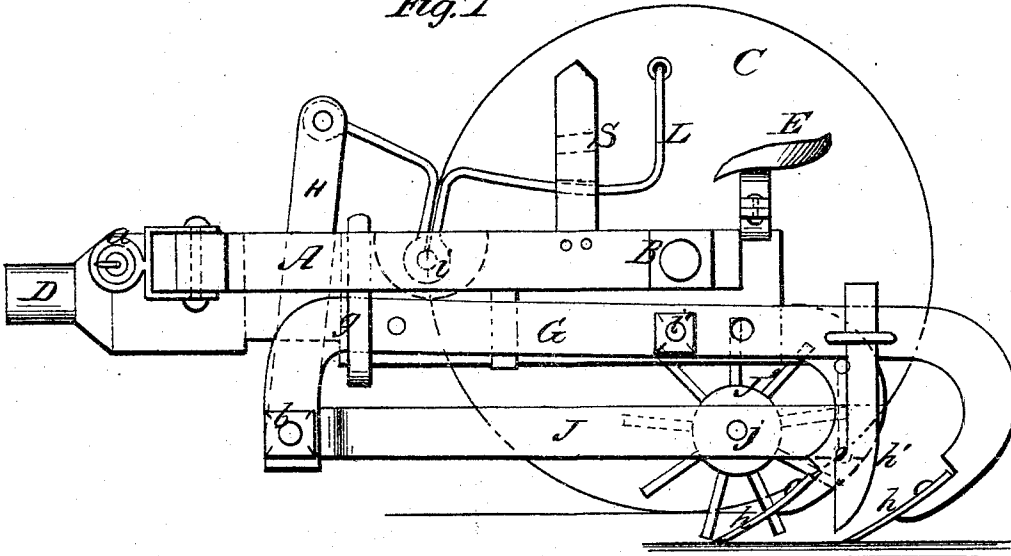


J. L. POLLARD.  
Cultivators.

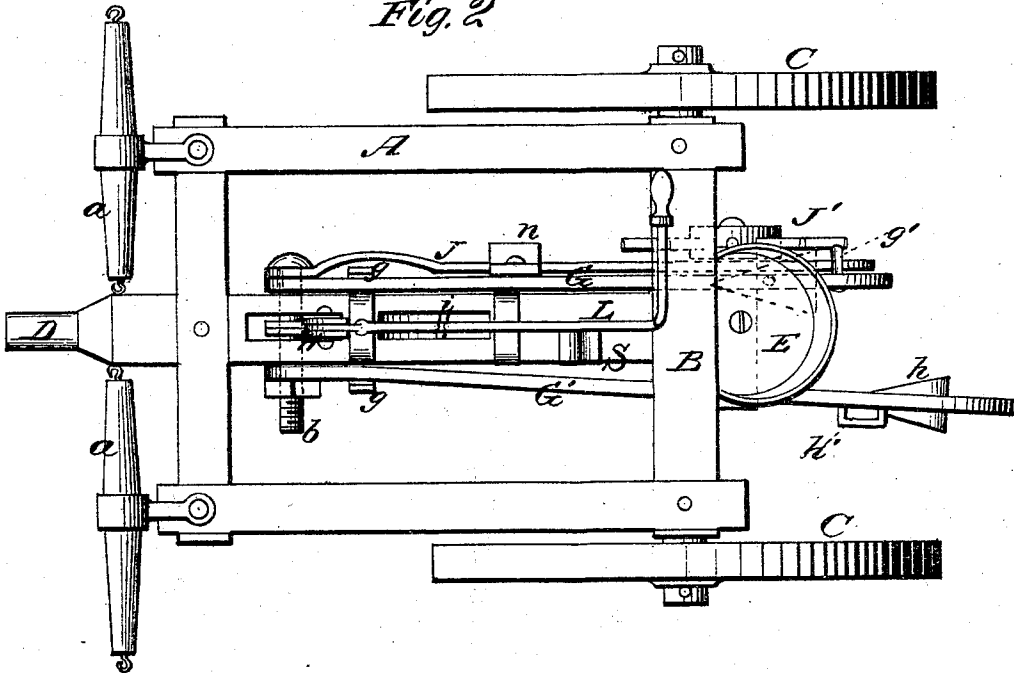
No. 154,081.

Patented Aug. 11, 1874.

*Fig. 1*



*Fig. 2*



WITNESSES

*George E. Upham,*  
*Robert Everett,*

B31

INVENTOR

*John L. Pollard,*  
*Chapman & Fennell & Co*

ATTORNEYS.

