

No. 771,369.

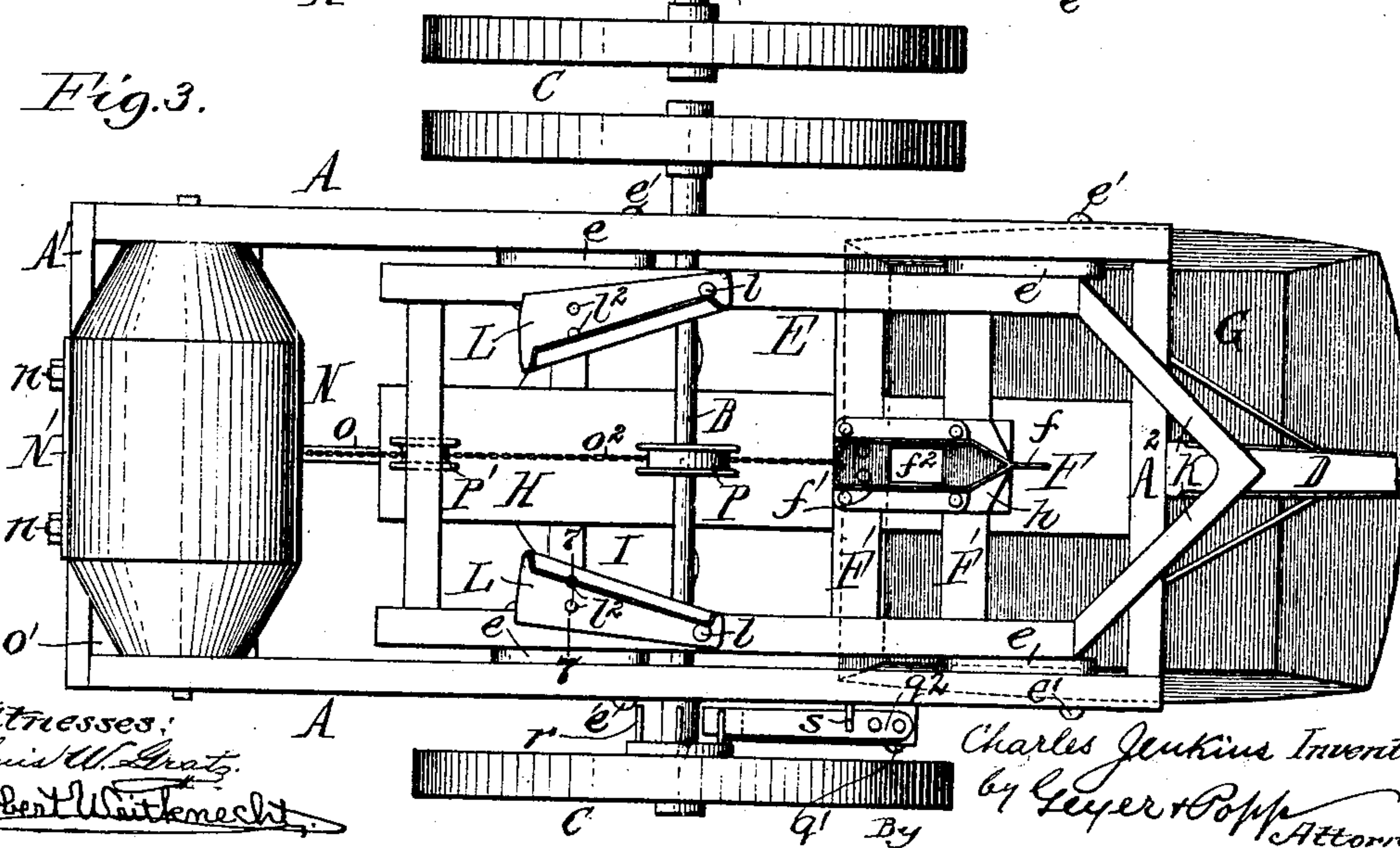
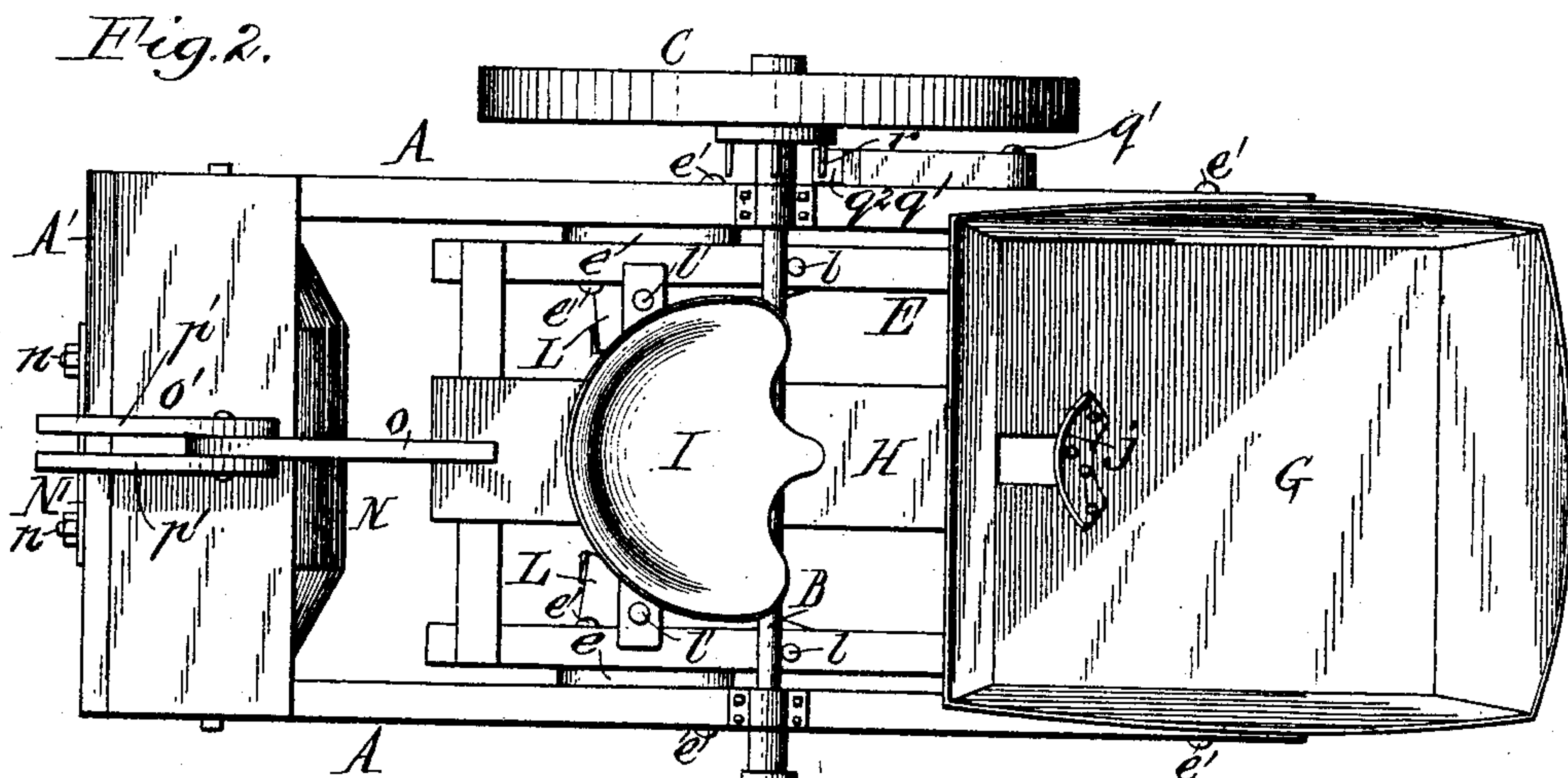
