

No. 743,583.

PATENTED NOV. 10, 1903.

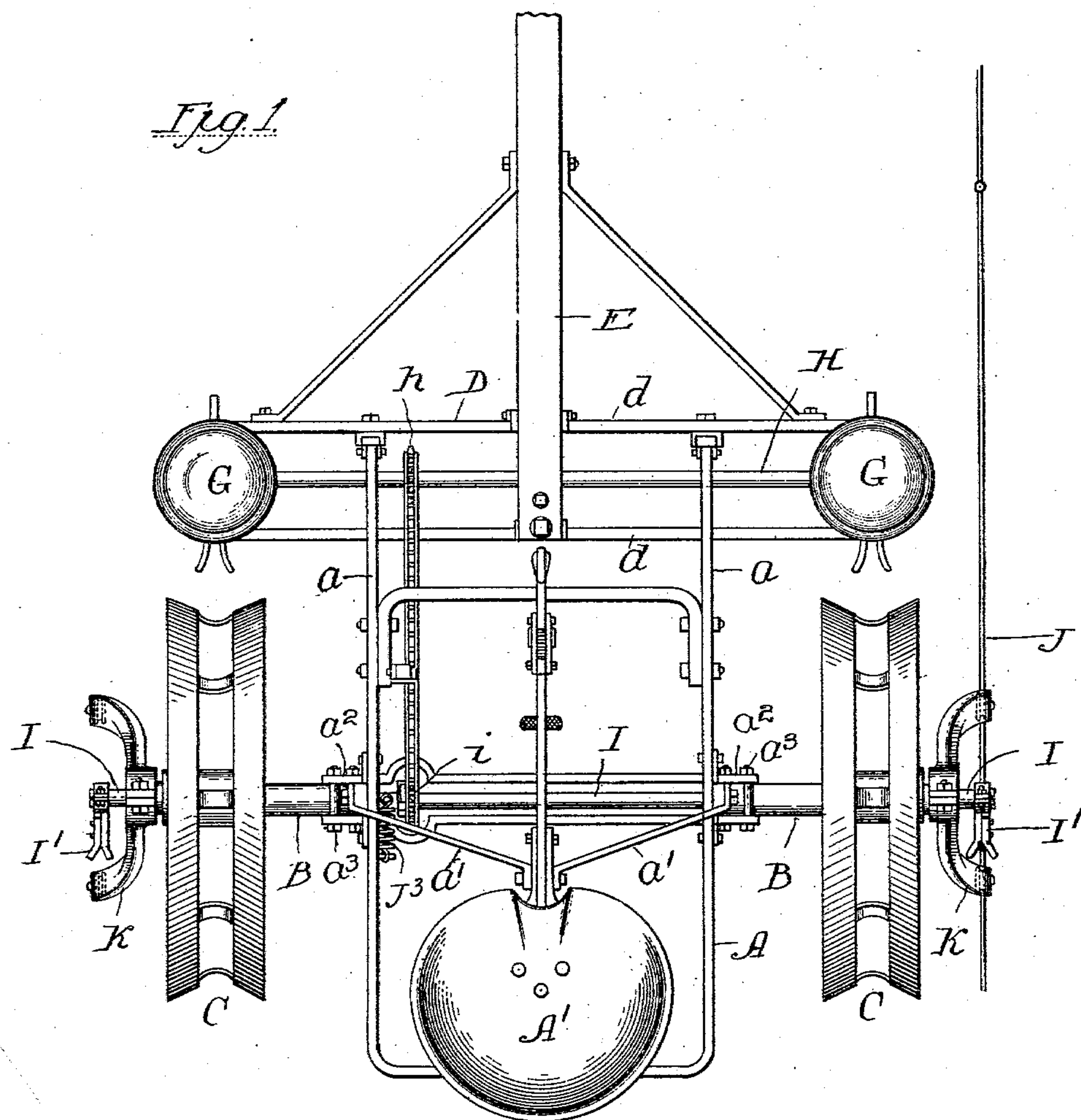
C. M. STEVENSON.