J. L. POLLARD.  
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Fig. 3

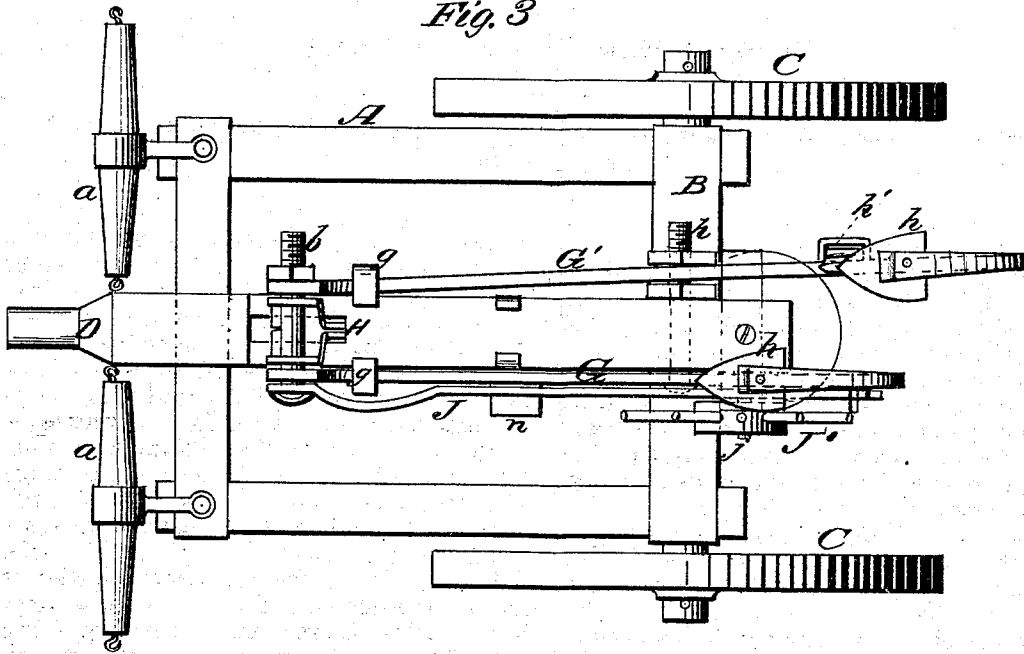
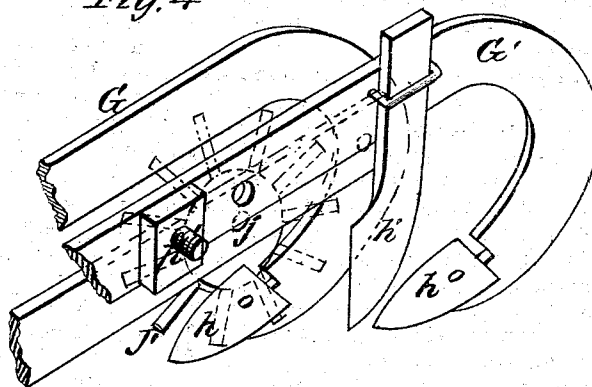


Fig. 4



WITNESSES

George C. Upham,  
Robert Everett,

By

INVENTOR

John L. Pollard  
Meyers & Co

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN L. POLLARD, OF SCOTT'S HILL, TENNESSEE.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **154,081**, dated August 11, 1874; application filed February 23, 1874.

*To all whom it may concern :*

Be it known that I, JOHN L. POLLARD, of Scott's Hill, in the county of Henderson and State of Tennessee, have invented a new and valuable Improvement in Cultivators; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side view of my cultivator. Fig. 2 is a top, and Fig. 3 a bottom, view of the same. Fig. 4 is a detail view.

This invention has relation to wheel-cultivators which are intended to be drawn by two horses; and it consists in a novel arrangement of shovel-beams, guides, and means for raising and depressing them, as will be hereinafter explained.

In the annexed drawings, A designates a rectangular frame, secured by its rear end to the axle-tree B of two transporting-wheels, C C. D designates a draft-pole, which is extended back to form the intermediate beam of frame A, and on opposite sides of which, at the front of this frame, two single-trees, *a a*, are attached. E represents the driver's seat, which is mounted on the rear end of the draft-pole in rear of the axle B. G G' are two cultivator-beams, which are arranged on opposite sides of the draft-pole, and extended back of the axle B, where they are curved downward, and provided with shovels *h h* of a suitable form. In front of the shovel of beam G' a colter, *h'*, is applied, and on the right-hand side of the shovel of the beam G a breaking-wheel, J', is applied, as will be more fully explained hereinafter. The two shovel-carrying beams G G' are secured to the draft-pole D below the axle by means of a pivot-bolt, *i'*, and the front downwardly-curved ends of these beams are passed through vertical guides *g g*, and connected together by a transverse bolt, *b*. The pivotal connection *i'* allows the two beams G G' to be vibrated vertically, which movements can be imparted to them by

means of a lever, L, having its fulcrum at *i*, and connected by a rod, H, to the transverse bolt *b*. The lever L extends back to the driver's seat E, so that the driver can, without leaving his seat, raise or depress the cultivators. S designates a standard, which rises from the rear portion of the draft-pole, and is provided with two notches for receiving lever L, and firmly holding the cultivators in a depressed or raised position. To the transverse bolt *b* the front end of a rod, J, is pivoted, which rod extends back and passes through a staple-guide, *g'*, which is rigidly fixed to the right-hand side of the rear curved portion of the shovel-beam G, and which is quite long, so as to allow the rear end of said rod J free vertical play. The wheel J', above referred to, is pivoted to this rod J, and constructed with spokes or breakers, which revolve in close relation to the shovel of the beam G as the machine is moved along. This spoked wheel is allowed to rise and descend freely at the same time that it revolves about its axis; it will, therefore, break up and pulverize the clods of earth and stir the soil, and at the same time prevent the shovel from being clogged with trash. The spokes or arms of this wheel J' will allow the earth raised by the shovel of the beam G to pass freely through them.

It will be observed that by adjusting the hand-lever L the two shovels and the breaking-wheel J' will be moved together.

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

The plow-beams G G', pivoted at *i* to the rear portion of the draft-pole D, and connected together at their front ends by a bolt, *b*, the guides *g g*, the rod H, and hand-lever L, all constructed, arranged, and operating as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

J. L. POLLARD.

Witnesses:

C. R. SCARBOROUGH,  
B. H. BROWN.