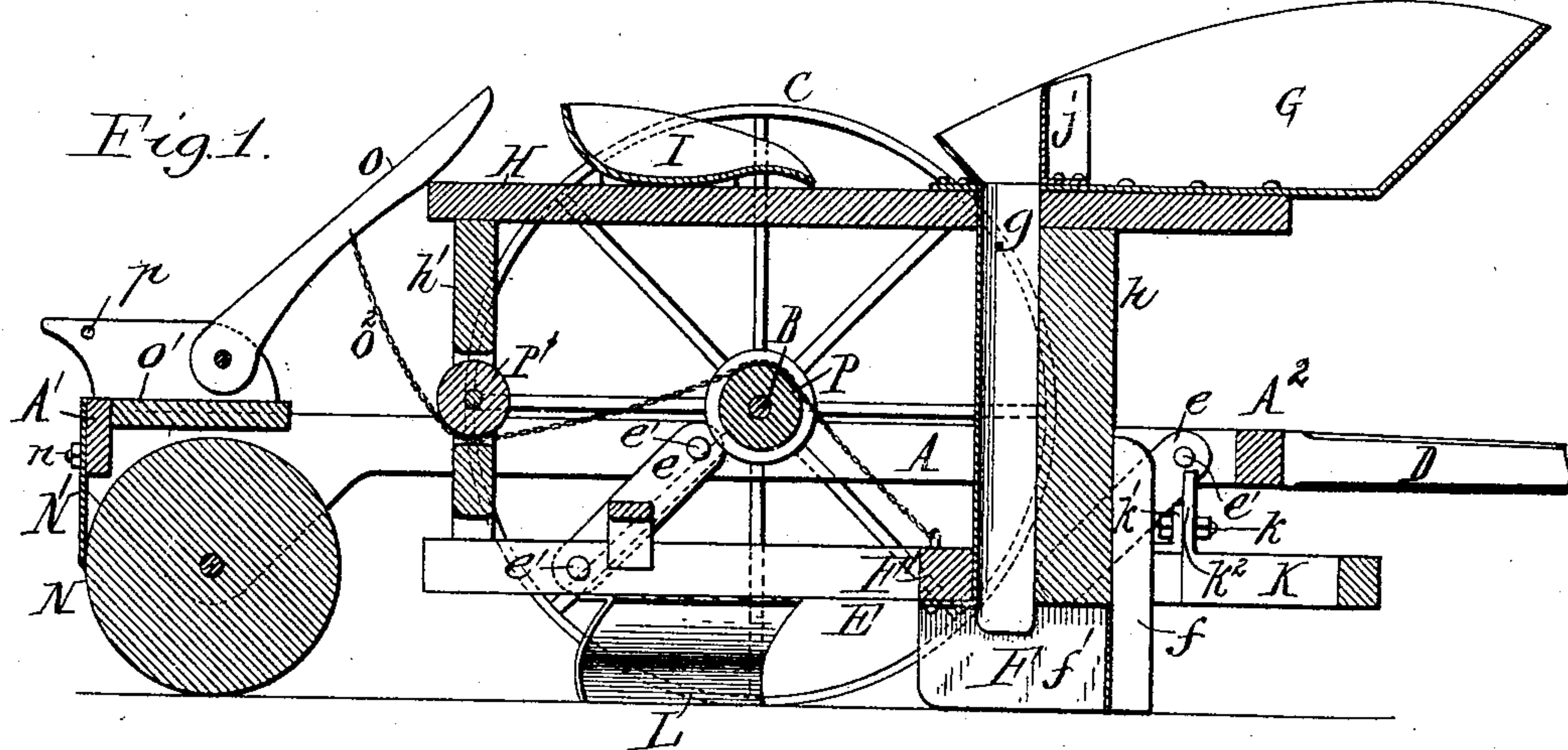
PATENTED OCT. 4, 1904.