CORN PLANTER.

APPLICATION FILED MAR. 30, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

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2 SHEETS—SHEET 2.

Fig. 2.

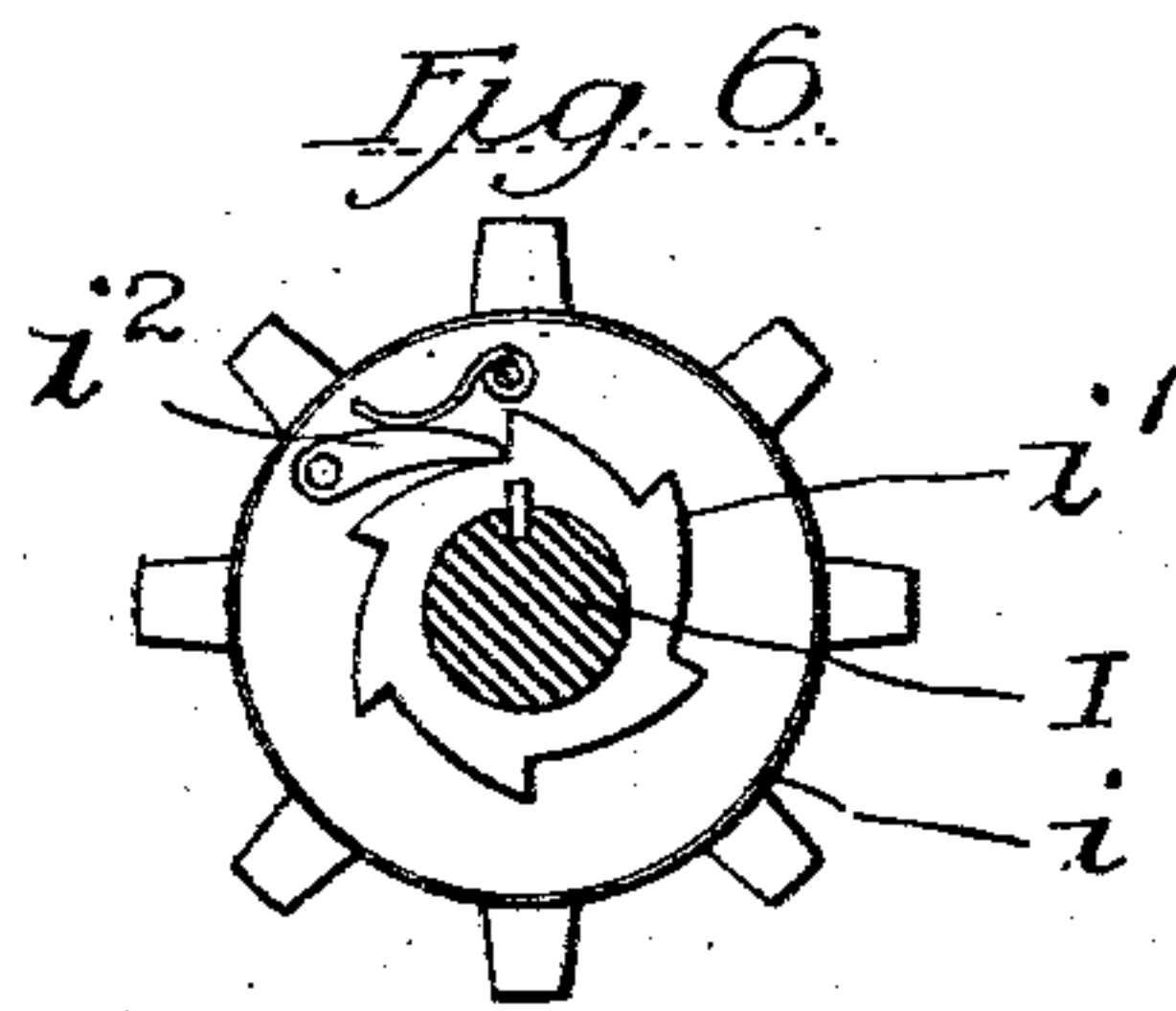
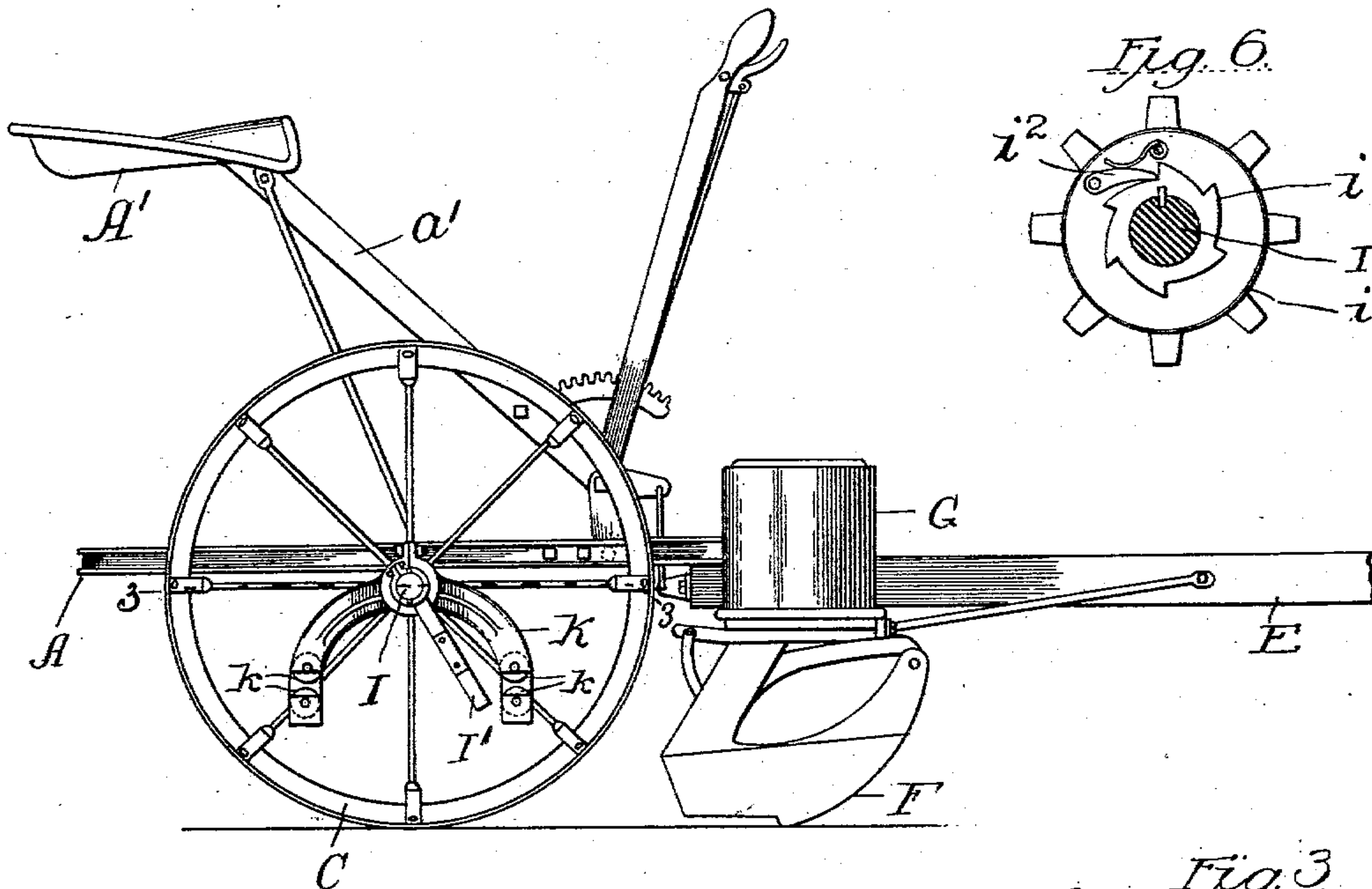


Fig. 3.

