

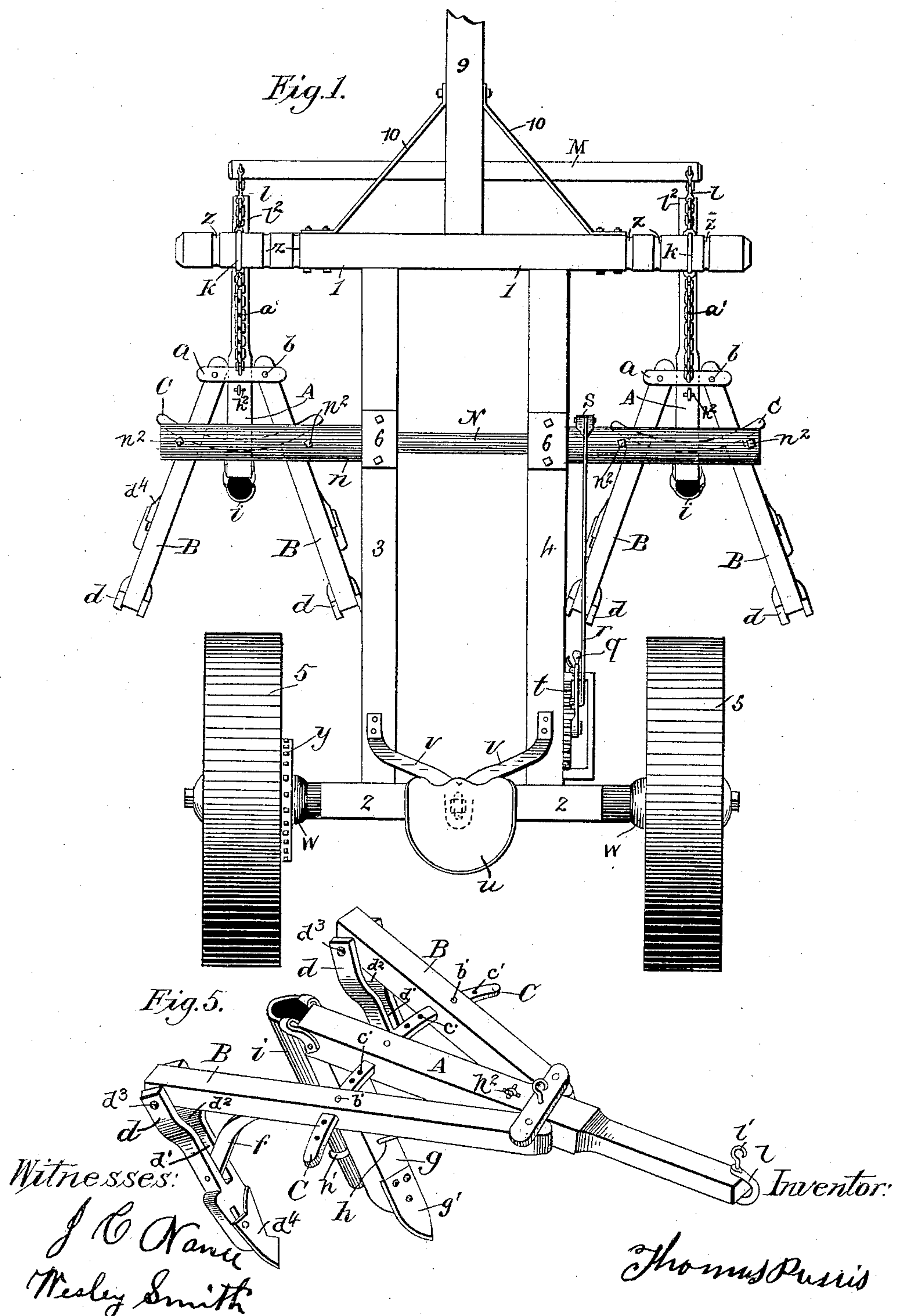
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3 Sheets—Sheet 1.

T. PARRIS.
COTTON BEDDER AND PLANTER.

No. 452,908.

Patented May 26, 1891.



