923,343.

J. M. DROKE.

COTTON HARVESTER.

APPLICATION FILED JULY 5, 1907.

Patented June 1, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

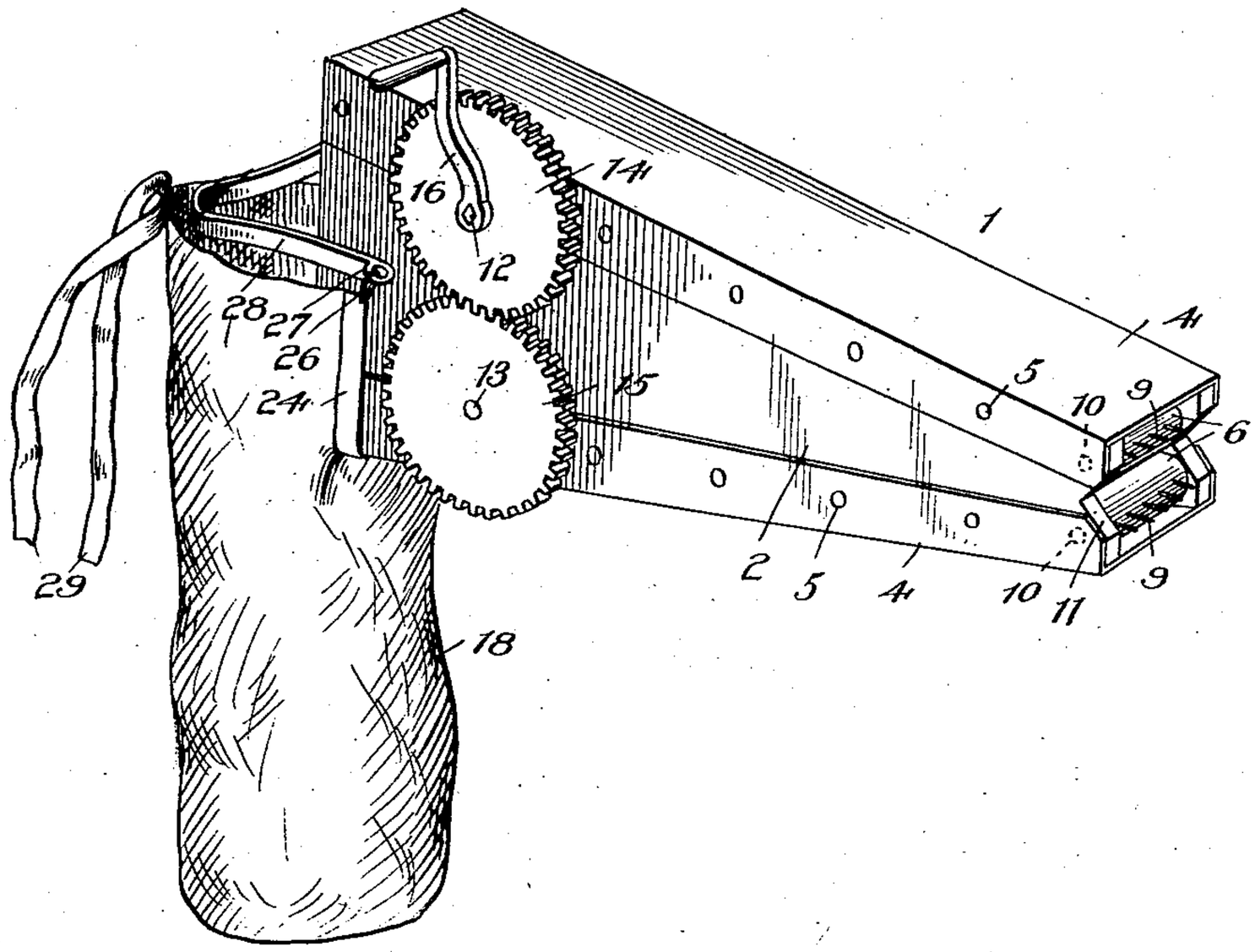
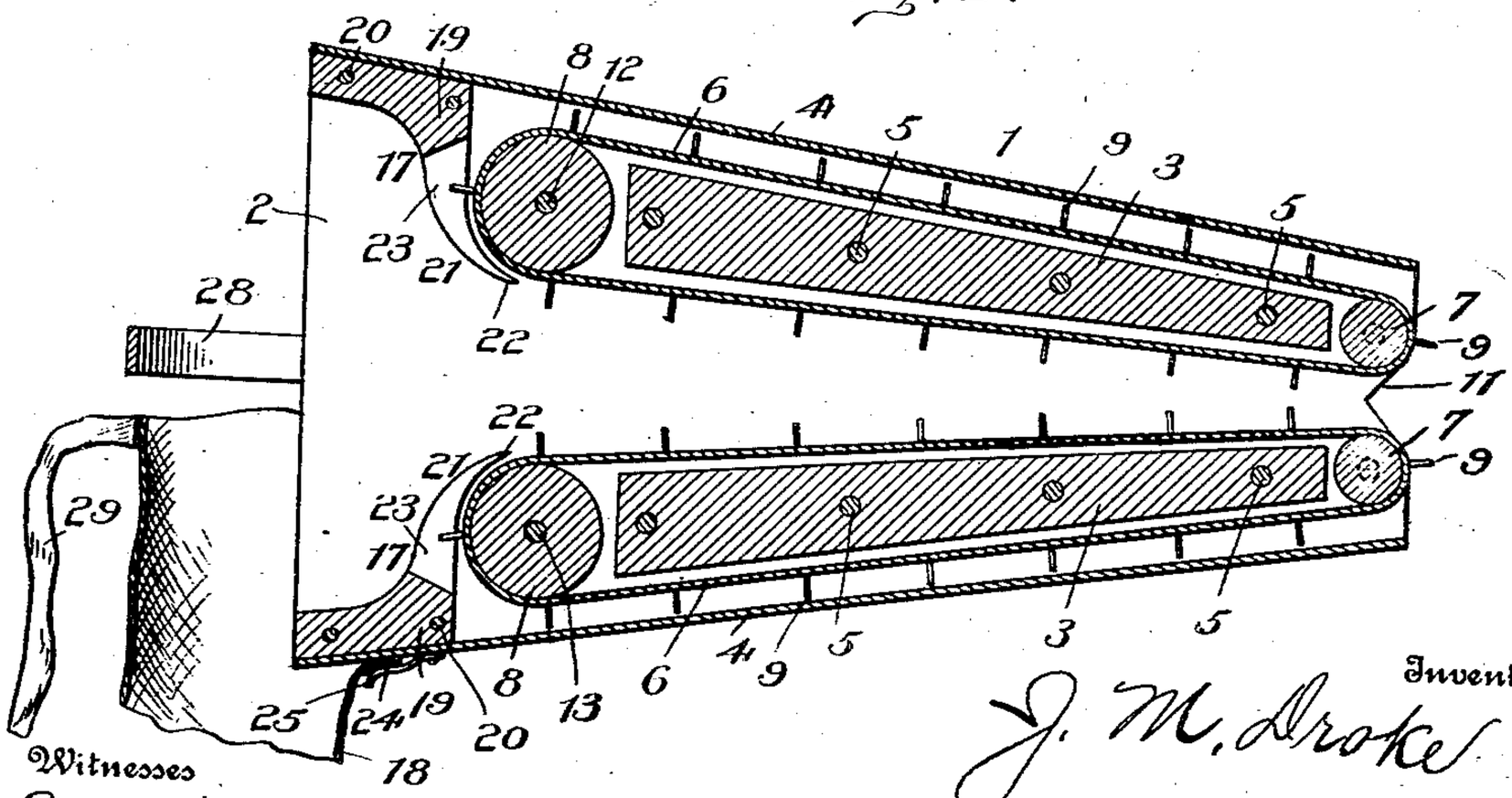


