(No Model.)

J. McGEE.

WHEEL CULTIVATOR.

No. 348,760. Patented Sept. 7, 1886.

Fig. 1.

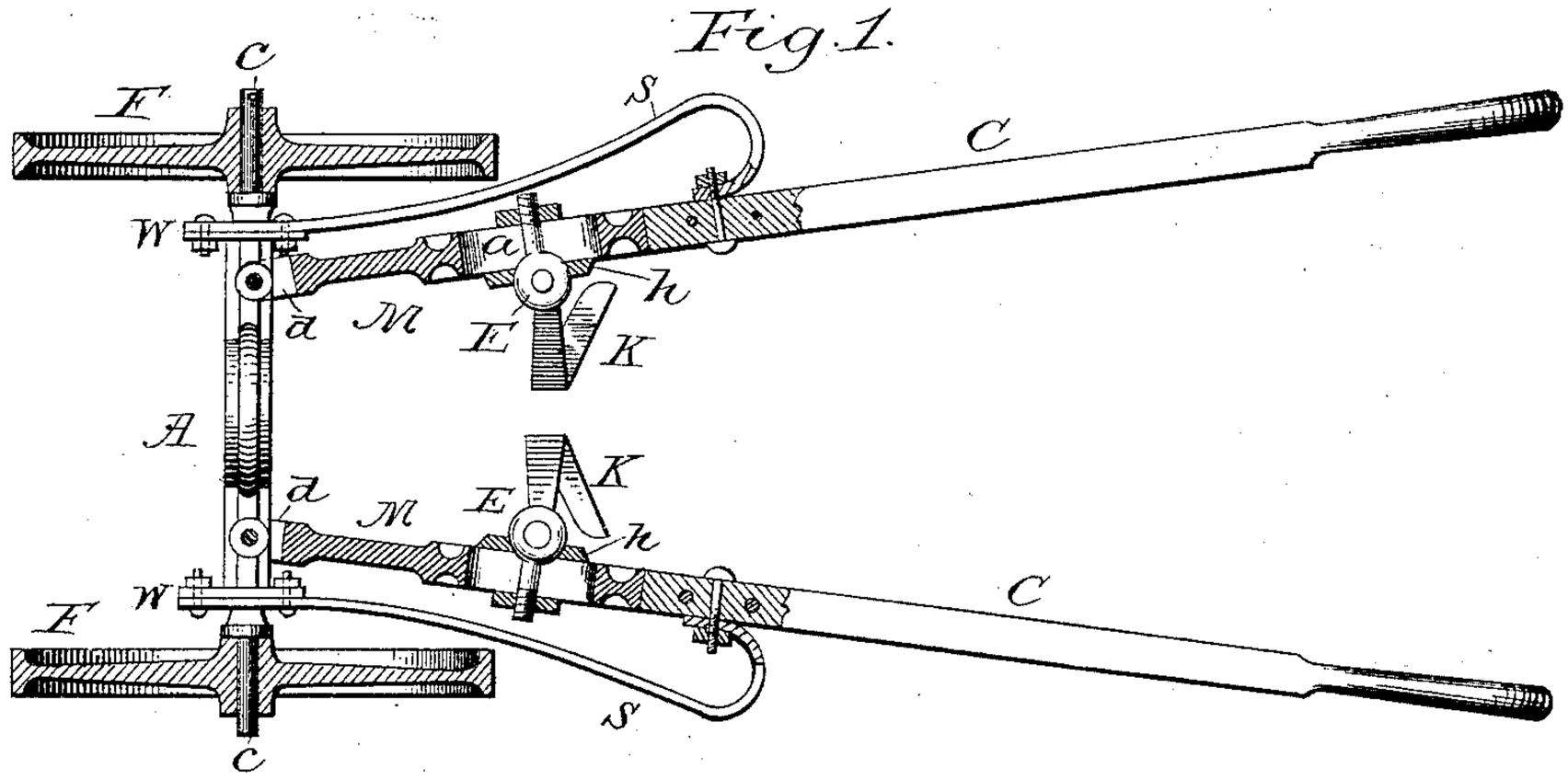


Fig. 2.

