

(No Model.)

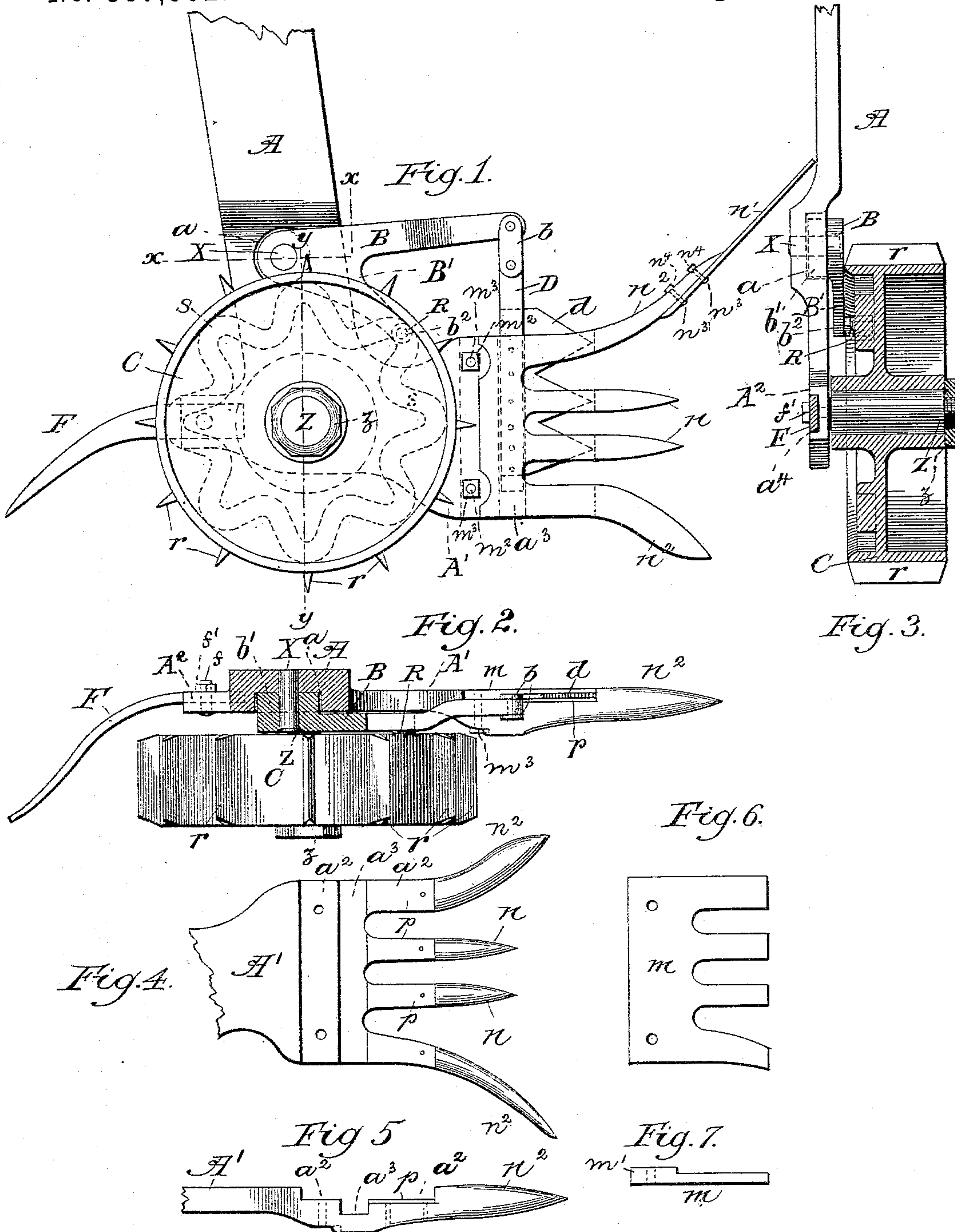
2 Sheets—Sheet 1.

M. B. SUTLEY.

CLEARING ATTACHMENT FOR PLOWS.

No. 387,962.

Patented Aug. 14, 1888.



Witnesses.
J. M. Elliott,
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Inventor.
Melvin Barker Sutley.

(No Model.)

