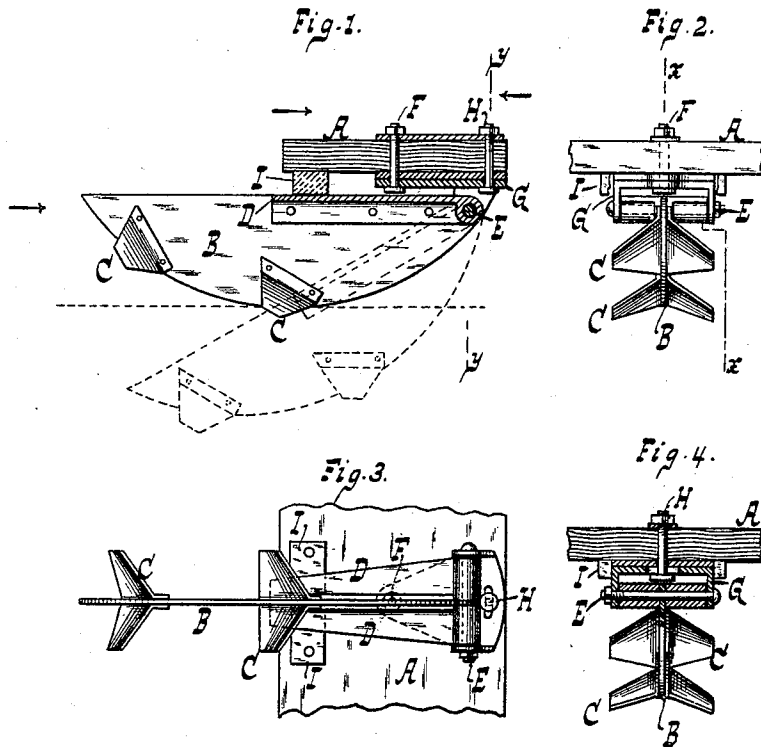


(No Model.)

J. S. WORCESTER.
CULTIVATOR TOOTH.

No. 481,129.

Patented Aug. 16, 1892.



WITNESSES:

William Miller
Edward Troff.

INVENTOR:

James S. Worcester.

BY

Vansant & Hauff
his ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES S. WORCESTER, OF HACKENSACK, NEW JERSEY.

CULTIVATOR-TOOTH.

SPECIFICATION forming part of Letters Patent No. 481,129, dated August 16, 1892.

Application filed June 9, 1892. Serial No. 436,123. (No model.)

To all whom it may concern:

Be it known that I, JAMES S. WORCESTER, a citizen of the United States, residing at Hackensack, in the county of Bergen and State of New Jersey, have invented new and useful Improvements in Cultivator-Teeth, of which the following is a specification.

This invention relates to an improvement in cultivator-teeth; and the invention consists in the novel features pointed out in the following specification and claims and illustrated in the annexed drawings, in which—

Figure 1 is a section of the tooth along *xx*, Fig. 2. Fig. 2 is an end elevation of the tooth. Fig. 3 is an inverted plan view of the tooth. Fig. 4 is a section along *yy*, Fig. 1.

In the drawings the letter A indicates a frame or support, such as a part of a harrow, cultivator, or wagon-hoe. The teeth are movably secured to said support. Each tooth consists of a share or runner B, to which are riveted or secured the plates or tongues C. These tongues or plates C are inclined upwardly toward the rear end of the share, so that as the share is drawn forward the tongues C will enter into the ground and will gradually draw the share deeper into the ground until the upper shield or guard D prevents farther penetration. By making the plates C of approximately triangular shape and riveting or bolting the plates to the share said plates when worn can be reversed and placed, respectively, on the opposite side of the share, so as to present a fresh edge for action. The share is adapted to swing vertically on the pivot or joint E, and is free to play or move laterally by reason of the pivot or swivel F, so that the share has sufficient play to avoid or move about stones or like obstructions. The swivel F connects a plate or frame G to the support A, and a stop H prevents excessive

swiveling of the plate G. The share B is hinged or jointed to the plate G. An elastic pad or rest I is provided for the tooth when in its upper position.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a frame or support, of a tooth movably secured to said support, said tooth being made to consist of a share or runner provided with plates or tongues having an upward inclination toward the rear, substantially as described.

2. The combination, with a frame or support, of a tooth movably secured to said support, said tooth being made to consist of a share or runner provided with plates or tongues having an upward inclination toward the rear, said share being constructed with an upper shield or guard to prevent excessive penetration of the share, substantially as described.

3. The combination, with a frame or support, of a swinging tooth swiveled to said support, so as to have a vertical and lateral motion, said tooth being provided with laterally-projecting plates or tongues, substantially as described.

4. The combination, with a frame or support, of a tooth movably connected to said support and provided with lateral plates or tongues and with an upper guard and an elastic rest for the tooth when in its elevated position, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JAMES S. WORCESTER.

Witnesses:

J. VAN SANTVOORD,
E. F. KASTENHUBER.