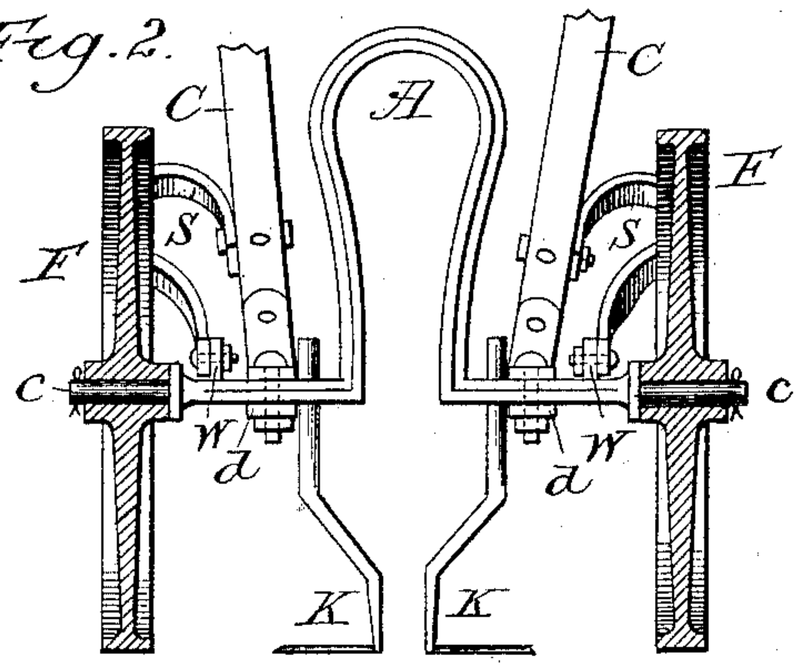


Fig. 4.

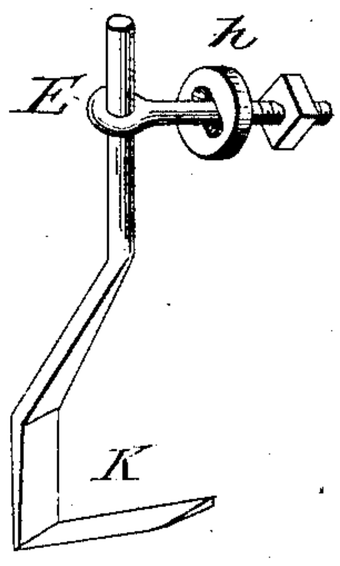


Fig. 5.

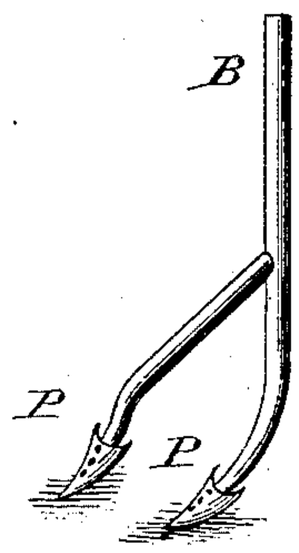
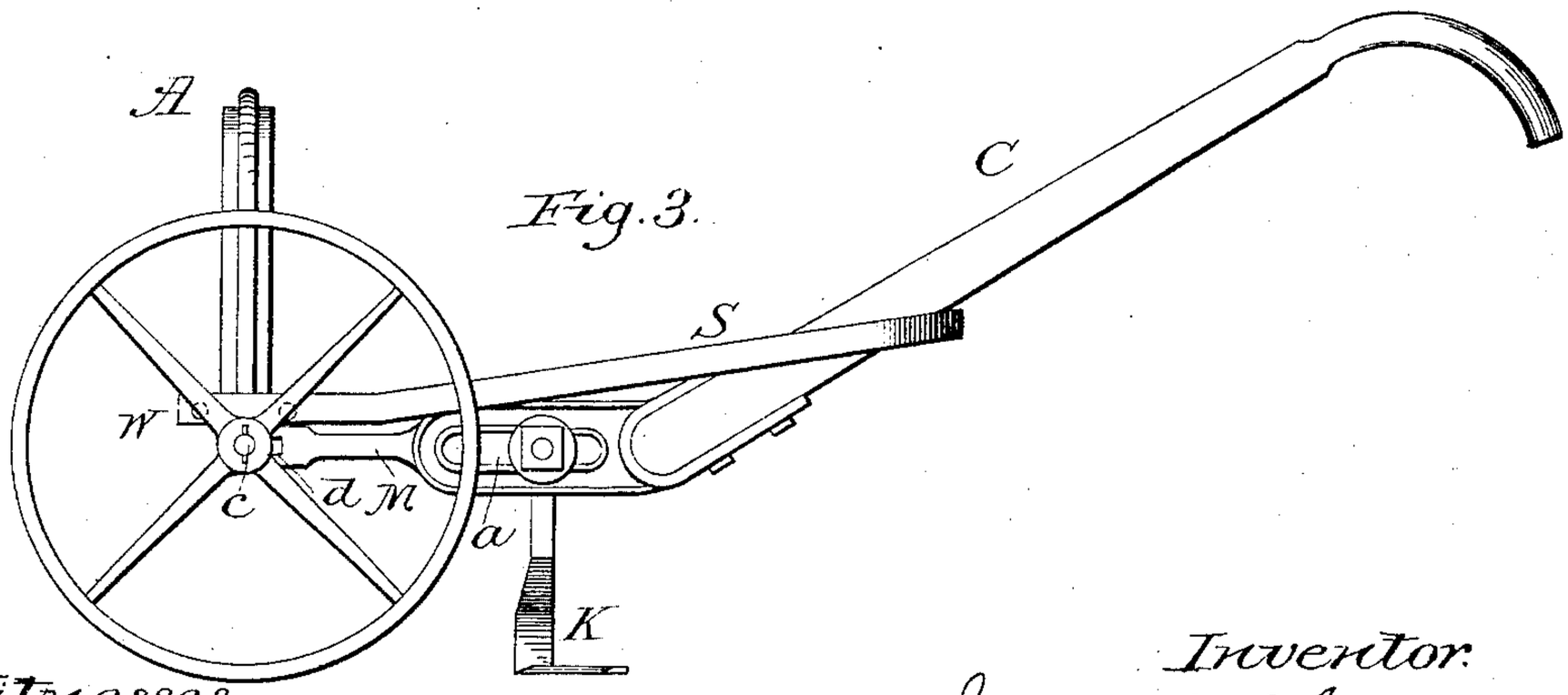


