

(No Model.)

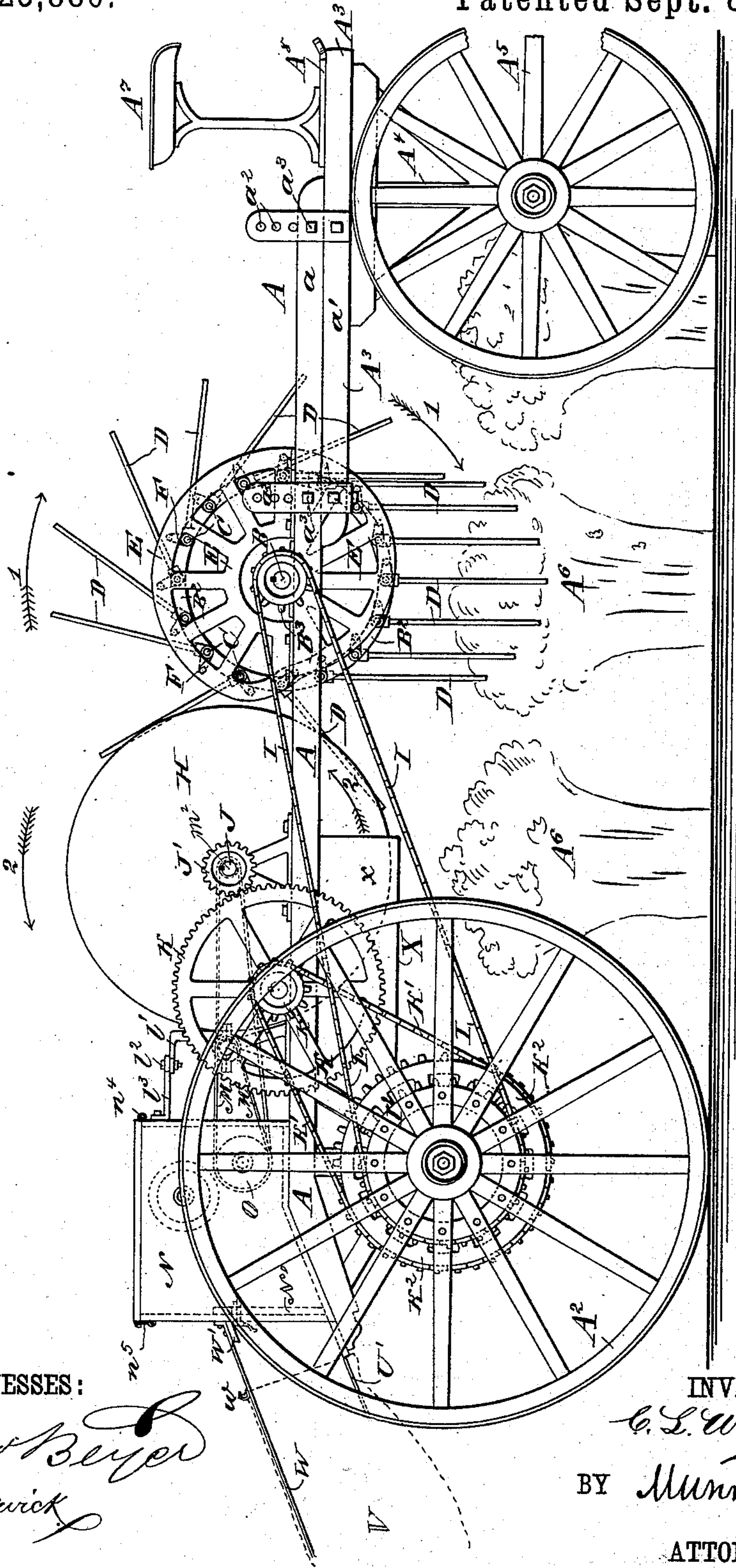
6 Sheets—Sheet 1.

C. L. WALTER.  
COTTON HARVESTER.

No. 325,880.

Patented Sept. 8, 1885.

Fig. 1.



WITNESSES:

*Wm. Beyer*  
*C. Sedgwick*

INVENTOR:

*C. L. Walter*

BY *Munn & Co*

ATTORNEYS.



(No Model.)

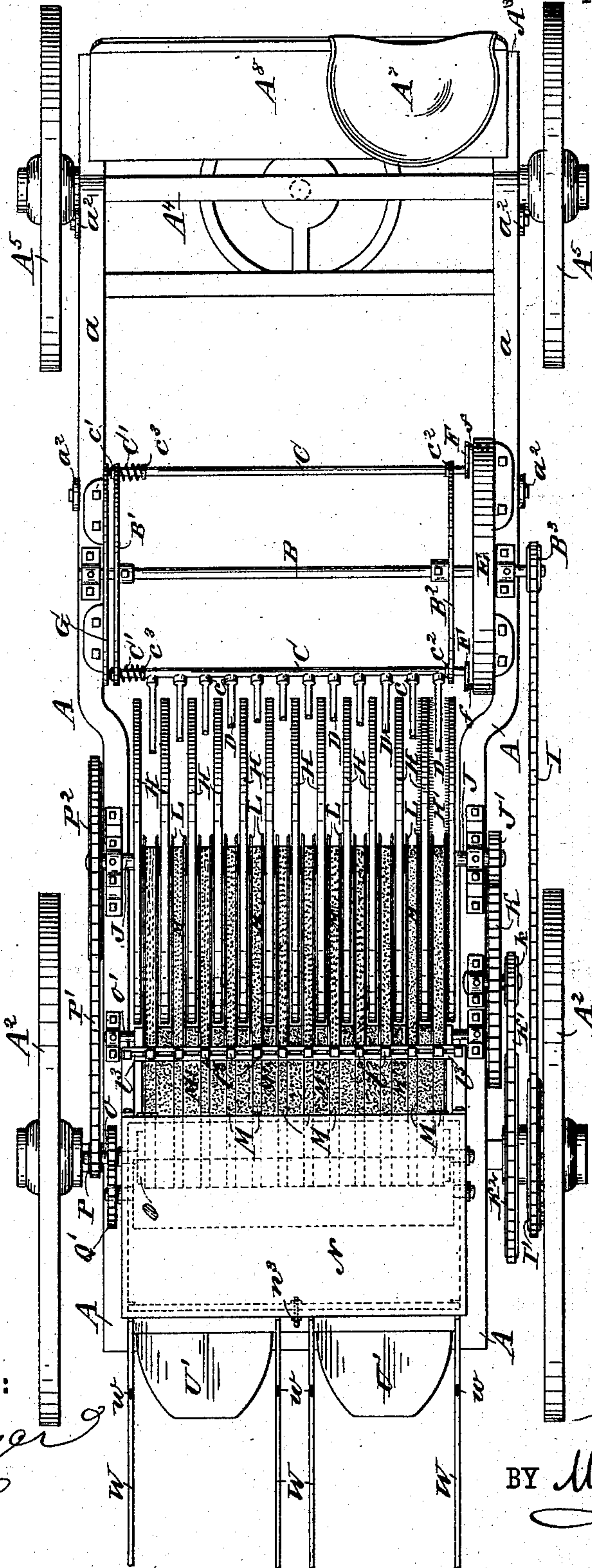
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C. L. WALTER.  
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Fig. 2.



