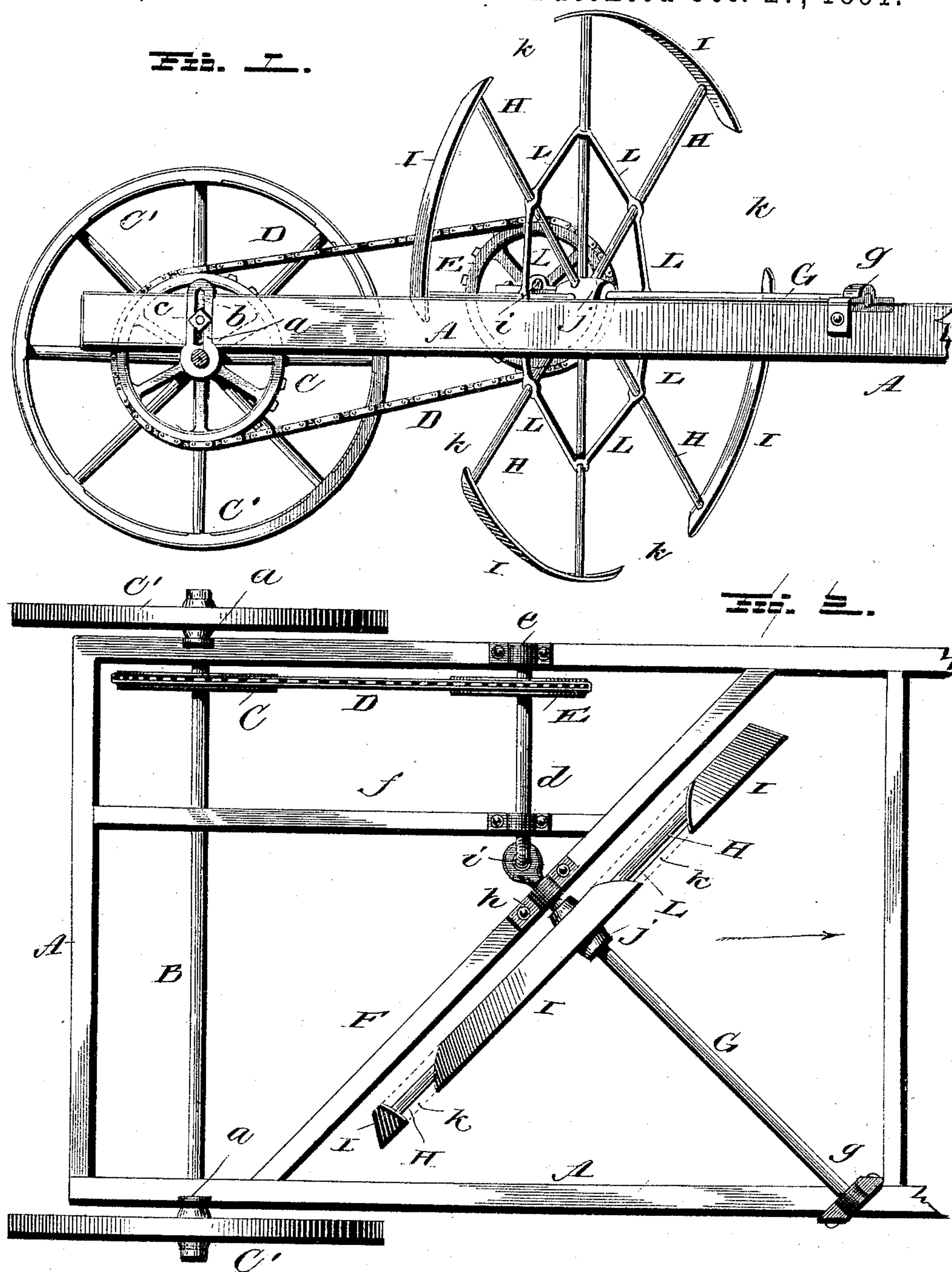


(No Model.)

L. M. POOLE.
COTTON CHOPPER.

No. 461,931.

Patented Oct. 27, 1891.



Witnesses

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UNITED STATES PATENT OFFICE.

LUTHER M. POOLE, OF LIBERTY HILL, TEXAS.

COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 461,931, dated October 27, 1891.

Application filed June 23, 1891. Serial No. 397,199. (No model.)