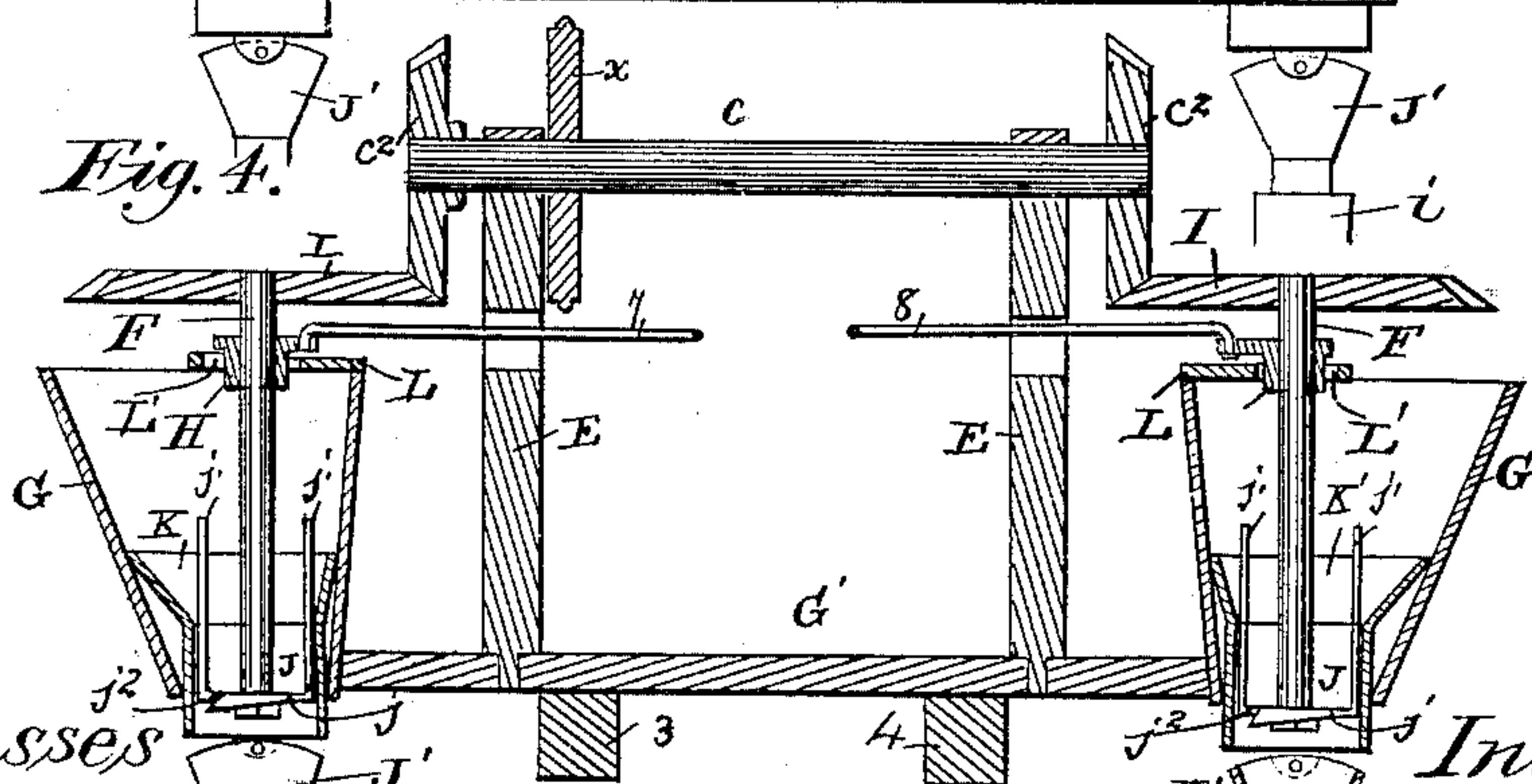
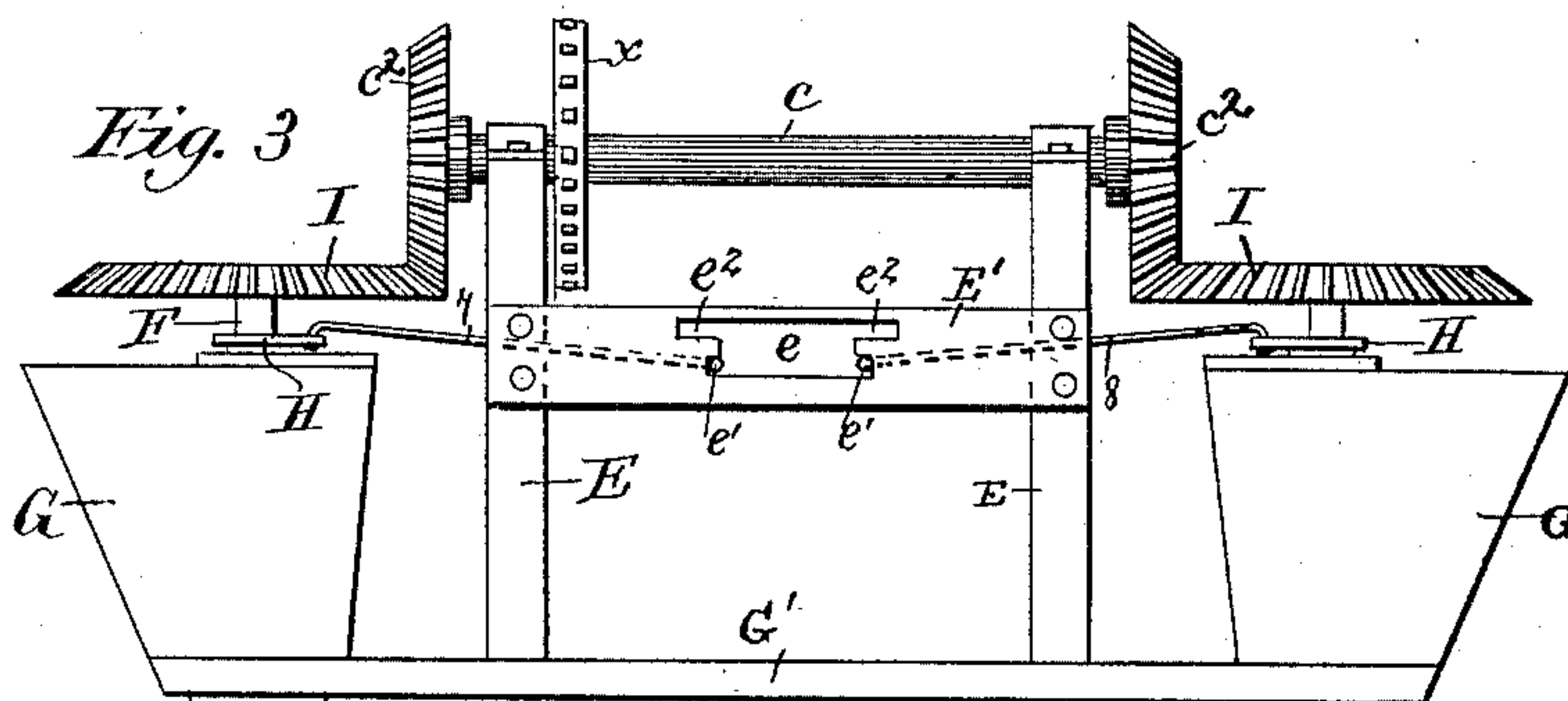
