

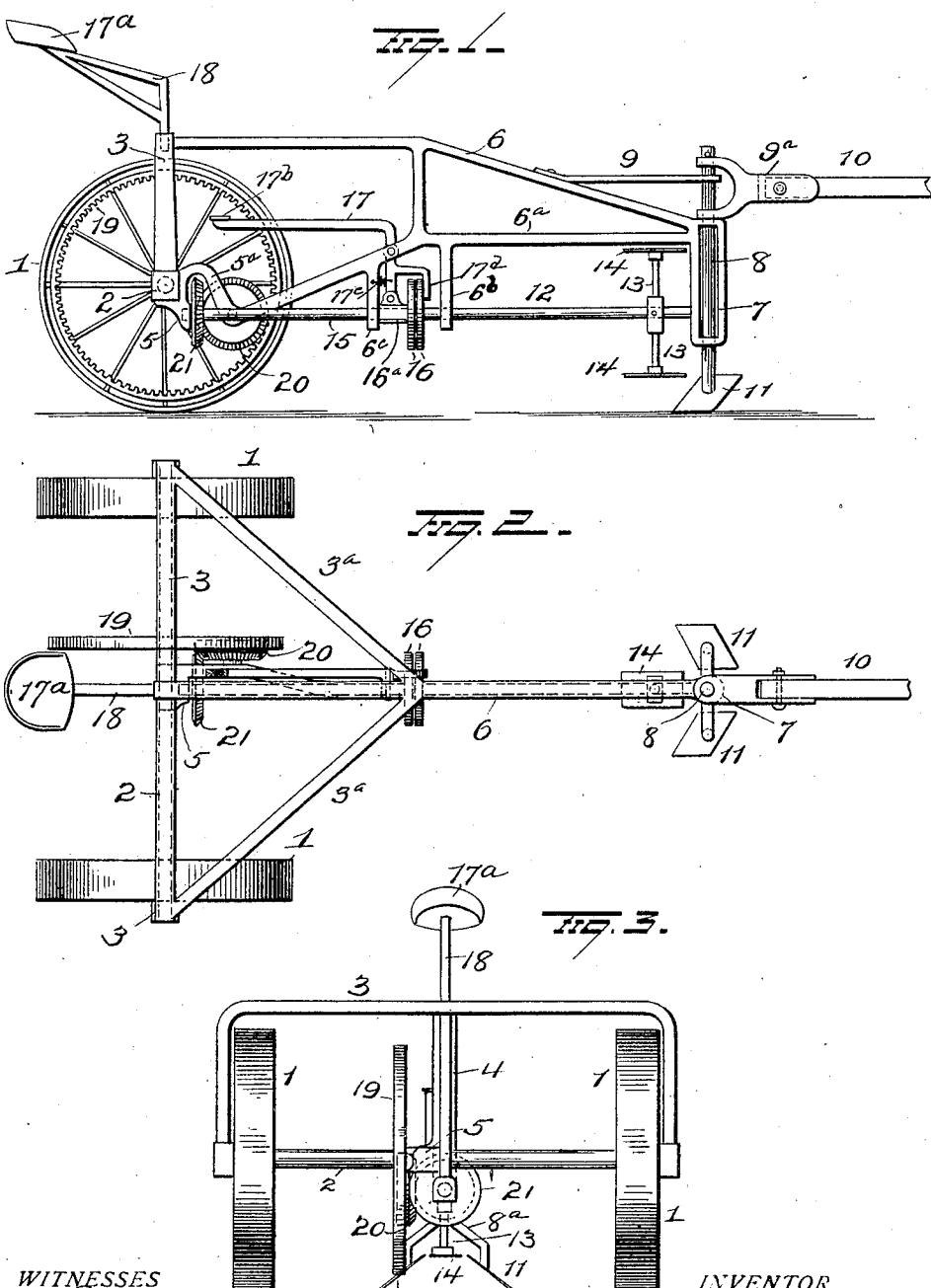
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PATENTED NOV. 27, 1906.

J. E. TUCKER.

COTTON CHOPPER AND SCRAPER.

APPLICATION FILED JAN. 10, 1906.



WITNESSES

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COTTON CHOPPER AND SCRAPER.

No. 836,718.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JUNIUS E. TUCKER, a resident of Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Cotton Choppers and Scrapers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it applies to make and use the same.

My invention relates to an improved cotton chopper and scraper, an object of the invention being to provide a machine of this character which shall be simple in construction and which shall be strong and durable and efficient in operation.

A further object is to so construct the machine that it shall be under complete control of the operator and so that the scrapers and chopper shall be maintained in proper relation to each other.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation illustrating my improvements. Fig. 2 is a plan view, and Fig. 3 is a rear view.

1 1 represent wheels in which an axle 2 is secured. The ends of this axle have bearings in the depending members of an inverted-U-shaped frame 3, disposed over the wheels. A bracket 5 is hung on the axle 2 between the ends of the latter, and from this bracket a standard 4 rises and supports the bracket 18 of a driver's seat 17^a. The upper member of a forwardly-projecting frame 6 is secured at its rear end to the upper end of the standard 4, and the lower member 6^a of this forwardly-projecting frame is made integral at its rear end with an arm 5^a of bracket 5. The frame 6 is braced by diagonal bars 3^a, extending from the ends of frame 3 to a point between the ends of frame 6. The two members of the forwardly-projecting frame unite at their forward ends with an open vertically-disposed bracket 7, in which a standard 8 is mounted. The standard 8 projects above the bracket 7 and is connected with the upper member of the forwardly-projecting frame by means of a brace 9. The lower end of the standard 8 is bifurcated to form

two arms or members 8^a, and to said arms or members 8^a scrapers 11 are rigidly secured, so as to straddle a row of cotton. An arm 9^a is attached to the upper portion of the standard 8, and to this arm a tongue 10 is pivotally attached at 10^a, so as to permit the scrapers (which support the forward end of the machine) to rise and fall.

