

No. 640,470.

Patented Jan. 2, 1900.

H. E. JEWETT.
POTATO PLANTER.

(Application filed Sept. 26, 1898.)

(No Model.)

4 Sheets—Sheet 1.

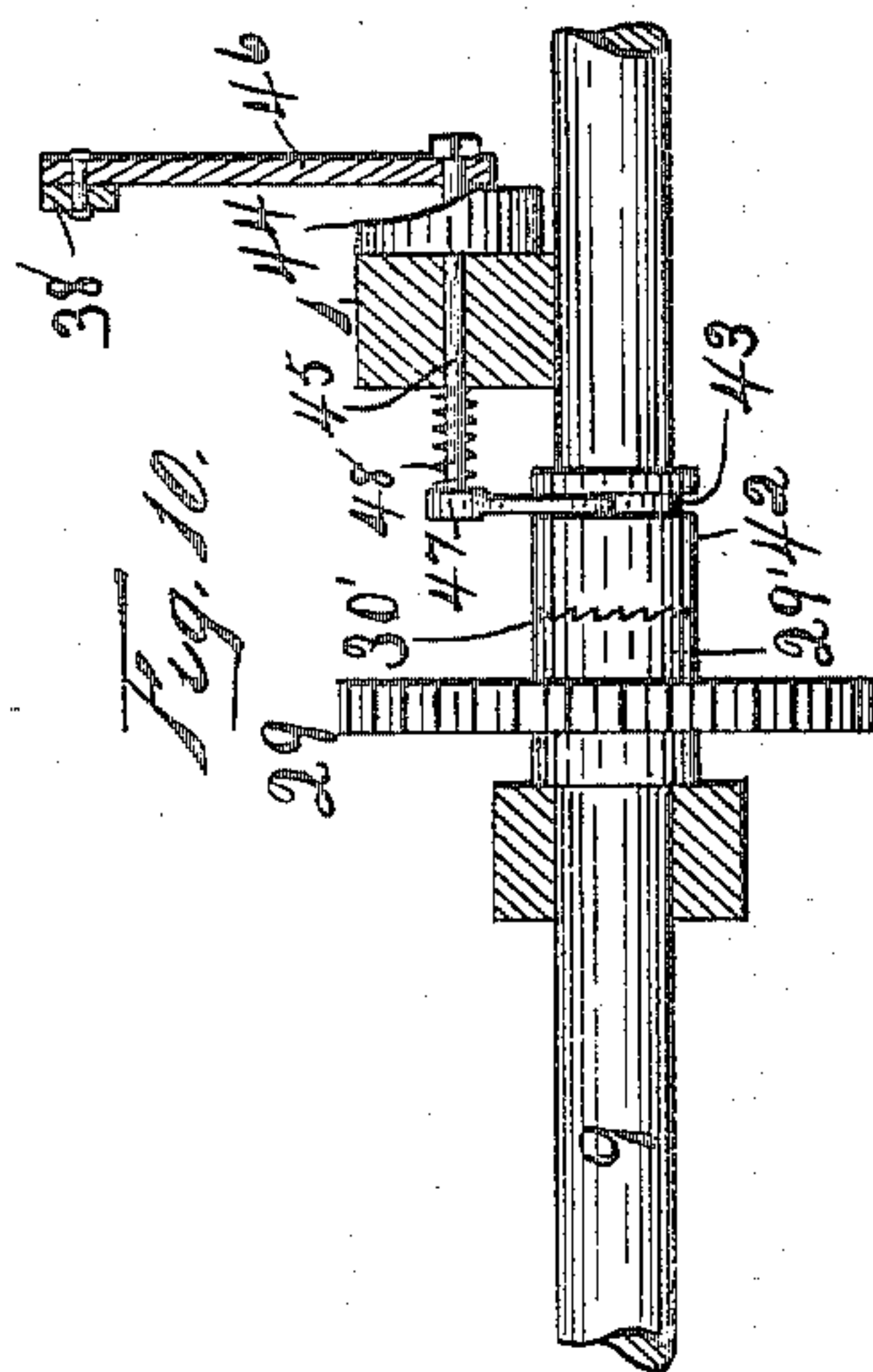
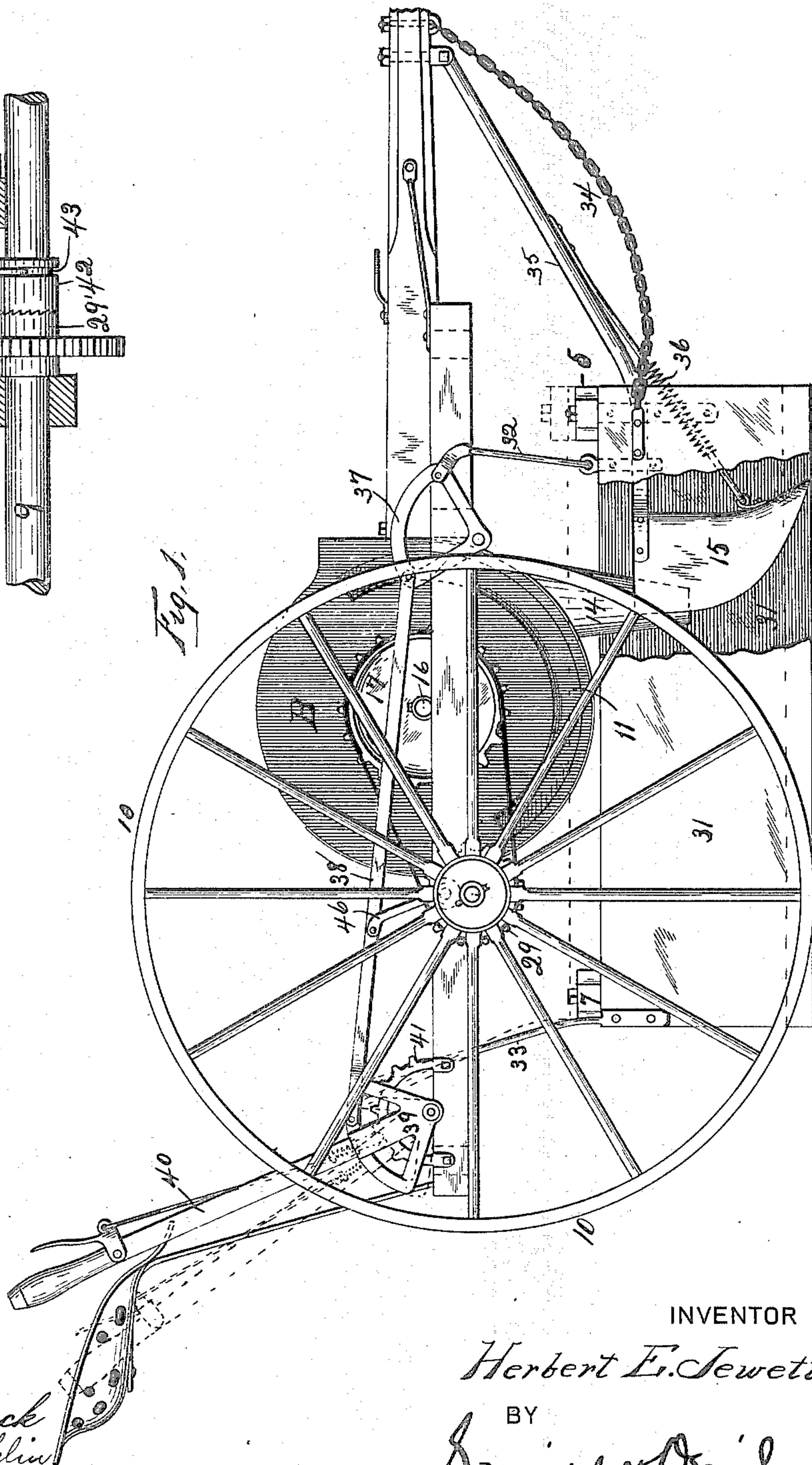


