No. 834,059. PATENTED OCT. 23, 1906.

H. T. JOHNSON.

COTTON CHOPPER.

APPLICATION FILED MAR. 13, 1906.

Fig. 1.

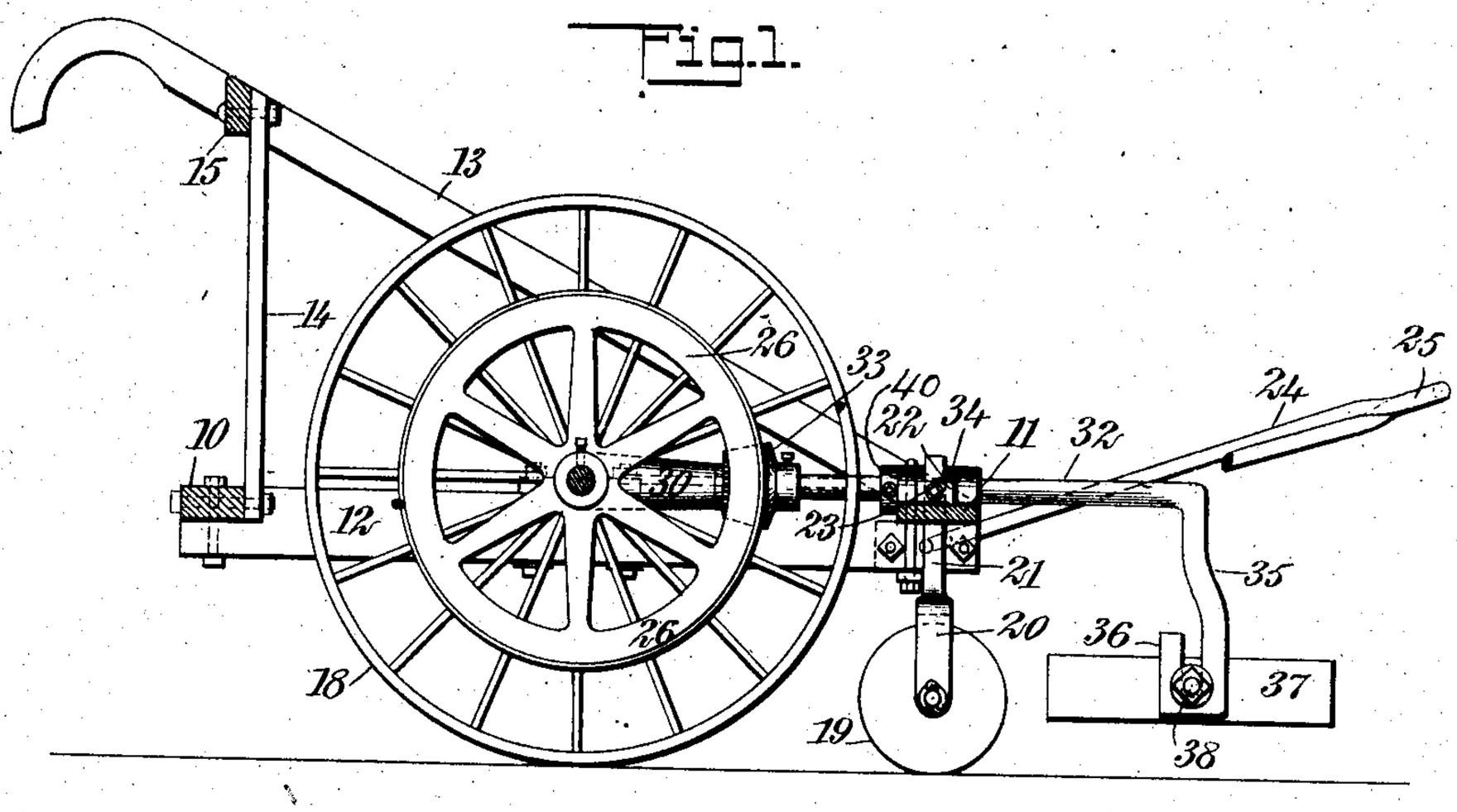
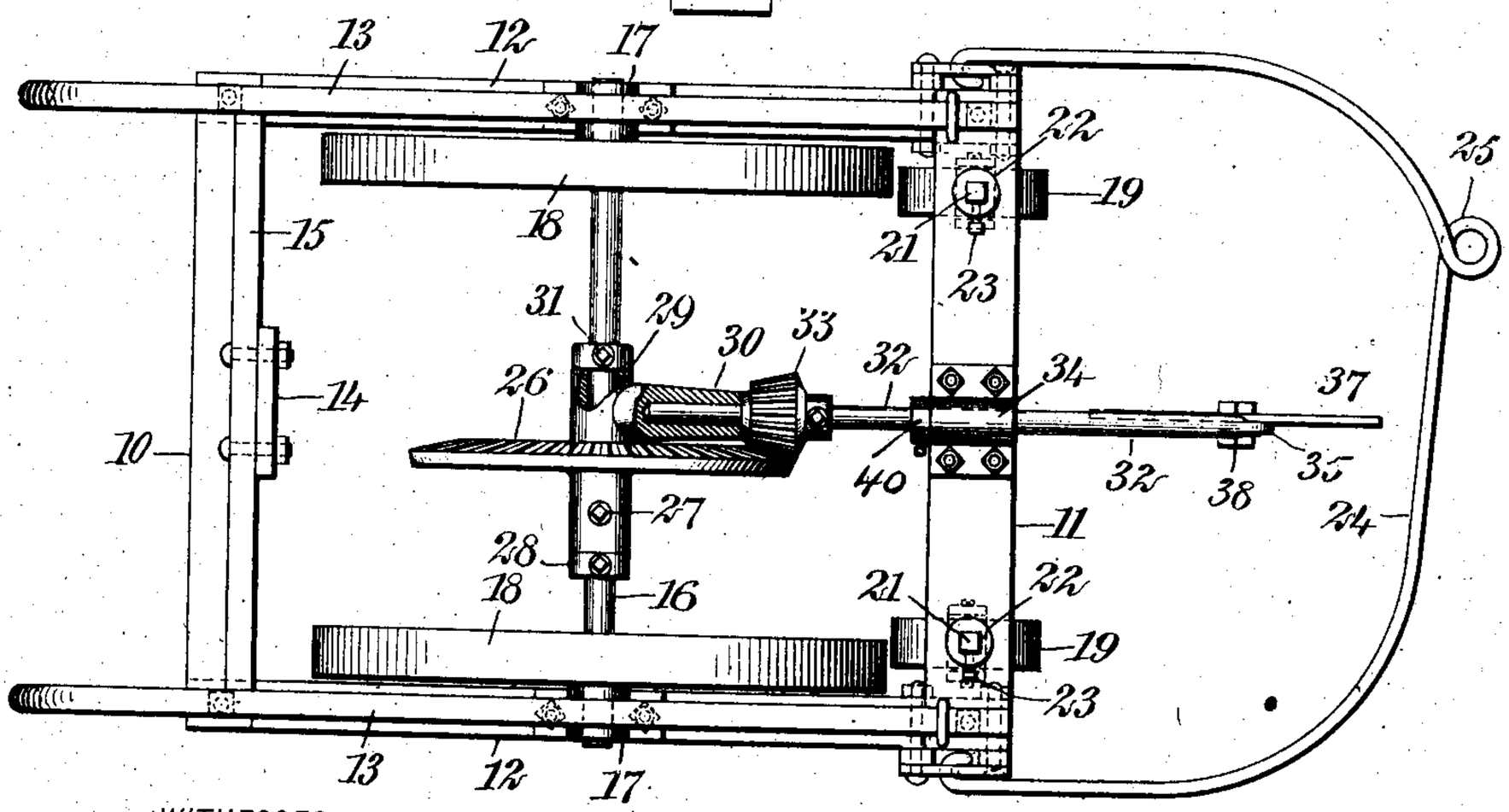