A section 12 of a two-part shaft is mounted at its forward end in the bracket 7 and at its rear end in an arm 6^b, depending from the lower member 6^a of the forwardly-projecting frame. To the shaft-section 12 a short distance in rear of the scrapers the arms 13 of scrapers 14 are secured. At the rear end of shaft-section 12 a disk of a friction-clutch 16 is secured. The other disk of this clutch is secured to a sleeve 16^a, mounted to slide on the forward end of a shaft-section 15, the latter being mounted at its forward end in a depending arm 6^c on the member 6^a of frame 6 and at its lower end in the bracket 5. A bevel-gear 21 is secured to the shaft-section 15 and receives motion from a bevel-gear 20, mounted on a stub projecting from the arm 5^a of bracket 5. The bevel-gear 20 is provided with peripheral gear-teeth which mesh with a large internally-toothed gear 19, secured to the axle 2. From this construction and arrangement of gearing it will be seen that when the disks of the friction-clutch are pressed together and the machine is moved forwardly the shaft-sections 12 15 will be rotated to operate the choppers.

An angular lever 17 is pivoted between its ends to the forwardly-projecting frame and terminates at its rear end in a treadle 17^b, located near the driver's seat 17^a. The lower end of the lever 17 is pivotally attached to the sleeve 16^a of the clutch-disk of shaft-section 15, so that when the treadle 17^b is depressed the clutch-disks will be pressed together and the shaft-sections caused to rotate together and operate the choppers. When pressure is removed from the treadle, the lever will be returned to its normal position and the clutch-disks released by means of a spring 17^c. The lever 17 is provided with a bent arm 17^d, which is pressed against the clutch-disk on shaft-section 12 by the action of the spring 17^c and acts as a brake for the shaft-section carrying the choppers. Thus it will be seen that when the treadle is pressed by the operator the choppers will be

rotated as the machine moves forwardly. To stop the operation of the choppers, the operator will release the treadle-lever, whereupon the spring 17^c will operate to separate 5 the clutch-disks and at the same time press the arm 17^d against the clutch-disk on shaft-section 12, braking said shaft-section and stopping the choppers.

Various slight changes might be made in the 10 details of construction of my invention without departing from the spirit thereof or limiting its scope, and hence I do not wish to limit myself to the precise details herein set forth.

Having fully described my invention, what 15 I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a frame mounted on wheels, of shaft-sections mounted in said frame, a clutch connecting said sections, 20 choppers carried by the forward section, and means for operating said clutch and braking the forward shaft-section.

2. The combination with a frame mounted on wheels, of shaft-sections mounted in said 25 frame, gearing for transmitting motion to the rear shaft-section, a clutch for connecting the shaft-sections, choppers carried by the forward shaft-section, and means for operating the clutch and braking the shaft-sections.

3. The combination with a frame mounted 30 on wheels, of two shaft-sections, choppers carried by the forward shaft-section, a fixed clutch-disk on the forward shaft-section, a longitudinally-movable clutch-disk on the rear shaft-section, gearing for transmitting motion to the rear shaft-section, a lever for moving said movable clutch-disk, and a brake to engage the fixed clutch-disk on the forward shaft-section.

4. The combination with a frame mounted 35 on wheels, of shaft-sections mounted therein, choppers carried by the forward shaft-section, gearing for operating the rear shaft-section, a fixed clutch-disk on the forward 40 shaft-section, a movable clutch-disk on the rear shaft-section, a lever for moving the movable clutch-disk and an arm on said lever to engage the fixed clutch-disk on the forward shaft-section.

5. The combination with an axle and 45 wheels, of an inverted-U frame mounted on the axle, a bracket hung on the axle, a standard rising from said bracket, a frame projecting forwardly from said standard and

bracket, choppers mounted in the forward 55 portion of the forwardly-projecting frame, gearing mounted on the bracket and axle, and means for transmitting motion from said gearing to the choppers.

6. The combination with an axle and 60 wheels, of a transverse frame mounted on the axle, a bracket hung on the axle between the ends of the latter, a standard rising from said bracket, a central longitudinal frame projecting forwardly from said bracket and 65 standard, means for sustaining the forward end of the longitudinal frame, an arm projecting forwardly from the longitudinal frame, a tongue pivoted to said arm and choppers located near the forward end of the 70 central longitudinal frame.

7. The combination with an axle and 75 wheels, of an inverted-U frame mounted on the axle, a bracket hung on an intermediate part of the axle, a standard rising from said bracket, an operator's seat sustained by said standard, a frame projecting forwardly from said standard, a vertical bracket at the forward end of the longitudinal frame, a standard in said bracket, a draft-arm attached to 80 the upper portion of said standard and choppers mounted in said frame and vertical bracket.

8. The combination with an axle and 85 wheels, of a transverse frame mounted on the axle, a bracket hung on an intermediate portion of the axle, a standard rising from said bracket, a longitudinal frame projecting forwardly from said standard and bracket, a shaft-section mounted in the longitudinal 90 frame, choppers carried by said shaft-section, a rear shaft-section mounted in said longitudinal frame and said bracket, a clutch for connecting said shaft-sections, means for operating the clutch, a gear carried by the 95 rear shaft-section, a gear mounted on the bracket and meshing with the gear on the shaft-section, and an internally-toothed gear on the axle meshing with the gear on the bracket. 100

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

JUNIUS E. TUCKER.

Witnesses:

ALVA PECK,
FLOYD PECK.