C. JENKINS.  
POTATO PLANTER.

APPLICATION FILED FEB. 19, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



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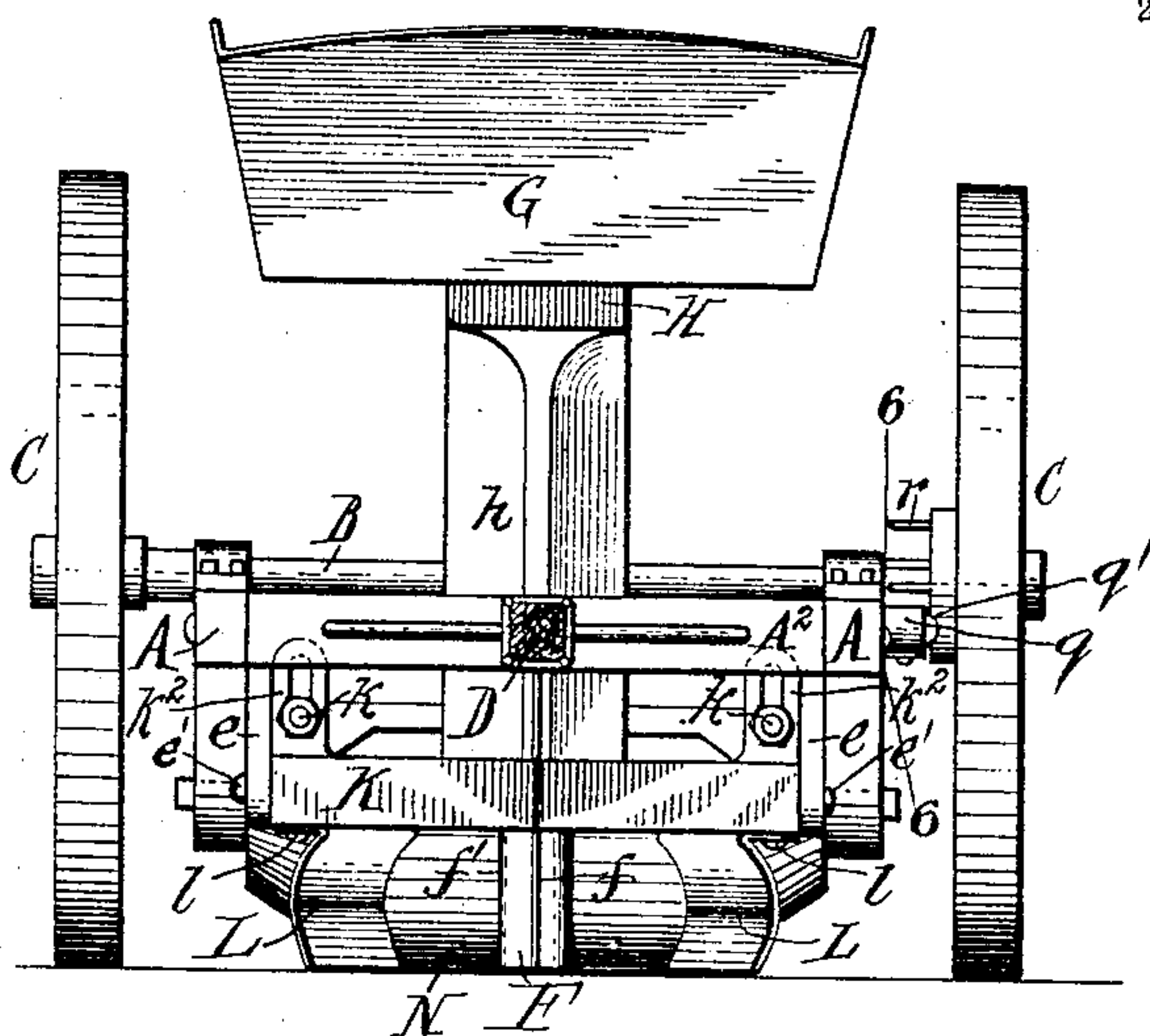
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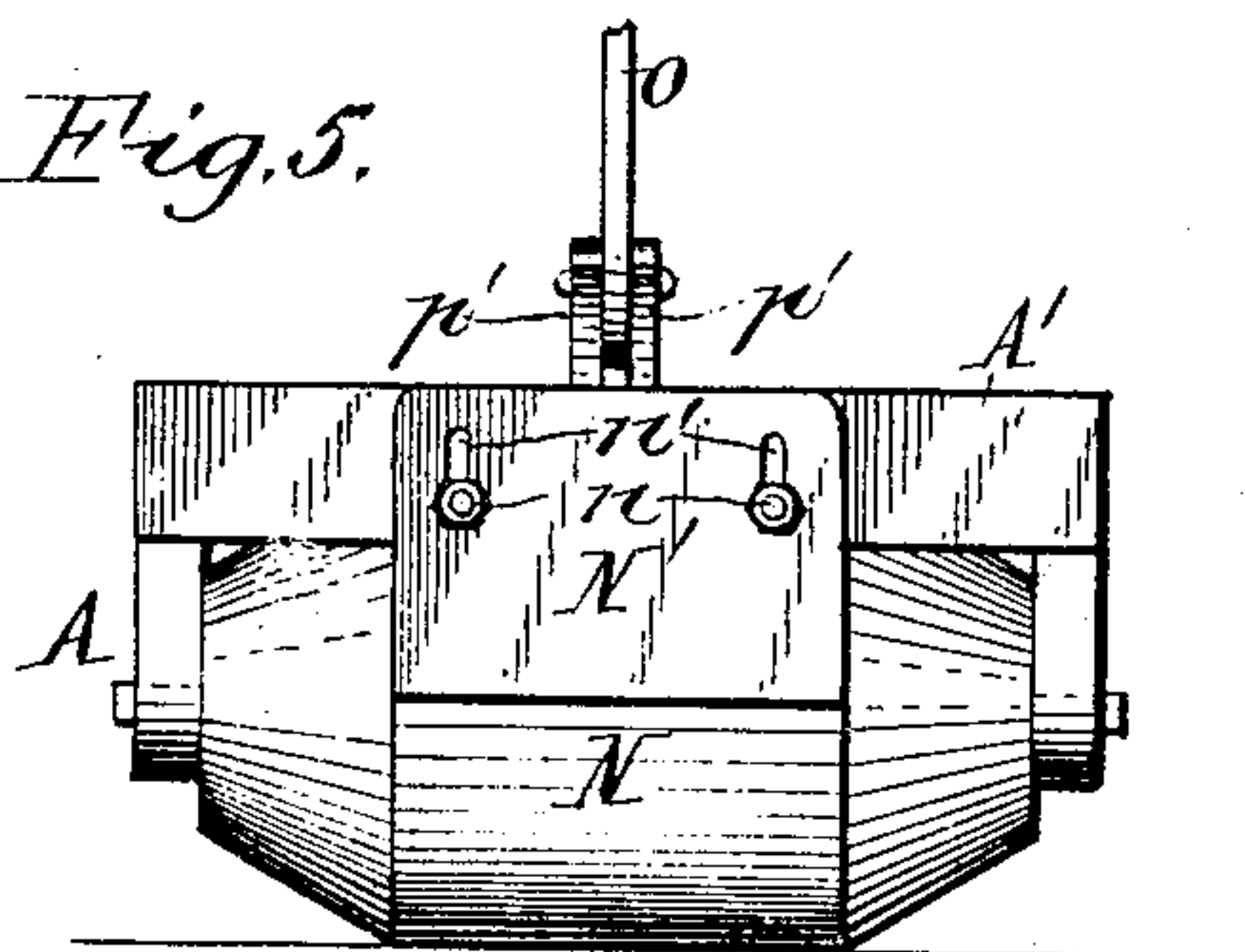
NO MODEL.