WITNESSES:

*Pro. Beyer*  
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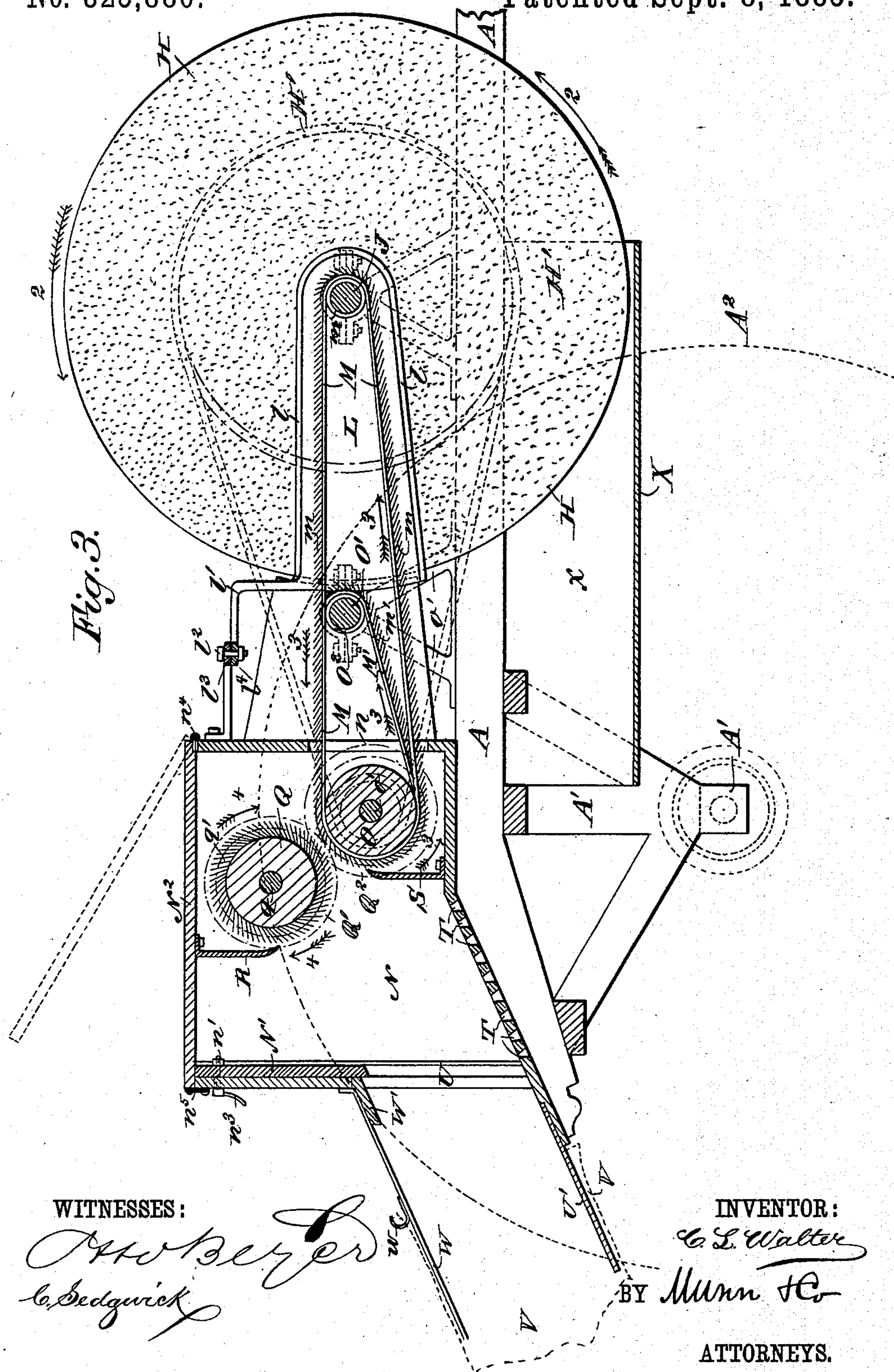
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WITNESSES:

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(No Model.)

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Fig. 4.

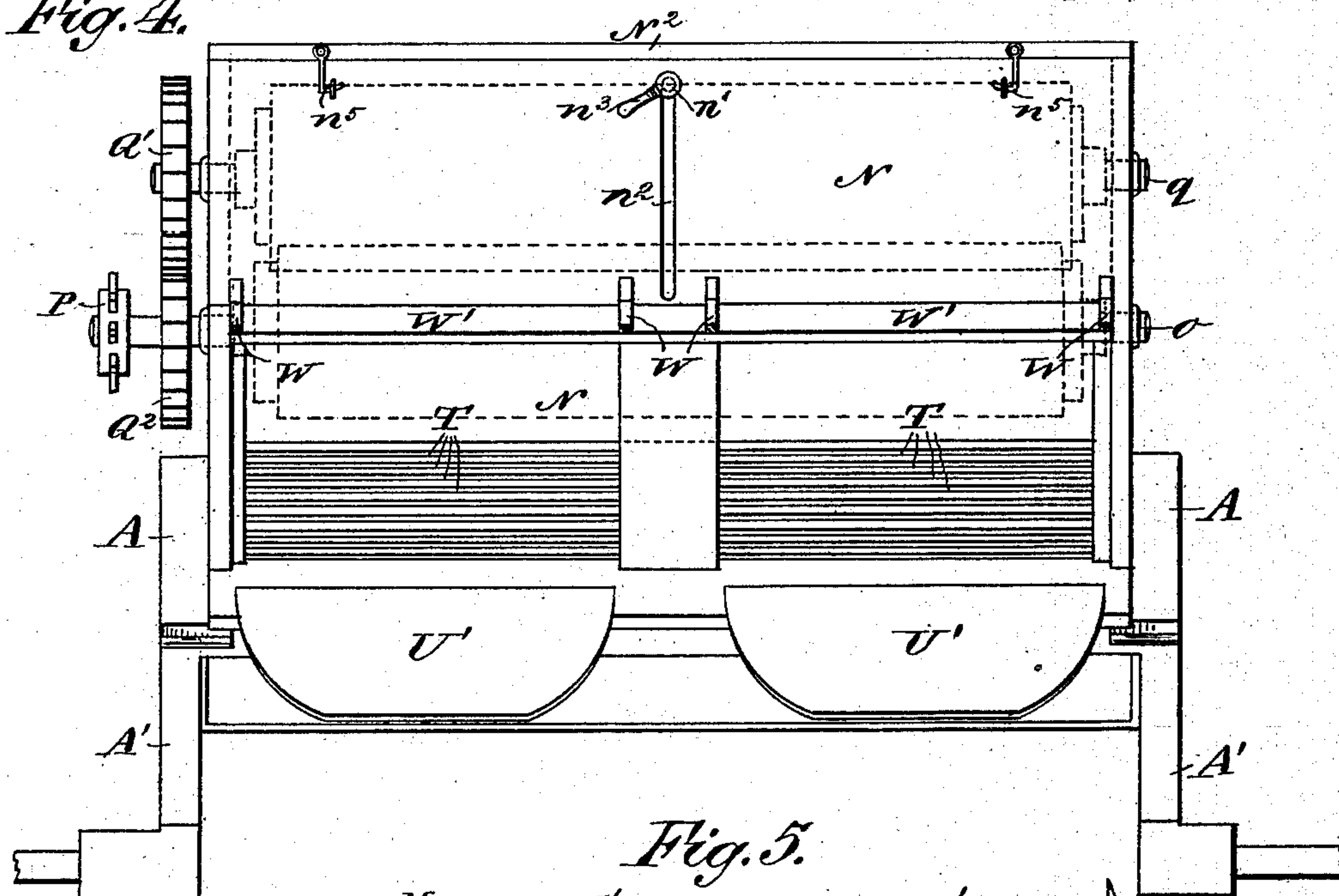
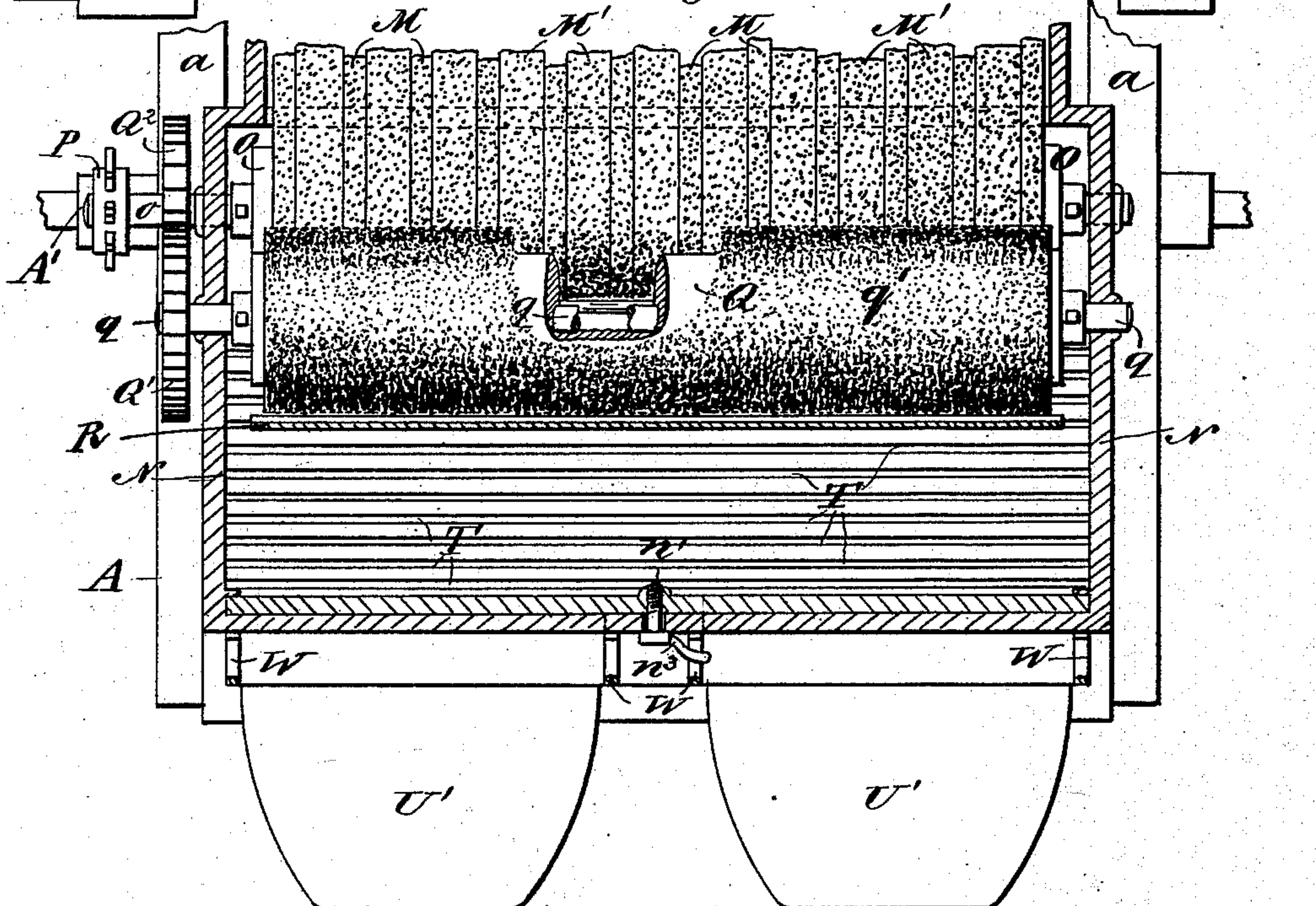


