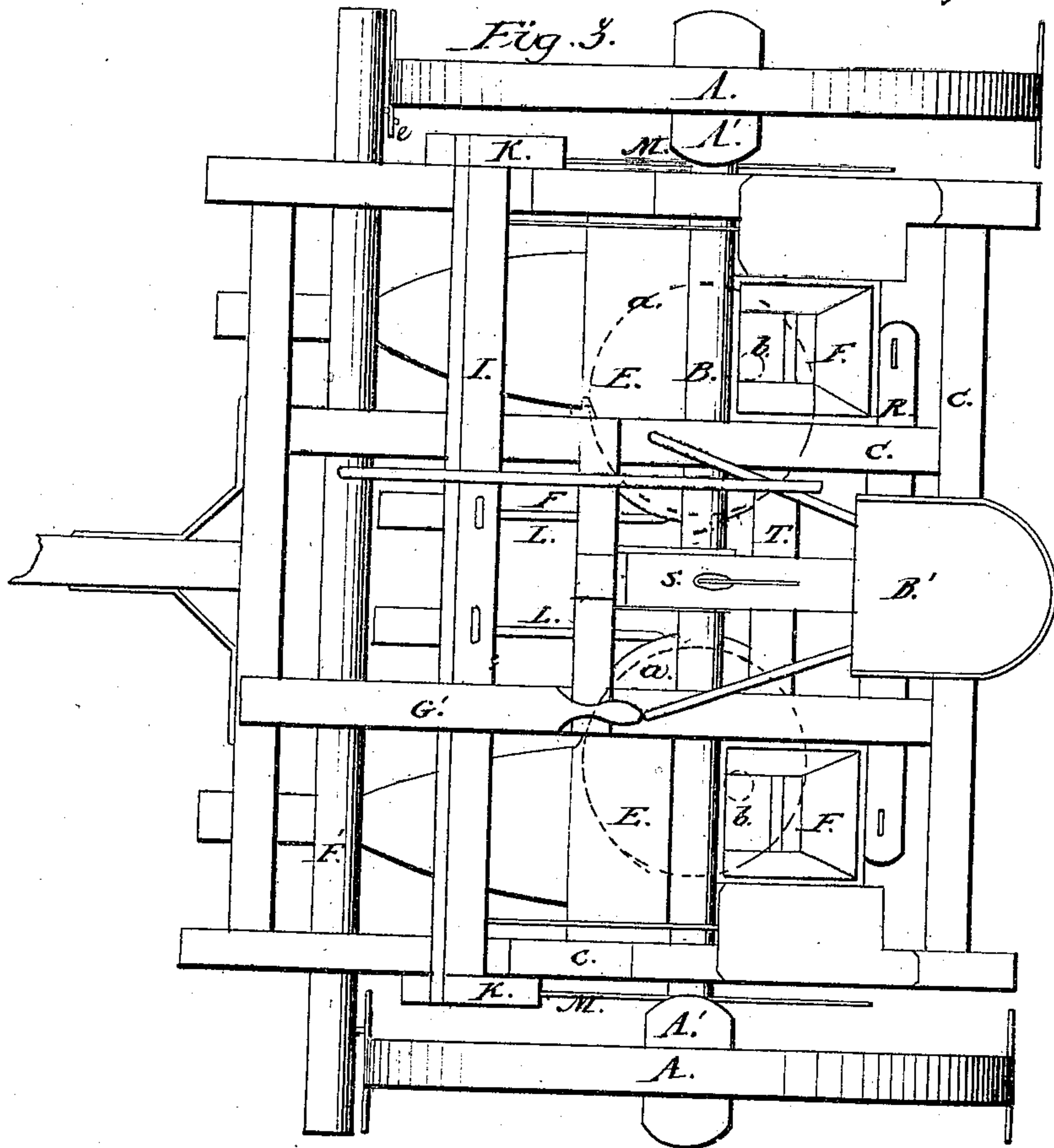
Witnesses:
J. A. Burridge
E. E. Maile

Sheet 2, 2 Sheets.

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Inventor:

W. Caldwell

Witnesses:

W. B. Burdette
E. E. Waite

United States Patent Office.

WALTER CALDWELL, OF BRYAN, OHIO.

Letters Patent No. 92,159, dated July 6, 1869.

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, WALTER CALDWELL, of Bryan, in the county of Williams, and State of Ohio, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, plate 1, is a side view of the planter.

Figure 2, a view of the front side.

Figure 3, plate 2, a view of the top.

Figure 4, a view of the rear end.

Like letters of reference refer to like parts in the different views.

This invention relates to a machine for planting corn in hills at regular distances apart, and each way in rows, so that said corn can be cultivated both ways, thereby saving time and labor in the cultivation of the field.

In figs. 4 and 3, A represents a pair of wheels, secured to the axle-shaft B, on which is mounted a frame, C.

In said frame is arranged the planting-devices, consisting of the seed-droppers F, one on each end of the frame.

Said seed-droppers consist of a revolving disk, indicated by the dotted lines *a*, fig. 3, also shown in fig. 4, placed between a pair of sides, D E, of which D is the lower side or bottom, and E, fig. 3, the upper side or top.