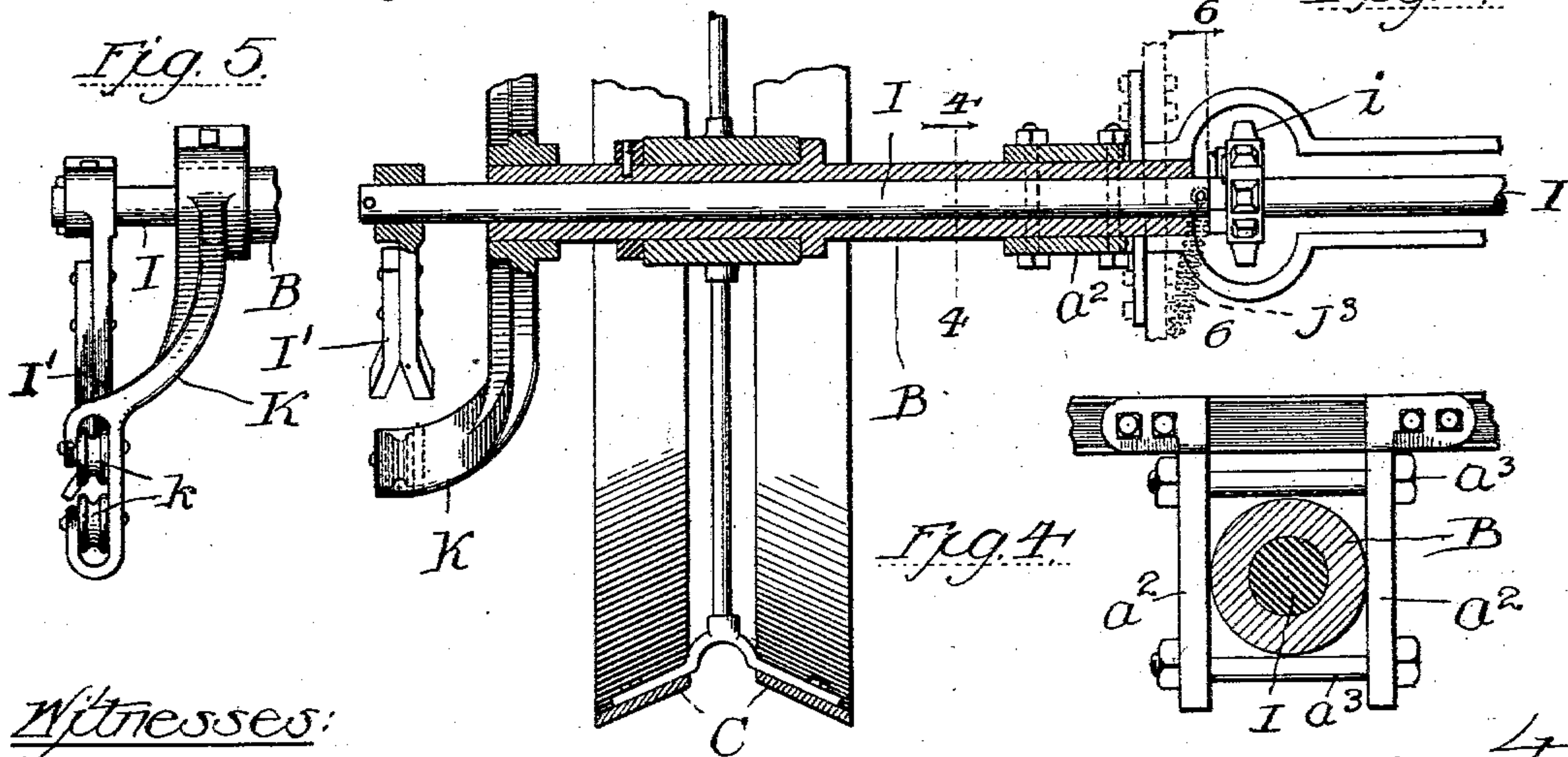
