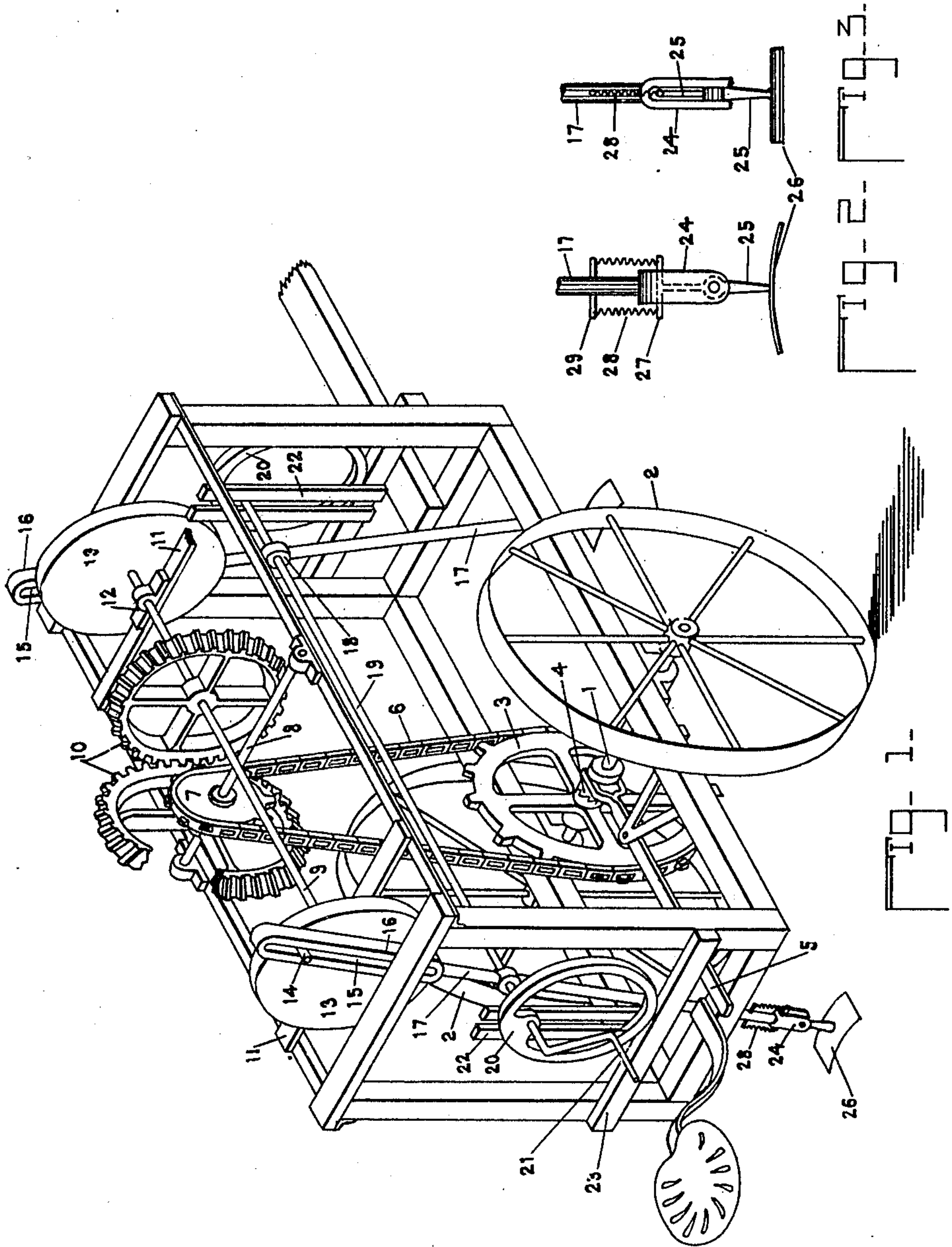


C. W. WEBER.
COTTON CHOPPER.
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WITNESSES:
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CHARLES WILE WEBER, OF MCGREGOR, TEXAS.

COTTON-CHOPPER.

969,757.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES WILE WEBER, a citizen of the United States, residing at McGregor, in the county of McLennan and State of Texas, have invented certain new and useful Improvements in Cotton-Choppers, of which the following is a specification.

My invention relates to new and useful improvements in cotton choppers. Its object is to provide a cotton chopper, which will be adapted to chop rows of cotton "to a stand," leaving the proper intervals of space between the resulting hills.

A further object is to provide a mechanism to accomplish this result, consisting in a number of oscillating hoes, adapted to be either raised or lowered while in operation, and having resilient connections between the hoe blades and shanks, permitting the former to be displaced on encountering an unyielding obstacle.

Finally, the object of the invention is to provide a device of the character described, that will be strong, durable, simple and efficient, and comparatively easy to construct, and also one in which the various parts will not be likely to get out of working order.

