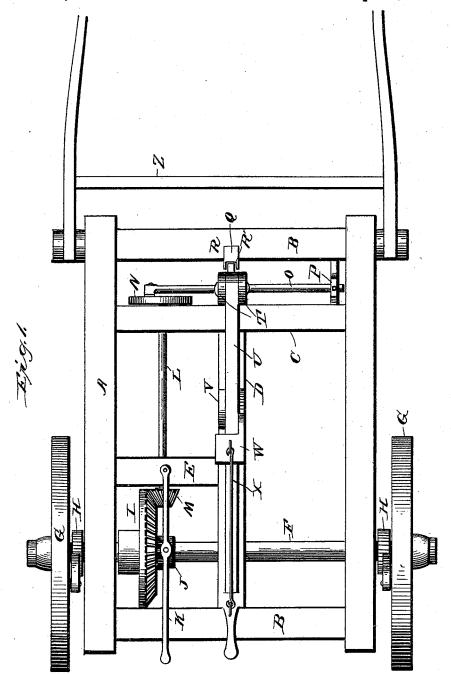
D. W. PATE. COTTON CHOPPER.

No. 496,383.

Patented Apr. 25, 1893.



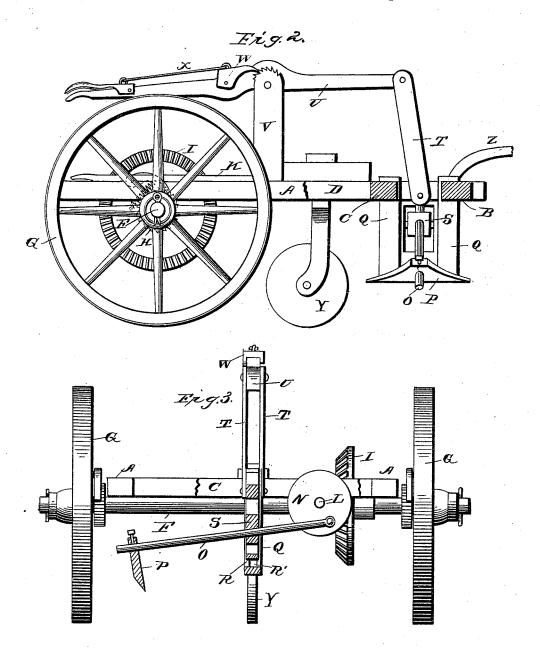
witnesses J.M. Fowler fr

Johand G. Titzgerald,

Inventor DW. Pate, Lehmann Partison Hosph D. W. PATE. COTTON CHOPPER.

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Witnesses J.M. Fowler for Toland A. Titzgerald, Freventor D. V. Pate, Be Lebinam Vattison & Medit, Altorneys

## UNITED STATES PATENT OFFICE.

DANIEL WILLIS PATE, OF McCOLL, SOUTH CAROLINA.

## COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 496,383, dated April 25, 1893.

Application filed February 15, 1893. Serial No. 462,469. (No model.)

To all whom it may concern:

Be it known that I, Daniel Wills Pate, of McColl, in the county of Marlborough and State of South Carolina, have invented cerstain new and useful Improvements in Cotton-Choppers; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in cotton choppers, and it consists in the novel combination and arrangement of parts which will be fully described hereinafter and more especially referred to in the claims.

The object of my invention is to provide a chopper having an improved and effectual comeans for adjusting vertically the chopping knife, which adjustment is independent of its reciprocal movement.

Referring to the accompanying drawings,—
Figure 1 is a plan view of my improved matherefore the same.
Fig. 2 is a side elevation of the same.
Fig. 3 is a front view, the mechanism for adjusting the chopper vertically being shown in section.

A, designates the side beams of the frame on and B, the end cross beams. Extending parallel with the front cross beam B, is the bar C, and connecting this bar with the rear cross beam is the bar D. Again, this last named bar is connected with one of the side beams as A, by the short bar E. Journaled on the under side of the rear of the frame is the axle F, having loose on its ends the drive wheels G, which latter rotate the shaft when moving forward by the ratchets H, but which when moving rearward simply turn on the shaft, the pawls slipping on their ratchets as will be readily understood.

I, designates a bevel gear on axle F, which is made to revolve therewith when the ma-45 chine is in gear by a clutch J, which latter is operated or thrown by lever K on the top of the frame.

Journaled to the under side of the cross bars C, and E, and extending longitudinally 50 with the frame is the shaft L, carrying on its rear end the bevel gear M, which meshes with

gear I. On the forward end of this shaft is disk N, and eccentrically secured thereto is the end of the rod O, carrying at its opposite end the chopping knife P. Depending from the bars 55 B, and C, is the vertical guide way Q, and adapted to move therein is the recessed slide R, the edges of which enter the longitudinal grooves R', of the guide Q. Pivotally secured in the recess of the slide is the head S, through 60 which the knife rod O, is reciprocated by the revolving disk N. The upper end of slide R, is connected by means of links T, to the outer end of a lever U, which latter is pivoted between its ends to the standard V, extending 65 vertically from the frame. One edge of the upper end of the standard is serrated to form a ratchet which is engaged by the pivoted dog W, operated by rod X, from the rear or handle end of lever U. The forward end of 70 the machine is supported by pivoted caster Y. The chopper may be drawn by shafts Z, suitably secured to its forward end.

The operation of the machine is apparent and needs no description.

By means of the lever U, and the slide R, it will be seen that the knife through its carrying rod may be elevated or lowered to suit the work being done, thus securing a very simple yet effective adjustment at the point where it 80 is most needed.

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

1. In a cotton chopper the combination of 85 a frame, supporting wheels therefor, a reciprocating knife carrying rod beneath the frame, a means for operating the same, and a vertically adjustable slide through which the said rod reciprocates, substantially as shown 90 and described.

2. In a cotton chopper, the combination of a frame, supporting wheels therefor, an axle which rotates with said wheels, a gear secured thereto, a longitudinal driving shaft having a 95 gear on its end meshing with said first named gear, a transversely reciprocating, knife-carrying rod eccentrically secured to the forward end of the said shaft, and a vertically adjustable slide through which the said rod reciprocates, substantially as shown and described.

3. In a cotton chopper the combination of

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a frame, supporting wheels therefor, a guide way depending from the frame, a slide movable vertically therein, a knife-carrying rod which reciprocates through said slide, and a means for operating said rod, substantially as shown and described.

4. In a cotton chopper the combination of a frame, a vertically adjustable recessed slide therein, a head pivoted in the recess of the

same, a knife carrying rod extending through 10 said head, and a means for operating said rod, substantially as shown and described.

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

DANIEL WILLIS PATE.

Witnesses:

A. W. Morrison,

H. C. PATE.