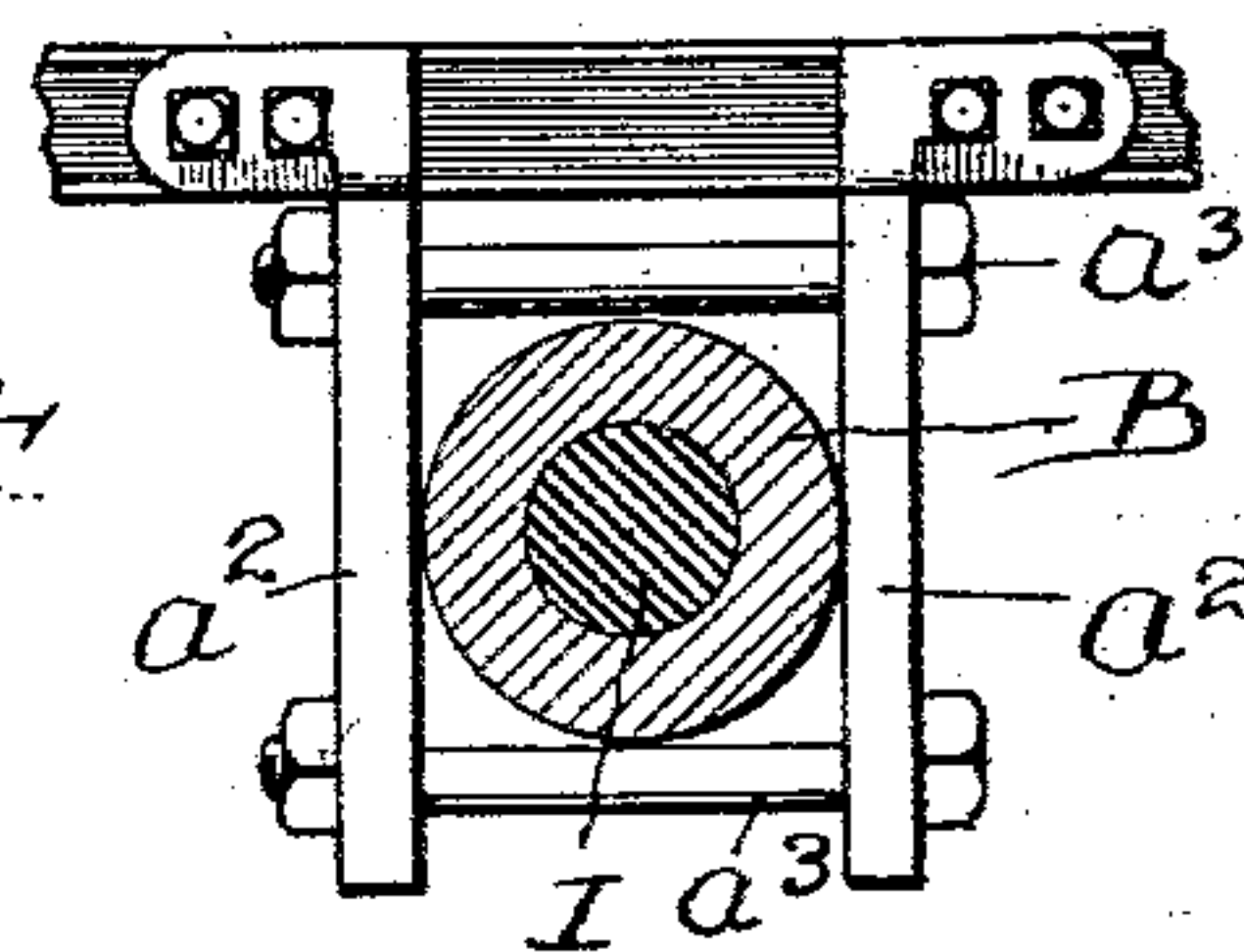