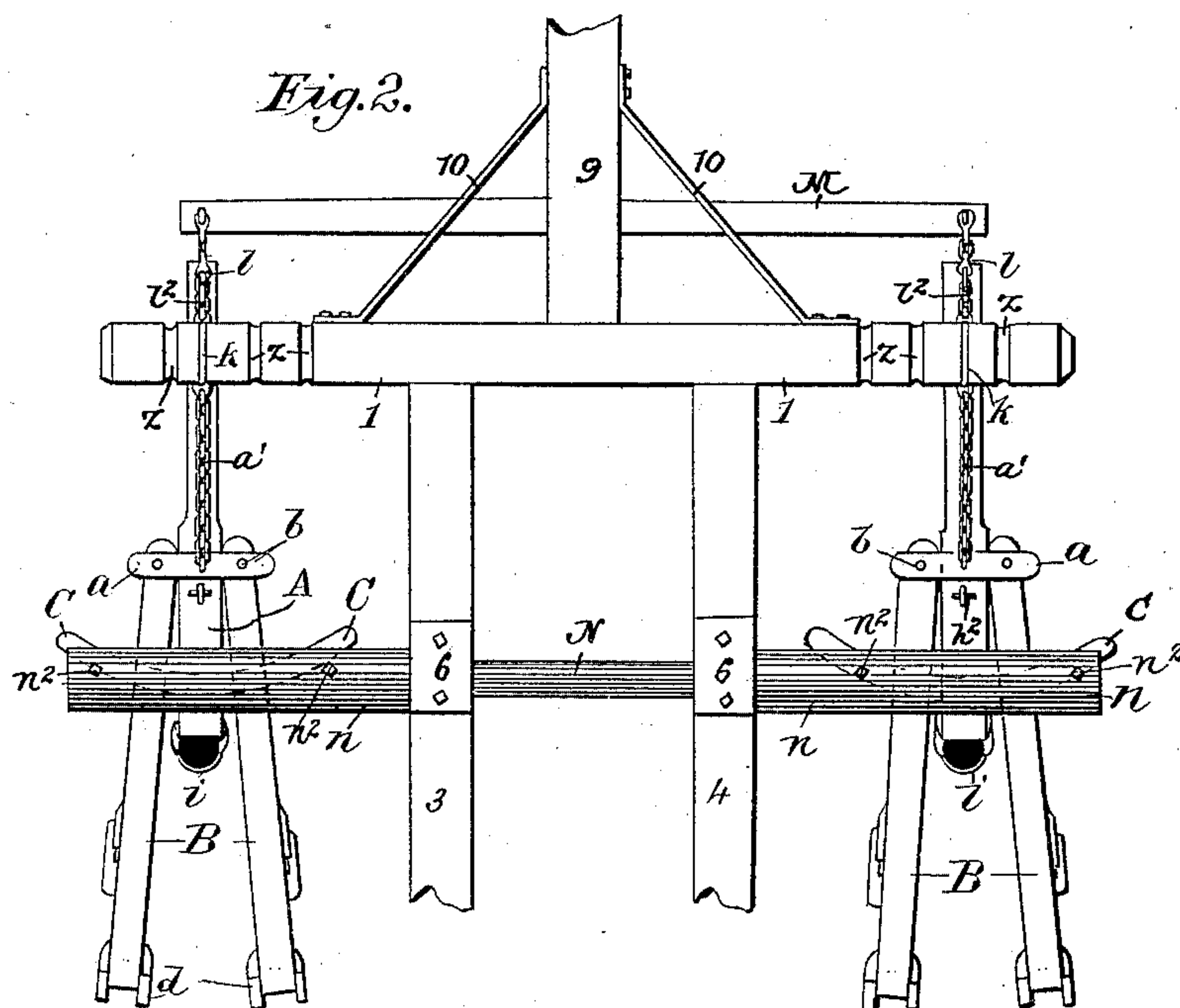
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Witnesses

