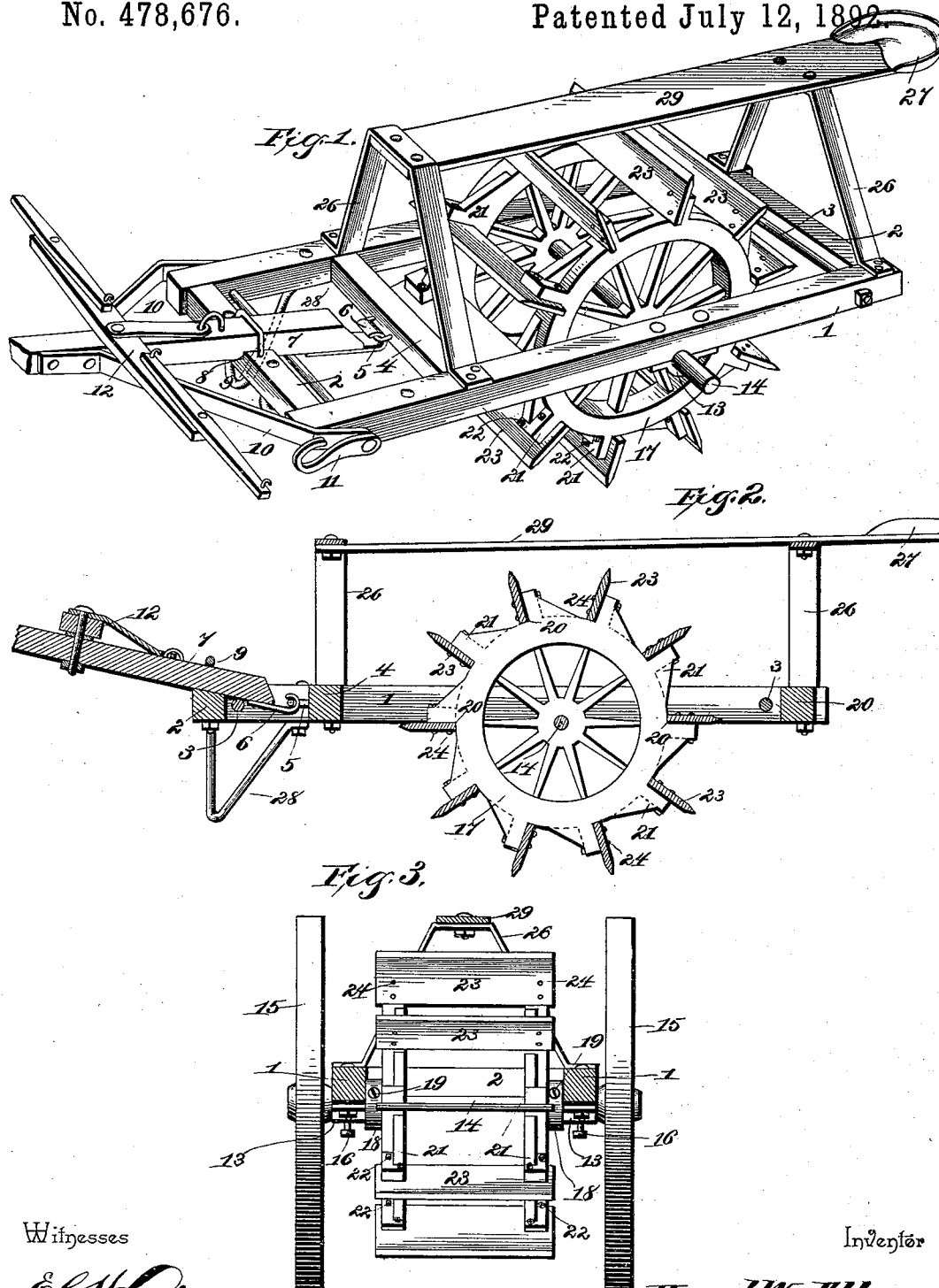


(No Model.)

H. W. ALLEN.
STALK CUTTER.

No. 478,676.

Patented July 12, 1892.



Witnesses

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HEROD WALTER ALLEN, OF LATTA, SOUTH CAROLINA.

STALK-CUTTER.

SPECIFICATION forming part of Letters Patent No. 478,676, dated July 12, 1892.

Application filed August 18, 1891. Serial No. 403,041. (No model.)

To all whom it may concern:

Be it known that I, HEROD WALTER ALLEN, a citizen of the United States, residing at Latta, in the county of Marion and State of South Carolina, have invented a new and useful Cotton-Stalk Cutter, of which the following is a specification.

This invention relates to improvements in stalk-cutters; and my objects are to provide a stalk-cutter of simple and cheap construction adapted to efficiently sever stalks and to gather the same for severance, directing the stalks in the path of the cutters or knives, and, furthermore, to improve the wheel carrying the cutters and adapt the machine for ready transportation to and from the field.

Various other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a perspective of a stalk-cutter constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a transverse section taken in front of the cutters and looking toward the same.