Fig. 5.



WITNESSES:

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(No Model.)

6 Sheets—Sheet 5.

C. L. WALTER.  
COTTON HARVESTER.

No. 325,880.

Patented Sept. 8, 1885.

Fig. 6.

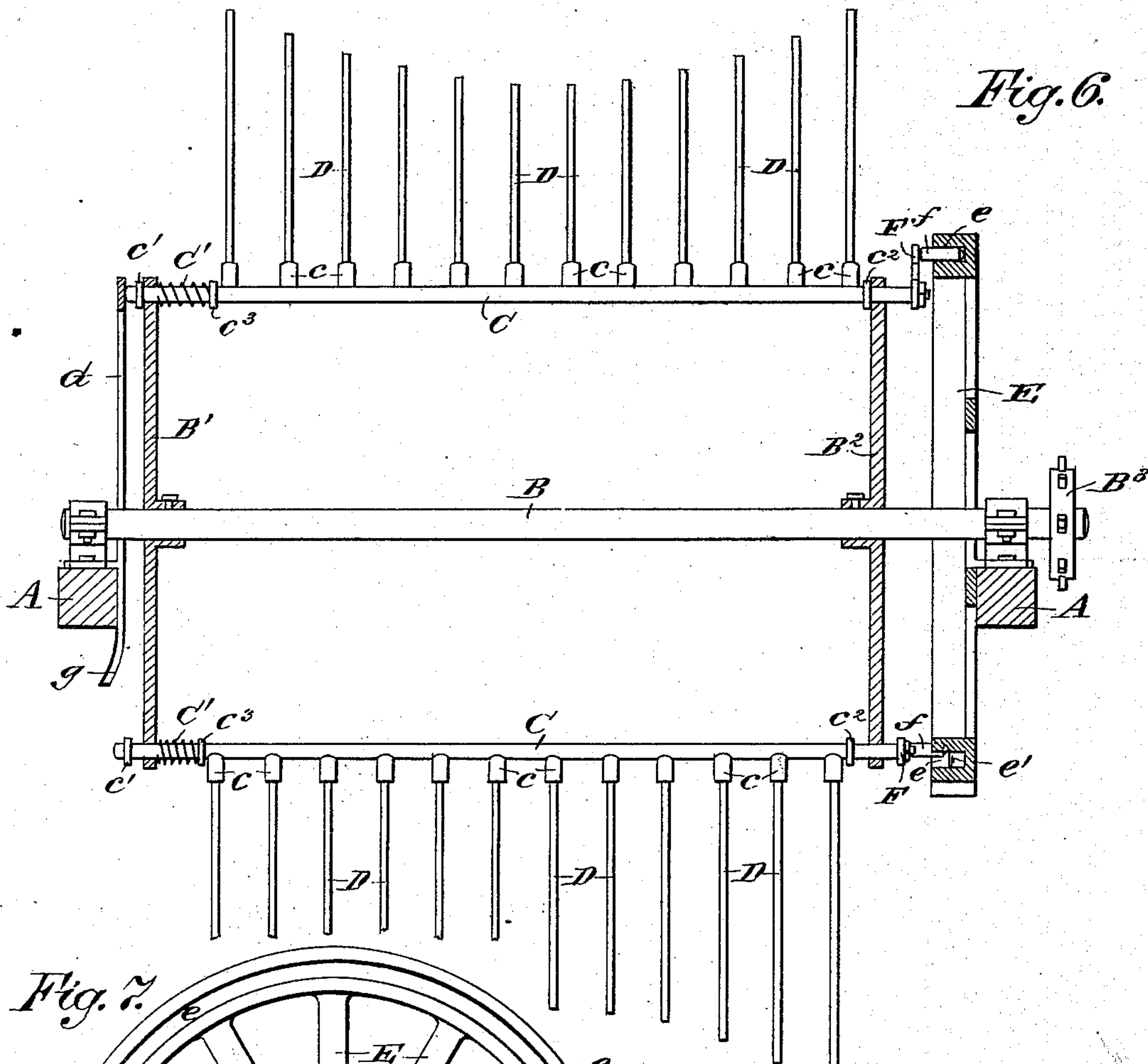
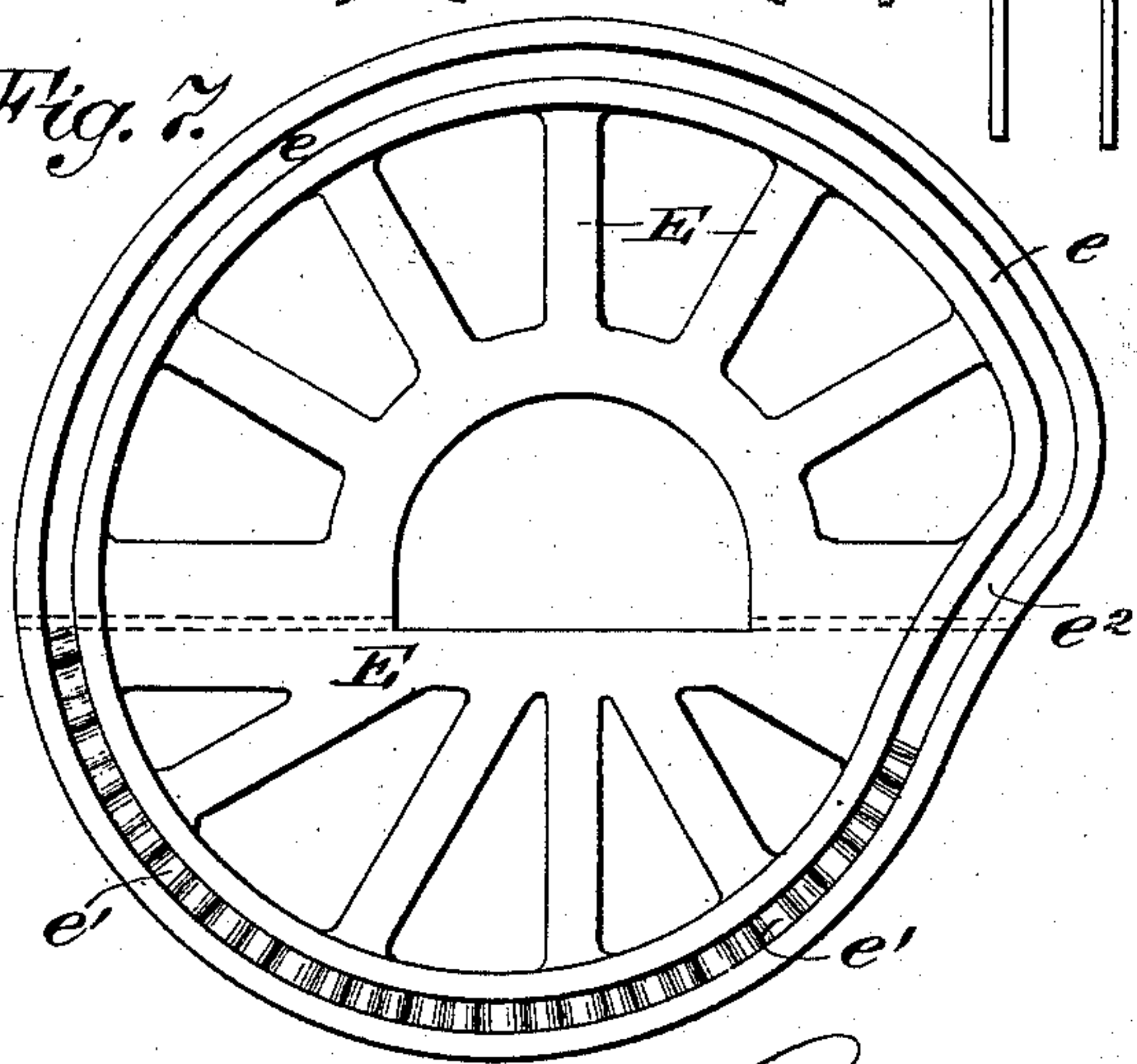


