(No Model.)

A. CARR.

COTTON CHOPPER.

No. 451,663. Patented May 5, 1891.

Fig. 1.

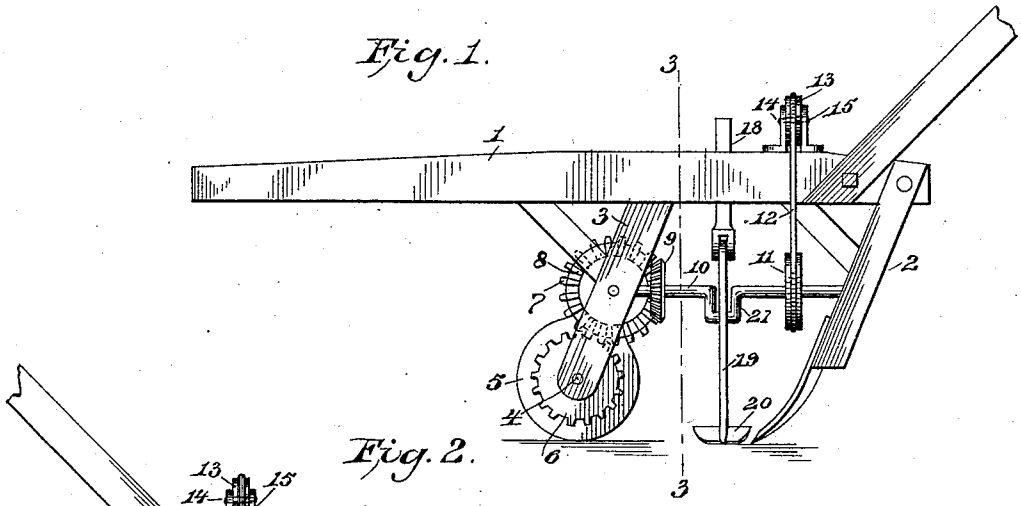


Fig. 2.

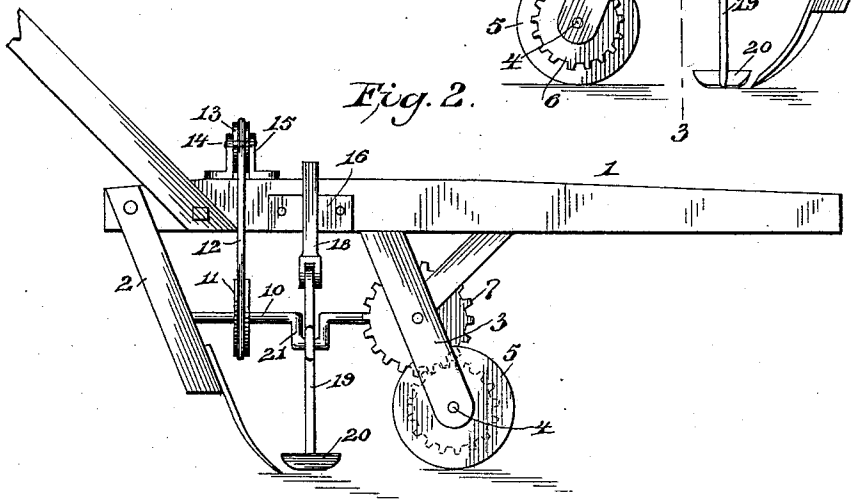


Fig. 3

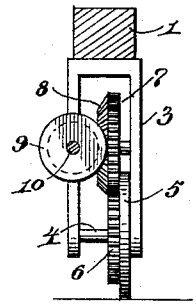
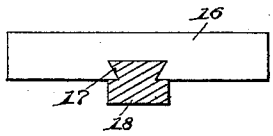


Fig. 4.



Witnesses:

C. No. Gallaher

W. L. Duvall.

Inventor

Alex. Carr

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ALEXANDER CARR, OF CHAMBERSVILLE, ARKANSAS.

COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 451,663, dated May 5, 1891.

Application filed November 28, 1890. Serial No. 372,956. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER CARR, a citizen of the United States, residing at Chambersville, in the county of Calhoun and State of Arkansas, have invented a new and useful Cotton-Chopper, of which the following is a specification.

This invention relates to cotton-choppers; and it has for its object to provide a machine of this class which shall be simple in construction, durable, and efficient in operation.

With these ends in view the invention consists in the improved construction, combination, and arrangement of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view of a cotton-chopper constructed in accordance with my invention. Fig. 2 is a side elevation taken from the opposite side of the same. Fig. 3 is a vertical transverse sectional view taken on the line 3 3 in Fig. 2. Fig. 4 is a sectional detail view through the slide 18, showing in plan the bearing-plate for the same.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the beam, and 2 a standard, of an ordinary plow to which my invention has been applied. The beam 1 is provided at some distance in front of the standard with a downwardly-extending foot 3, provided near its lower end with bearings for a transverse shaft 4, carrying the drive-wheel 5. Formed integrally with the latter or suitably mounted upon the shaft 4 is a spur-wheel 6, meshing with a gear-wheel 7, which is suitably journaled upon a shaft extending from the foot 3, and which is provided with an integral beveled toothed face 8, meshing with a pinion 9 upon the front end of a horizontal longitudinal shaft 10, bearings for which are provided in the foot 3 and in the standard 2. To assist in supporting the rear end of the shaft 10, the latter may be provided with a pulley 11, on which a belt or band 12 passes over a pulley 13, the shaft 14 of which is journaled in uprights 15 upon the upper side of the plow-beam.

Suitably attached to one side of the plow-beam is a plate 16, having a dovetail groove 17 for a vertically-movable dovetailed slide 18, to the lower end of which is hinged the handle 19 of the chopping-hoe 20, which is of ordinary construction. The handle 19 is suitably connected between its ends with a crank 21 upon the shaft 10.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. When the machine passes over the field, the guide-wheel will transmit motion through the gear-wheel 7 to the shaft 10, the crank of which will impart to the chopping-hoe an oscillating and vibratory motion, causing the said hoe to chop and thin the growing plants.

The construction of my improved cotton-chopper is simple and inexpensive, and it may be readily applied to any plow or cultivator of ordinary construction.

Having thus described my invention, what I claim is—

1. In a cotton-chopper, the combination of the beam having the foot and standard, the drive-wheel journaled at the lower end of the foot, a longitudinal crank-shaft having its bearings in the said foot and standard, the chopping-hoe connected with and operated by the said crank-shaft, the pulleys mounted upon the rear end of the latter and on the upper side of the beam, and a belt or band connecting the said pulleys and serving to support the rear end of the crank-shaft, substantially as set forth.

2. In a cotton-chopper, the combination of the beam having the foot and standard, the drive-wheel at the lower end of the foot, a longitudinal crank-shaft having its bearings in the said foot and standard, means for transmitting motion from the drive-wheel to the said crank-shaft, a plate secured to one side of the beam and having a vertical dovetail groove, a vertically-reciprocating slide having a dovetail groove fitting the groove, and the chopping-hoe hinged at its upper end to said slide and loosely connected between its ends with the crank upon the longitudinal shaft, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

his
ALEXANDER × CARR.
mark

Witnesses:
L. C. ACRUMAN,
ALBERT ACRUMAN.