Fig. 2.



Witnesses

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Fig. 3.

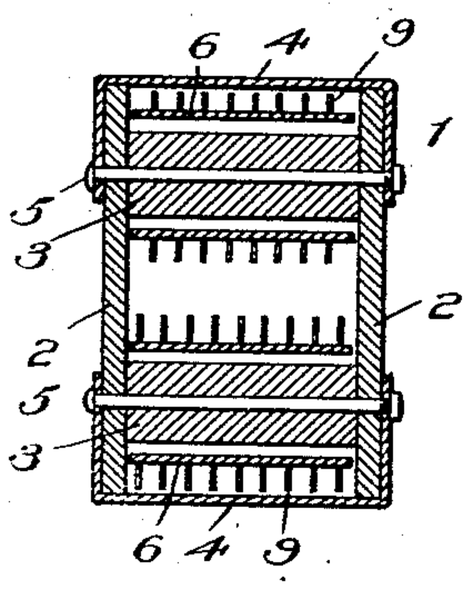


Fig. 4.

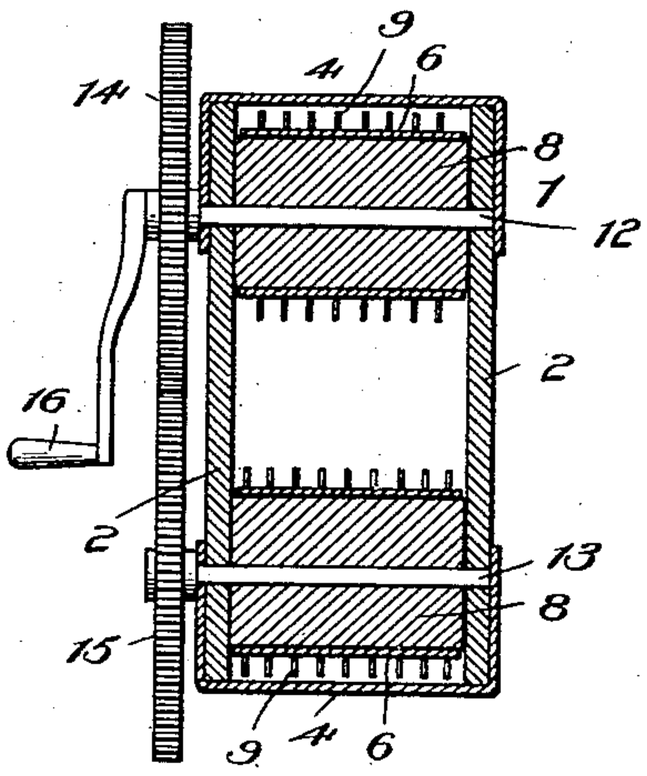


Fig. 5.

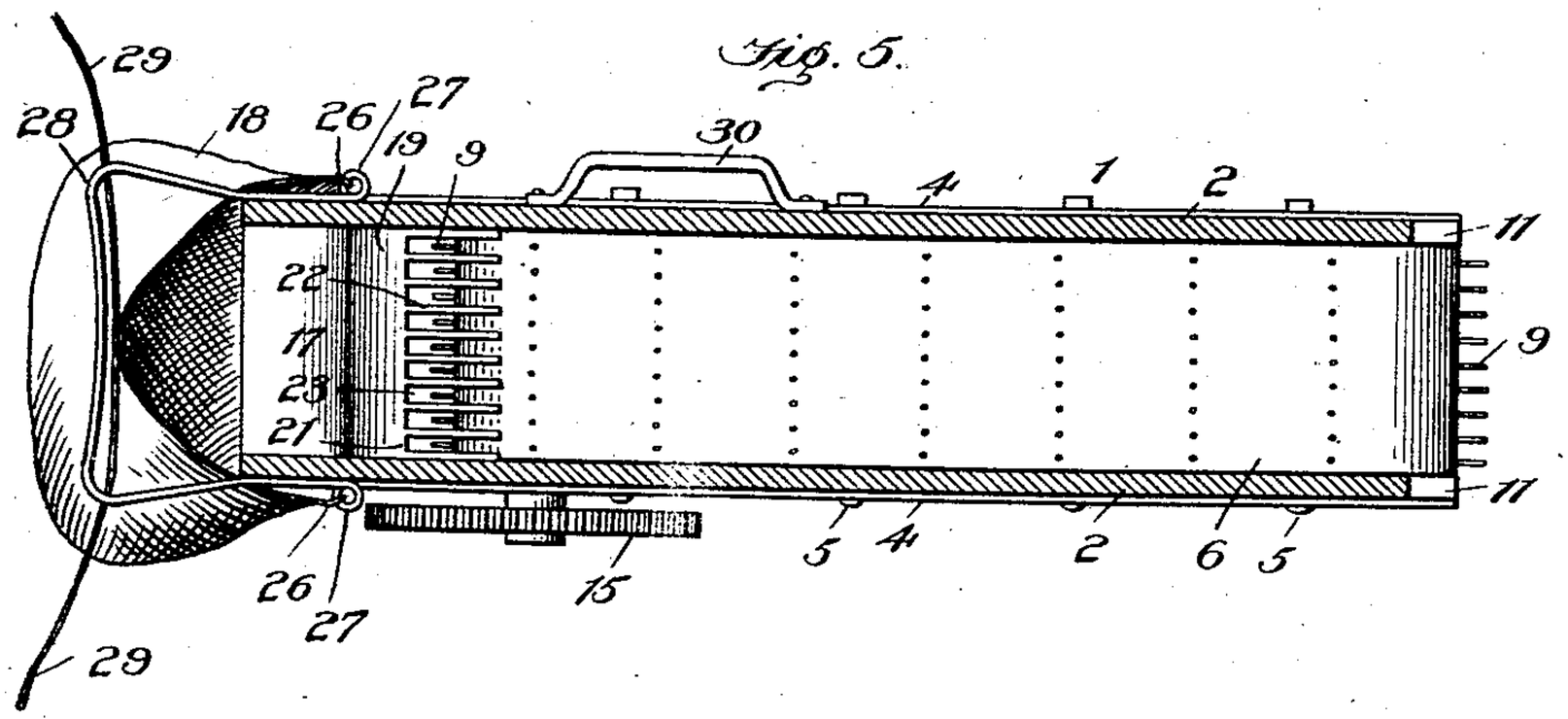
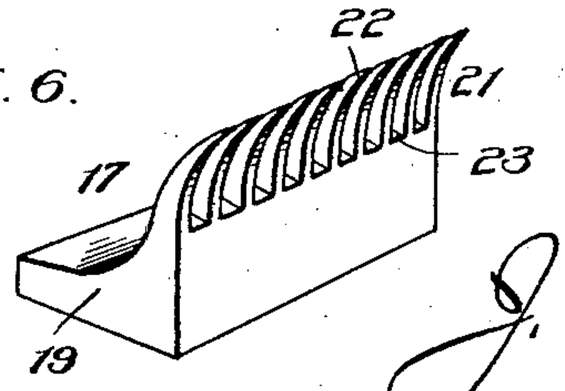