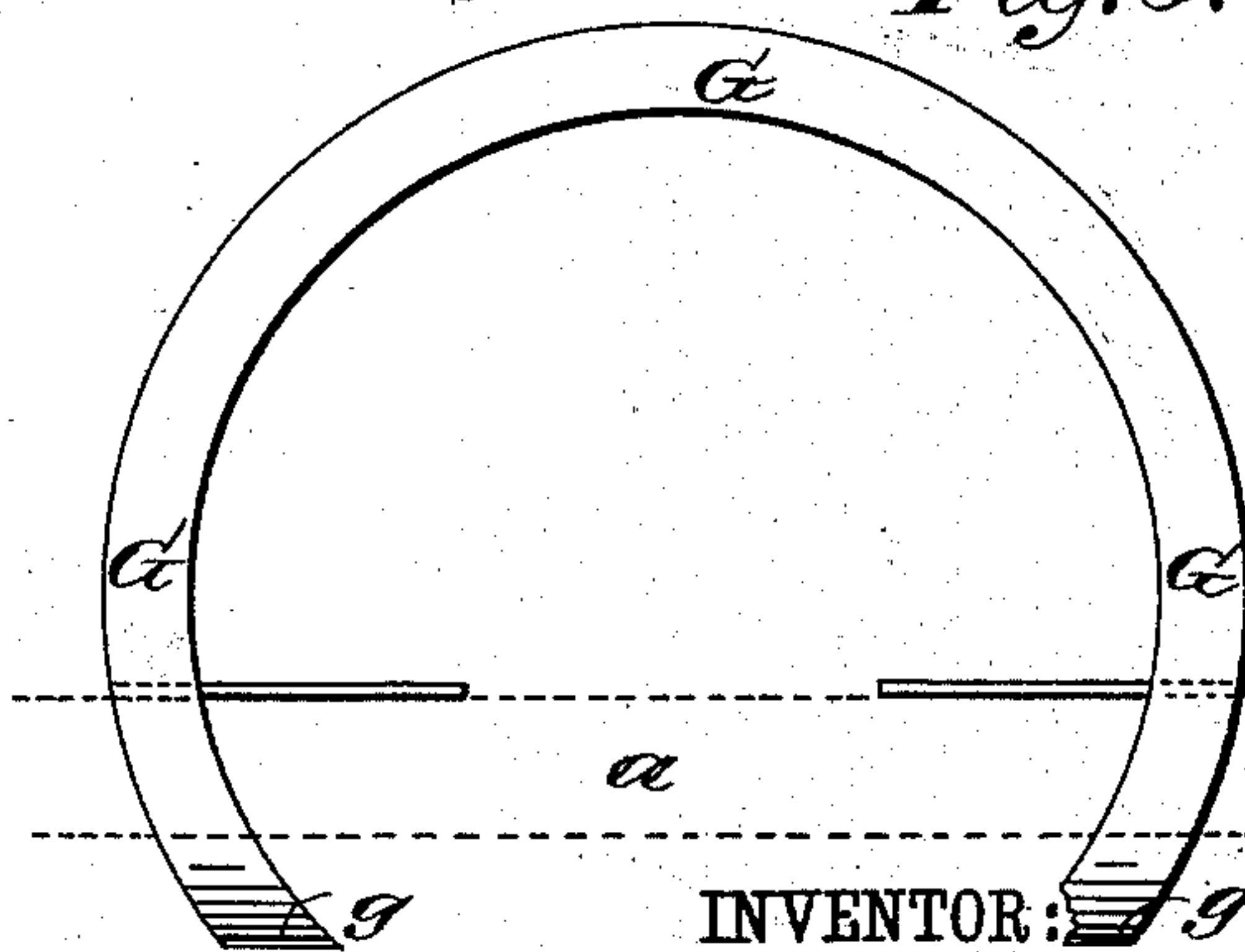
Fig. 7.



WITNESSES:

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*C. Sedgwick*

Fig. 8.



INVENTOR:

