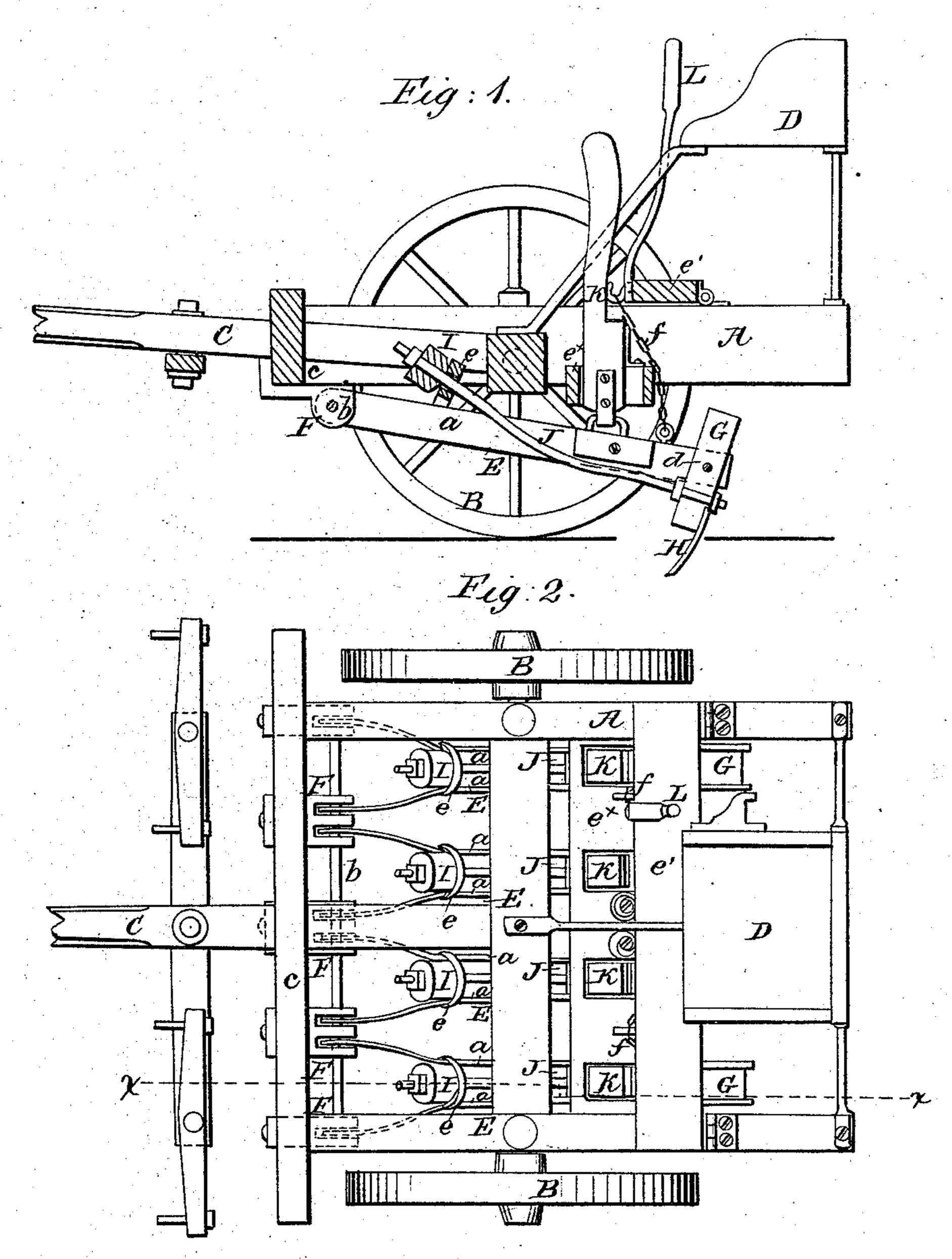
## J. H. B. KELLER.

Wheel Cultivator.

No. 83,509.

Patented Oct. 27, 1868.



Witnesses Amanlorgan il & Centton Inventor Jacob. St. B. Keller per muning for attorneys



## JACOB H. B. KELLER, OF CHAMBERSBURG, PENNSYLVANIA.

Letters Patent No. 83,509, dated October 27, 1868.

## IMPROVEMENT IN CULTIVATORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JACOB H. B. KELLER, of Chambersburg, in the county of Franklin, and State of Pennsylvania, have invented a new and useful Improvement in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention.

Figure 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved cultivator, and it consists in a novel construction of the same, as hereinafter fully shown and described, whereby the device may be used in rough or stony ground, without the liability of breaking or injuring it.

In the accompanying sheet of drawings, A represents a rectangular frame, which is mounted on two wheels B, and provided with a suitable draught-pole, C.

D is the driver's seat, placed on the rear part of the frame A, and E represents four shovel-beams, which are constructed each of two metal bars, a a, the front ends of the latter being secured by a rod, b, in metal heads F, which are attached to the front cross-bar, c, of the frame A. By this connection the beams E may be raised and lowered freely.

Between the rear parts of the bars, a a, of the beams E, standards, G, are secured, by pivot-bolts d, one standard to each beam, and to the lower end of each standard, a shovel, H, is attached, of any proper or desired form.

I represents India-rubber springs, which are placed in front of bearings, c, on the beams E, and J represents rods, which are secured to the standards G, below the pivot-bolts d, and extend forward, and pass through the springs I.

The springs I retain the standards G in a proper working-position, and in case any one of the shovels H

meets with an obstruction, its standard, G, will yield or give, and said shovel allowed to clear itself and pass over a small obstruction, while, in the event of any one of the shovels coming in contact with a large obstruction, the yielding of its standard will admit of the beam È being raised with facility, as the shovel will not become locked.

The beams E have each an upright lever, K, attached, and these levers pass up through a cross-bar, e<sup>×</sup>, in frame A, and are within convenient reach of the driver, on seat D. By-means of these levers, the beams E may be raised individually, and all the beams and shovels may be raised simultaneously, by actuating a lever, L, which is within convenient reach of the driver, on seat D, said lever L being attached to a hinged bar, e', on the frame A, to which bar the beams E are connected by chains f.

From the above description, it will be seen that this device may be used on rough or stony ground, without the liability of being broken or injured, as the shovel-standards are allowed to yield or give and pass over small obstructions, and, in case of coming in contact with large obstructions, the standards, in yielding, admit of the shovels being readily raised, either singly, or the whole of them, simultaneously, as may be required.

Having thus described my invention,

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

1. The pivoted standards G, arranged in connection with the rods J, India-rubber springs I, and beams E, all arranged in the manner substantially as and for the purpose set forth.

2. The levers K, attached to the beams E, and arranged in relation with the driver's seat D, substantially as and for the purpose specified.

JACOB H. B. KELLER.

Witnesses:

SM. ARMSTRONG, JAMES P. McCLINTOCK.