(No Model.)

W. H. BASHAM.

COMBINED COTTON CHOPPER AND SCRAPER.

No. 349,076. Patented Sept. 14, 1886.

Fig. 1

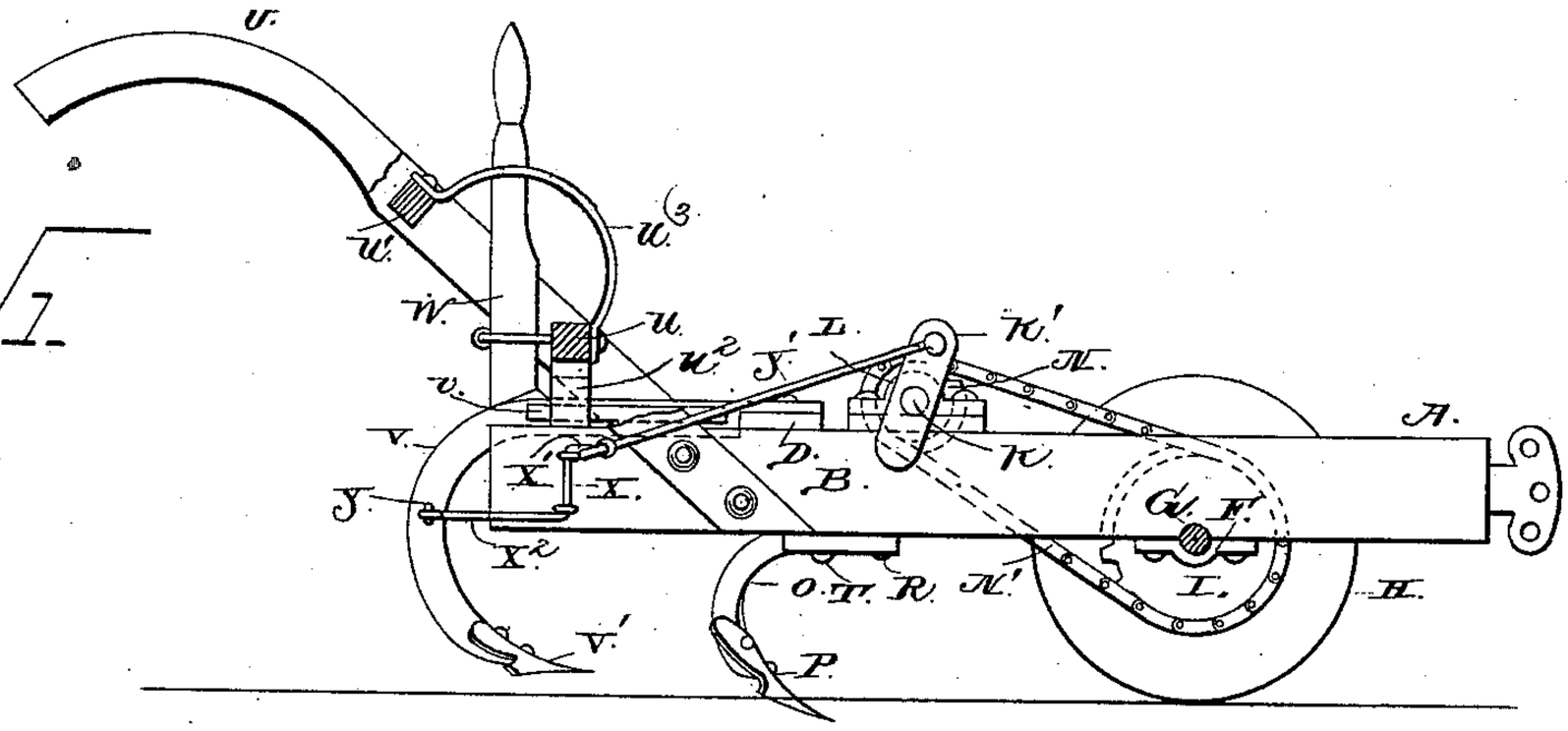


Fig. 2

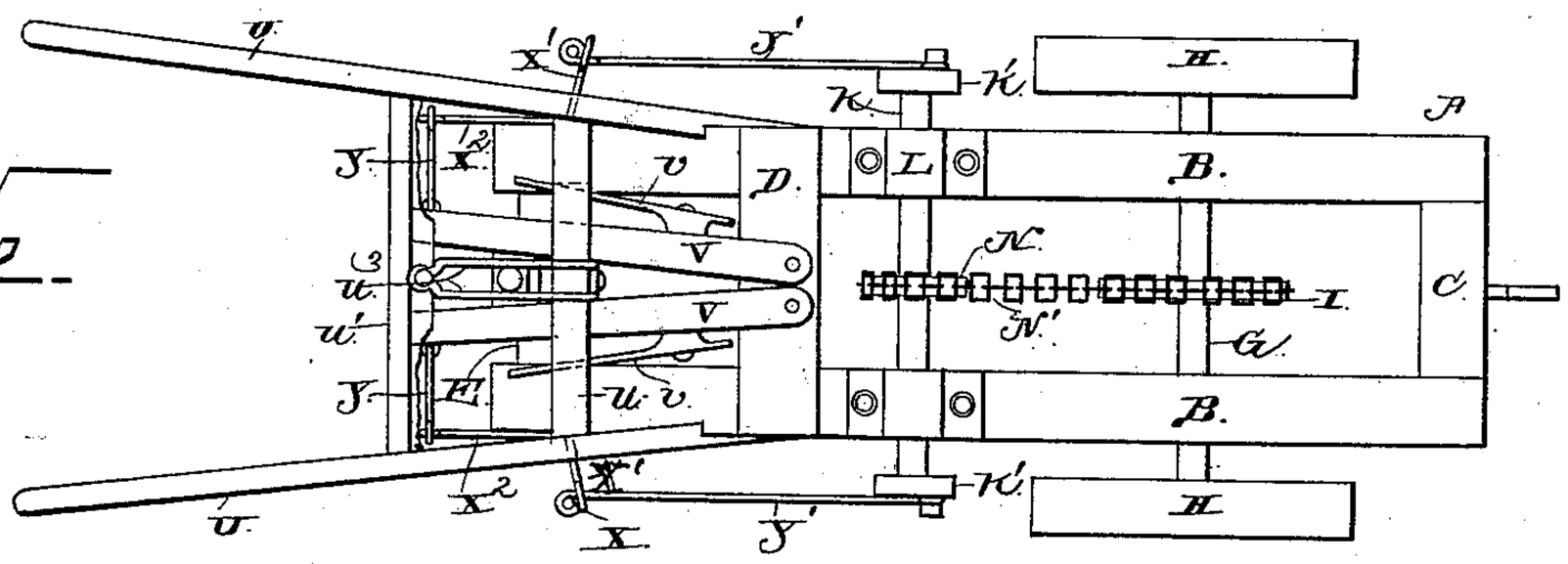
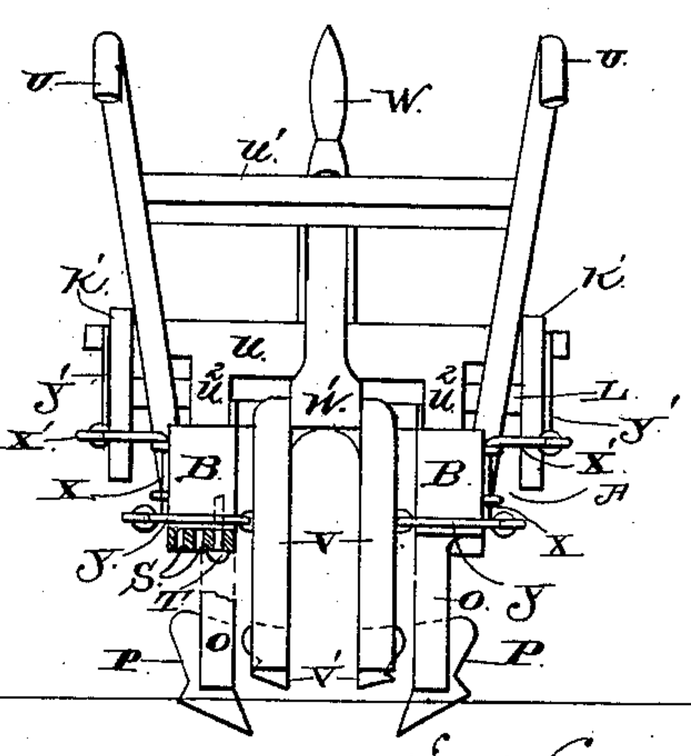


Fig. 3.



Witnesses
M. C. Fowler
Johnston & Siggers

Inventor
W. H. Basham
By his Attorneys
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

WESLEY HOUSTON BASHAM, OF GLEN ROSE, TEXAS, ASSIGNOR OF ONE-HALF TO B. R. MILAM, OF SAME PLACE.

COMBINED COTTON CHOPPER AND SCRAPER.

SPECIFICATION forming part of Letters Patent No. 349,076, dated September 14, 1886.

Application filed April 6, 1886. Serial No. 197,973. (No model.)

To all whom it may concern:

Be it known that I, WESLEY HOUSTON BASHAM, a citizen of the United States, residing at Glen Rose, in the county of Sommerville and State of Texas, have invented a new and useful Improvement in Combined Cotton Choppers and Scrapers, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in combined cotton choppers and scrapers; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my invention. Fig. 2 is a top plan view of the same. Fig. 3 is a rear elevation.

A represents a rectangular frame, which is composed of the parallel longitudinal side beams, B, and the bars C, D, and E, which connect the said beams. The bar C connects the front end of the beams B. The bar D is arranged at a suitable distance from the rear end of the said beams, and the bar E connects the extreme rear ends of the beams B.

From the under sides of the beams B, near the front ends thereof, depend a pair of bearing-blocks, F, in which is journaled a transverse shaft, G, which carries suitable supporting-wheels, H, at its extremities on the outer sides of the beams B. To the center of the shaft G is keyed a sprocket-wheel, I.