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES M. STEVENSON, OF HARVARD, ILLINOIS, ASSIGNOR OF ONE-HALF
TO ALEXANDER BECK, OF HARVARD, ILLINOIS.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 743,583, dated November 10, 1903.

Application filed March 30, 1903. Serial No. 150,101. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. STEVENSON, a citizen of the United States of America, residing at Harvard, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Corn-Planters, of which the following is a specification.

My invention relates to certain new and useful improvements in corn-planters; and its object is to produce a device of this class which shall have certain advantages over the forms heretofore in use, these advantages to appear more fully and at large in the course of the specification.

To this end my invention consists in certain novel features of construction, which will be fully explained in the following specification and illustrated in the drawings accompanying the same.

In the aforesaid drawings, Figure 1 is a plan of my improved corn-planter. Fig. 2 is a side elevation of the same. Fig. 3 is a section in the line 3 3 of Fig. 2. Fig. 4 is a section in the line 4 4 of Fig. 3. Fig. 5 is a front view of the check-rower, and Fig. 6 is a section in the line 6 6 of Fig. 3 looking in the direction of the arrow.

Referring now to the drawings, A indicates the frame of the machine, which is constructed in any suitable way, preferably from light channel-iron assembled substantially as shown in the drawings. It will be noted that a substantially rectangular portion is provided and two forwardly-extending arms, (indicated by *a a*.) To the frame A is secured by braces *a'* a seat *A'* of the ordinary form. At the two sides of the frame A are downwardly-projecting brackets *a''*, in which are secured by bolts *a'''* sleeves B on opposite sides of the frame and in line with each other. I consider this method of securing the sleeves in place advantageous on account of its cheapness and simplicity; but it will be quite obvious that the particular means by which these sleeves are secured in place is immaterial, or whether they are made separate and secured in place or cast integral with the frame. Upon the sleeves B are rotatably secured wheels C of the ordinary form used in corn-planters.

To the front end of the arms *a a* of the

frame is pivotally secured a front frame D, composed of two parallel members *d d*, which frame bears a tongue E. To this frame are also secured the runners or furrow-openers F, of the ordinary form, and hoppers G, provided with suitable dropping mechanism (not here shown) adapted to be operated to drop the corn by the intermittent rotation of a shaft H, which is journaled in the frame D transverse to the machine and connects with the two hoppers and dropping mechanisms. On the shaft H is a sprocket *h*. The seed-dropping mechanism is no portion of this invention, and for that reason I have not deemed it necessary to show it in detail. It is to be understood, however, that it is so arranged that forward rotation of the shaft H will drop the seed.

Through the sleeves B runs a spindle I, provided with a sprocket *i*, loose upon it and connected by a chain with the sprocket *h*. The shaft bears a ratchet-wheel *i'*, and the sprocket *i* bears a pawl *i''* in engagement with a ratchet, the construction being such that a rocking motion on the part of the shaft I will move the sprocket step by step forward. To the ends of the shaft I are secured forked arms I', adapted to engage with buttons or knots in a wire J, which is stretched across the field in the ordinary manner. This wire is guided between four rollers *k*, arranged in pairs on the two ends of yoke-shaped frames K, bolted to the sleeves B. The arms I' are arranged, as shown in the drawings, so that the forked end is substantially in line with the space between the pairs of rollers *k*, and they are held in the position shown in Fig. 2 with the lower ends forward by a spring J³, secured to the shaft I.