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOSEPH M. DROKE, OF OKEENE, OKLAHOMA.

COTTON-HARVESTER.

No. 923,343. Specification of Letters Patent. Patented June 1, 1909.

Application filed July 5, 1907. Serial No. 382,214.

To all whom it may concern:

Be it known that I, JOSEPH M. DROKE, a citizen of the United States, residing at Okeene, State of Oklahoma, have invented certain new and useful Improvements in Cotton-Harvesters, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in cotton harvesters and more particularly to a manually operated cotton picking device or implement.

The object of the invention is to improve and simplify the construction and operation of devices of this character and to provide one which is convenient to handle, easy to operate and highly efficient.

With the above and other objects in view, the invention consists in the novel features of construction and the combination of parts hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved cotton harvester; Fig. 2 is a vertical longitudinal section; Figs. 3 and 4 are vertical transverse sections; Fig. 5 is a horizontal section and Fig. 6 is a detailed view of one of the finger blocks.

In the drawings 1 denotes the body or frame of my improved cotton harvester, which comprises two substantially triangular shaped side plates 2, two similar shaped spacing blocks 3 arranged between said side plates and two channeled guard members 4. These parts 2, 3, 4, are detachably united by transverse bolts or similar fastenings 5 as clearly shown in Fig. 3.

Arranged within the frame or casing 1 are two endless belts or bands 6 which travel around the spacing blocks 3 and pass over small rollers 7 at the small front end of the frame and large rollers 8 at the rear or opposite end of the same. These belts 6 are provided with transverse rows of outwardly projecting spurs 9 which are adapted to pick the cotton and convey it rearwardly through the central portion of the frame and between the inner or opposing stretches or runs of the belts as presently explained. The forward rollers 7 are arranged in parallel relation and have at their ends trunnions 10 which rotate in bearings formed in the small ends of the side plates 2, which ends of the latter are formed with V shaped notches 11 to enable the device to be more readily directed against the cotton plants. The large rear rollers or wheels 8 are fixed upon transverse shafts 12, 13 also journaled in bearing openings in the side plates 2. Fixed upon the projecting ends of said shafts on one side of the frame or casing 1 are meshing cog wheels or gears 14, 15 and upon said end of the shaft 12 is a crank handle 16 by means of which said gears may be rotated to impart motion to the picking belts 6.