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FIG. 6.

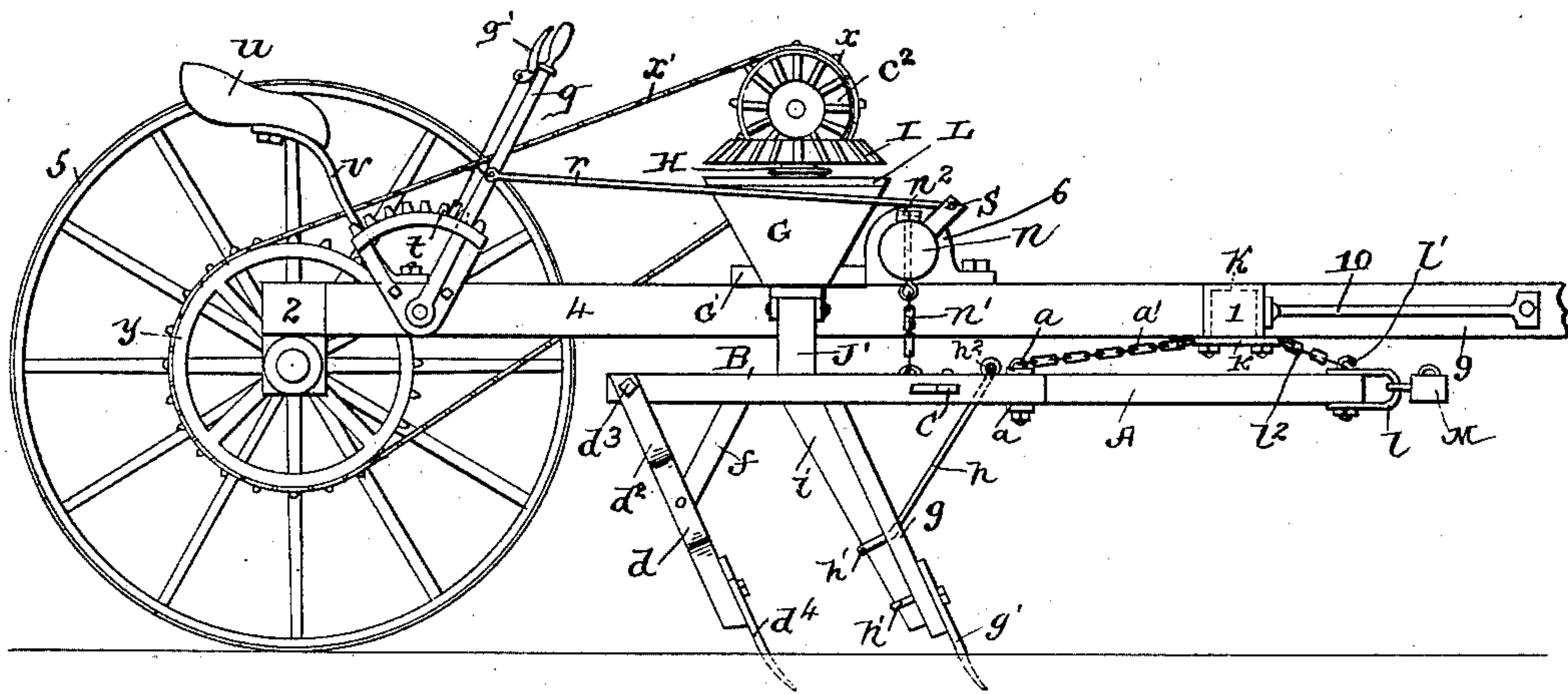
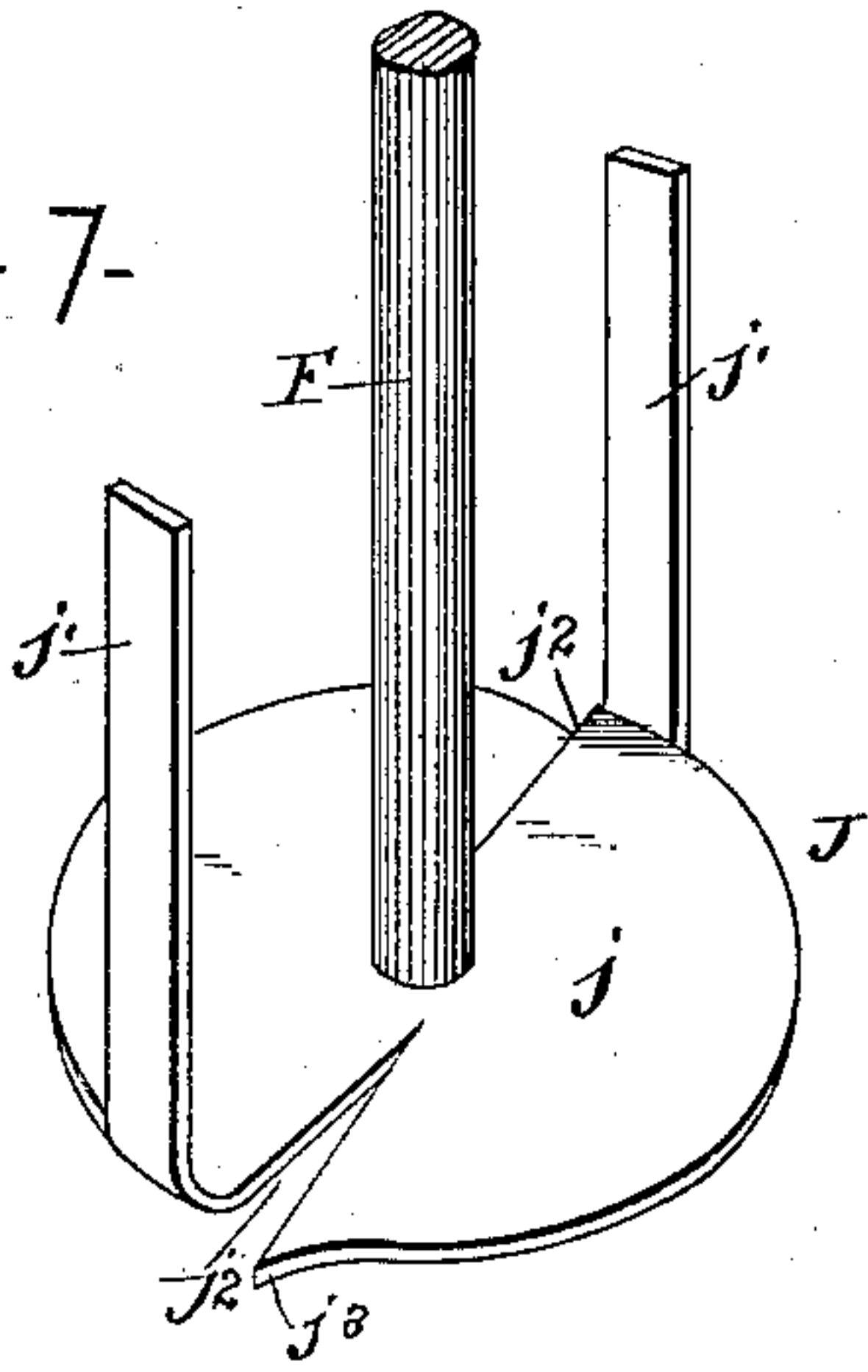