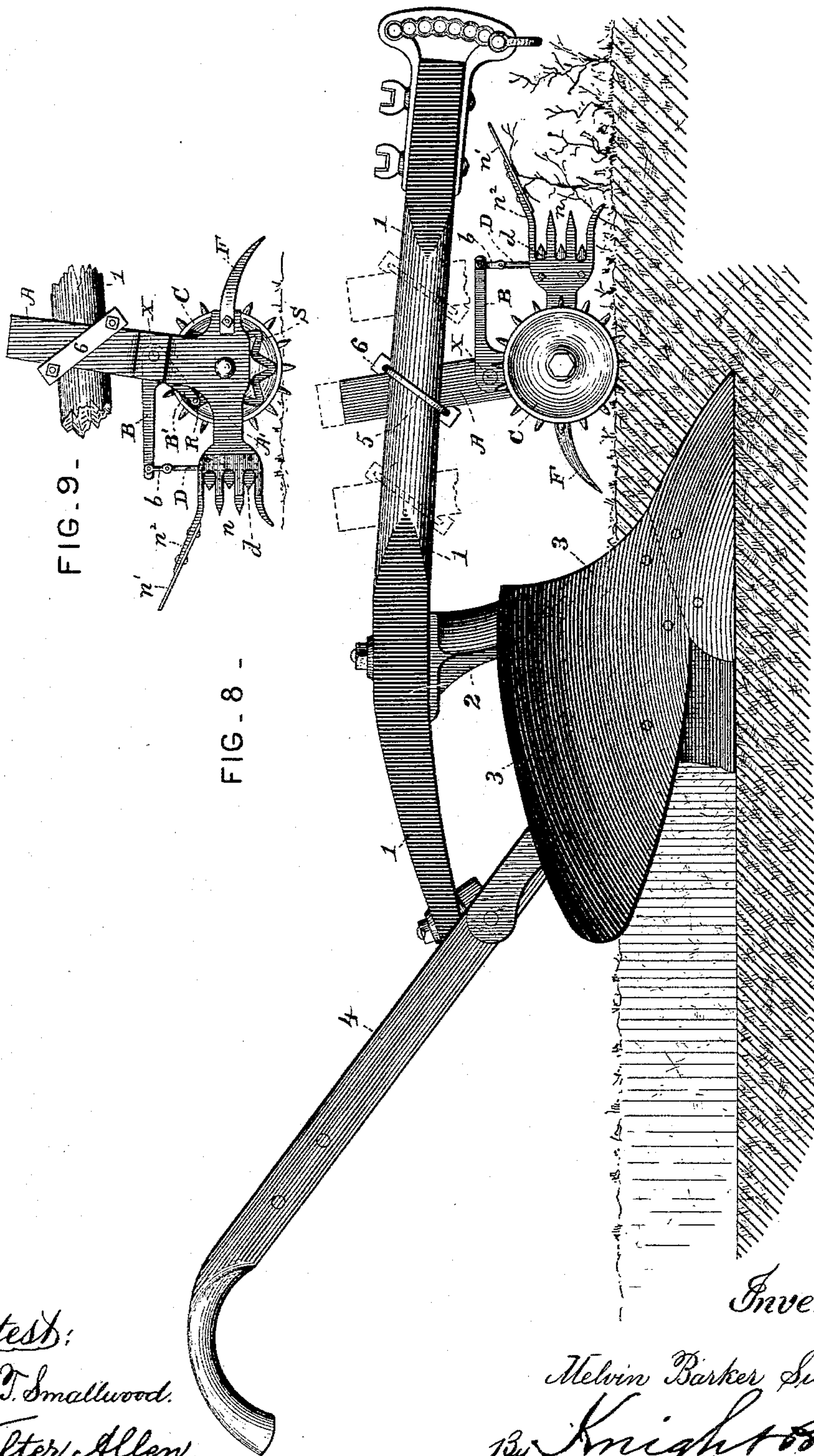
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Attest:
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UNITED STATES PATENT OFFICE.

MELVIN BARKER SUTLEY, OF ROCKLAND, PENNSYLVANIA.

CLEARING ATTACHMENT FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 387,962, dated August 14, 1888.

Application filed February 3, 1888. Serial No. 262,949. (No model.)

To all whom it may concern:

Be it known that I, MELVIN BARKER SUTLEY, a citizen of the United States, residing at Rockland, (formerly Witherup's,) in the county of Venango and State of Pennsylvania, have invented a new and useful Clearing Attachment for Plows, of which the following is a specification.

The object of my invention is to provide improved means for the purpose of plowing down clover, weeds, &c., by cutting away such obstructions in advance of the plow; and my improvement consists in an attachment to the beam of a plow of peculiar construction, as hereinafter described, and pointed out in the claims.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved attachment. Fig. 2 is a plan view of the same on the line $x x$, Fig. 1. Fig. 3 is a vertical transverse section thereof on the line $y y$, Fig. 1. Fig. 4 is an inside view of the lower end of the standard. Fig. 5 is a plan view of the same. Fig. 6 is a side view of the retaining-plate. Fig. 7 is a plan view of the same. Fig. 8 is a side elevation showing my attachment secured to the beam of a plow. Fig. 9 is an elevation of the attachment looking toward the opposite side to that shown in Figs. 1 and 8.

