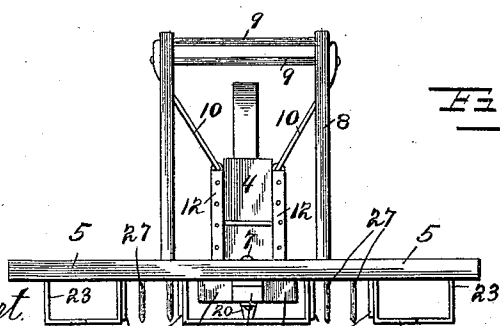
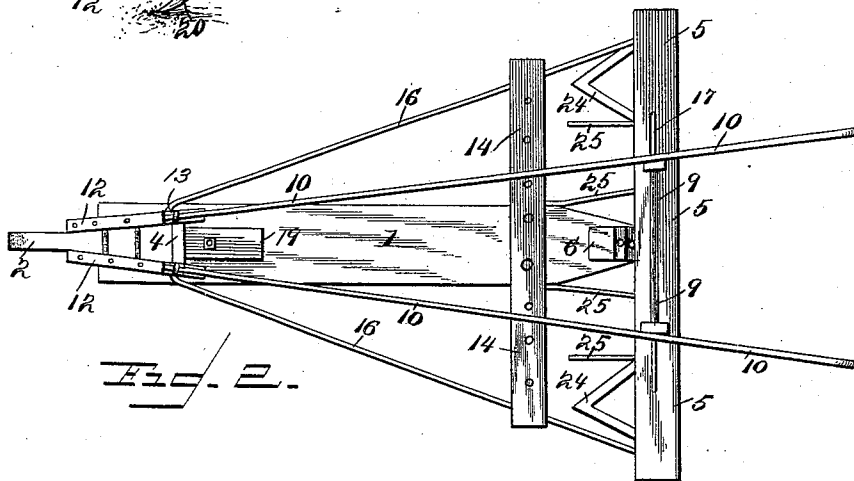
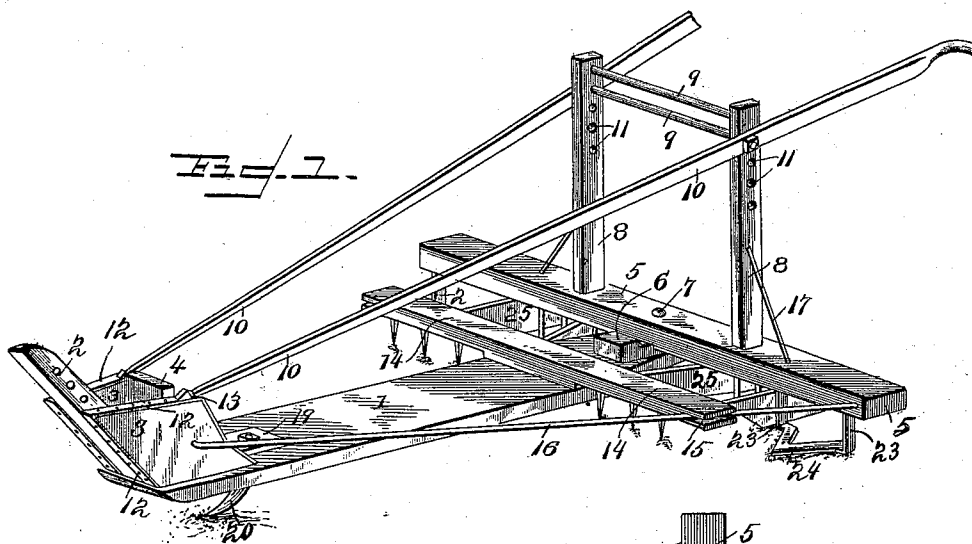


(No Model.)

I. E. GAY.
COTTON CHOPPER.

No. 487,831.

Patented Dec. 13, 1892.



Witnesses

C. N. Stewart.

Abner Macaulay

By his Attorneys,

Inventor

Isaac E. Gay.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ISAAC E. GAY, OF CAMDEN, SOUTH CAROLINA.

COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 487,831, dated December 13, 1892.

Application filed July 19, 1892. Serial No. 440,516. (No model.)

To all whom it may concern:

Be it known that I, ISAAC E. GAY, a citizen of the United States, residing at Camden, in the county of Kershaw and State of South Carolina, have invented a new and useful Cotton-Chopper, of which the following is a specification.

This invention relates to cotton-choppers, and has special reference to improvements upon the details of construction illustrated, described, and claimed in United States Patent No. 416,622, granted me June 7, 1892.

The objects and advantages of the invention, together with the novel features thereof, will hereinafter appear, and be particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a cotton-chopper embodying my invention. Fig. 2 is a plan view. Fig. 3 is a rear elevation.