*C. L. Walter*

BY

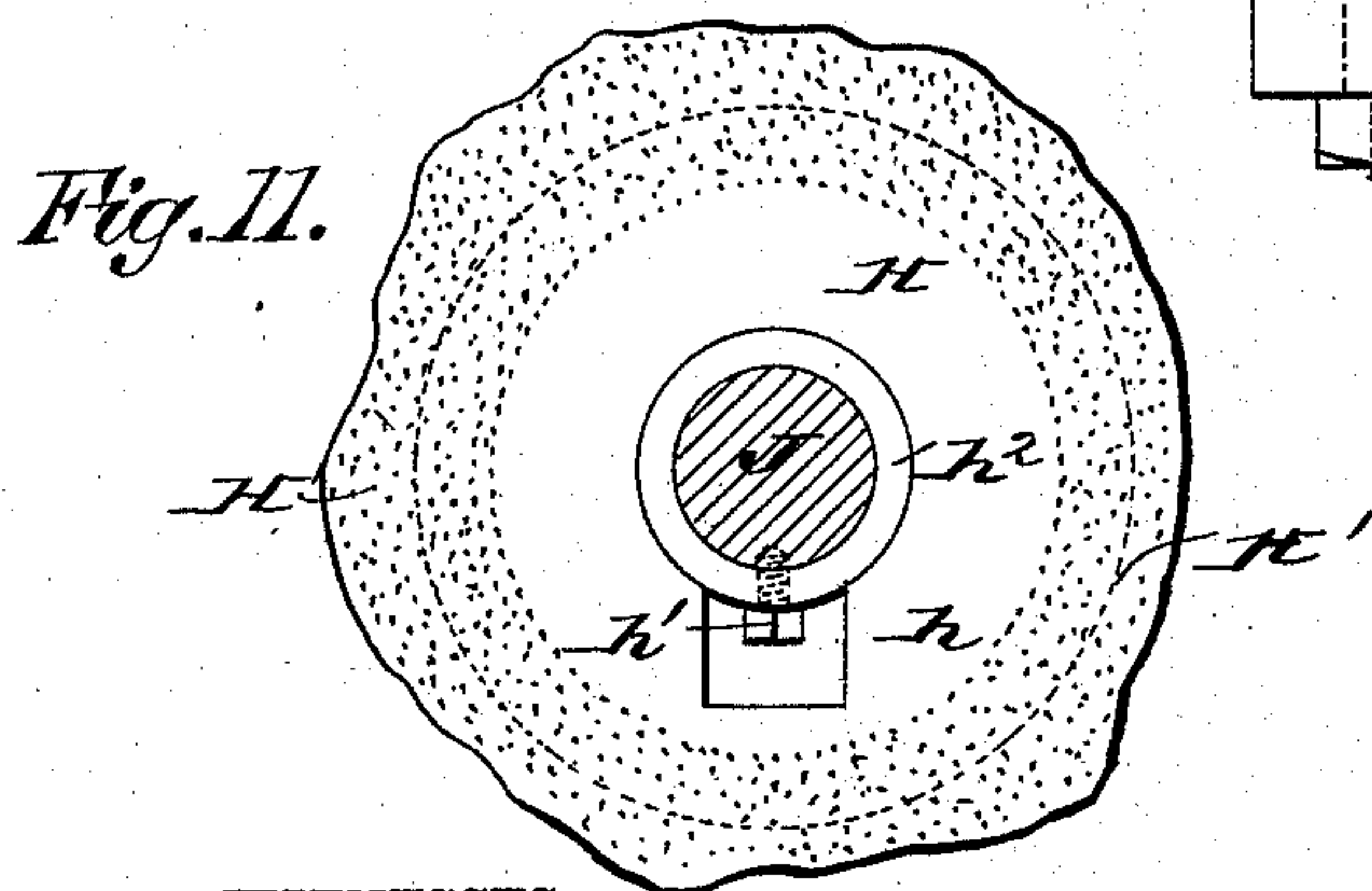
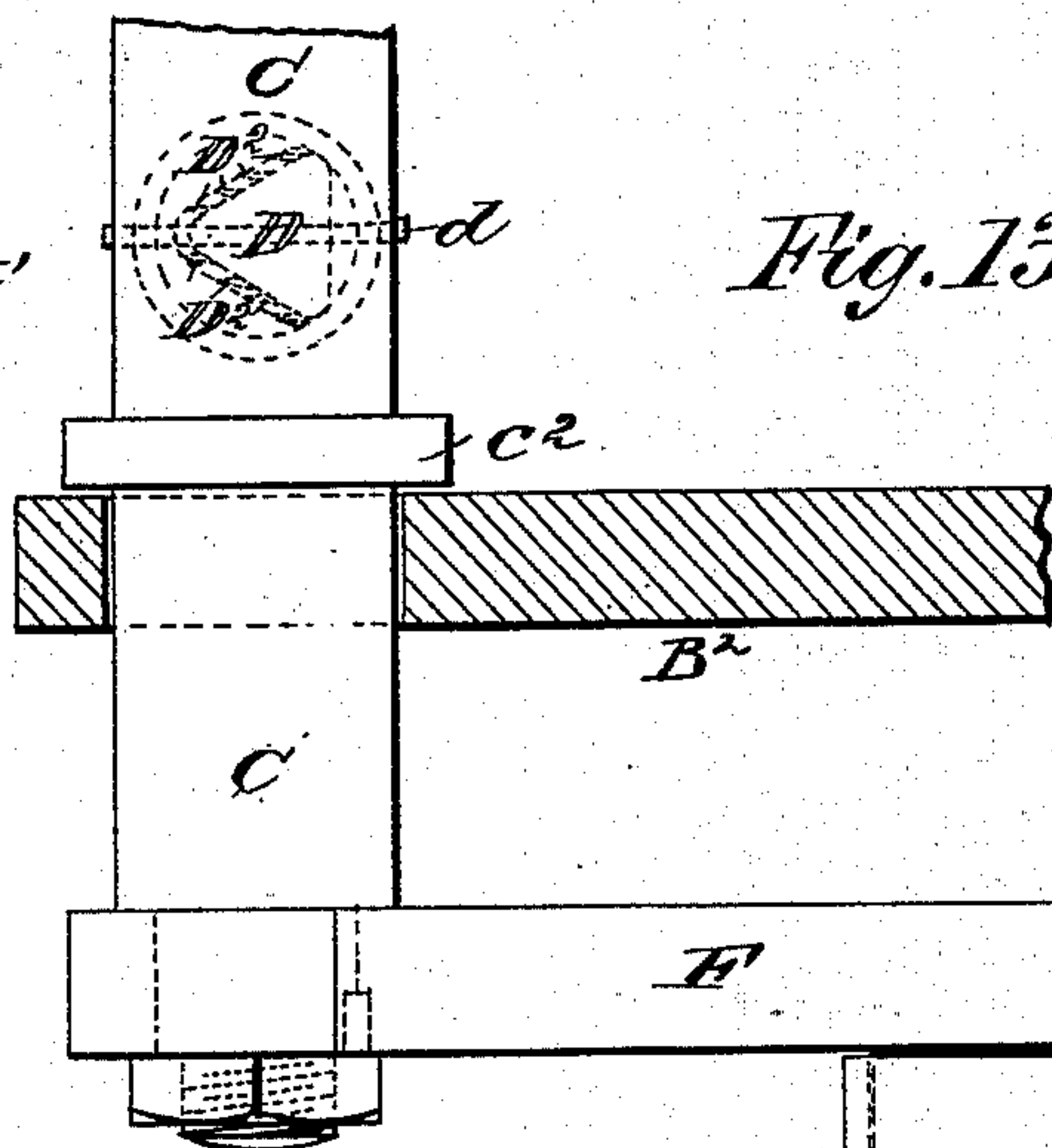
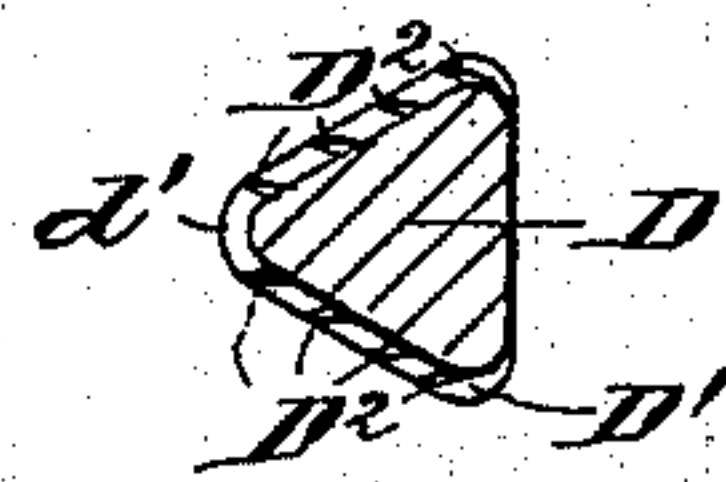
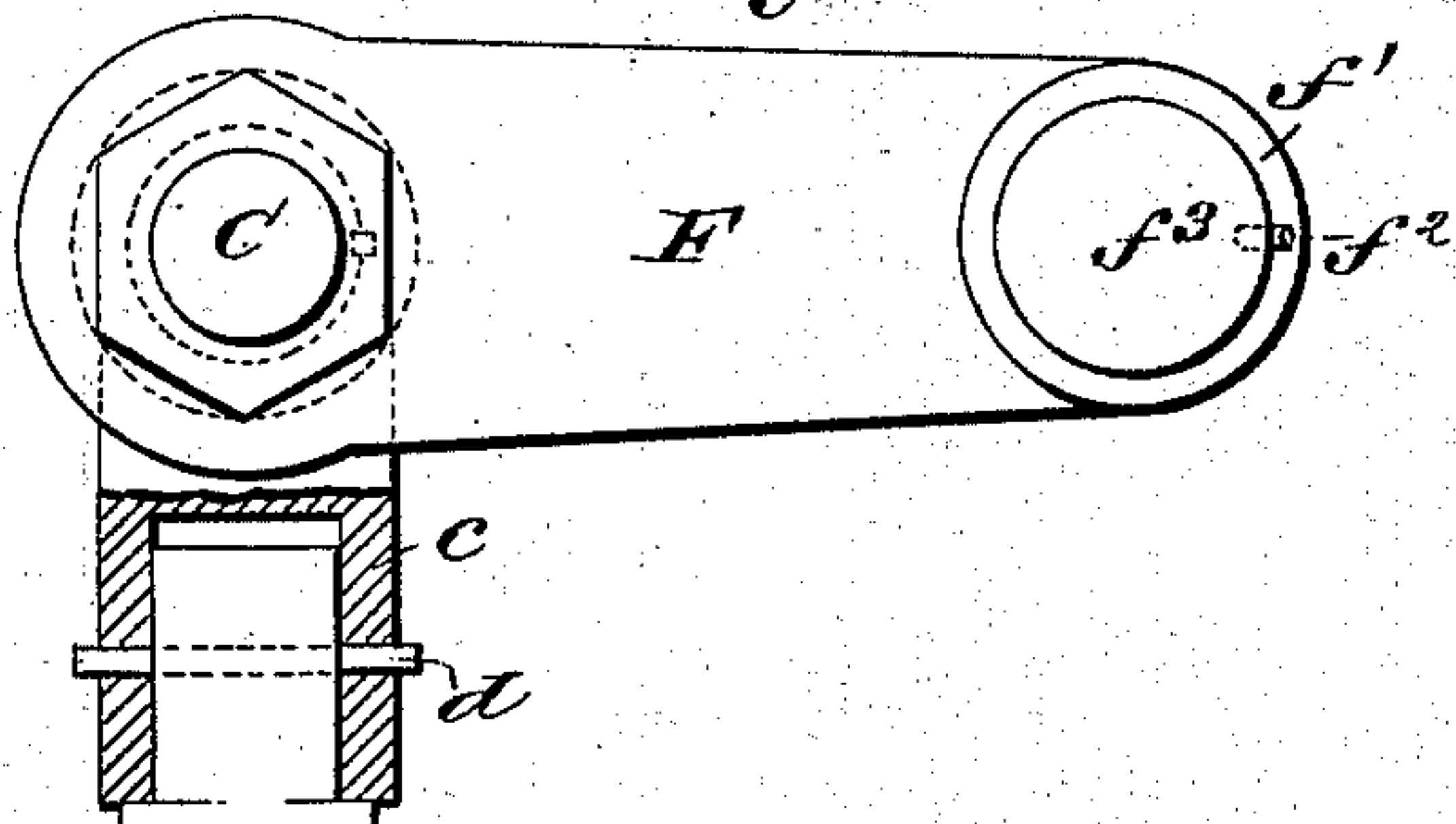
*Munn & Co.*