K represents a transverse shaft, which is journaled in bearing-blocks L, that are secured on the upper sides of the beams B at a suitable distance in rear of the shaft C, and the said shaft K is provided at its extremities with crank-arms K′, and to the center of the said shaft is keyed a sprocket-wheel, N, which is of less diameter than the wheel I, and is connected thereto by an endless sprocket-chain, N′.

On the under sides of the beams B, at a suitable distance from the rear ends thereof, is secured a pair of standards, O, to the lower ends of which are attached cultivating or scraping plow-shovels P, the mold-boards of which extend in opposite directions, and the landsides of the said shovels being opposed to each other. The standards O have their front ends pivoted to the beams by bolts R, and are provided at a suitable distance from the said bolts R with a series of openings, S, which are arranged laterally in the standards O, and through one of the said openings of each standard passes a bolt, T, which enters the under side of one of the beams, and thereby secures the standard firmly thereto. By providing the standards with the laterally-arranged series of openings S the said standards may be laterally adjusted on the beams B, so as to cause their shovels to work at any desired distance apart, according to the width of the row.

U represents a pair of handles, similar to plow-handles, which are attached near the rear ends of the beams B, and the said handles are connected together by transverse parallel bars *u* and *u′*. The bar *u* is arranged over the rear end of the beams B, and is provided with depending standards or arms u^2, which extend to the upper sides of the said beams.

V represents a pair of combined beams and standards, the front ends of which are pivoted to the cross-bar D, the said beams being arranged between the beams B.

To the sides of the beams V are attached flat outwardly-extending bearing-springs *v*, the outer rear ends of which bear against the depending arms u^2, and thereby serve to keep the beams V normally pressed together midway between the beams B.

To the lower ends of the standards V are attached choppers or shovels *v′*.

On the rear side of the bar *u* is fulcrumed a lever, W, the lower end of which is provided with a foot or cam, W′, which is wedge-shaped, having inclined sides which converge to a point at the front end of the said foot or cam, which latter is adapted to enter between the standards V and press them apart to any desired distance when the upper end of the lever W is drawn rearwardly. Curved guideways w^3 connect the bars *u* and *u′*, and the upper end of the lever W passes between the said curved bars and is guided thereby, the function of the said ways or bars being to keep the lever in a vertical position at all times.

X represents a pair of rock-shafts, which are vertically journaled on the outer side of the beams B, and have their upper ends bent at right angles and extending horizontally from the sides of the beams B, and normally at right

angles thereto, forming arms X′. The lower ends of the rock-shafts are bent rearwardly to form horizontal arms X^2. The arms X^2 are connected to the beams V by means of links Y, and the arms X are connected to the crank-arms K′ of the shaft K by means of rods Y′.

The operation of my invention is as follows: The machine is drawn along the row of cotton-plants with one of the plows P running on each side of the said row. As the machine advances the rotation of the driving-wheels causes the shaft K to rotate, thereby actuating the rock-shafts X, and causing the standards V to be moved outwardly against the resistance of the springs *v* during half a rotation of the shaft K. The pitman-rods which connect the cranks of the shaft K with the arms X′ of the rock-shafts X have their rear ends passed through openings or eyes at the outer ends of the arms X of the rock-shafts, the said pitmen having heads on their rear ends, which engage with the said eyes of the arms of the rock-shafts, and move the latter forwardly during half a revolution the shaft K, as before described. On the reverse movement of the pitman-rods during the remaining half of the revolution of the shaft K, the springs *v* are enabled to bear with their full force against the standards V, thus causing the said standards to be thrown or moved violently toward each other, and enabling the chopping-plows attached to said standards to cut out and thereby thin the cotton-plants which may happen to be between them. When the lever W is moved so as to cause the wedge-shaped foot or cam to be inserted between the opposing sides of the standards V, the latter are forced apart to any suitable extent, and prevented from being moved inwardly, thereby enabling the operation of chopping out the plants to be discontinued when desirable.

While the chopping hoes or shovels are in operation to thin the plants, the plows P, which run on opposite sides of the rows, thoroughly cultivate them.

By removing the sprocket-wheel N from the shaft K, and substituting another wheel of greater or less diameter therefor, the distance between the "stands" of plants left by the machine may be regulated at will.

Having thus described my invention, I claim—

1. The combination, in a cotton-chopper, of the frame A, the arms or standards V, pivoted to the said frame and carrying the chopping hoes or plows, the rock-shafts X, having the arms X^2, connected to the standards or arms V, and the arms X′, and the rotating crank-shaft K, connected to the arms X′, whereby the standards or arms V will be caused to alternately approach and recede from each other as the machine advances, substantially as described.

2. The combination of the pivoted vibrating arms or standards V, carrying the chopping hoes or plows, the springs for normally pressing the said arms or standards together, and means for moving them apart as the machine advances against the pressure of the springs, and the pivoted lever W, having the wedge-shaped foot or cam adapted to be inserted between the arms or standards V, for the purpose set forth, substantially as described.

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

WESLEY HOUSTON BASHAM.

Witnesses:
D. L. CARMICHAEL,
J. A. KINCAID.