(No Model.)

A. C. BAKER.

WHEEL CULTIVATOR.

No. 349,972. Patented Sept. 28, 1886.

Fig. 1

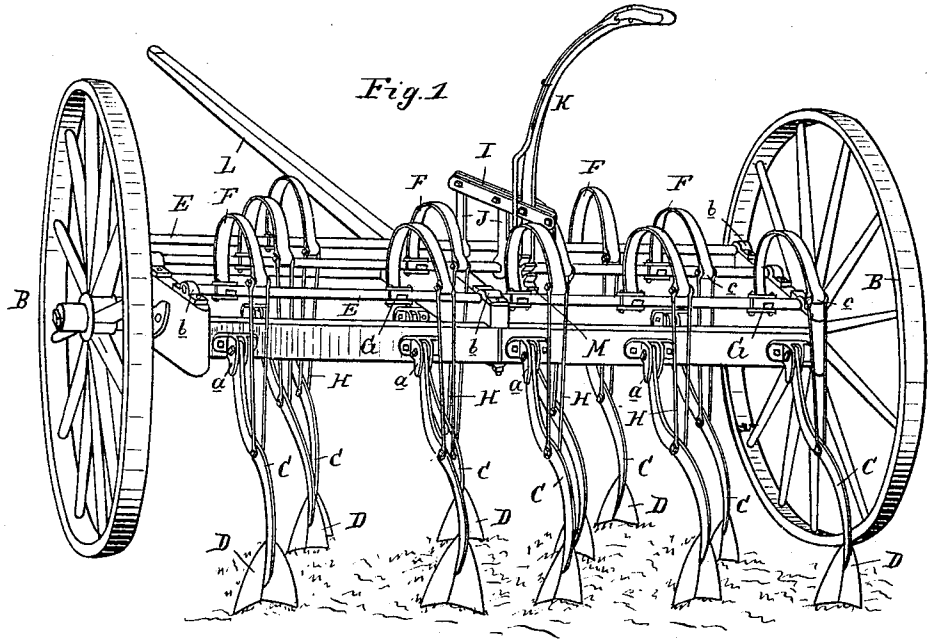


Fig. 3

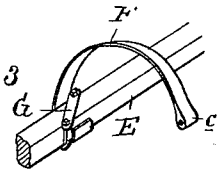


Fig. 2

Attest:
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UNITED STATES PATENT OFFICE.

ANDREW C. BAKER, OF ALBION, MICHIGAN.

WHEEL-CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 349,972, dated September 28, 1886.

Application filed July 1, 1886. Serial No. 206,791. (No model.)

To all whom it may concern:

Be it known that I, ANDREW C. BAKER, of Albion, in the county of Calhoun and State of Michigan, have invented new and useful Improvements in Wheel-Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in wheel-cultivators.

The object of the invention is to provide simple, effectual, and economically-constructed means for controlling the operation and position of the teeth of the cultivator, whereby all the pliability usually found in a spring-tooth harrow is obtained with the teeth secured to a rigid standard.

The invention consists in the peculiar construction of the parts and their various combinations and operation, as more fully hereinafter described.

Figure 1 is a perspective view of my improved wheel-cultivator, taken from the rear. Fig. 2 is a vertical central section through the machine on the line of the draft-pole. Fig. 3 is a sectional detail.

In the drawings which accompany this specification and form a part thereof, A represents a rectangular frame, to the ends of which, by means of stub-axles, the wheels B are secured in the usual manner, said stub-axles being vertically adjustable upon the ends of the frame in a manner well known in the construction of implements of this class. The two ends of the frame are connected together by means of two or more bars or girts, to the rear face of which are secured ears *a*, having downward prolongations below the bar, as shown, to form more firm bearings for the curved standards C, which carry the teeth D at one end, while the opposite end is pivotally secured between the ears *a*.

E are square rock-bars having journals formed on their ends, which are inserted in the boxes *b* on the ends of the frame, so as to bring each rock-bar forward of a tooth-carrying bar. Curved springs F are secured to each of the rock-bars E, and these springs are so formed, as shown in Fig. 3, as to engage with the under side of such rock-bar passing up the front side and curving downward to the rear, where they terminate in a loop, *c*, and each spring is secured in its position upon the rock-bar by means of a clip, G, passing diagonally around such bar and the embracing end of the spring. Links H connect such springs with the standards, the upper end of such links being secured to the springs by a bolt passing through the loop of the spring and the upper ends of the links, while the lower ends of the links are secured one on each side of the standard by a bolt passing through the same.

I is a bar secured by means of bolts to the upper end of the levers J, the lower ends of which are secured to the rock-bars E in such a manner that the movement of the lever to the front or rear will partially rotate such rock-bars in their bearings.

K is a spring-latch lever of the ordinary construction, the lower end of which is pivoted to the tongue L, to which is also secured the toothed segment M, such spring-latch lever being secured also to the bar I by means of a bolt, such spring-latch lever and segment being such as is ordinarily employed for a like purpose. It will be seen that by this construction the efficiency of the springs—such as are ordinarily employed in spring-tooth cultivators—is retained, while a better result is produced by the attachment of the teeth to rigid arms pivotally secured to the cross-bars of the frame, and connected as they are with the springs, as described.

What I claim as my invention is—

1. In a wheel-cultivator, the combination, with the frame and rocker-arm journaled therein, of the rigid tooth-arm pivoted at one end to said frame, the spring connected with the rocker-arm, and the link pivotally connected to said tooth-arm and spring, substantially as described.

2. In a wheel-cultivator, a spring connected with a rocker-arm and with the standard, which carries a tooth, in combination with the means described for giving partial rotation to the rocker-arm, substantially as and for the purposes specified.

3. In a wheel-cultivator, the combination of

the frame having vertically-adjustable wheel-carrying stub-axles, ears secured to the rear face of the cross-bars of the frame, to which are pivotally secured the curved standards, which carry the teeth, links connecting such standards with springs, which are secured to rocker-bars, and the means described for rocking such bars, substantially as and for the purposes set forth.

ANDREW C. BAKER.

Witnesses:
H. S. SPRAGUE,
CHAS. THURMAN.