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6 Sheets—Sheet 6.

Patented Sept. 8, 1885.

No. 325,880.



**WITNESSES:**

WITNESSES:  
*Mr. Beyer*  
*C. Sedgwick*

**INVENTOR:**

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# UNITED STATES PATENT OFFICE.

CHARLES L. WALTER, OF BOSTON, MASSACHUSETTS.

## COTTON-HARVESTER.

SPECIFICATION forming part of Letters Patent No. 325,880, dated September 8, 1885.

Application filed December 10, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES LOUIS WALTER, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and improved Cotton-Harvester, of which the following is a full, clear, and exact description.

My invention relates to cotton pickers or harvesters, and has for its object to improve the construction of this class of machines so as to enable the cotton to be picked from the plants and delivered to bags without damage to the picked staple or to the cotton-bolls remaining on the plants, and with considerable economy of time and labor.

The invention consists in the particular constructions and combinations of parts of the cotton-harvester, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improved cotton-harvester. Fig. 2 is a plan view thereof. Fig. 3 is an enlarged detail sectional side elevation of the stripper-disks and mechanism for conveying the picked cotton to bags held to a box or receiver at the rear end of the machine. Fig. 4 is a rear view of the machine with the hind wheels removed and parts broken away. Fig. 5 is a sectional plan view of the rear end of the machine. Fig. 6 is a transverse vertical sectional elevation of the picking-fingers and the mechanism for controlling their movements with relation to the stripper-disks. Fig. 7 is an inner face view of the cam which regulates the throw of the picker-fingers. Fig. 8 is an inner face view of the guide-plate by which the picker-fingers are kept in proper position to enter between the stripper-disks should their springs fail to act. Fig. 9 is a perspective view of a preferred construction of the knife-edged plates which remove the picked cotton from the stripper-disks. Fig. 10 is an enlarged detail sectional view of parts of two stripper-disks, stripper knives or plates, and adjacent cotton-carrying belt. Fig. 11 is a side view of the central part of one of the stripper-disks with the shaft in cross-section, and Figs. 12, 13,

and 14 are enlarged detail views of the picker-fingers, their bars, and crank-connections.

I make the frame of the machine in two parts or sections—a main rear part, A, which is supported by an upwardly cranked or arched axle, A', on the hind wheels, A<sup>2</sup>, and a forward section, A<sup>3</sup>, which is supported by the upwardly cranked or arched axle A<sup>4</sup>, on the forward wheels, A<sup>5</sup>. The side bars, a, of the rear frame-section overlap the side bars a' of the front section, A<sup>3</sup>, to a point about over the forward axle, and to the bars a' are fixed the upwardly-projecting plates a<sup>2</sup>, each of which has a series of holes, through any one of which a pin or bolt, a<sup>3</sup>, may be passed into the side bar, a, of the rear frame-section on which the cotton-picking mechanism is supported, so that said mechanism may be raised or lowered with the rear frame to suit the height of the cotton-plants A<sup>6</sup>, from which the cotton is to be picked. I show four plates, a<sup>2</sup>, with a pin passed through each plate into the rear-frame-section. The forward frame-section is supported from its axle by fifth-wheel or other suitable running-gear, so as to be turned freely to guide the machine, and suitable shaft or pole connections will be provided to enable either one or two animals drawing the machine to walk between the rows of plants, and I provide a seat, A<sup>7</sup>, and foot-board A<sup>8</sup> for the driver.

The letter B indicates a transverse shaft, which is journaled in suitable boxes held to the frame A, and has fixed to it the opposite disk-plates or spider-frames B' B<sup>2</sup>, in which are held loosely, so as to turn axially and slide longitudinally, the picker bars C, fifteen or twenty in number, and having collars or socket pieces c fixed to them, in which the cotton-picking fingers D are rigidly held—say, by pins d passed through them and the collars. (See Fig. 12.)

The picker-bars C have the fixed stop collars or studs c' c<sup>2</sup> c<sup>3</sup>, the collar c' standing outside of the plate B', the collar c<sup>2</sup> standing inside of the plate B<sup>2</sup>, and the collar c<sup>3</sup> inside of and a short distance from the plate B', and between the collar c<sup>3</sup> and the plate B' on each of the bars C is placed a suitable spring, C', which acts to force the bar C endwise toward the plate B<sup>2</sup> and a cam-plate, E.



The cam-plate E is fixed to the frame A of the machine, say, by bolts passed through projecting flanges at the back of the cam, as shown, and said plate has around its inner face the eccentric or cam groove *e*, into which the arms *f* of the cranks F, fixed to the adjacent ends of the picker-bars C, enter, and the back wall or base of the lower part of the cam-groove *e* has a waved or fluted configuration, as at *e'*, to impart to the picker-fingers D, in connection with the springs C', a sidewise vibratory movement as the fingers are passing through the cotton-plants to pick the ripe cotton therefrom.

The crank-arms *f* have anti-friction sleeves or rollers *f'* fitted on them loosely and held on by pins *f''*, and the extreme ends of the crank-arms are rounded over, as at *f'''*, to work easily and truly over the notched base portion *e'* of the cam-groove *e*, in which groove the rollers *f'* run.

At the side of the machine opposite that to which the cam E is placed, I fix the curved bar or plate G, which has a semicircular form struck on a circle described by the ends of the picker-bars C, and the opposite ends, *g g*, of the plate G are bent outward. (See Fig. 6.) The plate G has such a facial relation to the cam E and the picker bars and fingers C D and the stripper-disks H, presently to be described, that if for any cause the springs C' should fail to act as the fingers D rise from the cotton plant or bush, the ends of the picker-bars C will ride up the inclined end *g* of the plate G, which will force the picker-bars endwise and toward the cam E, and so that they will sweep backward directly in the center of the spaces between the next adjacent stripper-disks H, which remove from the fingers D the cotton picked from the plants by them, as hereinafter more fully explained. The guide-plate G thus insures the proper relative positions of the fingers with the stripper-disks and prevents any breakage or damage of the fingers or disks by contact with each other.

The shaft B passes through a central opening of the cam-plate E, and has fixed to it the chain-wheel B<sup>3</sup>, over which a power-transmitting belt, I, passes to a chain-wheel, I', fixed to the right-hand wheel, A<sup>2</sup>, from which power thus is taken to drive the picker-fingers.

The picker-fingers D have a peculiar construction. I make them of slender rods, which may have some little flexibility, and have by preference, where they enter the cotton-plant, a triangular cross-sectional form with rounded corners, and the fingers are set on the bars C so that one of their angles or corners faces the direction in which they move, permitting them to enter and pass through the cotton-plant easily.

In the two forward sides or faces of the fingers which diverge rearward I cut or form, quite closely together, transverse slots D', and along one edge of each slot I fix a series of teeth or prongs, D<sup>2</sup>, which project rearward and outward from the fingers about half-way,

more or less, across the slots, but do not project beyond the general plane of the body of the finger. The teeth D<sup>2</sup> preferably project toward the bars or shafts C, on which the fingers are fixed. (See Figs. 12 and 14.) With this construction it is evident that as the fingers pass through the plant, the teeth D<sup>2</sup> will catch the ripe cotton fiber and pick or draw it from the boll, and the ribs or projections *d'*, between the slots D', or, in other words, the general plane-faces of the fingers, will prevent the teeth D<sup>2</sup> from tearing or injuring the unripe cotton-bolls, and the fingers will have a tendency to carry nothing from the plants but the fibers of cotton.