To all whom it may concern:

Be it known that I, LUTHER M. POOLE, a citizen of the United States, residing at Liberty Hill, in the county of Williamson and State of Texas, have invented certain new and useful Improvements in Cotton-Choppers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in cotton-choppers; and it has for its objects, among others, to provide an improved device of this class which shall be simple, cheap, durable, and efficient, composed of but few parts, and those readily assembled and not liable to get out of order. I provide a frame in which is journaled the shaft carrying the cutting-wheel, which derives its motion through connection with the traction-wheels, the said shaft being arranged at an angle to the line of travel of the machine and connected by knuckle or swivel joint with a shaft comprising a part of the driving mechanism. The cutting-wheel is of novel construction, being light, yet strong, and traveling in a plane at about an angle of forty-five degrees to the line of travel of the machine.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation of a cotton-chopper constructed in accordance with my invention. Fig. 2 is a top plan of the same.

Like letters of reference indicate like parts in both of the views.

Referring now to the details of the drawings by letter, A designates the frame, which may be of any suitable construction, and in which in suitable bearings is designed to be journaled the front axle, (not shown,) carrying the front wheels, (not shown,) which may be of any suitable construction.

As the novelty in my present invention resides solely in the construction to the rear of

the front wheels I have chosen to show only such parts.

The chopper may be drawn in any suitable manner. The rear axle B is journaled in suitable boxes *a*, which are vertically adjustable on the side bars of the frame, as seen in Fig. 1, being provided with vertical slot *b* and set-screw or bolt *c*, so that the same may be raised or lowered to make the chopper-wheel cut more or less deep, as may be desired. This rear axle carries the wheels *C'* and also a sprocket-wheel *C*, inside the frame preferably, and over which passes the sprocket-chain *D*, which passes over the sprocket-wheel *E*, carried by a short shaft *d*, parallel with the rear axle and journaled in suitable boxes *e* on the side bar of the frame and on the longitudinal timber or brace *f*, which at its forward end is secured to the diagonal timber or brace *F*, which is secured to the side bars of the frame, as seen in Fig. 2.

G is a shaft arranged at an angle of about forty-five degrees to the side bars of the frame and journaled at one end in a suitable box *g* on one of the side bars and at the other end in a box *h* on the inclined or diagonal timber or brace *F*, as seen in Fig. 2, the adjacent ends of the shafts *d* and *G* being connected together by a knuckle or swivel joint *i*, as seen in Fig. 2.

On the shaft *G* is the chopper-wheel, which consists of a suitable hub *j*, from which extend the radial arms *H*, arranged in pairs, as seen in Fig. 1, and to the outer ends of the arms of each pair are secured the knives *I*, which are of the requisite width and thickness for the work designed to be done and are curved to the shape of the circumference of said wheel, the cutting-edge standing a little farther from the center than the back edge of the knife, so as to give clearance to the knife while in the act of striking the cotton. Any desired number of knives may be employed; but I prefer four, as shown. There is a space *k* left between each two knives, as seen clearly in both views, so that the knives will cut a requisite length of the row and leave a space not chopped or touched on account of the said spaces between the knives. The knife-arms are braced by the straps or rods *L*, which are arranged circumferentially between the hub and knives, as seen in Fig. 1, being preferably a ring with apertures for

the passage of the knife-arms, as shown, so as to hold them at the regulated distance apart and prevent bending thereof during the operation of the machine.

5 The operation will be readily understood from the foregoing description when taken in connection with the annexed drawings, and a detailed description thereof is not deemed necessary.

10 What I claim as new is—

1. The cotton-chopper described, consisting of the frame, diagonal brace F, the bearing thereon, the bearing at one corner of the frame, the diagonal shaft journaled in said
15 bearings, the chopper-wheel on said shaft, the shaft *d*, having knuckle connection with the inner end of said shaft, the sprocket-wheel on said shaft *d*, the rear axle, the sprocket-

wheel thereon, and the sprocket-chain connecting said wheels, and adjustable bearings 20 for the said axle, substantially as specified.

2. In a cotton-chopper, the chopper-wheel consisting of a hub and knife-arms and having openings through which the said arms pass, extending radially therefrom, curved knives 25 at the outer ends of said arms, with a space between each two knives, and the brace-ring connecting the said arms, as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence 30 of two witnesses.

LUTHER M. POOLE.

Witnesses:

JNO. HUDSON,

J. K. LANE.