The operation of the device will now be readily apparent. The wire J is stretched across the field in the ordinary manner and runs between the rollers *k*. The machine is then driven forward. Each button as it strikes the arm I' swings it backward, rotating the shaft I a certain distance forward, and consequently moving the sprocket *i* forward. This of course rotates the shaft H forward and operates the dropping mechanism in the hoppers G. When the button has passed the rear limit of motion of the arm I',

the spring J³ draws the shaft back to its normal position, the sprocket *i* remaining stationary and the pawl and ratchet *i*² *i*' moving with respect to each other.

5 The particular advantage of my construction lies in the fact that the "check-rower device," as the frame K and the arm I' are commonly called, and the hopper and dropping mechanism are separated, so that each can
10 be placed where it will work to the greatest advantage. The hopper should be placed in front of the main wheels, so that the furrows made by the shoes may be closed by the main wheels of the device as it moves along. The
15 check-rower device should also be placed adjacent to the wheels in order that the weight of the wire may be removed from the shoes and supported by the wheels. Numerous advantages arise from placing the check-
20 rower device in line with the supporting-wheels, one of these advantages being the fact that the weight is removed from the horses' necks, another being that the two furrows are substantially equal in depth, and
25 still another being that the machine can be driven nearer to the edge of the field than it can when the check-rower devices are placed forward on the frame of the machine. The
30 only way in which these advantages can be combined with the much greater advantage of having the supporting-wheels of the device close the furrows is by cutting the check-rower device and the dropping mechanism into two parts, as I have done, and
35 placing each in the most advantageous position.

I realize that considerable variations are possible in the details of this construction without departing from the spirit of the invention, and I therefore do not intend to limit
40 myself to the specific form herein shown and described except as pointed out in the claims.

I claim as new and desire to secure by Letters Patent—

45 1. In a device of the class described, the combination with a frame, of shoes secured thereto, supporting-wheels journaled thereon in line with and behind the shoes, hoppers and dropping mechanism arranged over
50 the shoes, a check-rower device secured to the frame adjacent to the axles of the wheels, and means of connection between the check-rower device and the dropping mechanism.

2. In a device of the class described, the combination with a frame, of shoes secured
55 thereto, supporting-wheels journaled thereon in line with and behind the shoes, hoppers and dropping mechanism arranged over the shoes, check-rower devices secured to the axle-bearings of the wheels, and means of
60 connection between the check-rower device and the dropping mechanism.

3. The combination with a frame provided with sleeves in line with each other, supporting-wheels upon the sleeves, a shaft running through the sleeves, an arm secured to
65 the end of the shaft, and means for guiding a wire adjacent to the end of said arm, of shoes secured to the frame in line with and in front of the wheels, hoppers and dropping
70 mechanism secured to the frame above the shoes, and means of connection between the shaft and the dropping mechanism.

4. In a device of the class described, the combination with a frame provided with
75 sleeves in line with each other, supporting-wheels upon the sleeves, a shaft extending through the sleeves, an arm upon the end of the shaft, means for guiding a wire adjacent to the arm, a sprocket loose upon the shaft,
80 and a ratchet connection between the shaft and sprocket, of shoes connected to the frame and in line with and in front of the wheels, hoppers, dropping mechanism secured to the frame above the shoes and a drive-chain con-
85 necting said sprocket with said dropping mechanism.

5. In a device of the class described, the combination with the frame and supporting-
90 wheels of a corn-planter, of shoes for opening furrows, a hopper and dropping mechanism adjacent to the shoes and a check-rower device for operating the dropping mechanism, the check-rower device being
95 mounted upon the frame and separated from the hopper and dropping mechanism and shoes.

In witness whereof I have signed the above application for Letters Patent at Chicago, in the county of Cook and State of Illinois, this
100 24th day of March, A. D. 1903.

CHARLES M. STEVENSON.

Witnesses:

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CHAS. O. SHERVEY.