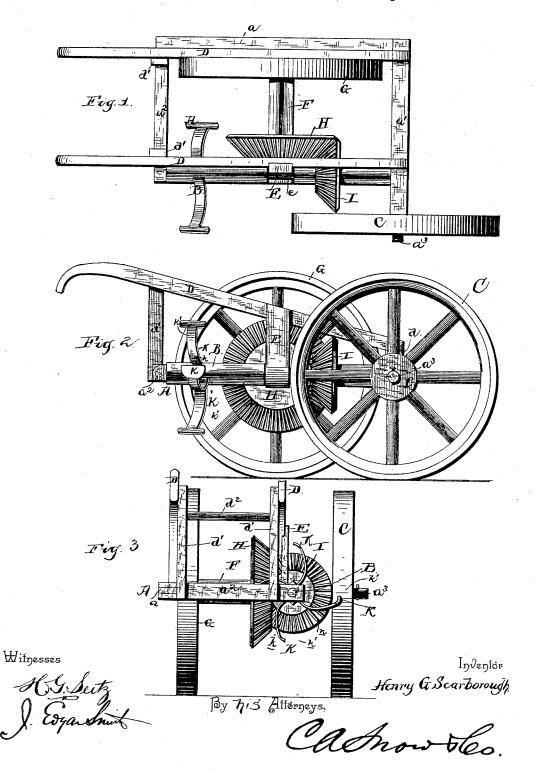
## H. G. SCARBOROUGH. COTTON CHOPPER.

No. 450,797.

Patented Apr. 21, 1891.



## UNITED STATES PATENT OFFICE.

HENRY G. SCARBOROUGH, OF BISHOPVILLE, SOUTH CAROLINA, ASSIGNOR OF ONE-HALF TO ORLANDO C. SCARBOROUGH, OF SAME PLACE.

## COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 450,797, dated April 21, 1891.

Application filed December 9, 1890. Serial No. 374,077. (No model.)

To all whom it may concern:

Be it known that I, HENRY G. SCARBOR-OUGH, a citizen of the United States, residing at Bishopville, in the county of Sumter and State of South Carolina, have invented a new and useful Cotton-Chopper, of which the following is a specification.

This invention is an improvement in cotton-choppers, and has for its objects to improve the general structure of cotton-choppers in such manner that the same will be more useful, simple, and less expensive than

they have heretofore been.

With these objects in view the invention resides in the various novel details of construction, and in the combination of parts hereinafter fully described, and particularly pointed out in the claims.

In the drawings, in which I have illustrated my invention, and in which like letters of reference indicate corresponding parts, Figure 1 is a plan view of my improved cotton-chopper. Fig. 2 is a side elevation of the same, and Fig.

3 is a rear elevation of the device.

In the drawings, the letter A designates the frame of my cotton-chopper, which frame is composed of one longitudinal side beam a, which has secured to its front end a crossbeam a' and to its rear end a cross-beam  $a^2$ . 30 These cross-beams are connected on the side opposite to the longitudinal side beam a by means of a longitudinal shaft B, journaled in said cross-pieces, thereby completing the frame-work. The cross-beam a' has upon its outer end a stub-axle  $a^3$ , upon which is mounted the wheel C. Upon the cross-beam a' is placed a beam a, which is provided to re-enforce said cross-beam and to afford a point for fastening the handles D, which extend 40 rearwardly back of the frame. The handles D are rigidly secured to the rear cross-beam  $a^2$  by means of the standards d', which are braced to each other by the bar  $d^2$ . Depending from the handle D farthest from the longitudinal beam a is a bracket E. This bracket is provided with a bearing e, in which is journaled the center of the longitudinal shaft B, and between this bracket E and the longitudinal beam a is journaled a transverse 50 shaft F, upon which within the frame is seend of the shaft is secured the beveled gear-wheel H. Fast upon the longitudinal shaft B is a beveled gear-wheel I, which meshes with the beveled gear-wheel H, fast upon the 55 transverse shaft F, which has fast upon it a driving-wheel G. At the rear of the longitudinal shaft B choppers K are arranged upon the same. These choppers are provided with shanks k, which extend outwardly from the 60 shaft in a spiral or inclined direction, and have upon their ends the chopping-knives k'.

As shown in the drawings and as specified above, the wheels C and G are arranged upon different axes, the one in front of the other, 65 in such manner that the line of support furnished by said wheels is diagonal to the frame, being coincident with a line drawn from the center of one wheel to the center of the other.

It will be seen that in order that the device 70 may be held on a level when in operation support must be given the same through the handles to the side on which the longitudinal shaft B is situated. This is especially designed for the purpose of enabling the oper- 75 ator to elevate or depress the choppers K, as may be necessary, according to the ground over which the machine is passing, and for the purpose of omitting to cultivate any particular plant or otherwise. If it is desired to 80 raise the machine above a particular plant, it is not necessary to support the entire weight of the same, as is usually the case; but by the peculiar arrangement of my frame and the wheels thereon the operator is saved from 85 that waste of labor, and he may lift the device sufficiently to escape the particular plant or row of plants by merely raising a part of the weight, using the line of support between the two wheels as a fulcrum.

The bracket E gives strength and support to the parts and serves to retain them in their

proper relative positions.

The arrangement of the choppers K is such that the knives cut not directly across the path 95 of the machine, but at an acute angle thereto.

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

shaft F, upon which within the frame is secured the driving-wheel G, and at the other side beam a and the front cross-beam a', and

the rear cross-beam a<sup>2</sup> secured thereto, of the longitudinal shaft B, journaled between the said cross-beams, a pair of handles secured to the frame and having depending from one 5 of them the bracket E, between which and the side beam a is journaled a shaft having fast upon it the driving-wheel and a beveled gear-wheel, the said beveled gear-wheel meshin the limit is a similar wheel upon the longitudiio nal shaft B, and by this means imparting motion to the choppers K, and a supportingwheel C, mounted upon a stub-axle on the forward cross-beam in such a manner that a line uniting the center of the driving-wheel with the center of the supporting-wheel will be diagonal to the frame, substantially as and for the purpose described.

2. In a cotton-chopper, the combination, with the frame A, consisting of a longitudinal

side beam a and a front cross-beam a', and the rear cross-beam  $a^2$  secured thereto, of the transverse shaft F, arranged in the rear of the front cross-beam and carrying the driving-wheel G, and a supporting-wheel C, mounted upon a stub-axle on the forward cross-beam in such a manner that a line uniting the center of the driving-wheel with the center of the supporting-wheel will be diagonal to the frame, substantially as and for the purpose described.

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

## HENRY G. SCARBOROUGH.

Witnesses:

- J. EDGAR SMITH,
- J. A. SAUL.