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

1 designates the main or longitudinal beam, to the upper side of which, at the front end thereof, there is secured an upwardly-inclined perforated draft-bar 2, to which the usual draft devices may be applied and adjusted. Opposite-inclined blocks 3 are bolted to the opposite sides of the bar 2 and the beam 1, and have their edges covered with strap-iron, as shown, for the purpose of giving strength and adding protection. Interposed between the blocks 3 is a space-block 4, to which the blocks 3 are bolted, and whose upper end rises above the upper edges of the blocks 3.

A transverse beam 5 is located upon the upper side of the main beam 1, and may be raised and lowered upon said beam 1 through the medium of an adjusting-block 6, provided with a series of steps, each one of which has a bolt-hole for the accommodation of a bolt 7. By arranging the various steps of this block under the beam 5 it will be obvious that the beam and the parts carried thereby will be raised and lowered in accordance therewith.

A pair of vertical standards 8 rise from the cross-bar 5 at opposite sides of the center of the same, and are connected at their upper ends by transverse rungs 9. A pair of handles 10 have perforations 11, which may receive the ends of either of the rungs, and thus be raised or lowered. The front ends of the

handles pass removably into sockets located upon metal straps 12, that embrace and bind the edges of the two blocks 3, and beyond said strap the handles 10 are bolted at 13 to the upper edges of the blocks.

In advance of the transverse beam 5 a transverse rake-head or bar 14 is secured to the main beam 1, and the same is provided at each side of the main beam with a series of depending rake-teeth. The ends of the rake-head are slotted at 15, as shown. Inclined brace-rods 16 have their front ends connected to the blocks 3, extend rearward, pass through the slots 15, and are finally connected to the extremities of the bar 5, whereby the bar 5, rake-head, and blocks form a rigid structure. Inclined braces 17 are secured to the standards 8, and at their lower ends to the bar 5, whereby the standards are braced against the strain to which they are subjected. A block 19 surmounts the beam 1 between the blocks 3, and a shank-bolt 20 passes through a perforation in said block and through the upper end or shank of a shovel 21, which is located upon the under side of the main beam 1 near the front end of the latter.

22 designates a U-shaped chopper, which embraces the under side of the main beam 1, and whose extremities are connected to opposite sides of the center of the transverse bar or beam 5. The beam 1 is reduced at its rear end, so as to facilitate the passage through the chopper of the cotton, weeds, and other rubbish. Near the ends of the transverse beam 5 a pair of outer and smaller choppers 23 are located, and the same are provided at their lower ends with V-shaped blades 24. At the inner ends of the choppers 23 and the outer ends of the chopper 22 fenders 25 are secured, and the same are designed to protect the plants that remain unchopped and pass between the choppers. The central pair of fenders have their front ends connected to the main beam 1, and all the fenders have their front ends inclined, so as to ride readily over the ground. Between the series of choppers the bar 5 is provided with a series of depending teeth 27.

In operation, after the seed has been sown and the furrows formed, thus dividing the plants into rows, and when the young plants, together with the grass, completely fill each

row my machine is dragged across the rows transversely or at right angles to the before-mentioned furrows. The advance plow breaks the ground and is followed by the rake, which 5 thoroughly removes all rubbish, and therefore prevents the choppers, which follow in the path of the rake, from becoming clogged by such rubbish. The choppers serve to chop out the space and thus form the stands, while 10 the rake-teeth pass through the stands, destroying the growth of grass and weeds that is usually chopped out by hand. When the end of the field has been reached, the machine is turned and started toward the opposite 15 side, the chopper traveling back at one side of the same path it originally traveled. In this manner the crop is most thoroughly worked and the cotton is brought to a stand with expedition. The cotton being drilled it 20 is of course planted too deep to be affected much by the rake-teeth, while the light grass and weeds not being deep-rooted are readily torn up and destroyed.

Having described my invention, what I 25 claim is—

In a cotton-chopper, the combination, with the central main beam provided upon its un-

der side near its front end with a depending shovel and upon its upper side at said end with a pair of blocks, an interposed draft device located between the blocks, a rake-head 30 mounted on the beam in rear of the blocks and provided at opposite sides of the beam with depending teeth, a vertically-adjustable chopper bar or beam in rear of and parallel 35 to the rake-head and supported by the beam 1, U-shaped choppers depending from the chopping-beam, forwardly-disposed fenders at the inner sides of and secured to the outer 40 choppers, and a similar fender at each side of the central chopper and extending forward therefrom and connected to the beam 1, teeth depending from the chopping-bar between the fenders, standards rising from the chopping-beam, and handles secured to the standards 45 and at their front ends to the blocks, substantially as specified.

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

ISAAC E. GAY.

Witnesses:

W. CLYBURN,
W. CLYBURN, Jr.