F is the hopper, into which the corn is thrown. A section of the top F is removed, thereby bringing the disk in open and direct relation to the hopper, of which it forms the bottom.

In said disk is a hole or cup, *b*, fig. 3, having a holding capacity of about four or five grains. Also, in the bottom or side D is a hole, corresponding in size to that in the disk, and which communicates with the ground by means of the tube G, fig. 4, to the lower end of which is attached a shoe, H, figs. 1 and 2, whereby a furrow is made in the ground for the reception of the seed.

I, fig. 3, is a swing beam, pivoted to and suspended from the standards J, fig. 2, by means of the arms K.

To said beam is attached the disks *a*, referred to, by means of the links L, whereby they are given an oscillating movement, as the beam is made to vibrate, by the cams M, fig. 1, secured to the hub of the wheels A, and revolve therewith, and in so doing impinge upon the arms K, thereby pushing them forward and the beam I, to which the disks are attached, as above said, causing them to move around a certain distance, but which are again moved back, as the cams leave the arms, by the reverse movement of the beam, effected by the weight M', attached thereto by the cords O, for a purpose hereinafter shown.

To the under side of the front end of the frame is

hung a pair of cultivators, P, figs. 1 and 2, the front end being pivoted in the stays Q, whereas the rear end is suspended by a hook and eye to the beam R.

Said beam is attached to one end of the lever S, the lever being pivoted to the frame by means of the shaft T, fig. 3, which serves as a fulcrum for the vibration of the lever, for the purpose of raising and lowering the cultivators above described, in the rear end of which is a roller, V, fig. 4, the purpose of which will presently be shown.

It will be observed that on the periphery of each of the wheels A there are arranged four wings, A', projecting from each side of the wheel. The circumference of the wheels is such that the said wings are about four feet distant from each other, or the distance that the hills of corn are to be, with which distance the wings on the wheel will correspond; hence there will be more or less wings, as the distance the hills are to be apart.

In this machine, the distance is assumed to be four feet, which is also the distance that the shoes H and seed-boxes are from each other.

It will also be observed that the cams M are four in number, and which are so constructed that from one extreme point to the other is four feet, or rather the distance is so calculated that they will operate the swing-beam so that the cups or holes *a* in the disk will come in open relation to the discharging-tube G, at the distance of each four feet or hill, be the distance more or less.

Having described the construction and arrangement of this machine, the practical operation of the same is as follows:

The seed-boxes, on being filled with corn, and the machine properly placed in the field, in the line of work, the operator takes his place on the seat B', and starts it off. As the wheels revolve, the cams operate the swing-beam, which, in turn, operates the disk, bringing the cup or hole *b* therein in open relation to the tube, through which the corn drops into the furrow plowed out by the shoe H, which is then covered by the shares *c*, following immediately along each side of the shoe. The dirt is then slightly raked over, smoothed down, and rolled, by the rake C' and rollers V, following in the rear of the shoe. Should the ground be hard, the front shoes can be used.

As above said, the corn is dropped at intervals of four feet in the row, and dropping two rows at once. On the return of the machine, one wheel is adjusted so as to follow back in the tracks made by the wings A', said tracks being exactly opposite the hill or hills planted, and, as will be seen, just half the distance therefrom that the hills or rows of hills are apart. This will bring the next row of hills four feet from the row on the opposite side of the wheel. As the tracks made by the wings are plainly to be seen, the operator is thereby enabled to know exactly where to adjust the

machine, so that the wings will follow back in the tracks; therefore, each successive row of hills will be in line, and equally distant from each other, which will allow of the field being cultivated each way in the after treatment.

On turning the machine around at the end of the rows, should the wheels not be properly in position to follow the tracks, they can be locked by means of the hooks depending from the side of the roller F", which, on turning the roller, by means of the lever F', fig. 3, will throw the hooks up within reach of the wings, and thereby prevent the wheels from turning, but which will drag upon the ground until the wings and tracks are in exact relation to each other. The wheels are then liberated, by dropping the lever to the position shown in fig. 1, and the work of planting resumed.

By this device, it will be obvious that the rows of hills will be planted equally distant from each other in both directions, and that the hills will be uniform in the rows, and as truthfully so in this particular as though the ground had first been marked out and cross-marked into squares, as practised.

When required to move the machine from one field to another, or other places, the cultivators can be lifted from the ground by means of the lever S, and thereby prevent them from being injured and obstructing the movements of the planter.

The machine is also thrown out of gear, for the same purpose, by pushing the swing-bar forward, and holding it there, out of reach of the cams, by the hook G. In this condition, the machine can be run from place to place as safely and as easily as an ordinary cart.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The cams M, when constructed and arranged to operate in combination with the swing-bar I, in the manner substantially as described and for the purpose set forth.

2. The arrangement and combination of the roller U, rake C, shares c and D, and shoe H, in the manner substantially as described and for the purpose specified.

3. The winged wheels A, cams M, swing bar I, cultivators P, and corn-droppers, when constructed, arranged, and combined to operate and co operate in relation to each other, substantially as described, and for the purpose set forth.

WALTER CALDWELL.

Witnesses:

J. W. BURRIDGE,
M. E. RUSSELL.