2 SHEETS—SHEET 2.

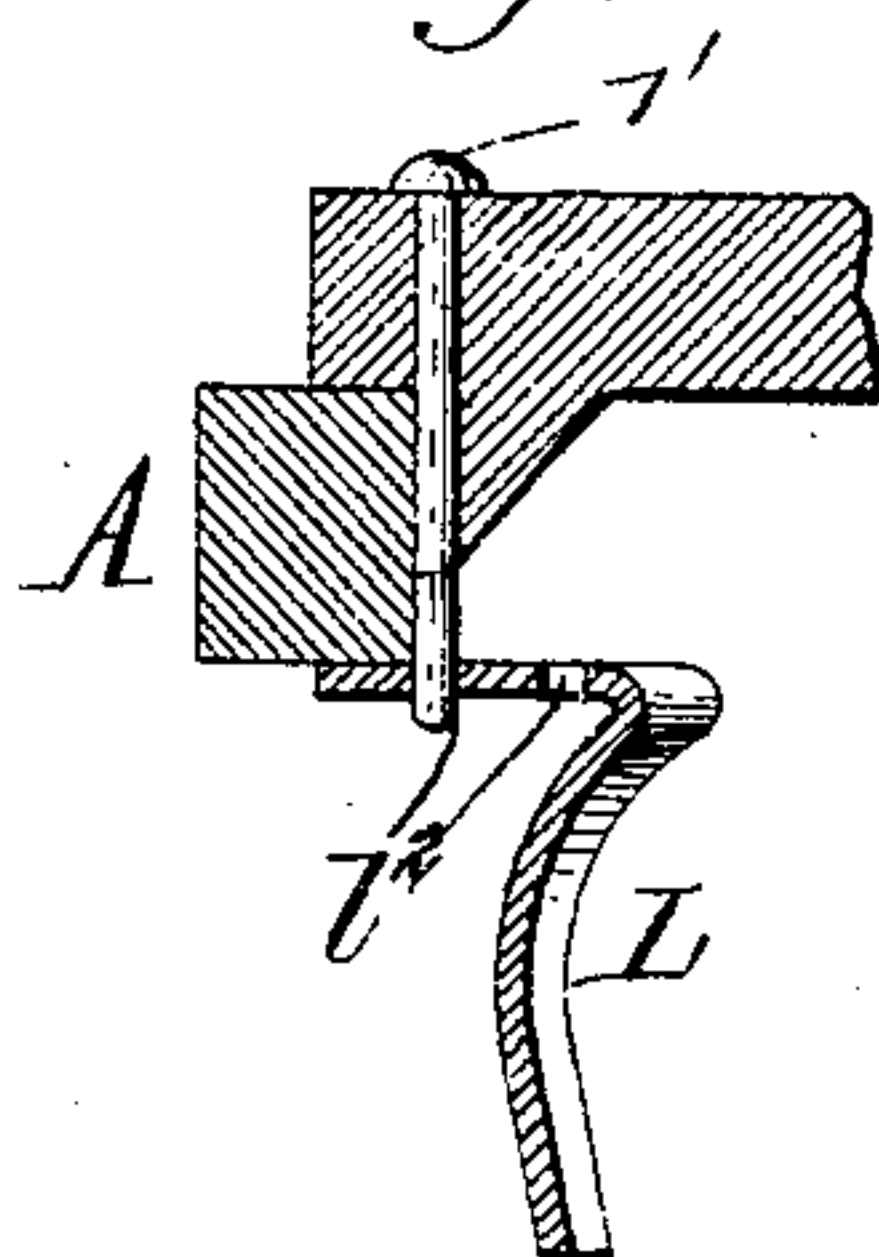
*Fig. 4.*



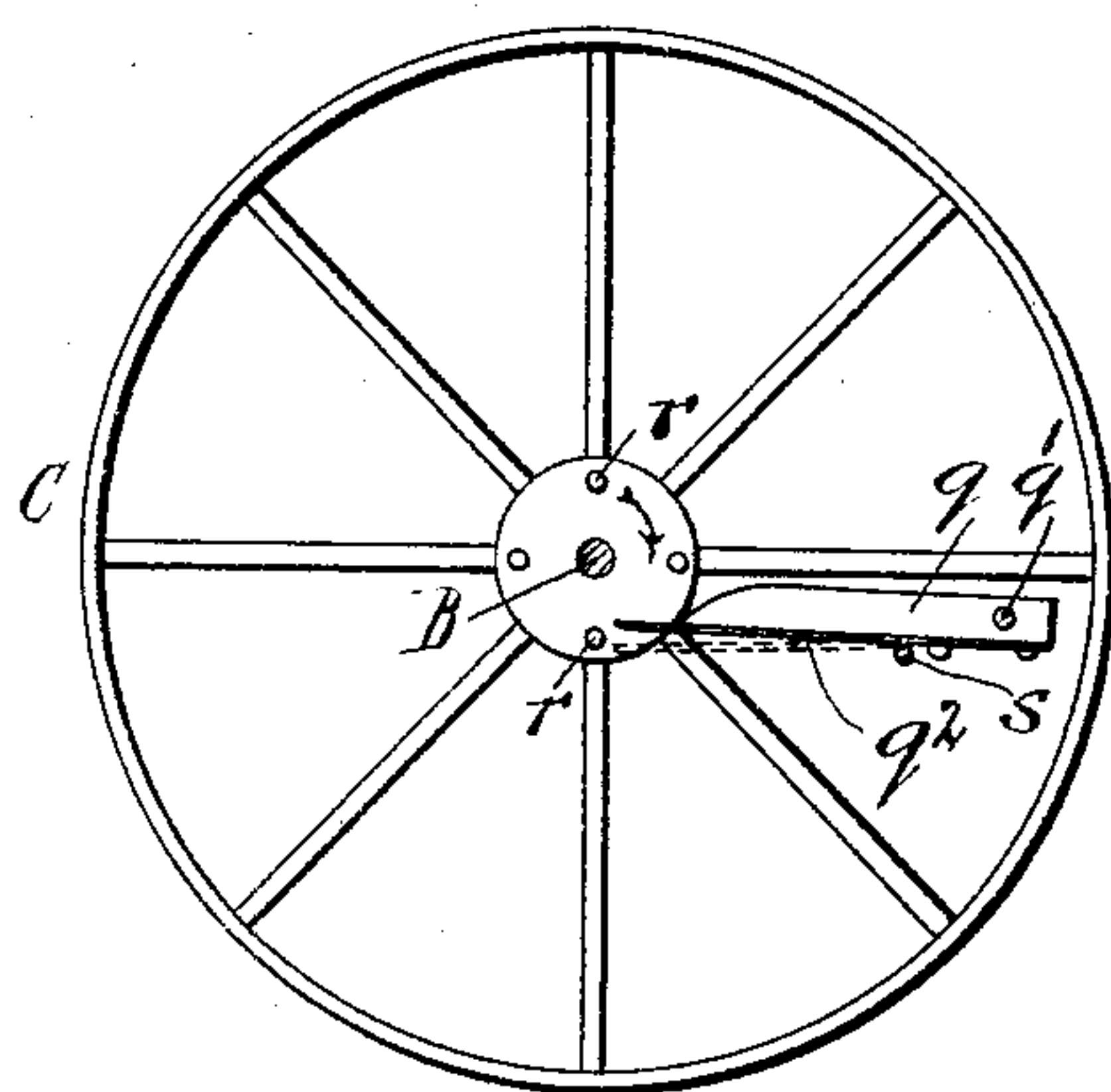
*Fig. 5.*



*Fig. 7.*



*Fig. 6.*



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# UNITED STATES PATENT OFFICE.

CHARLES JENKINS, OF YORKSHIRE, NEW YORK.

## POTATO-PLANTER.

SPECIFICATION forming part of Letters Patent No. 771,369, dated October 4, 1904.