Fig. 1.



WITNESSES:

W. A. Franklin
M. A. Franklin

INVENTOR

Herbert E. Jewett

BY

Smith & Orison
ATTORNEYS.

No. 640,470.

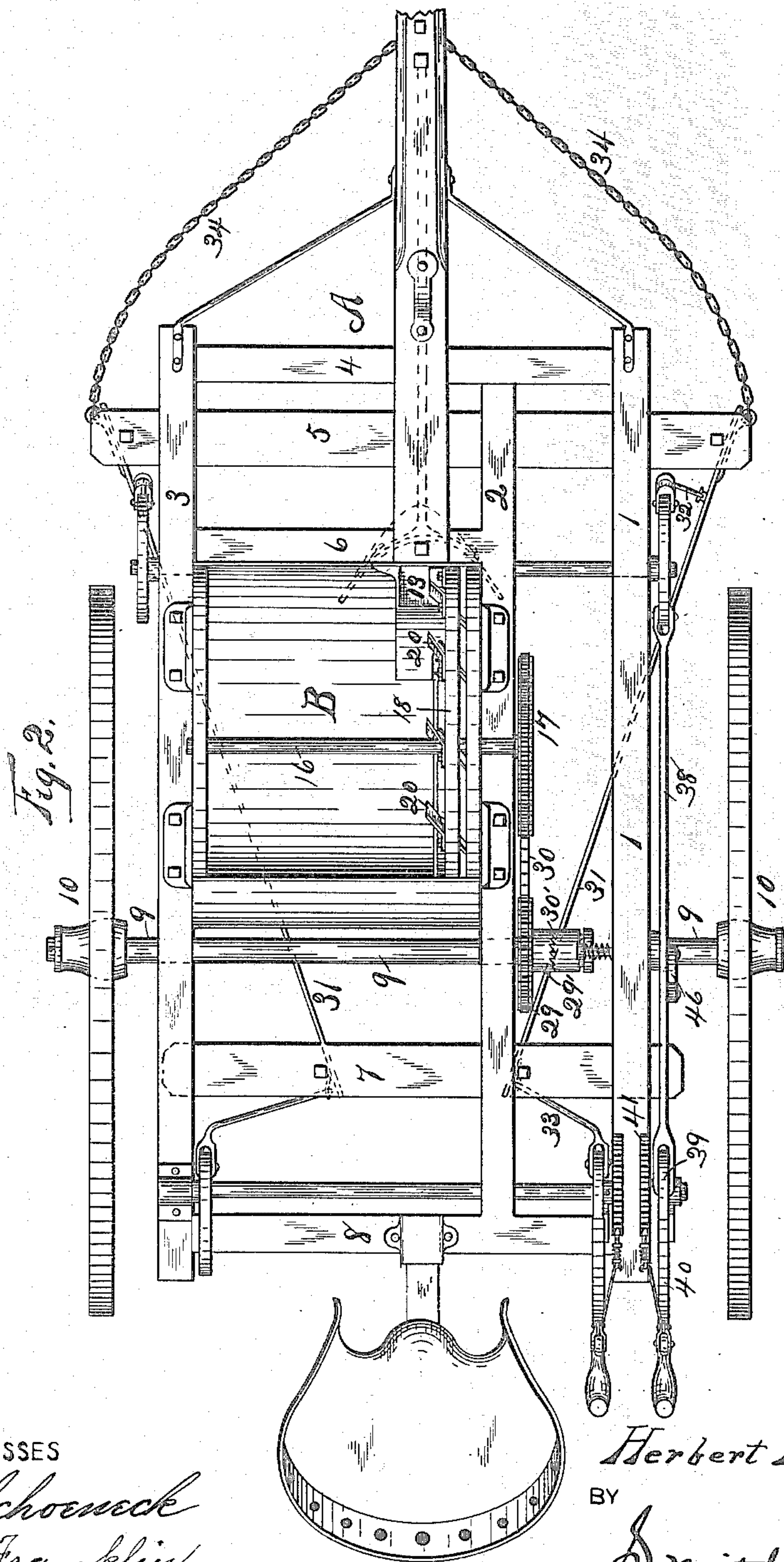
Patented Jan. 2, 1900.