Fig. 2.



WITNESSES:

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HENRY T. JOHNSON, OF TIMMONSVILLE, SOUTH CAROLINA.

COTTON-CHOPPER.

No. 834,059. Specification of Letters Patent. Patented Oct. 23, 1906.

Application filed March 13, 1906. Serial No. 305,828.

To all whom it may concern:

Be it known that I, HENRY T. JOHNSON, a citizen of the United States, and a resident of Timmonsville, in the county of Florence and State of South Carolina, have invented a new and Improved Cotton-Chopper, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a machine for chopping out young cotton-plants wherein a hoe will be automatically given a rotary chopping action as the machine is drawn over the ground and to provide a machine of the character mentioned which will be very simple, durable, and economic in construction and which will have few working parts and those not liable to get out of order.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claim.

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

Figure 1 is a central longitudinal vertical section through the machine, and Fig. 2 is a plan view thereof.

The frame consists of a rear member 10, a forward member 11, and parallel side members 12. A handle 13 is located at each side of the frame, the forward ends of the handles being attached to the forward portion of the frame in any suitable manner, and the rear portions of the handles are supported by attaching thereto a cross-bar 15 and securing to the cross-bar a standard 14, which in its turn is fastened to the rear member 10 of the frame. An axle 16, which likewise serves as a drive-shaft, is journaled in bearings 17, secured on the side members 12 of the frame centrally thereof, and the supporting-wheels 18 are secured to the axle 16, being located within the frame. Small guide-wheels 19 are also employed, which tend to support the forward end of the frame, and these guide-wheels 19 are journaled in forks 20, having polygonal shanks 21 integral therewith or attached thereto, and said shanks 21 pass up through the forward member 11 of the frame and through polygonal openings in collars 22, located at the upper portion of the said forward member 11, which collars are provided with set-screws 23, so that the wheels 19 can be adjusted up and down in order to control the depth to which the hoe, to be hereinafter described, enters the ground.

A draft-iron 24 in the form of a bail is pivotally attached at its ends to the forward side portions of the frame, and this draft-iron 24 is provided with an eye between its center and one side, with which the swingletree is connected.

The hub of a bevel-gear 26 is secured to the axle 16 by means of a suitable set-screw 27 or its equivalent, and the gear is further prevented from moving on the axle by placing a collar 28 at the end of the hub, which collar is also provided with a set-screw or the like.

A sleeve 29, provided with an attached forwardly-extending horizontal bearing-arm 30, is held upon the axle 16, the said sleeve bearing against the central portion of the toothed face of the gear 26, and the sleeve is held in position on the axle by means of a set-screw 31, which enters the groove in the axle. The inner end of a shaft 32 is mounted to turn in the bearing-arm 30, the said shaft being carried beyond the front of the frame and being journaled in a bearing 34, secured to the front member 11 of the frame at its center. A bevel-pinion 33 is secured on the shaft 32 close to the bearing 30 in any suitable or approved manner, and the pinion 33 meshes with the bevel-gear 26. The shaft 32 is held from slipping through the bearings 34 by the collar 40.

A downwardly-extending arm 35 is formed at the outer end of the shaft 32, and at the lower end of the said arm 35 a hook member 36 is provided, and the hoe-blade 37, both longitudinal edges of which are cutting edges and which blade is therefore reversible, is secured to the arm 35 by means of a suitable bolt passed through the center of the blade and through the hook extremity 36 of the arm, the bolt being provided with a suitable nut and washer.

As the machine is drawn over the ground the shaft 32 is rotated, and consequently a rotary chopping motion is given to the hoe 37, which as it strikes the ground will dig up any plants in its path.

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

A cotton-chopper comprising a frame, a shaft journaled transversely of the frame at the center thereof, wheels near the end of the shaft, a bevel-gear secured to the shaft near

the center thereof, a collar journaled on the shaft and provided with a bearing-arm, a shaft journaled in the bearing-arm and on the frame and longitudinally with respect to the frame, the forward end of the shaft projecting beyond the frame and being provided with an integral angular portion having a hook at the end thereof, a hoe having an opening at the center thereof, a bolt passing through the opening of the hoe and through the hook for securing the hoe thereto, a bevel-gear on the rear end of the shaft meshing with the bevel-gear on the transverse shaft, and caster-wheels connected with the front corners of the frame.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY T. JOHNSON.

Witnesses:

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J. K. WILLIAMS.