Application filed February 19, 1904. Serial No. 194,361. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES JENKINS, a citizen of the United States, residing in York-shire, in the county of Cattaraugus and State of New York, have invented new and useful Improvements in Potato-Planters, of which the following is a specification.

This invention relates to improvements in potato-planters.

One of its objects is to support the plow or furrow-opener in such a manner that the same is capable of yielding to stones or other obstructions for preventing injury to the plow and other parts of the machine.

The invention has the further object to provide simple means for regulating the depth to which the plow enters the ground and for deflecting stones, clods, and other obstructions out of the path of the plow and to improve the construction of such machines in other respects.

In the accompanying drawings, consisting of two sheets, Figure 1 is a central longitudinal section of a potato-planter embodying my invention. Fig. 2 is a top plan view, and Fig. 3 a bottom plan view, of the same. Fig. 4 is a front view of the machine. Fig. 5 is a rear view of the frame, roller, and scraper. Fig. 6 is a transverse vertical section in line 6 6, Fig. 4, showing the audible indicator. Fig. 7 is a transverse section, on an enlarged scale, in line 7 7, Fig. 3.

Similar letters of reference indicate corresponding parts throughout the several views.

The main or draft frame of the machine consists of side beams A and cross-pieces A<sup>1</sup>, connecting the same. These side beams are secured to the axle B, upon which the wheels C are mounted.

D is the draft-pole, connected to the front cross-piece A<sup>2</sup>.

E is a horizontal frame, preferably of rectangular form, carried by the main frame and capable of moving bodily lengthwise of the machine. For this purpose the frame E is suspended from the side beams A by links e, pivoted by transverse pins e' to the inner sides of the side beams and the outer sides of the longitudinal bars of the frame E. In the construction shown in the drawings two of such

links are employed at each side of the suspended frame. This connection permits said frame to swing lengthwise of the machine, and in order to cause the same to rise when swung rearwardly the links are normally arranged to incline toward the rear end of the machine, as shown.

F is a plow or furrow-opener carried by the frame E and secured to the under side of a pair of cross-pieces F', arranged near the front end of said frame, as seen in Fig. 3. This plow may be of any suitable form, but preferably consists of a pair of forwardly-converging plates terminating in a cutting blade or point f and provided with parallel rearward extensions f', which are separated to form an intervening space f<sup>2</sup>, adapted to receive the potatoes to be planted. Into this space extends the lower end of a spout g, which depends from a feed-hopper G, as shown in Fig. 1. The parallel rearward extensions f' of the plow serve to keep the furrow open long enough to receive the potatoes. The feed-hopper is mounted on a horizontal board or platform H, which is supported by standards h h', rising from the front and rear portions of the frame E.

A seat I for the operator is mounted on the platform H behind the feed-hopper, the operator feeding the potatoes by hand into the spout g. To enable the operator to control the feed of the potatoes, an upright guard or wall j is arranged in the hopper at the front side of the spout, this guard being preferably concave on its front side, as shown.

K is a V-shaped guard or fender projecting forwardly from the front end of the frame E and serving to deflect any stones, clods, or other obstructions out of the path of the plow F. This guard is preferably made vertically adjustable on the frame E, so as to serve also as a gage for determining the depth of cut of the plow. In the construction shown in the drawings, Figs. 1 and 4, the guard is adjustably secured to the frame E by bolts k, passing through lugs k' on said frame, and vertically-slotted slugs k<sup>2</sup> at the ends of the guard.

L indicates a pair of opposing furrow-coverers secured to the under side of the frame E in rear of the plow F. These coverers



converge rearwardly, and in order to permit their angle to be varied according to the condition of the soil each of the same is pivoted at its front end to the frame E by a vertical pin *l*, while its rear end is adjustably secured to said frame by a pin or bolt *l'*, passing through the frame and one of a transverse row of holes *l''* in the flanged upper portion of the coverer, as shown in Figs. 3 and 7.

By placing the pins *l'* in one or another of the holes *l''* the angle of the coverers is changed accordingly.

N is a transverse roller journaled in the main frame in rear of the coverers and serving to press or roll down the earth on the potatoes. The end portions of this roller are preferably tapered, as shown, to facilitate turning the machine, especially in soft soil. A scraper *N'* bears against the cylindrical portion of this roller for detaching any adhering soil therefrom. This scraper may consist of a plate adjustably secured to the rear cross-piece *A'* of the main frame by bolts *n*, passing through this cross-piece, and vertical slots *n'* in the scraper-plate, as shown in Fig. 5.

