[84.]

Geo. W. Owens

Corn Cultivator.

No. 118,549. Fig. 1. Patented Aug. 29, 1871.

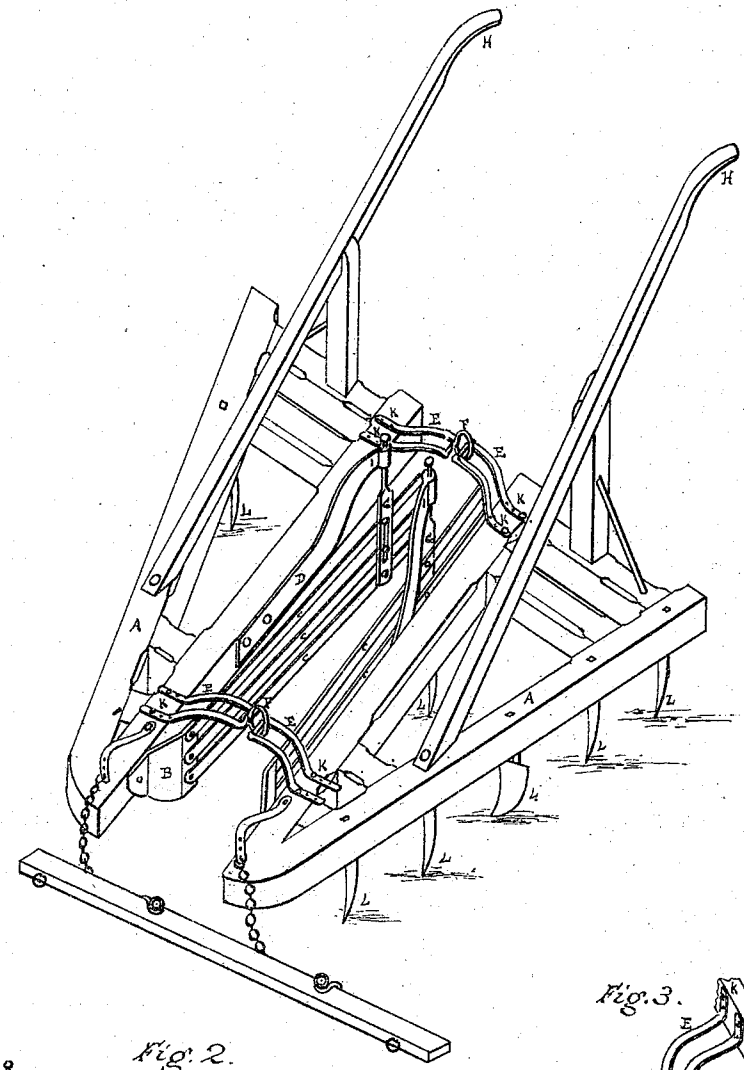


Fig. 2.

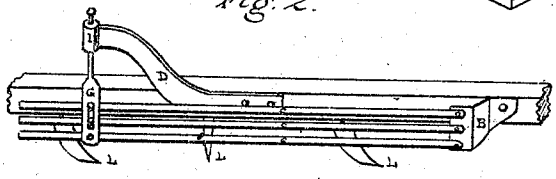
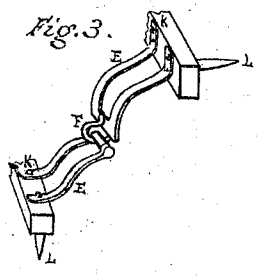


Fig. 3.



Witnesses.

John A. Shaffer

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UNITED STATES PATENT OFFICE.

GEORGE W. OWENS, OF FAIRFIELD, IOWA.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 118,549, dated August 29, 1871.

To all whom it may concern:

Be it known that I, GEORGE W. OWENS, of the city of Fairfield, county of Jefferson and State of Iowa, have invented a new and Improved Cultivator for Corn, and for other crops planted like corn; and I hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists of a double harrow, armed with teeth, and diamond and shovel-plows, so connected and arranged that either division of the implement can be at work on the ground at pleasure, by means of a slide and a stationary ring or staple; also, that one division can be several inches in advance of the other, and also several inches below the other, by the operation of the ring or staple and slide; also, of a shield, provided with a spring and movable slats, to prevent clods of earth or other obstructions from falling upon the growing crops; it has also an upward and downward motion, to accommodate itself to uneven ground; also, that the two sides of the implement, by means of the plan of connection, may be folded together for convenience in transportation, and for other purposes hereafter indicated.

To enable others skilled in the art to make and use my invention, I will proceed to describe its operation and construction.

Figure 1 is a perspective view of my cultivator. Fig. 2 is a view of the shield. Fig. 3 represents the connection of the two divisions of the implement when the same are folded together.

Similar letters indicate like parts in each of the figures.

A represents the main frame of the implement, being two angular frames armed with teeth L, plows L, &c. H shows the handles. K K′, &c., are the points of attachment of the brackets E E, &c. They are attached by means of a bolt, with three or more openings on either side, by which the space between the shields and the interior surface of the frame may be increased or diminished at pleasure. B B are plates to which are attached the movable slides C C C. These slides can be raised or lowered by means of a slot, G, in which the bolt works. D is a spring, attached to the interior surface of the frame, giving free motion to the shield from side to side, and also upward and downward, to accommodate it to any obstructions, as clods of earth, sods, &c., and to have the implement work satisfactory on uneven ground. Thus, while one section or division of the implement is on high ground the other may be depressed to accommodate itself to any inequality of surface. Fig. 3 is a detached drawing of the shield or fender, showing the spring D, the plate B, where it is attached to the interior surface of the frame A, the movable slides C C C, and the arrangement by which the bolt, working in a slot, G, may enable the slides to be moved at pleasure. I is an eye, in which the iron frame holding the slot G works, giving upward and downward motion to the shield C C C, and enabling the same to accommodate itself to uneven ground. Fig. 3 is a detached drawing of the connection between the two separate divisions of the implement. K shows the arrangement of openings and bolt, as set forth in Fig. 1, and for the purposes indicated. E E and F are two iron brackets or arrangements, attached to the upper surface or interior side of both ends of the implement. The one is furnished with a stationary ring or staple, F, in which the free surface of the bracket on the opposite side works with ease. This arrangement permits one section or division of the implement to be eight to twelve inches in advance of the other; it enables the operator to raise one or other section to pass an obstruction, to avoid injury to the growing crop; to depress either side at pleasure to accommodate the implement to uneven surface; to fold the implement for convenience of transportation; to raise either side with ease to cleanse it of weeds, &c.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The arrangement of the cultivators A A, coupling device E E F, self-adjusting clod-fenders B C C C, and spring D, as set forth and described.

GEORGE W. OWENS.

Witnesses:

JOHN R. SHAFFEN,

B. S. MCELHINNY.