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

JAMES McGEE, OF SCOTT COUNTY, IOWA.

WHEEL-CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 348,760, dated September 7, 1886.

Application filed May 3, 1886. Serial No. 201,015. (No model.)

To all whom it may concern:

Be it known that I, JAMES McGEE, a citizen of the United States, residing in the county of Scott and State of Iowa, have invented certain Improvements in Wheeled Cultivators Intended to be Propelled by Hand, of which the following is a specification.

The object of my invention is to spread the beams apart laterally by spring-power, so as to keep the shovels or knives from cutting the plants, requiring the operator to exert force in opposition to the spring to cause the shovels or knives to come nearer to the plants; also, to utilize the spring as a brace between the beam and axle, rendering the manipulation of the implement easier and less danger of one wheel getting ahead of the other.

The invention is shown in connection with an ordinary two-wheeled cultivator having an arched axle and two laterally-moving drag-bars terminating in handles for propelling the implement and moving the bars laterally.

I attain these objects by the mechanism illustrated in the accompanying drawings, of which—

Figure 1 is a top view of the lower horizontal section of the cultivator. Fig. 2 is a rear view of a vertical section of the cultivator. Fig. 3 is a side view of the cultivator. Fig. 4 is a perspective view of the knife and standard and eyebolt for securing the same upon the beam through the slot therein, and Fig. 5 is a perspective view of the shovels and standards.

Similar letters refer to similar parts throughout the several views.

The ends of the arched axle-tree A are inserted in the hubs of the wheels F F, and secured by the shoulders thereon and the pins *c c*, or in any other well-known manner. The beams M M have at their rear ends the handles C C, bolted or secured thereto, and the front ends of said beams M M are bolted to the axle A, between the arch and wheel F, in any of the well-known ways, so that the beams M M may be moved laterally. Standards are secured to the beams M M by the device shown in Figs. 4 and 3, the eyebolt passing through slot *a*, and secured by nut and thread or by any well-known method, so that the shovels P P or knife K may enter the ground. This combination constitutes a well-known hand-cultivator. To this I add the features of my invention, which are the curved springs S S, attached as follows: The front end of each spring S is secured by a clip-bolt, W, or other convenient means, to the axle A, between the wheel F and beam M, its rear end being bolted to the handle C, the force or power of the spring being lateral and outward toward the wheel. The spring S, when thus attached, exerts a lateral and outward force, carrying the beam M and shovels P P or knife K, attached outwardly, toward the track of the wheel and away from the plants, requiring the operator to use force to press the handles inward to move the beam M in the same direction and cause the shovels P P or knife K to come closer to the plants. The spring S also acts as a brace between the handle C and axle A, causing the wheels F F to run parallel, and preventing one wheel from running in advance of the other, steadying the implement and rendering it easy of manipulation. The cultivator is propelled by the operator pushing the same by the handles C C, and the shovels P P or knife K guided nearer to the plants by the operator forcing the handles C C inwardly, and upon the operator desisting from exerting such force the spring S thereupon forces the beam M outward.

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

In combination with a two-wheeled hand-cultivator having an arched axle, two rear laterally-moving beams with shovels or knives and handles for propelling or guiding connected therewith, the curved springs S S, each attached at one end to the axle between the wheel and beam and at the opposite end to the handle, so as to exert a force to move the beam outwardly toward the wheel and act as a brace between the axle and rear laterally-moving beam, substantially as described.

JAMES McGEE.

Witnesses:
J. W. STEWART,
ANDREW MILES.