1 is the beam, 2 the standard, 3 the share, and 4 the handles, of a plow adapted to receive my attachment.

5 is a clamp, and 6 the clamp-plate by which the attachment can be secured at suitable height or in desired position, as shown in full and dotted lines in Figs. 8 and 9.

A is a standard for attachment to a plow-beam, directly in front of the plow and in line therewith, formed with a socket, a , having a forwardly-extending arm, A' , formed with inner cutter-fingers, n , and outer guard-fingers, n^2 , a vertical cutter-recess, a^2 , and a counter cutter-recess, a^3 , and a rearwardly-extending arm, A^2 , having groove a^4 .

Z is a bolt secured to the standard, and C is a wheel mounted on said bolt and held in place by a nut, z . This wheel is formed with transverse peripheral ribs r and a web, c , hav-

ing serpentine or cam groove S on its inner face. Secured to the standard between it and the wheel by means of a pivot-pin, X, is a lever, B, formed with a collar, b' , occupying and working in the socket a of the standard, and having a short arm, B' , provided with a wrist-pin, b^2 , carrying a roller, R, working in the serpentine or cam groove. Suspended from the lever B by a link, b , is a cutter-bar, D, guided in the counter-recess a^3 , and carrying knives or cutters d , working in the front portion of the recess a^2 , across the fingers n and n^2 .

p are steel bearing plates or knives riveted or otherwise fastened to the fingers. The cutter-bar is retained in place by means of a plate, m , secured by its rib m' in the recess a^2 by bolts m^2 and nuts m^3 . To the upper guard-finger is secured by bolts n^3 and nuts n^4 a guard-extension, n' .

F is a sweep-bar secured by a bolt, f , and a nut, f' , in the recess a^4 of the rear arm, A^2 .

The wheel C runs on the ground, and the roller R, following the cam-groove thereof, causes the lever B to oscillate on its pivot and impart a vertical reciprocating movement to the cutter-bar D, which cuts the grass or weeds, after the manner of a mowing-machine, allowing thereby the plow to have a free passage through such entanglements. The cut weeds and grass are swept over or downward into the preceding furrow by the sweep-rod F.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent.

1. In a plow attachment, the combination of the standard having a forwardly-extending arm provided with fingers, the lever pivoted to the standard having a wrist-pin, the wheel having a cam-groove in which the wrist-pin works to vibrate the lever, and a cutter-bar suspended from the lever, having knives working against the fingers, substantially as described.

2. The combination, with the plow and beam, of the standard having fingers, the lever pivoted to the standard having a wrist-pin, a cutter-bar suspended on the lever, having knives working over the fingers, and a wheel journaled to the standard, having a cam-groove in which the wrist-pin works to vibrate the lever, substantially as described.

3. In a plow attachment, the combination

of the standard having a forwardly-extending arm provided with fingers and formed with a cutter-recess, the lever pivoted to the standard having a wrist-pin, the wheel having a cam-groove in which the wrist-pin works to vibrate the lever, a cutter-bar suspended from the lever, having knives, and the retaining-plate, substantially as described.

4. In a plow attachment, the combination of the standard having a forwardly-extending arm provided with fingers and formed with a cutter-recess, the lever pivoted to the standard, having a wrist-pin, the wheel having a cam-groove in which the wrist-pin works to vibrate the lever, a cutter-bar suspended from the lever, having knives, the bearing-plate, and the retaining-plate, substantially as described.

5. The combination of the standard having a socket and fingers, a cutter-bar having knives, a lever on which the cutter-bar is suspended, having a collar occupying the socket, a pivot-pin by which the lever is hinged to the standard, and a wheel, by which the lever

is operated to reciprocate the cutter-bar, substantially as described.

6. In a plow attachment, the combination of the standard, a sweep secured to the standard, and a carrying-wheel supporting the attachment and sweep at the proper height, substantially as described.

7. The combination of the standard having forwardly-extending arm formed with fingers, guard-extension secured to the upper finger, cutter-bar, lever, wheel, and mechanism by which the wheel is caused to operate the lever, substantially as described.

8. The combination of the standard having fingers, the cutter-bar, the lever pivoted to the standard, the link by which the cutter-bar is suspended on the lever, a wheel having a continuous serpentine groove, and a wrist-pin by which the lever is connected with the cam-groove, substantially as described.

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Witnesses:

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