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

1 designates the opposite side bars, and 2 the transverse end bars connecting the side bars and comprising an oblong or rectangular frame-work, which near its ends has its side bars connected by transverse tie-bolts 3. In rear of the front transverse bar a second transverse bar 4 connects the side bars 1, and the same is provided at its central front face with a staple 5, to which is connected a hook 6, located upon the rear end of a draft bar or beam 7, said beam extending forwardly over the front transverse bar 2 and resting loosely in a notch or recess 8, formed in the upper face thereof. The notch and beam are bridged by a staple 9, the ends of which are bolted through the transverse bar at opposite sides of the notch. The staple loosely embraces the beam, as shown, and the latter, by means hereinafter described, may be easily removed for the purpose of shipping or storing away. A pair of bent hounds 10 are securely bolted to the opposite sides of the beam 7 and have their rear terminals bent to embrace the outer sides of the bars 1 near the front ends of the latter,

and are here connected pivotally to the bars by means of the front transverse tie-rod 3 heretofore mentioned. The tie-rod is provided at one side with a nut, which may be loosened and tightened for the purpose of clamping the hounds in any of their rigid positions, and consequently allowing for the removal of the beam 7. Ordinary draft-hooks 11 are also mounted upon the ends of the tie-rod 3. The beam 7 carries the doubletree 12, which at its ends is provided with the usual singletrees, and to the latter the team may be attached.

Bearing-boxes 13 are located upon the under sides and near the center of the beam 1, and in said boxes there is loosely journaled for rotation a transverse shaft or axle 14, the ends of which project beyond the boxes, as shown, and are adapted to receive cast-iron or other ground-wheels 15. (Shown in Fig. 3.) Binding-screws 16 pass through the boxes and may be run down to bear upon the axle, whereby the latter may be made rigid in its bearings, and consequently not turn when the ground-wheels rotate. When the ground-wheels are not used and the machine is in operation, said wheels being then removed, the binding-screws are loosened, so that the shaft or axle may freely rotate.

Upon the shaft or axle, between the side bars 1 and adjacent thereto, is mounted a pair of cast-metal wheels 17, the hubs 18 of which are bound fast upon the axle, so that the wheels rotate therewith, by means of set-screws 19. The wheels 17 have their peripheries or rims provided with a series of radial notches 20, those of one wheel being transversely opposite and in line with those of the companion wheel. Immediately in rear of each notch there is located a radial brace-block or shoulder 21, the front face of which is in radial alignment with the center of the wheel and the rear face of which is inclined. These blocks or shoulders are cast integral with the wheel and are provided with bolt-openings 22.

23 designates a cutting-blade, of which there is a series, one for each pair of blocks. These blades extend transverse the two wheels 17 and at their inner edges rest within the recesses or grooves 20 thereof and are securely bolted by bolts 24, which pass trans-

versely through the blade and the metal shoulders or blocks. The outer edges of the blades 23 are beveled to form cutting-edges, as shown.

Upon the rear cross-bar 2 and the intermediate cross-bar 4 are mounted transversely-disposed inverted-U-shaped standards 26, and upon the same is supported the seat 27.

In operation in order to transport the machine to the field the ground-wheels are applied to the ends of the axle or shaft and the latter tightened within its bearings. By reason of the ground-wheels being of greater diameter than the cutting-wheel the latter is elevated with its knives some distance above the ground and out of operative contact therewith. The cutter-wheel also remains inactive or at rest during transportation by reason of the fact that the shaft or axle is now non-rotated. When the point of operation has been reached, the ground-wheels are removed, so that the cutters are lowered into contact with the ground and support the machine. The weight of the machine and the driver serves to force the cutters through the stalks as the machine is dragged along and the cutter-wheel rotates. In this manner the stalks are successfully and efficiently chopped or cut in the manner of this class of stalk-cutters.

28 designates a pair of converging depending deflecting-rods, which are removably bolted to the under side and at the front corners of the frame-work, said rods or wires having adjacent depending vertical portions below the front of the frame and diverging inwardly and upwardly inclined side portions, the same serving to gather and direct the stalks into the path of the following cutter.

The driver's seat 27 is secured upon the outer end of a supporting-bar 29, the front end of which is bolted under the front inverted-U-shaped standard, while its rear end passes over and is bolted to the rear standard back of the cutting-wheel and extends as far back and supports said seat as far back of the cutter as may be desired to give the proper leverage or weight, as the conditions of the work may require.

Having described my invention, what I claim is—

In a machine of the class described, the combination, with the oblong framework comprising the opposite side and the front and intermediate transverse bars, of a staple located at the center of the intermediate bar, a draft-beam terminating at its rear end in a hook detachably engaging the staple and at its front end loosely fitting a notch formed in the front bar, a staple mounted on the front bar and bridging the beam, opposite hounds bolted to the beam in advance of the framework and having their rear ends bent to loosely embrace the outer corners of the framework, and a tie-bolt passed through the opposite side bars and the hounds to pivot and secure the same to such frame and provided with a clamping-nut, substantially as specified.

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

HEROD WALTER ALLEN.

Witnesses:

WILLIAM AKEN. WALL,
ELLY DAVID SMITH.