Co-acting with the belts 6 and arranged between the side plates 2 in rear of the rollers 8 are finger blocks 17 which are adapted to remove the cotton from the pins or spurs 9 on said belts and cause the same to drop out of the open rear end of the frame 1 and into a sack or bag 18. Each of the finger blocks 17 has a solid body portion 19 secured between the plates 2 by bolts or similar fastenings 20 and a forwardly curved and tapered portion 21. This portion 21 is formed into a plurality of fingers 22 by providing it with longitudinal slots 23 adapted to receive the pins or spurs 9 on one of the belts 6. Owing to the peculiar shape and arrangement of the fingers 22 it will be seen they will effectively remove the cotton from the pins or spurs 9 and will cause it to drop into the sack 18. The latter may be of any suitable form and construction and attached to the rear end of the frame or casing 1 in any suitable manner, but I preferably employ a fabric sack or bag with a reinforced neck band 24. This band is passed around the bottom of the rear end of the frame 1 and engaged with suitable keepers 25 and its two ends are provided with clasps or catches 26 to detachably engage eyes 27 formed at the ends of a supporting brace 28 attached to the upper portion of the rear end of the frame and adapted to bear against the body of the operator. The bag or sack 18 is also preferably attached to the body of the operator by a tie 29 attached to the open end of the sack and adapted to be passed around the operator's waist and tied or otherwise fastened as will be readily understood.

Upon the side of the frame 1 opposite to that upon which the crank handle 16 is located I provide a vertically extending hand loop or bail 30 which permits the operator to readily guide the device and to conveniently support the same with the spacing bar or brace 28 against his body.

In using the device the operator passes the strings or ties 29 around his waist and se-

cures them, and holds the device in front of him with the brace 28 bearing against his body and with his left hand holding the handle 30 and his right hand upon the crank 16. As he turns the latter, motion is imparted to the two belts 6 to cause their inner opposing stretches to move rearwardly in the same direction and to convey the cotton engaged by their spurs or pins 9 rearwardly through the frame to the fingers 22 which deflect it into the sack 18. Since the device is comparatively light in construction it may be conveniently handled and directed toward the cotton so that the belts will pick the same.

Having thus described my invention what I claim is:

1. A device of the character described, comprising a frame, front and rear pairs of rollers arranged therein, endless belts passed over said rollers and provided with spurs, a plurality of fingers arranged in the rear end of the frame and adapted to receive the spurs on the belts between them to remove the cotton from said spurs, a bag or sack attached to the rear end of the frame, a handle upon one side of the frame, meshing cog gears arranged upon the shafts of the rear pair of rollers and a crank attached to one of said shafts, substantially as described.

2. A device of the character described comprising a frame, cotton picking belts which travel in said frame driving rollers for said belts, meshing gears on the shafts of said rollers, a crank handle upon one of said shafts, a handle upon one side of said frame, a bag or sack attached to the rear end of said frame and a body engaging said brace attached to the rear end of said frame, substantially as described.

3. A device of the character described comprising a frame consisting of side plates, spacing blocks between the latter, channeled guard members engaged with said plates and fastenings passed through said plates, said blocks, and said members, cotton picking belts arranged within said frame and means for driving said belts, substantially as described.

4. A device of the character described comprising a frame consisting of side plates, spacing blocks between the latter, channeled guard or casing members engaged with and secured upon the longitudinal edges of said plates, and cotton picking means arranged in said frame.

5. A device of the character described comprising a frame, cotton picking means within the same, a substantially U-shaped body engaging brace arranged upon the rear end of the frame and having arms secured to the opposite sides of the same and formed with eyes, the portion of the brace uniting said arms being adapted to engage the body of the operator and to space the rear end of the frame from his body, and a bag or sack arranged beneath and engaged with the rear end of the body and provided with catches to engage the eyes on said brace, substantially as described.

6. A device of the character described comprising a frame, cotton picking means within the same, and a metal strap bent into substantially U-form and having arms secured to the opposite sides of the frame, the portion of said strap uniting said arms being adapted to engage the body of the operator to space the rear end of the frame from his body.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JOSEPH M. DROKE.

Witnesses:

G. B. BOARDMAN,

C. C WISDOM.