H. E. JEWETT.
POTATO PLANTER.

(Application filed Sept. 26, 1898.)

(No Model.)

4 Sheets—Sheet 2.



WITNESSES

C. Schoenck
M. A. Franklin.

INVENTOR

Herbert E. Jewett

BY

Smith & Windsor
ATTORNEYS.

No. 640,470.

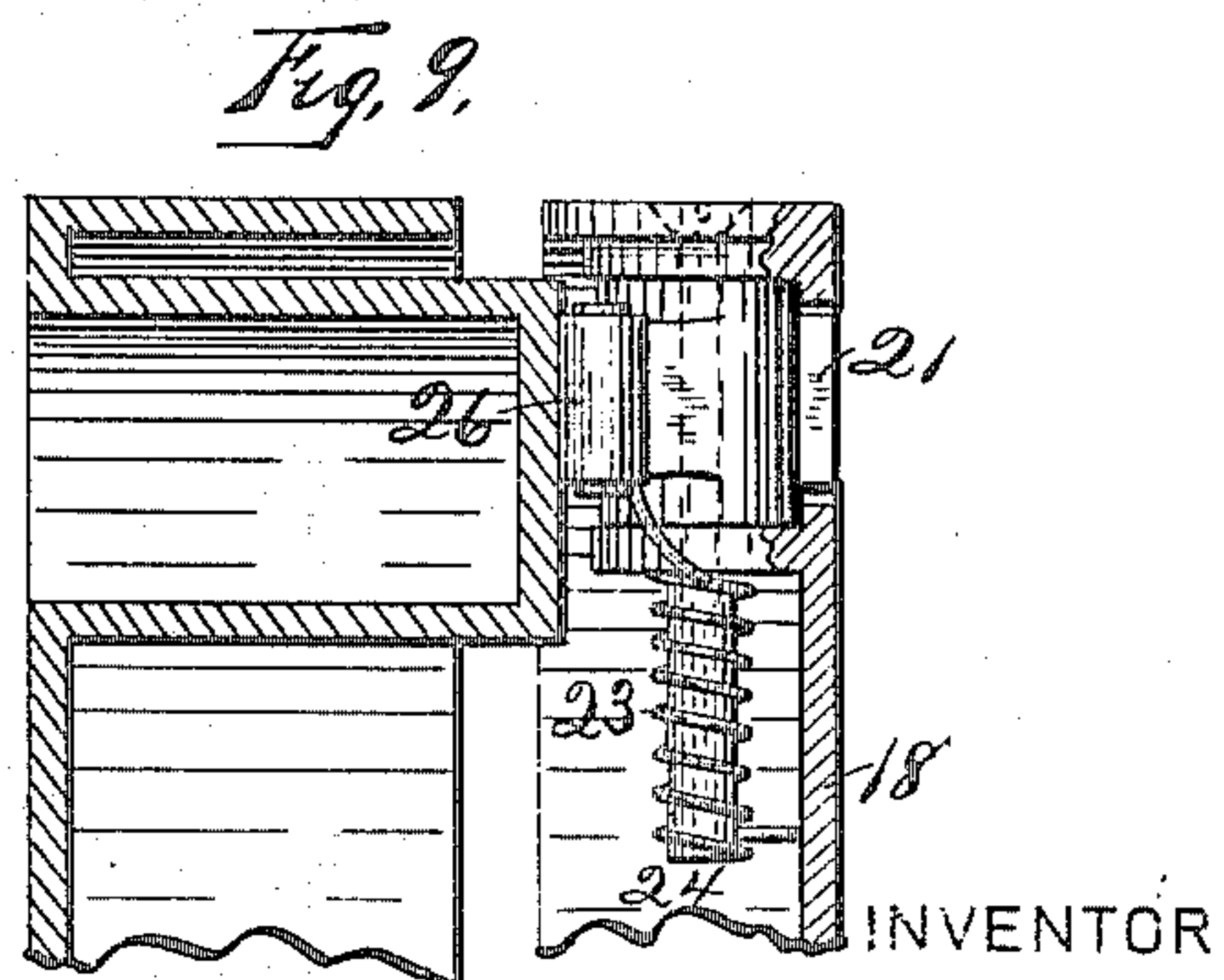
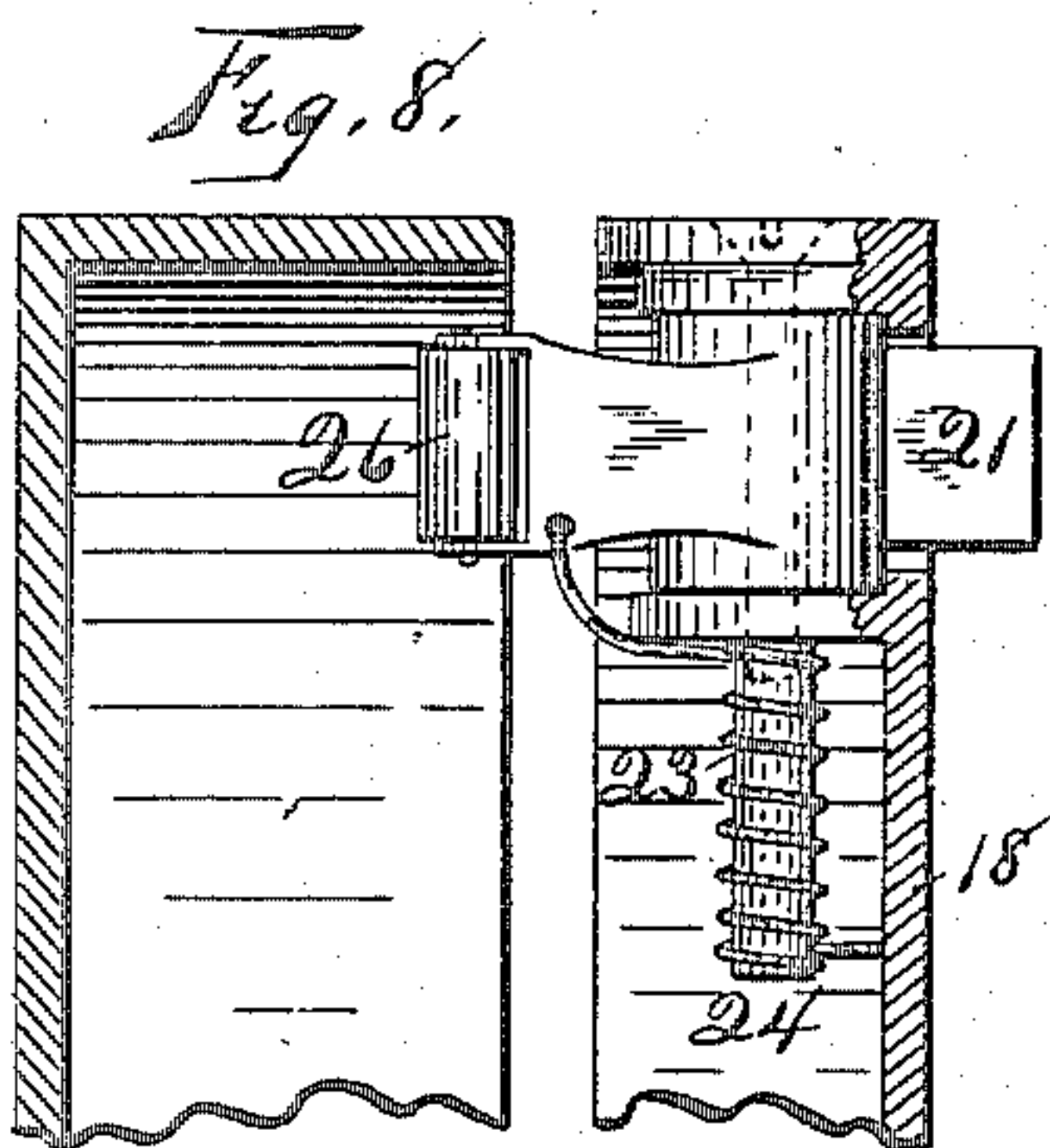
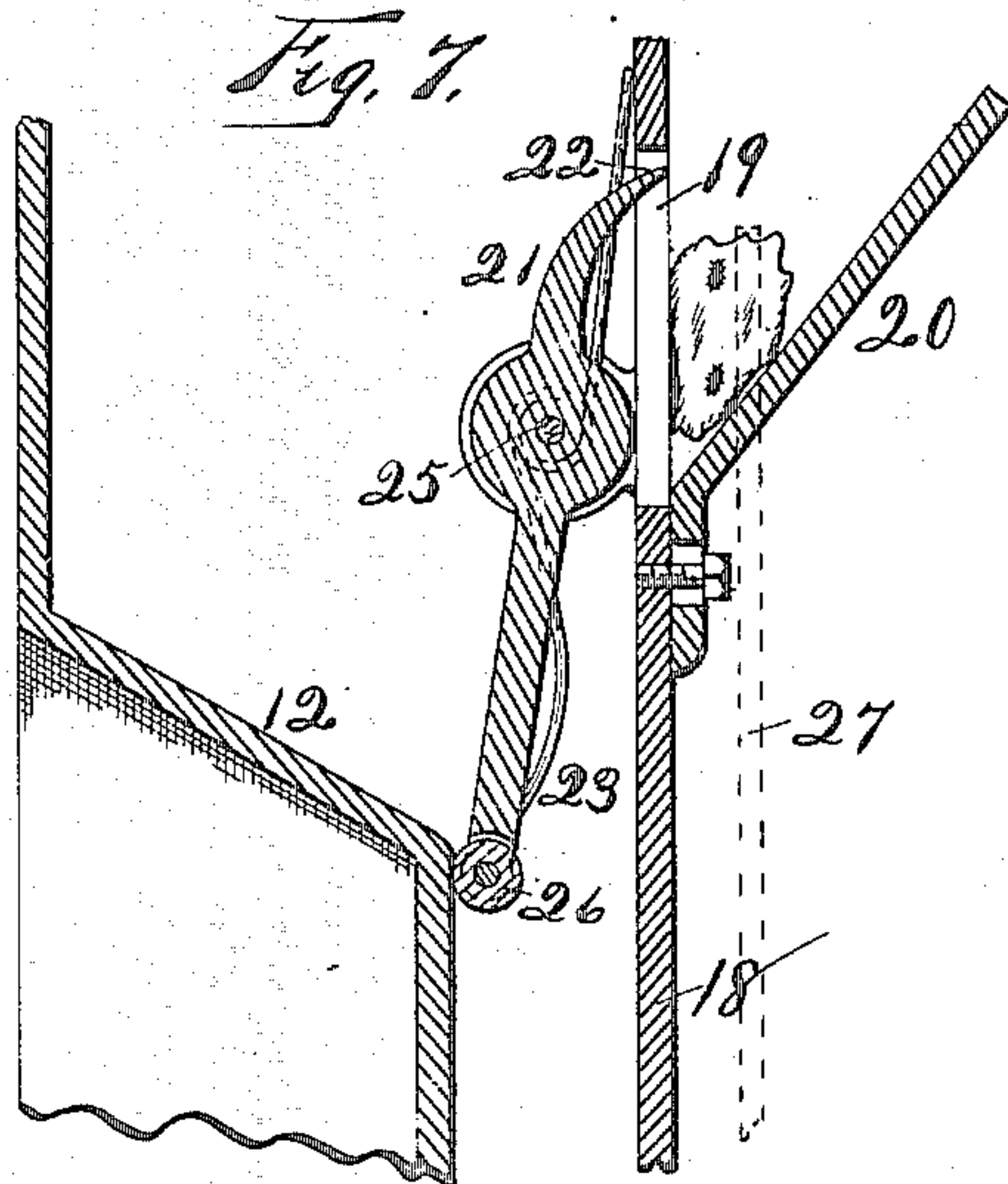
