No. 611,192. Patented Sept. 20, 1898.

J. E. BARRON.

COTTON CULTIVATOR.

(Application filed Mar. 29, 1898.)

(No Model.)

Fig. 1.

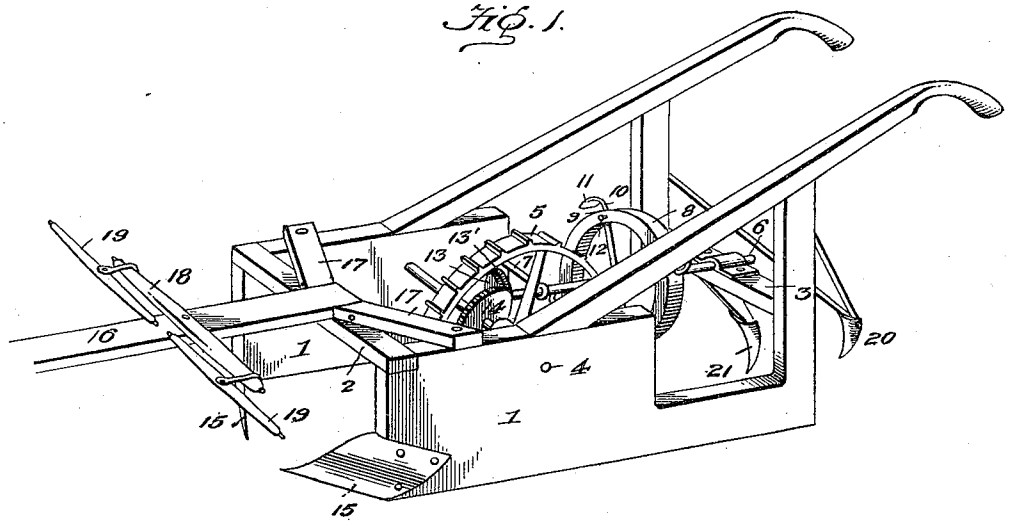


Fig. 2.

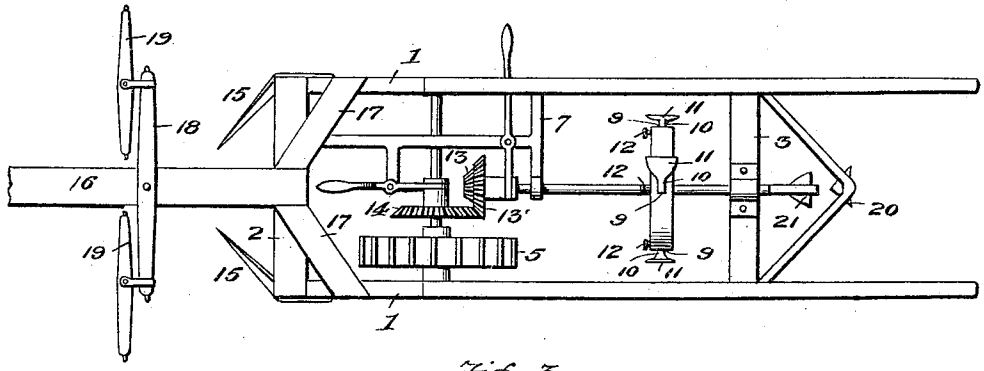
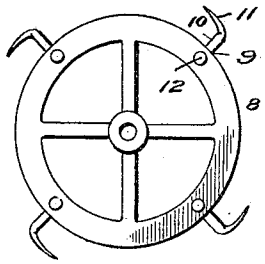


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES E. BARRON, OF CRYSTAL SPRINGS, MISSISSIPPI, ASSIGNOR OF ONE-HALF TO J. J. HYLAND AND L. W. KETHLEY, OF SAME PLACE.

COTTON-CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 611,192, dated September 20, 1898.

Application filed March 29, 1898. Serial No. 675,610. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. BARRON, a citizen of the United States, residing at Crystal Springs, in the county of Copiah and State of Mississippi, have invented certain new and useful Improvements in Cotton-Cultivators; and I do 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 appertains to make and use the same.

My invention has relation to cotton-cultivators; and the object is to provide a machine of this character which shall be simple in construction, durable in use, and comparatively inexpensive of production.

With this object in view the invention consists in certain features of construction and combination of parts which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved cotton-cultivator. Fig. 2 is a top plan view of the same, and Fig. 3 is a side elevation of the chopper-wheel.

In said drawings, 1 denotes two runners connected together at their forward and rear ends by cross-pieces 2 and 3. Journaled in the sides of the runner is a shaft 4, provided with a traction-wheel 5.

6 denotes the chopper-wheel shaft, having one end journaled in the cross-piece 3 and the opposite end journaled in a bracket 7, secured to one of the runners 1. Fixed to the shaft is a chopper-wheel 8, the periphery of which is provided with a series of radial holes 9 to receive the shanks 10 of the chopping-hoes 11, which are adjustably secured therein by the set-screws 12.

The forward end of the shaft 6 is provided with miter-gears 13 13′ of different diameters, which are adapted to be thrown into gear with a miter-gear 14 on the shaft 4. When the gear 13 is thrown into mesh with the gear 14, it is evident that the chopper-wheel will be rotated at a greater speed than when the gear 13′ is in mesh with the gear 14.

Any approved form of shifting mechanism may be employed for throwing these gears into and out of mesh with each other, a simple form being shown by the hand-levers in Fig. 2.

15 denotes scrapers arranged at the forward lower ends of the runners and serve to smooth down the ground and furnish the runners with a smooth plane to slide along, thus preventing vertical tilting or jumping of the cutting-hoes, which would be the case were not a smooth path furnished for the runners and which would be objectionable in that the hoes would miss the cotton-plant and fail to perform their duty. To prevent the runners being tilted upward in case the team should walk on elevations or in depressions, I have hinged the tongue 16 between blocks 17, secured to the front piece 2 of the frame. To the free end of the tongue 16 is attached the whiffletree 18, provided with singletrees 19.

20 denotes molding-plows projecting downwardly at the rear end of the runners, and 21 denotes fenders also projecting from the rear end of the runners.

From the foregoing description, taken in connection with the accompanying drawings, the construction of the machine will be readily understood without requiring further explanation. By arranging the chopping-hoes nearer to or farther from each other the distance between the chopped corn may be varied as desired.

It will be noticed by referring to Fig. 2 that the traction-wheel being arranged close to one of the side pieces follows the smooth path formed by one of the scrapers, thereby preventing jolting of the machine as it is dragged along and showing a positive cut of the chopper-hoes. The molding-plows attached to the rear end of the machine and the fenders will prevent any covering of the plants.

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

In combination, the parallel runners 1 1, the scrapers 15 15 fixed to the forward lower ends of said runners, the transverse shaft journaled in said runners, the traction-wheel 5 fixed on said shaft and in the path of one of said scrapers, the miter-gear 14 carried by

said shaft, the longitudinal shaft 6, the miter-gears 13 13′ carried by said shaft and adapted to alternately mesh with the gear 14, the chopper-wheel 8 fixed on said longitudinal shaft 6 and the chopping-hoes 11 adjustably secured in said chopper-wheel, substantially as shown and described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES E. BARRON.

Witnesses:
L. W. KETHLEY,
J. J. HYLAND.