I make the picker-fingers D of each bar C gradually longer from the center of the length of the bar toward its opposite ends, so that the outer ends of the fingers on each bar are in a curved or concaved line transversely, which conforms somewhat to the conical tops of the cotton-plants to enable the fingers to reach all parts of the plant without unduly thrashing or beating the tops or central parts of the plants. (See Figs. 2 and 6.)

I mount the stripper-disks H rigidly on a shaft, J, which is journaled in boxes on the frame A, and so as not to have endwise movement. These disks H, I prefer to make of two circular plates, *h h*, of wood or metal, secured to each other back to back, and provided on their side faces with brush material H', which may consist of bristles, wires, or other suitable substance held to the disk-plates or center in any approved way. I show the disks held to the shaft at even distances apart by set-screws *h'*, entered through a central collar or bushing, *h''*, fitted in the disks. (See Figs. 10 and 11.)

On the shaft J is fixed a pinion, J', which meshes with a large gear-wheel, K, the shaft of which is journaled in a box held to the frame A, and carries also a fixed chain-wheel, *k*, over which a chain-belt, K', passes to a larger chain-wheel, K<sup>2</sup>, fixed to the chain-wheel I', so as to be revolved by the right hand wheel, A<sup>2</sup>, from which a quick rotary motion thus is imparted to the stripper-disks H in the direction of the arrows 2, or reversely to the direction of movement of the fingers D, and at a much quicker speed.

I describe the operation of the picker-fingers D and of the stripper-disks H with relation to the fingers as follows: As the machine is drawn along the rows of cotton-plants, the fingers D will be swung around in direction of arrows 1, Fig. 1, and as the fingers pass through the cotton-plants the cranks F will be guided by the groove *e* of cam-plate E, so as to retain the fingers about in a vertical position, and at the same time the wavy portion *e'* of the cam-groove, with the springs C', will give a sidewise reciprocation to the fingers to cause them to traverse all parts of the cotton-plants, from which the teeth D<sup>2</sup> will pick the ripe cotton, which will be carried upward and rearward by the fingers to and between the brush-faces H' of the stripper-disks H.



The cranks  $F$  of the finger-bars pass by the wavy portion  $e'$  of the cam before the fingers  $D$  reach the disks  $H$ , and the springs  $C'$  then act, aided, it may be, by the guide-plate  $G$ , as before described, to hold the fingers steady and cause them to swing upward fairly between the stripper-disks, and as the fingers enter between the disks and until they assume a horizontal position as they rise, the disk-brushes act from the roots of the finger-teeth  $D^2$  toward their points, so that the cotton is easily brushed from the fingers, and without tearing the fiber of the cotton, which is carried around by the brushes to the knife-edged stripping-plates and toothed belts, which remove the cotton from the disks  $H$ , as will be presently described. As the fingers  $D$  move upward between the disks  $H$ , a quick upward swing is given the fingers by the part  $e^2$  of the cam-groove to facilitate the stripping of the cotton from them by the disks.

The letters  $L$  indicate stripping-plates, which consist of suitable thin plates of metal, one side of which faces the brush material of the adjacent disk  $H$ . These plates  $L$  may be supported in any suitable way, so that their upper edges,  $l$ , stand about in horizontal plane a little above the upper or backward running or going sides of the toothed belts  $M$ , which belts pass around loose bushings or rollers  $m^2$  on the shaft  $J$ , between the disks  $H$ , and backward through an opening,  $n$ , in the front of the cotton-receiving box  $N$ , to and around a roller,  $O$ , which extends for quite the full width of the box  $N$ .

The plates  $L$  may rest at their outer or forward ends on top of the shaft  $J$ , between the belts  $M$  and their rollers  $m^2$ , and extend a little below the upper or going sides of the belts  $M$ , and the rear ends of each plate  $L$  may connect by an arm,  $l'$ , and bolt or screw  $l^2$  with a cross-bar,  $l^3$ , held to the box  $N$ , as shown, or to the frame  $A$ ; but I prefer to make the stripper-plates  $L$  in pairs, or to connect their arms  $l'$  by a cross piece,  $l^4$ , through a hole in which the attaching-bolt  $l^2$  may pass, and I make said plates  $L$  broad or deep, so that they extend also below the bottom or returning sides of the belts  $M$ , and serve as division plates or guards to prevent contact of the belts  $M$  and stripping-disks  $H$ , so they in no manner impede each other in their independent movements; and I support the forward ends of the plates  $L$  directly on the shaft  $J$  by passing the shaft through holes  $L'$ , near the forward ends of the plates, which holds the plates safely to their work and prevents noisy jarring of the plates on the shaft, and gives them a substantial support at the forward ends, which permits a light and simple support at their back ends.

I sharpen the edges of the stripper-plates  $L$  by beveling them back from their inner faces, and to prevent the edges of the plates from cutting into or crushing the brush material of the disks  $H$ , I place washers  $L^2$  on the shaft  $J$ , between the plates and the bushings  $h^2$  or

body portions of the disks, said washers being about as thick as the brush material is long, as shown clearly in Fig. 10.

In the spaces directly back of the stripper-disks  $H$  and between the belts  $M$ , I arrange intermediate belts,  $M'$ , which run over the roller  $O$ , with the belts  $M$ , and over loose bushings  $O^2$ , placed on a forward roller,  $O'$ , journaled by its shaft or gudgeons  $o'$  in bearings fixed to the frame, and so as to come just below the upper sides of the belts  $M$ , and to the shaft  $o$  of roller  $O$  is fixed the chain-wheel  $P$ , over which a chain-belt,  $P'$ , passes to a chain-wheel,  $P^2$ , on the shaft  $J$  of the stripper-disks  $H$ , whereby motion is imparted to the belts  $M$   $M'$  in the direction of the arrows 3, so that the cotton removed from the disks  $H$  by the plates  $L$ , and falling from the plates onto the belts  $M$ , will be carried back into the receiving-box  $N$ .

The toothed belts  $M$   $M'$  form a continuously-traveling floor or bed from between the disks  $H$  at the shaft  $J$ , and back of these disks into the box  $N$ , the intermediate belts,  $M'$ , preventing the cotton from falling from the belts  $M$  back of the disks, and materially aiding the transfer of the cotton to the box  $N$ , so that all the cotton picked by the fingers  $D$  from the plants, and stripped from the fingers by the disks  $H$ , and from the disks by the plates  $L$ , will be carried back into the box, and none of it will be allowed to drop to the ground and be wasted. I slant the teeth or brush material  $m$   $m'$  of the belts  $M$   $M'$  in the direction of motion of the belts, to more easily and promptly catch the cotton falling from the plates  $L$ , and also to enable the rotary brush  $Q$ , journaled by its shaft  $q$  in the box  $N$ , to more easily brush the cotton from the traveling belts  $M$   $M'$  into the box  $N$ .

Motion is given the brush  $Q$  in the direction of arrows 4 by a cog-wheel,  $Q'$ , on the shaft  $q$ , meshing with a cog-wheel,  $Q^2$ , on the shaft  $o$  of the belt-roller  $O$ , which is driven by the belt  $P'$ , as before described. I slant or incline the brush material  $q'$  of the brush  $Q$  backward or in the direction of rotation of the brush, so that the sides of the brush material will act on the toothed belts  $M$   $M'$  to brush the cotton therefrom without tearing or damaging the fibers of the cotton.

A stripper-plate,  $R$ , fixed to the box  $N$  or its cover, acts by its lower knife-edge to remove from the brush  $Q$  any cotton which it may carry upward from the belts, and a stripper-plate,  $S$ , arranged behind the roller  $O$  and its belts  $M$   $M'$  and fixed also to the box  $N$  strips from the belts any cotton which may not be removed from them by the brush  $Q$ , so that all the cotton will fall upon the floor of the box, which has a slotted construction or is provided with slots  $T$  of proper size to allow any dust or dirt which may have been carried in with the cotton to fall through to the ground while retaining the cotton in the box.

The floor  $T$  of the box slants downward, so that the picked cotton passes through an open-



ing or openings, U, at the back of the box N, and over tail-pieces U' into bags V, which are attached to hooks w, fixed to sloping rods W, fastened at their forward ends to the box N, or to a hood-plate, W', fixed to the box.

