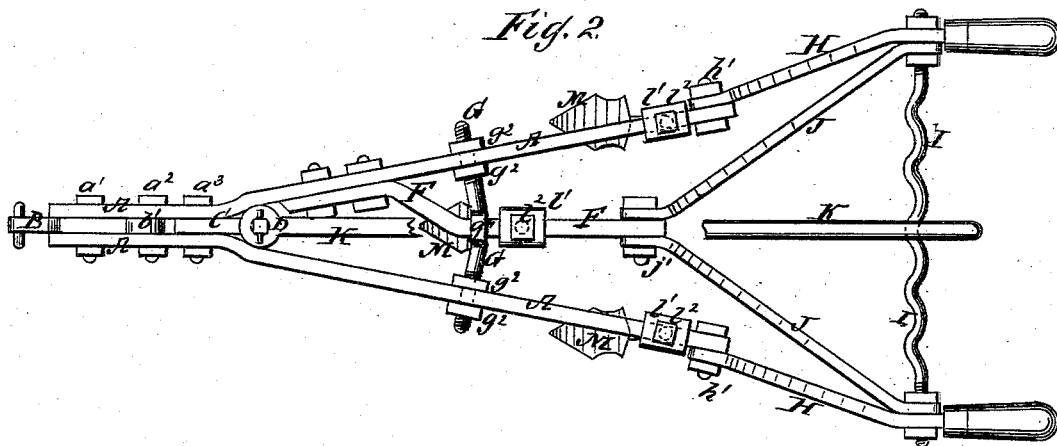
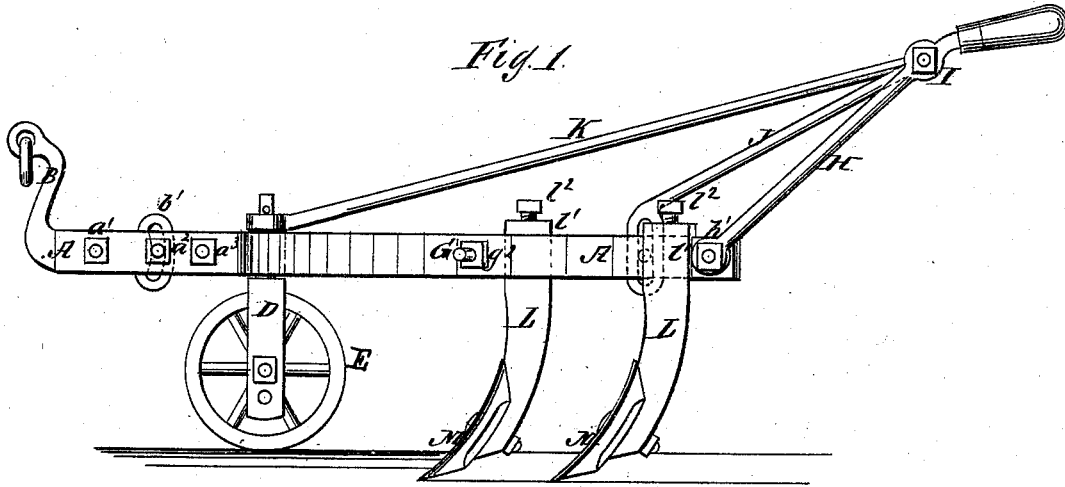


E. NAUMAN.  
CULTIVATOR.

No. 182,128.

Patented Sept. 12, 1876.



WITNESSES:

*E. Woff*  
*John Goethals*

INVENTOR:

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# UNITED STATES PATENT OFFICE.

EDWARD NAUMAN, OF BRIDGEPORT, OHIO.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 182,128, dated September 12, 1876; application filed June 12, 1876.

*To all whom it may concern:*

Be it known that I, EDWARD NAUMAN, of Bridgeport, in the county of Belmont and State of Ohio, have invented a new and useful Improvement in Cultivators, of which the following is a specification:

Figure 1 is a side view of my improved cultivator. Fig. 2 is a top view of the same, part being broken away to show the construction.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved cultivator, which shall be so constructed that it may be conveniently adjusted for covering seeds, digging potatoes, and cultivating various kinds of plants planted in hills and drills, and which shall be simple in construction and effective in operation in either capacity.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

A are the side beams, the forward parts of which are parallel with each other, and between their forward ends is pivoted the draw-bar B by a bolt,  $a^1$ . The forward part of the draw-bar B is curved upward and forward, and has a ring, link, or hook attached to or formed upon its end for the attachment of the draft. The rear end of the draw-bar B has a vertical cross-head,  $b'$ , formed upon it, which is slotted to receive the bolt  $a^2$ , by which the said draw-bar is clamped in place when adjusted. Between the rear ends of the parallel parts of the side beams A is secured, by a bolt,  $a^3$ , the shank of the socket C, in which is pivoted the standard D of the gage-wheel E. Several holes are formed in the standard D, to receive the pivot of the gage-wheel E, so that the said gage-wheel may be adjusted higher or lower to regulate the depth at which the plows work in the ground. The rear parts of the side beams A incline from each other, and to one of them, just in the rear of the socket C, is bolted the forward part of the central beam F, which is bent inward and rearward, so as to bring its rear part midway between the rear parts of the side beams

A. The rear parts of the three beams A F A are held in the proper relative positions by the cross-rod G, the middle part of which is notched or has a U-bend,  $G^1$ , formed in it to receive the center beam F. The ends of the rod G pass through holes in the side beams A, and have screw-threads cut upon them to receive the nuts  $g^2$ —one upon each side of each beam A—so that, by adjusting the said nuts  $g^2$ , the beams A F A may be adjusted at any desired distance apart. H are the handles, the forward ends of which are secured to the rear ends of the side beams A by bolts  $h'$ . The upper parts of the handles are secured to the ends of the cross-bar I. To the ends of the cross-bar I are also secured the upper ends of the braces J. The lower ends of the braces J are bent downward, and are slotted to receive the bolt  $j'$ , by which they are secured to the rear end of the center beam F.

By this construction, by loosening the bolts  $h' j'$ , the handles can be raised and lowered, as the height of the plowman may require.

The connecting-rod I is scalloped or notched, to receive and hold the end of the rod K, the forward end of which is attached to the upper end of the standard D of the gage-wheel E, so that the said standard and gage-wheel can be conveniently turned by the plowman, to guide the machine. L are the plow-standards, to the lower ends of which are attached the plows M. In the upper ends of the standards L are formed sockets  $l'$ , to receive and fit upon the beams A F A, so that they may be moved forward and back upon said beams to adjust the plows according to the kind of plowing to be done. The standards L are secured in place, when adjusted, by set-screws  $l^2$ , which pass in through their upper ends and rest upon the upper edges of the said beams A F A.

As shown in the drawings, the machine is adjusted as a cultivator. By moving one of the side standards forward and the central standard back, the machine will be adjusted as a "side-wipe." By moving the center standard forward and attaching a larger shovel to it, and moving the side standards back, and

attaching half-shovels to them, the machine becomes a potato-plow. By detaching the center standard and moving one of the side standards forward, the machine becomes a double shovel. By detaching the side standards, the machine becomes a single shovel; and, by detaching the center standard, and attaching half-shovels to the side standards, the machine becomes a corn-coverer.

Having thus described my invention, I claim

as new and desire to secure by Letters Patent—

The combination of short bent central beam F, rod G *g*<sup>1</sup>, and braces J J, with beams and handles, as and for the purpose specified.

EDWARD NAUMAN.

Witnesses:

A. H. MITCHELL,

JAS. F. CHARLESWORTH.