With these and various other objects in view my invention has relation to certain novel features of construction and operation, an example of which is described in the following specification, and illustrated in the accompanying drawing, wherein:

Figure 1 is an isometric view of the cotton chopper, as seen from the rear right-hand side, portions of one of the gears and of one of the transverse beams being broken away to reveal parts behind the same. Figs. 2 and 3 are detail vertical elevations of the resilient connections between the hoe blades and the hoe shanks.

Referring now more particularly to the drawing, wherein like numerals of reference designate similar parts in all the figures, the numeral 1 denotes the axle of the cotton chopper, upon the extremity of which axle, the transporting wheels 2 are rigid. A large sprocket wheel 3 is mounted loose upon the axle, and is adapted to be made fast thereupon by a clutch 4, controlled by a lever 5.

The sprocket wheel 3 is adapted by a chain 6 to communicate rotation to a smaller sprocket wheel 7, fast on a shaft 8, mounted transversely upon the frame. Rotation is communicated from the shaft 8 to a shaft

9, mounted longitudinally upon the frame, by a pair of bevel gears 10 fast upon said shafts. Transverse beams 11 support bearings 12, in which the shaft 9 is rotatably mounted.

Upon each end of the shaft 9, a wheel 13 is mounted fast, and from each wheel, there projects a pin 14 mounted near the wheel rim. These pins project into the slots 15 of slotted bars 16 forming the upper portions of hoe shanks 17. In each of these shanks, is provided a bearing or journal box 18, by which the shank is pivotally mounted upon a rod 19, extending longitudinally of the cotton chopper. The rod 19 has a rigid eccentric connection at each extremity with a ring 20, being thus adapted to be adjusted vertically. To accomplish this vertical adjustment, rotation is communicated to the rings 20 by means of a crank 21 upon the rear extremity of the rod 19. The rod 19 is restricted to a vertical motion during this adjustment by pairs of upright bars 22, mounted at each end of the frame. Since the rings 20 cannot roll upon the transverse beams 23 which support them, the base of support of each ring is shifted by rotation thereof, producing the desired vertical adjustment of the rod 19.

The hoe shanks 17 are each provided with a bifurcated lower extremity 24, between the prongs of which is pivotally mounted a short shank 25 carrying a blade 26. Upon the upper extremity of each shank 25, is a transverse rod 27, the extremities of which are connected by coiled springs 28 with pins 29 projecting from the shank 17. By this arrangement, the hoe blades are adapted to swing back to some extent upon encountering a rock or other non-yielding obstacle. The strength of the springs 28 may be made sufficient to hold the blades firm for all ordinary work.

It is apparent from the above description and accompanying illustration, that the forward motion of the transporting wheels produces a rotation of the wheels 13, and that by means of the pins 14 acting in the slots 15, this rotation is made to produce an oscillating motion of the hoe shanks, upon the rod 19 as a fulcrum.

Obviously the hoe mechanism might be multiplied in number as far as desired, and various other changes are possible in the form and proportion of parts and details without departing from the spirit or sacri-

ficing the advantage of my invention. I therefore reserve the right to make such changes and alterations in said device as fairly come within the scope of the following claims.

What I claim is:—

1. In a cotton chopper, the combination with the frame, axle, and transporting wheels thereof, of a vertically adjustable rod extending longitudinally of the frame, a plurality of hoe shanks pivotally mounted upon said rod, each shank having a slotted upper extremity, a wheel rotatably mounted adjacent to the slotted portion of each shank, a pin carried upon each wheel, entering the slot of the adjacent shank, a shaft upon which said wheels are mounted, mechanism adapted to communicate rotation to said shaft from the transporting wheels, means by which the operation of said mechanism may be interrupted a hoe blade pivoted upon the lower extremity of each hoe shank, and resilient means by which the hoe blades are normally retained in their working positions.

2. In a cotton chopper, the combination with the frame, axle, and transporting

wheels thereof, of a horizontal rod, extending longitudinally of the cotton chopper, rings resting upon the frame at the extremities thereof, in which rings the rod is eccentrically mounted, means for manually rotating said rings, means for restricting the motion of the rod to a vertical direction, hoe shanks pivotally mounted upon said rod at their middle portions, the upper extremities of said shanks being slotted, wheels adapted to rotate adjacent to the slotted portions of said shanks, a pin carried by each of said wheels, projecting into the slot of the adjacent hoe shank, a shaft mounted longitudinally of the cotton chopper, upon which said wheels are fast, mechanism adapted to communicate rotation to said shaft from the transporting wheels, and blades carried by the hoe shanks.

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

CHARLES WILE WEBER.

Witnesses:

F. H. JOHNSON,
E. W. CROUCH.