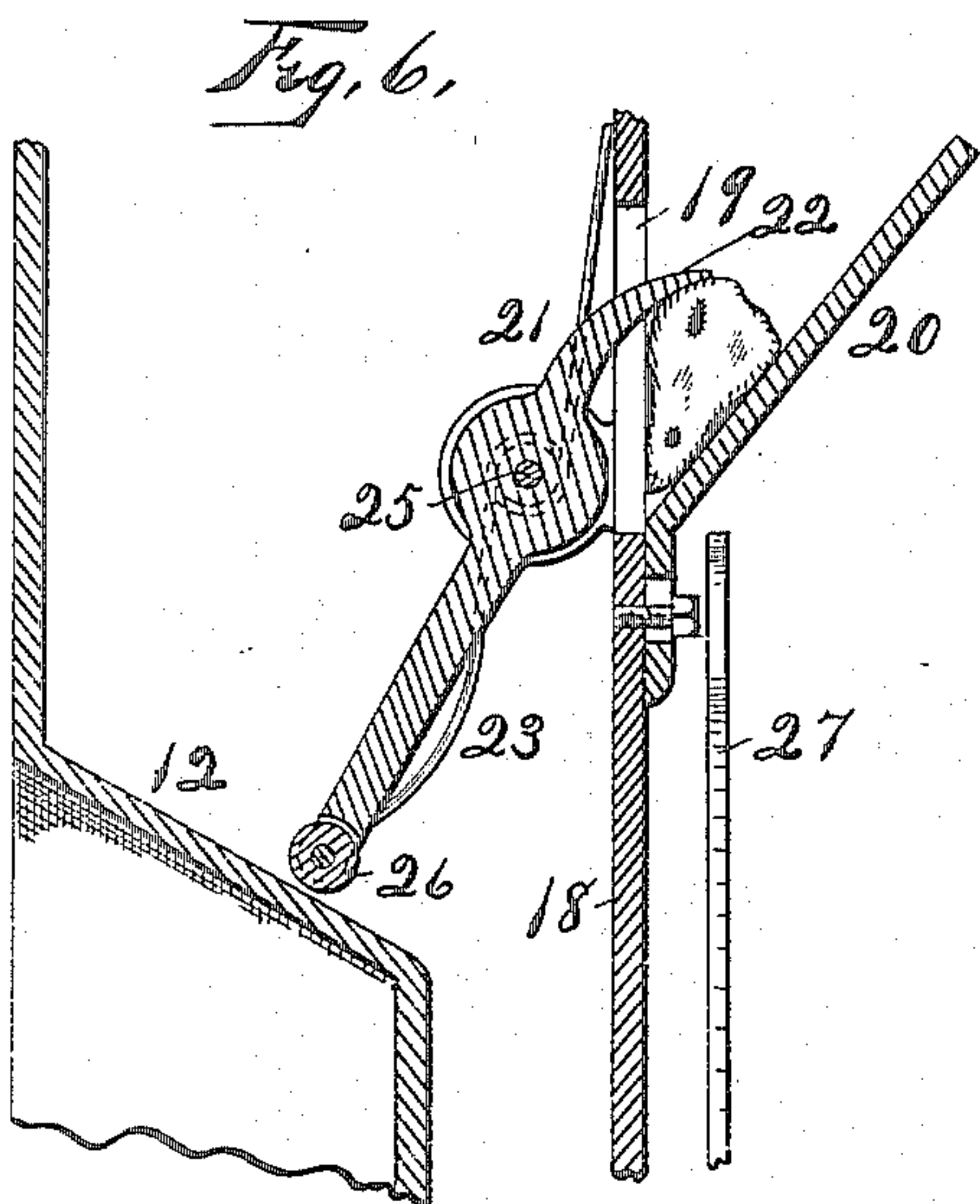
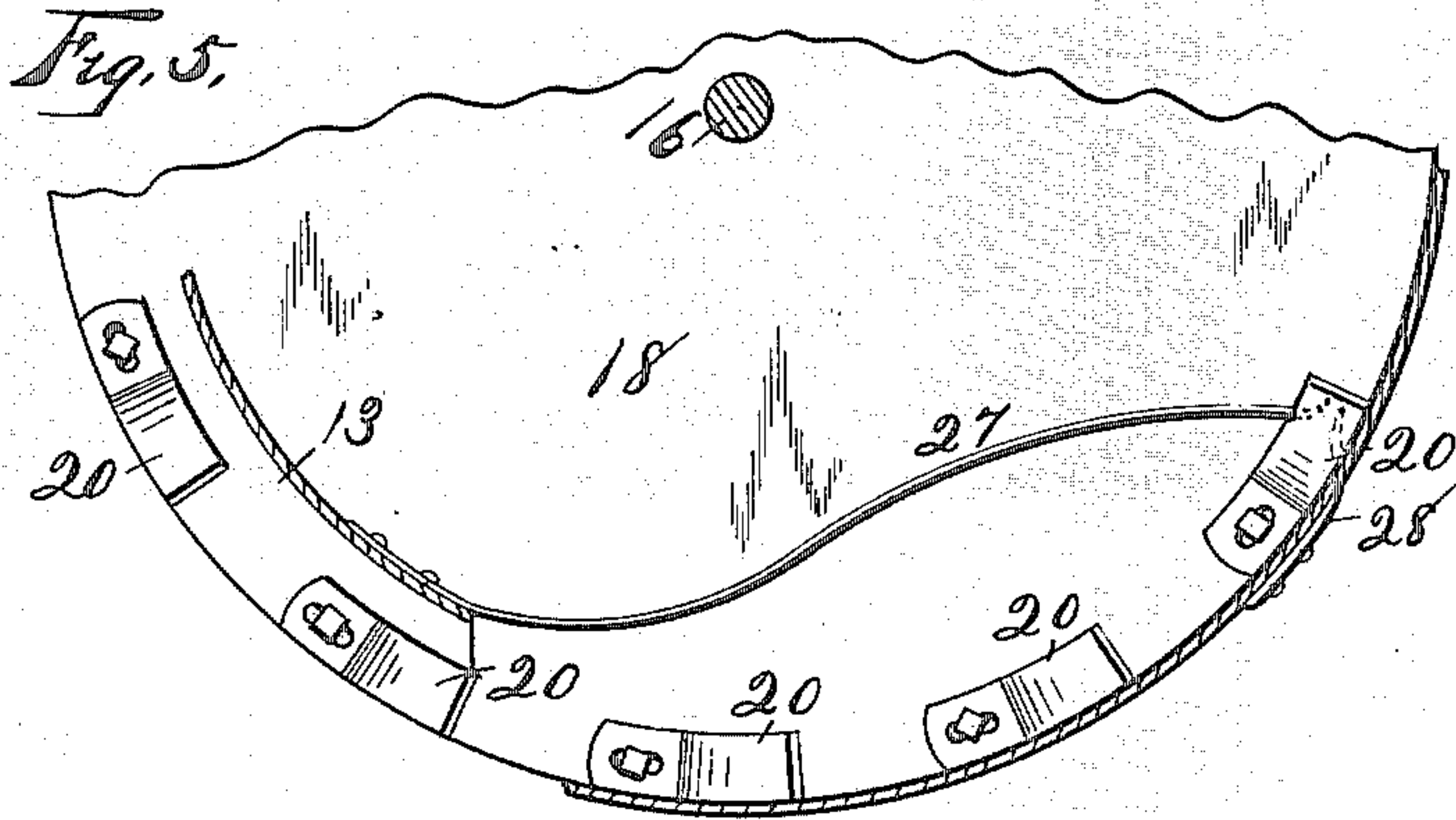
Patented Jan. 2, 1900.