FIG-7-



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UNITED STATES PATENT OFFICE.

THOMAS PARRIS, OF RISING STAR, TEXAS.

COTTON BEDDER AND PLANTER.

SPECIFICATION forming part of Letters Patent No. 452,908, dated May 26, 1891.

Application filed April 20, 1889. Serial No. 308,040. (No model.)

To all whom it may concern:

Be it known that I, THOMAS PARRIS, a citizen of the United States of America, residing at Rising Star, in the county of Eastland and State of Texas, have invented certain new and useful Improvements in Cotton Bedders and Planters, of which the following is a description.

This invention relates to machines for bedding and planting cotton, the object being to provide a machine of this class which shall be simple in construction, easy of operation, and very effective for the purpose set forth. This object and such others as fairly fall within the scope of the invention I attain by means of the mechanism illustrated in the accompanying drawings, the peculiar construction, combination, and arrangement of which will be fully described hereinafter, and the specific points of novelty particularly pointed out in the claims.

In the drawings, Figure 1 is a plan view of my invention, the seed-planting mechanism being removed, showing the plows in position for bedding. Fig. 2 is a similar view of the forward portion of the same, showing the plows in position for planting. Fig. 3 is a rear elevation of the seed-hoppers and mechanism for operating the same. Fig. 4 is a central sectional view of the same. Fig. 5 is a perspective view of the plow-frame. Fig. 6 is a side elevation of my invention with one of the carrying-wheels removed. Fig. 7 is a detail perspective view of the seed-dropper.

Similar letters and figures of reference designate corresponding parts in the several views.

The frame of my invention consists of the front beam 1, the axle 2, and the longitudinal beams 3 and 4, connecting the front beam and the axle together. The carrying-wheels 5 5 are formed with a wide tread and mounted upon the axle 2 in such position as to roll over the planted row behind the plows, as will be hereinafter described. The plow-beams A A are secured to the ends of the front beam 1 by means of chains $a' a'$, which are secured at their rear ends to bolts passing through transverse strips a upon the plow-beam A and at their forward ends to clips k , secured in grooves $z z$ upon the ends of the front bar 1. A clevis l is secured upon the front end of each of the plow-beams A by

means of a bolt having a hook l' at its upper end. Chains l^2 are hooked at one end upon the hooks l' and secured at their opposite ends to the clips k .

By reference to Fig. 1 it will be seen that the plow-beams A A are placed below the ends of the front beam 1 and have a limited transverse and vertical movement, but are held from backward movement by the chains $a' a'$ and from forward movement by the chains $l^2 l^2$. Beams B B are pivotally secured to the beams A A by bolts $b b$ passing through the strips $a a$, which are placed above and below the beams A and B, and the front ends of the beams B B thus securing one of the beams B to each side of each of the beams A. A segment C passes through and is secured at its center to each of the beams A, near the rear ends thereof, the ends of the said segment C extending laterally and passing through the beams B B. Bolts $b' b'$ pass through the beams B and one of a series of holes c' in the segment C, thus making it convenient to adjust the beams B laterally, as will be readily understood.

d designates the standards to which the rear plows $d^4 d^4$ are bolted. The said standards are bifurcated to form slots $d' d'$, the upper ends of which are widened, as at $d^2 d^2$, to receive the rear ends of the plow-beams B B, to which they are secured by the bolts $d^3 d^3$. Braces or grass-rods f are secured at one end to the beams B, the opposite ends of the said rods f being adjustably secured in the slots $d' d'$.