A suitable elevating device is connected with the plow-carrying frame E for raising the latter out of the furrow in turning the machine to plant the next row of potatoes. The preferred means (shown in the drawings) for this purpose consist of a hand-lever *o*, fulcrumed upon a rear cross-piece *o'* of the main frame and connected with the vertically-movable frame E by a chain *o''* or similar flexible connection running over a guide-pulley P, mounted on the axle B, and under a similar pulley *P'*, journaled in the rear standard *h'*. The hand-lever *o* may be locked in its rearward or depressed position by passing a pin through holes *p*, formed in the lugs *p'*, between which the lever is pivoted.

If desired, the machine may be provided with an audible signal for insuring a regular feeding and uniform planting of the potatoes. The signal shown in the drawings consists of an arm *q*, carrying a flat spring *q''*, which extends into the path of an annular row of pins *r*, projecting inwardly from the hub of one of the wheels C, so that the free end of the spring is tripped and caused to snap against the under side of the arm every time one of the pins *r* rides over the spring by the forward rotation of the wheel, thus producing a succession of clicking sounds which indicate to the operator the proper intervals at which the potatoes are to be planted. The arm *q* is preferably pivoted to the main frame by a horizontal pivot-pin and is free to swing upwardly, but limited in its downward movement by a stop-pin *s*, projecting from the side of the main frame, as shown in Figs. 3 and 6. This construction, while rendering the arm practically rigid in a downward direction, permits the same to rise freely when

engaged by the trip-pin *r* in backing the machine.

In the use of the machine the operator, occupying the seat I, feeds the potatoes from the hopper G into the spout *g* and the driver of the team walks behind the machine. The weight of the plow-carrying frame E, supplemented by that of the operator, causes the plow F to enter the ground and form a furrow for the potatoes. In the drawings the swinging frame E is shown in its elevated position with the plow and coverers resting on the surface of the ground; but in practice the frame swings forwardly below that position to allow the plow to enter the ground. Although the weight of the operator and the frame E and superposed parts is sufficient to hold the plow down to its work under ordinary conditions, this frame is nevertheless free to swing rearwardly for allowing the plow to rise and ride over stones or other obstructions lying in its path, preventing injury or breakage of the plow and its carrying-frame and undue straining of the machine. In turning the machine the driver raises the plow and coverers out of the furrow by swinging the hand-lever *o* toward the rear end of the machine, as hereinbefore described.

I claim as my invention—

1. In a potato-planter, the combination of a main frame, a plow-frame arranged below the same and having its front and rear portions connected therewith by links which are pivoted to swing lengthwise of the machine, said frame being free to swing rearward bodily and restrained only by its own weight and that of the parts and the operator carried thereby, and a plow attached to said swinging frame, substantially as set forth.

2. In a potato-planter, the combination of a main frame, a plow-frame arranged below the same and connected therewith by links pivoted to swing lengthwise of the machine and arranged to incline toward the rear end thereof, said frame being free to swing rearward bodily and restrained only by its own weight and that of the parts and the operator carried thereby, a plow attached to the lower portion of said swinging frame, and a seat mounted on the upper portion of the last-named frame, substantially as set forth.

3. In a potato-planter, the combination of a main frame, a plow-frame arranged below the same and having its front and rear portions connected therewith by links which are pivoted to swing lengthwise of the machine, a plow attached to said plow-frame, a platform supported on the plow-frame and extending above the main frame, and a potato-hopper and a seat mounted on said platform, substantially as set forth.

4. In a potato-planter, the combination of a main frame, a plow-frame arranged below the same and connected therewith by links pivoted to swing lengthwise of the machine and ar-



ranged to incline toward the rear end thereof, said frame being free to swing rearward bodily and restrained only by its own weight and that of the parts and the operator carried thereby, a  
5 plow attached to the lower portion of said plow-frame, front and rear standards rising from said plow-frame, a platform supported upon said standards, a potato-hopper mounted on said platform, and a seat arranged on said  
10 platform in rear of the potato-hopper, substantially as set forth.

5. In a potato-planter, the combination of a main frame, a frame suspended from the same by links pivoted to swing lengthwise of the  
15 machine, a plow carried by said swinging

frame, a raised frame mounted on said swinging frame and extending above the main frame, a potato-hopper mounted upon said raised frame, a hand-lever mounted on the main frame, a flexible connection extending from 20 the hand-lever to said swinging frame, and guide-pulleys for said connection journaled on the axle of the machine and said raised frame, substantially as set forth.

Witness my hand this 17th day of February, 25  
1904.

CHARLES JENKINS.

Witnesses:

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ARTHUR E. PRESTON.