H. E. JEWETT.
POTATO PLANTER.

(Application filed Sept. 26, 1898.)

(No Model.)

4 Sheets—Sheet 4.



WITNESSES:

G. Schoenck
M. A. Franklin

Herbert E. Jewett
BY
Smith & Brinck
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HERBERT E. JEWETT, OF ITHACA, NEW YORK, ASSIGNOR TO MICHAEL MC-NAMARA, ROCKWELL E. GAGER, AND ANSON L. JENKS, OF SAME PLACE.

POTATO-PLANTER.

SPECIFICATION forming part of Letters Patent No. 640,470, dated January 2, 1900.

Application filed September 28, 1898. Serial No. 691,949. (No model.)

To all whom it may concern:

Be it known that I, HERBERT E. JEWETT, of Ithaca, in the county of Tompkins, in the State of New York, have invented new and
5 useful Improvements in Potato-Planters, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to improvements in
10 potato-planters.

My object is to produce a planter of the class above referred to which shall be positive in its operation, so as to avoid the possibility of skipping, cheap and durable in its construction, and of great utility; and to that end
15 my invention consists in the several new and novel features of construction and combination of parts hereinafter described and which are specifically set forth in the claims here-
20 unto annexed.

It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of the planter complete, ready for use, one wing of the cover-
25 ing-scraper being broken away to show the ground-opener. Fig. 2 shows a top plan view. Fig. 3 shows a side view of the hopper detached, the portion at the left of the figure showing the outside, the middle section being
30 broken away to show the rotating disk, and the right portion of the figure showing the potato-chute and the opposite side or end of the hopper. Fig. 4 is a cross-section on line
35 $x x$, Fig. 3. Fig. 5 shows an inner face view of a portion of the rotating disk. Fig. 6 is an enlarged section of a portion of the end of the hopper and a rotating disk upon which the
40 buckets are mounted, showing the spring-finger engaging the seed within the bucket. Fig. 7 is a similar view showing a portion of the spring-finger just before it engages the
45 seed. Fig. 8 is a face view of the spring-finger, showing it in the position it would occupy when in engagement with the seed, showing
50 it mounted in the disk, which is in cross-section and within the hopper. Fig. 9 shows a similar view and showing one end in engagement with the track, so as to hold the arm
55 which normally engages the seed flush with the face of the disk, as shown in Fig. 7. Fig. 10 shows a detail of the mechanism by which

the gearing engages to rotate the disk out of engagement.

Similar letters and figures of reference indicate corresponding parts.

A is the frame, composed of parallel bars
1, 2, and 3, cross-bars 4, 6, and 8, mounted
upon the axle 9, upon which are mounted the
wheels 10, and 5 and 7 are cross-bars mounted
on the covering-wings, and B is a hopper hav-
60 ing its upper side open, mounted just forward of the axle and between the frame-bars 2 and 3, having in one end a semicircular recess 11,
as shown in Figs. 3 and 4, which forms a
raised trackway on the inner face of the hop-
65 per for the purposes hereinafter specified, the ends thereof being inclined, as shown at 12. I do not, however, limit myself to forming a
recess in the end of the cylinder, as above de-
scribed, as it will be evident that the recess
70 may be dispensed with, and the inner face of the hopper may be provided with a trackway. I preferably, however, construct the end of
the cylinder of cast-iron and cast this recess
75 therein, which forms the trackway of the inner side, for convenience, and because it is much cheaper to construct it in that way.

Within the hopper B, I mount a shaft 16, on one end of which and outside of the hop-
per is a sprocket-wheel 17, and within the
80 hopper and adjacent to the end just described and upon the shaft 16 I secure a disk 18, adapted to rotate with said shaft, and adjacent to the periphery of said disk I construct
openings 19, and adjacent to these openings
85 I secure arms 20, which serve as buckets to hold the seed. Upon the opposite face of the disk I mount rotatably fingers 21, one end of which is curved, as shown at 22, and 23 is
90 preferably a coiled spring secured about the post 24, which is in alinement with the pin 25, upon which the finger 21 is mounted, so
as to impart a tension to the finger 21 to hold
it in position, (shown in Fig. 6,) so that it
will normally hold a piece of seed between
95 the end 22 and the arms 20 or bucket. The opposite end of finger 21 is provided with an
antifrictional roller 26.

Just inside of the rotating disk 18 and within the hopper I secure a strap-spring 27,
100 as shown in Fig. 5, the free end of which works in the pathway of the bucket—that is,

at the point between the arm 20 and the disk 18—and secured to the hopper is a shorter strap-spring 28, which meets it, as shown in Fig. 5.

5 Upon the axle 9 and outside of the hopper is a sprocket-wheel 29, loosely mounted, and having a sleeve 29', provided with gear-teeth 30' at its outer end, and 30 is a sprocket-chain which connects the sprocket-wheel 29 and
10 the sprocket 17, and by the rotation of the axle a rotary motion is imparted to the shaft 16, which in turn causes the disk 18 to rotate within the hopper.

Beneath the hopper I place a covering device, which comprises wings 31, approaching
15 each other as they approach their rear ends. These wings rest upon the ground and are connected to the frame fore and aft by rods 32 and 33, by which the ends are raised or
20 lowered independent of each other, and connected at their forward ends with draw-chains 34.

The ground-opener 15 is mounted midway between the wings upon the draw-iron 35,
25 and the lower end of the ground-opener 15 is yieldingly secured to the draw-iron 35 by some yielding connection 36, as by a coiled spring or a rod having a coiled spring in the center, so as to allow the ground-opener to yield at
30 its point, so as to prevent its being broken when it comes in contact with stones or other obstructions.