To the rear ends of the beams A are secured the standards g carrying the forward plows g' . Braces or grass-rods $h h$ pass through the said standards g , and are formed into eyes h' at their rear ends behind the standards g to hold the seed-spout i , which will be hereinafter described. The forward ends of the brace-rods h pass through the beams A and are secured in place by a pin h^2 , which passes through eyes in the forward ends of the rods h and rests upon the upper side of the beam A.

Journaled in suitable bearings 6 6 upon the beams 3 4 of the frame is a transverse shaft N, having the drums $n n$ upon the ends thereof. Chains $n' n'$ are secured at one end to the drums $n n$ by means of the bolts $n^2 n^2$ and at their opposite ends to the plow-beams B B.

A lug S is secured to one of the drums n near the adjacent bearing 6, and a link-rod r connects the lug S with a lever q , fulcrumed to a toothed segment t , secured to the longitudinal beam 4 of the frame of the machine. The usual locking device q' is provided to lock the lever q in any desired position upon the segment t . From the foregoing it will be seen that a movement of the lever q will act through the link-rod r and lug S to turn the shaft N and wind or unwind the chains $n' n'$ upon the drums $n n$ to raise or lower the plow-beams.

The seed-hoppers G are supported upon a transverse piece G' , arranged upon the longitudinal beams 3 4 of the frame in rear of the shaft N. The hoppers G are made of the usual form, being square and large at the top and reduced to a small round opening at the lower end, in which is placed a lining K. A seed-dropper J (more clearly shown in Fig. 7) is arranged within the said opening at the bottom of the seed-hopper G. The seed-dropper J is formed from a metallic disk j , having strips $j' j'$ at diametrically-opposite points, which are bent upwardly at right angles to the surface of the said disk j to form agitators. Slits $j^2 j^2$ are cut into the said disk J at the points where the strips $j' j'$ unite therewith, and one edge of the said slits j^2 is bent downward slightly, as at j^3 , to form a passage for the seed, as will be readily understood by reference to Fig. 7. The disk j is secured to the lower end of a vertical shaft F, which extends upward through the seed-hopper G and has a bearing in a block H, arranged to slide in a slot L' , formed in a covering-plate L upon the top of the hopper G. A bevel gear-wheel I is mounted upon the upper end of the shaft F, by means of which the said shaft F and the seed-dropper may be rotated. The foregoing description of one seed-hopper will apply equally well to both, as the construction of the two is identical.

Standards E E project upwardly from the piece G' near the seed-hoppers and have journaled in their upper ends a shaft c , carrying bevel-pinions $c^2 c^2$ at its ends, which mesh with the bevel gear-wheels I upon the shafts F. A sprocket-wheel x is mounted upon the shaft c and connected by a sprocket-chain x' with a sprocket-wheel y upon one of the carrying-wheels 5, from which the shaft c will receive motion to operate the shafts F in the seed-hoppers, as will be readily understood.

Spouts $J' J'$ are pivoted to the lower sides of the seed-hoppers G in proper position to receive the seed from the dropper J and conduct the same to the spout i upon the plow-standards g' .

When it is desired to use my invention for bedding the ground previous to planting, the gear-wheels I may be thrown out of gear with the pinions c^2 to prevent the seed-droppers from operating in the manner described in the following: A plate E' is secured at its

ends to the standards E E, said plate having near the middle thereof a slot e , provided with notches $e' e'$ at the lower side thereof and with notches $e^2 e^2$, deeper than the notches $e' e'$ at its upper side. Rods 7 8 are pivotally connected at their outer ends to the bearing-blocks H and have their inner ends hooked to take into the notches $e' e^2$ of the slot e .

When it is desired to use my invention for planting, the rods 7 8 are hooked into the lower notches $e' e'$, and will thus hold the gear-wheels I I in gear with the pinions $c^2 c^2$, as shown in Fig. 3, and when it is desired to throw the gear-wheels I I out of gear the rods 7 8 are hooked in the notches $e^2 e^2$, which, being deeper than the notches $e' e'$, will allow the rods 7 8 to move laterally and slide the blocks H in the slots L' to move the shaft F and gear-wheel I away from the pinion c' , as will be readily understood.