A door, N', is fitted to slide in suitable ways in the box N, and has a bolt, n', which passes through a slot, n<sup>2</sup>, in the back of the box, so that the door may be raised and held open by tightening the handle-nut n<sup>3</sup> on the bolt n', as in Fig. 3, to allow the cotton to pass through the box-openings U into bags V, and when the bags are filled the doors N' may be let down, as indicated in dotted lines in Fig. 1, to prevent discharge of the cotton from the box N while the filled bags are being removed from the rods W and empty bags placed thereon.

I hinge the top N<sup>2</sup> of the box N, as at n<sup>4</sup>, and fasten it down by hook or latch devices, as at n<sup>5</sup>, so that the top may be swung open at any time for access to the interior of the box for cleaning it or for adjusting or cleaning the brush and belts therein.

I fasten to the machine-frame, by bolts or screws passed through its upturned ends x x, the plate X, which ranges transversely of the machine below the stripper-disks H, to prevent entanglement of the disks with the cotton-plants or weedy growths as the machine moves over the field.

To prevent the operation of the picking mechanism as the machine is being drawn to and from the place of use, it only is necessary to throw the belts I K' from the chain-wheels or pulleys I' K, or any suitable clutch devices may be provided, when the wheels I' K may be fitted on the axle to throw the wheels in gear to operate or disconnect the picking mechanism from either the hind axle or one of its wheels, as will readily be understood.

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

1. In a cotton-harvester, the following elements in combination: a suitable supporting-frame, one or more series of rotating picker-fingers mounted on the frame, a series of disks rotating behind the fingers, and between the brushing sides of which the fingers pass as they rise from the cotton-plant, stripping-plates acting to remove the picked cotton from the disks, a series of toothed belts running between the stripper-disks, and a series of intermediate toothed belts running between the first-named belts and behind the stripper-disks, said belts acting to transfer the picked cotton to a receiver, and means within the receiver for removing the cotton from the belts, substantially as herein set forth.

2. In cotton-harvesters, the picker-fingers fixed in transverse rows on bars journaled in end plates of a rotating frame, and mechanism for giving said fingers an independent sidewise movement as they pass through the cotton-plant, substantially as herein set forth.

3. In a cotton-harvester, the combination, with the picker-fingers D, fixed on bars C, jour-

naled in end plates, B' B<sup>2</sup>, of a rotating frame, and cranks F on the bars C, of a cam, E, having the lower portion of the groove e provided with a notched base portion, e', whereby the picker-fingers are maintained in about vertical positions as they pass through the plants and at the same time have imparted to them a sidewise movement, substantially as herein set forth.

4. In a cotton-harvester, the combination, with the picker-fingers D, fixed on bars C, journaled in end plates, B' B<sup>2</sup>, of a rotating frame, and cranks F on the bars C, of a cam having a notched portion, e', on which the ends of the cranks act, and springs tending to carry the bars C toward the cam, whereby the picker-fingers are guided through the plants and at the same time have imparted to them a lateral reciprocation, substantially as herein set forth.

5. In a cotton-harvester, the combination, with the picker-fingers D, fixed on bars C, journaled in end plates, B' B<sup>2</sup>, of a rotating frame, and cranks F on the bars C, of a fixed cam, E, having a groove, e, shaped substantially as specified, and said groove also having a notched portion, e', and springs acting to force the bars C toward the cam E, whereby the fingers are maintained in about vertical positions as they pass through the plants, and at the same time have imparted to them a lateral reciprocation, substantially as herein set forth.

6. In a cotton-harvester, the combination, with the picker-fingers D, secured to bars C, journaled in end plates, B' B<sup>2</sup>, mounted on a shaft, B, of the collars c' c<sup>2</sup> c<sup>3</sup>, and springs C' on the bars C, substantially as herein set forth.

7. In a cotton-harvester, the combination, with the picker-fingers D, secured to bars C, journaled in end plates, B' B<sup>2</sup>, of a rotating frame, of the guide-plate G, substantially as herein set forth.

8. In a cotton-harvester, the picker fingers D, constructed with their portions which enter the plants made in triangular form in cross-section and fixed to supporting-bars with one angle facing their direction of movement and with their two forward diverging faces provided with grooves D' having teeth D<sup>2</sup> set therein with their points lying at or below the general plane of the faces of the fingers, substantially as herein set forth.

9. In a cotton-harvester, the picker-fingers D, constructed with their portions which enter the plants made triangular in cross-section and with the apex of one of the angles toward the front fixed to bars which are journaled in a rotating frame, and said fingers having teeth D<sup>2</sup> set in grooves, with their points lying within the general plane of the face of the finger, and means for rotating the finger-bar frame, substantially as herein set forth.

10. In a cotton-harvester, the combination, with the picker-fingers D, having teeth D<sup>2</sup>, and rotating in one direction, of the stripper-disks H, having brush material H' on their opposing faces, between which the fingers D pass, and said disks H rotating in the opposite direc-



tion, whereby the brushes will act on the fingers as they rise from the plant in the direction of the length of the teeth and toward the points of the teeth, substantially as herein set forth.

11. In a cotton-harvester, the combination, with the rotating picker-fingers D, and the stripper-disks H, rotating in reverse directions, as specified, of a cam acting to impart a quick movement to the fingers as they pass between the stripper-disks, substantially as herein set forth.

12. In a cotton-harvester, the combination, with the rotating picker-fingers D and rotating-disks H, of stripper-plates acting to remove the picked cotton from the disks, and toothed belts M, running between the plates and receiving the cotton from the stripper-plates and conveying it to a receiver, substantially as herein set forth.

13. In a cotton-harvester, the combination, with the stripper-disks H and conveyer-belts M, of stripper-plates extending above the upper sides of belts M and supported at their forward ends by the passage of the disk-shaft through them, substantially as herein set forth.

14. In a cotton-harvester, the combination, with the stripper-disks H and conveyer-belts M, of stripper-plates L, made broad or deep to extend above and below the opposite running sides of the belts, substantially as herein set forth.

15. In a cotton harvester, the combination, with the stripper-disks H and conveyer-belts M, of stripper-plates L, extending above and below the opposite running sides of the belts M, and hung at their forward ends on the shaft J of the stripper-disks, substantially as herein set forth.

16. In a cotton-harvester, the combination, with the stripper-disks H and conveyer-belts M, of stripper-plates L, extending above and below the opposite running sides of the belts M, and hung at their forward ends on the shaft J of the stripper-disks, and connected at their rear ends by bars  $l'$  to a transverse bar,  $l^3$ , substantially as herein set forth.

17. In a cotton harvester, the stripper-plates constructed in pairs L L, having forward holes,  $L'$ , and connected at their shanks by a tie-bar,  $l^4$ , substantially as herein set forth.

18. In a cotton-harvester, the combination, with the stripper-disks H, stripper-plates L, and shaft J, of the washers  $L^2$ , substantially as herein set forth.

19. In a cotton-harvester, the stripper-disks H, mounted rigidly on the shaft J, the washers  $L^2$  on the shaft next the body portions of the disks, the stripper-plates L, held on the shaft outside the washers, the bushings  $m^2$  on the shaft between the plates L, and the belts M, running over the bushings  $m^2$ , all combined and operating substantially as herein set forth.

20. In a cotton-harvester, the combination, with the stripper-disks H, stripper-plates L, and belts M, running between the disks H and running over a rear roller, O, of intermediate belts,  $M'$ , running over roller O and over a roller,  $O'$ , located behind the disks H, substantially as herein set forth.

21. In cotton-harvesters, the combination, with the rotating picker-fingers D, stripper-disks H, stripper-plates L, and conveyer-belts M M', of the brush Q, substantially as herein set forth.

22. In cotton-harvesters, the combination, with the brush Q and toothed belts M M', of the stripper-plates R S, substantially as herein set forth.

23. In cotton-harvesters, the cotton-receiving box N, constructed with a sloping floor having slots or openings T, substantially as herein set forth.

24. In cotton-harvesters, the cotton-receiving box constructed with a sloping floor having slots or openings T, with rear openings, U, adapted to be closed by a vertically-sliding door,  $N'$ , and with rods W, having hooks  $w$ , on which to hang the bags to receive the cotton, substantially as herein set forth.

CHARLES L. WALTER.

Witnesses:

J. J. HALEY,

J. J. HALEY, Jr.