Upon one side of the frame I mount rotatably a quadrant or triangular bracket 37, as
35 shown in Fig. 1, to one side of which I secure the rod 32, and to the other end I secure a rod 38, which is secured to a bracket 39 pivotally upon the rear of the frame. This bracket 39 is provided with an operating-arm
40 40, which is also provided with an ordinary spring-actuated pawl adapted to engage with a rack-bar 41, by which mechanism just described it will be observed that the forward end of the wings may be raised or lowered at
45 will. It will also be observed that by the rigid connection above described the wings may be forced into the earth at any reasonable depth, so as to cover the seed to any desired depth. The rod 33 upon the rear end
50 of the wings is secured direct to the bracket, having a handle which operates substantially similar to the bracket 39 just described for the purpose of throwing the sprocket-wheel 29 in and out of gear, so as to prevent the
55 working of the dropping mechanism when it is desired to move the planter from one place to another—as, for instance, traveling along the road.

I have provided the axle 9 with a sleeve 42,
60 having gear-teeth at one end and an annular recess 43, adjacent to its opposite end rigidly secured to the axle 9, and upon the side of the frame-bar 1 I secure an inclined bracket 44, and through these I mount or pass the rod
65 45, upon the outer end of which is secured a bar 46, adapted to engage with said incline, and upon the opposite end I secure an arm

47, adapted to engage with the annular recess 43, and upon the rod 45 and between the bar 1 and the arm 47 I mount a coil-spring 48 for
70 the purpose of producing a tension to normally hold the sleeve 42 in engagement with the sleeve 31'.

The upper end of the bar 46 is secured to the bar 38, so that when the operator forces
75 the handle-bar 40 backward, so as to draw the bar 38 backward for the purpose of raising the forward end of the wings, the lower end of the bar 46 will pass up the incline 44 and draw the sleeve 42 out of engagement with the
80 sleeve 30.

My invention is operated as follows: I first throw the sprocket-wheel 29 into engagement, so as to cause the disk 18 to rotate. The seed-potatoes are then placed in the hopper B, and
85 when the disk having the arm 20 passes around adjacent to the bottom more or less of the seed is caught in the position shown in Fig. 7. The finger 21, with its antifrictional roller 26 engaging with the trackway 12, holds the point 22
90 of said finger, as shown in Fig. 7; but as soon as it passes the trackway 12 the point 22 engages with the seed, as shown in Fig. 6, and while the seed within the pocket is passing between the springs 27 and 28 the seed is
95 forced down to a position where the finger 21 will securely hold it, and the disk then passes up over in its rotation, and when it gets above the chute 13 the roller 26 upon the finger again engages with the trackway 12 and disengages
100 the seed and allows it to pass down through the chutes 13 and 14, and the spring-finger 21 is held in this position until the disk has rotated to the opposite side, where it makes the same operation.

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

1. In a potato-planter, a hopper having a downward opening for the seed, combined
110 with a vertical disk placed in the hopper and provided with openings near its outer edge, and arms secured to the disk opposite the openings, the arms being made to extend at an angle from the disk and form pockets to receive the potatoes, substantially as shown.

2. In a potato-planter, a hopper having a downward opening for the seed, and a rotating disk placed therein having openings near its periphery, combined with bent or angular
120 arms secured to the disk opposite the openings, and which arms serve to pick up the potatoes as the disk revolves, spring-actuated means for automatically grasping the potatoes, and means connected to the hopper
125 for operating the fingers so as to cause them to release the potatoes, substantially as described.

3. A potato-planter, comprising a hopper having a downward opening for the seed, a
130 rotating disk mounted therein, openings in the face of said disk, arms secured to said disk, and laterally in alinement with said openings, spring-fingers mounted adjacent to

said openings and adapted to engage with the seed for the purpose of holding it within the arms during rotation up to a predetermined point, and means for rotating said disk.

5 4. A potato-planter, comprising a hopper, with a downward opening for the seed, and provided with a semicircular trackway upon the inner face of one of the ends, a rotating disk mounted in said hopper, openings in said
10 disk, arms mounted adjacent thereto, having their free ends extending in line with said openings laterally, spring-fingers centrally mounted, one end adapted to engage the seed through the said opening, and the other end
15 adapted to travel upon said trackway, for the purpose of releasing the seed within said arm during rotation and up to a predetermined point, and means for rotating said disk.

5 5. A potato-planter, comprising a hopper, having a downward opening for the seed, a
20 rotating disk mounted therein, arms mounted on the face of said disk for the purpose of receiving a piece of seed, means for rotating the said disk, and a strap-spring, mounted to
25 travel in the pathway of said arms, for the purposes specified.

6. In a potato-planter, a hopper, a vertically-rotating disk mounted therein and provided with a series of openings near its outer

edge, bent arms secured to the disk opposite 30 the openings and serving to pick up the potatoes, combined with spring-actuated fingers secured to the opposite side of the disk from the said arms, and arranged to operate through
35 the openings in the disk so as to press the potatoes against the arms, and means connected with the hopper for causing the fingers to release the potatoes at predetermined times, substantially as specified.

7. In a potato-planter, a hopper, a vertically-rotating disk placed therein, and provided with openings near its outer edge, bent
40 arms secured to the disk opposite these openings, spring-actuated fingers secured to the disk opposite the openings on the opposite
45 side from the arms for picking up the potatoes, and means connected with the hopper for operating said arms, combined with the spring 27 secured to the disk, and a second shorter spring secured to the hopper, and
50 which have their ends approach each other, substantially as set forth.

In witness whereof I have hereunto set my hand this 3d day of September, 1898.

HERBERT E. JEWETT.

Witnesses:

M. A. FRANKLIN,

HOWARD P. DENISON.