The driver's seat u is supported above the axle 2 upon a support v by means of a bolt which passes through a slot in the said support, thus adjustably securing the seat thereto. The support v has two branches, which are secured at their lower ends to the beams 3 4 of the frame, as shown in Fig. 1.

A draft-pole or tongue 9 is secured to the front beam 1 of the frame and suitably braced by braces 10 10. When two horses are used, the draft-pole 9 is placed in the center of the beam 1; but when three horses are used the said tongue is placed at the proper distance to one side of the center of the said beam. When two horses are used, the two single-trees are attached to the clevises $l l$ on the front ends of the beams A, and when three horses are used a beam M is attached to the said clevises $l l$, thus coupling the two plow-beams A A together, and a three-horse equalizer is attached to the said beam M.

When the machine is used for bedding, the plow-beams B B are opened, as shown in Fig. 1, and the seed-planting mechanism may be removed or may be simply thrown out of gear, as hereinbefore explained.

When my invention is used for planting, the seeding mechanism is of course in place, and the plow-beams B B are placed near together, as shown in Fig. 2. The plow g' upon the beam A will open a drill to receive the seed from the spout i , which extends downwardly in rear of the said plow g' and is secured thereto by means of the eye h' , as hereinbefore described. The plows $d^4 d^4$ upon the beams B B, following on each side of the seed-spout i , will throw the earth over upon the seed to cover the same, the operation being completed by the carrying-wheel 5, which follows in the line of the seed-drill and rolls the earth firmly and smoothly over the seed. When it is desired to vary the distance between the rows, the clips $k k$ may be moved into another of the grooves $z z$ in the front beam 1, which will place the plow-beams A A nearer together or farther apart, according to the direction in which the clips k are moved,

the pivoted spouts $J' J'$ upon the lower ends of the seed-hoppers swinging far enough to accommodate themselves to the movement of the seed-spouts i . In order to move the drums or wheels 5 5 laterally to accommodate them to the position of the seed-drills, I provide washers $W W$, which are placed on the spindles of the axle 2, and may be placed inside of the wheels 5 to increase the distance between them or on the outside of the same to bring them nearer together, as will be readily understood.

It is usual to plant the rows of cotton about three and a half or four feet apart; but should it be required to plant the same nearer together—say about two feet apart—the plow-beams $A A$ may be set at four feet apart and the ground gone over twice, the second time planting the rows midway between the rows already planted.

The operation of my invention will be clearly understood from the foregoing, and hence further description thereof is unnecessary.

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

1. The combination of the frame and the front beam 1 with the plow-beams $A A$, the chains $a' b'$ for adjustably securing the beams to the front beam of the frame, and beams $B B$, adjustably secured to the beams $A A$, the said beams $A A$ and $B B$ having suitable plow or cultivator teeth, substantially as described.

2. The combination, with a frame and the front beam 1, of plow-beams $A A$, pivotally and adjustably secured to the ends of the front beam, and beams $B B$, pivotally and adjustably secured to the beams $A A$, the beams $B B$ having suitable plow or cultivator blades,

and the beams $A A$ having a drill and a seed-spout attached to the rear end thereof, substantially as described.

3. The combination, with a seed-hopper, of a dropper formed of a disk j , having the agitators j' , and the slits j^2 , with their edges bent to form outlets for seed, the said droppers being adapted to be rotated to allow the seed to pass spirally through the openings j^2 , substantially as described.

4. The combination, with a seed-hopper, of a dropper formed of a disk j , having the slits j^2 , with their edges bent to form outlets for seed, the said droppers being adapted to be rotated to allow the seed to pass spirally through the openings j^2 , substantially as described.

5. In a cotton bedder and planter, the combination, with a frame mounted upon suitable carrying-wheels and the front beam 1, having clip k , of a set of plow-beams and plows attached to each end of the front beam by means of chains or set of chains $a' a'$, extending from one of the said plow-beams to the clip, and a chain b' from the said clip to the front end of the same plow-beams, substantially as illustrated and described.

6. In a seed-planter, a dropper consisting of a disk j , having slits j^2 , the edges of which are bent to form spiral delivery-openings for the seed, and the vertical shaft on which the dropper is mounted, in combination with suitable means for operating the same, substantially as described, and for the purpose set forth.

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Witnesses:

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