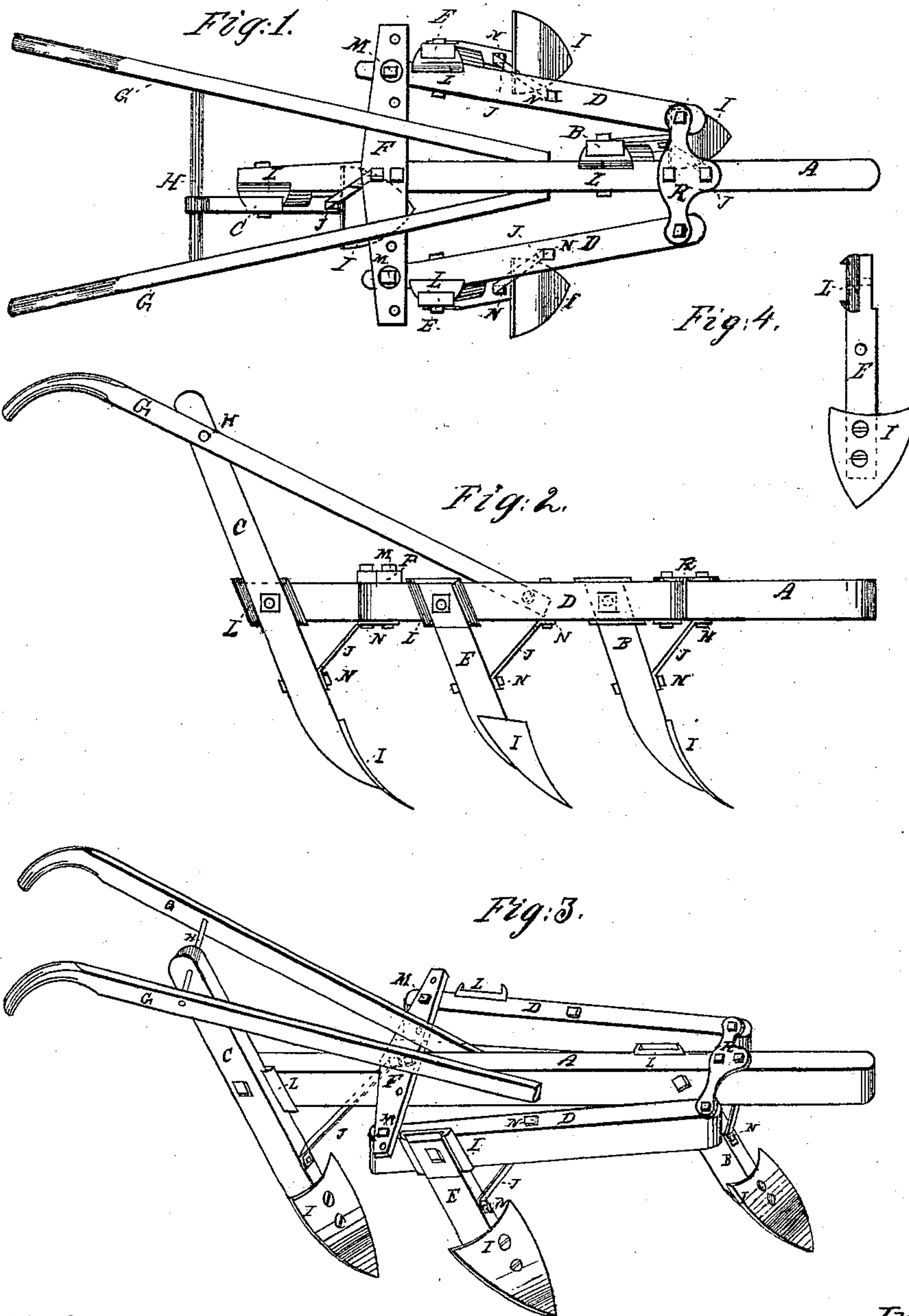


E. BRIGGS.
Cultivators.

No. 141,199.

Patented July 29, 1873.



Witnesses

D. Stepan
M. Maures

Inventor

Ephraim Briggs

UNITED STATES PATENT OFFICE.

EPHRAIM BRIGGS, OF CLEVELAND, OHIO.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **141,199**, dated July 29, 1873; application filed July 18, 1872.

To all whom it may concern:

Be it known that I, EPHRAIM BRIGGS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Cultivators, of which the following is a specification:

This invention is an improvement upon the apparatus described in Letters Patent granted to me on the 17th day of July, 1860, No. 29,136; and it consists of a certain combination and construction of parts, as hereinafter specified and claimed.

In the drawing, Figure 1 is a top plan view of the cultivator. Fig. 2 is a side view of the same. Fig. 3 is a perspective view with the left reversible tooth and standard removed. Fig. 4 is a view of one of the reversible teeth and standard.

A represents the main or central beam, provided near its front end with socketed couplings L L, to which is adapted the standard B, having on its lower end the colter or tooth I. At the rear end of the beam A is bolted a standard, C, having at its upper end an eye, through which the bar H passes, which connects the handles G G of the cultivator together. By providing the standard C with an eye, through which the round H passes, great rigidity and firmness is imparted, not only to it but also to the handles G G in controlling the different movements of the cultivator. Upon the beam A, near its front end, is attached a cross-bar, R, to each end of which is pivoted the side-beams D D, the rear ends of these beams being secured to the cross-bar F, which latter is bolted at its center to the beam A, and is provided with a series of eyes, to any of which the beams D may be adjusted and secured by means of the bolts M, for the purpose of expanding and contracting the width of the cultivator. The beams D are provided near their rear ends with socketed couplings L, to which are adapted the upper mortised ends of the standards E, each of which has at its lower end a right and a left hand tooth or colter, I. To retain the standards in a firm position they are provided with braces J connected to the beams D by

means of the bolts N N. The object of these right-and-left hand reversible colters is to work small plants, which is done by removing the bolts N and placing the left-hand colter-bar in the coupling L on the right beam D, as in Fig. 3, and then traversing a row twice, when the outside colter will turn a furrow away from the hill or inward, and the rear colter on the standard C following will fill in the space with fresh earth without covering the plants. The colters I are of such form that when secured upon the standard E one side of the same will extend out laterally beyond the standard further than the opposite side, thus enabling, by their reversal, a furrow to be thrown either inward or outward, as the case may require, in working small plants, or corn and large plants.

By thus providing the beams D with the reversible standards E it is necessary to traverse but once between two rows of corn or other plants, which has the effect of throwing up a furrow on both rows at the same time, thus obviating the necessity of several passages of the cultivator, as is now usual in the cultivation of plants.

I do not claim, broadly, a socket attached to the beam of a cultivator and serving to connect the standards carrying the teeth to the cultivator, as shown in the patent to Endsley and Fletcher, May 18, 1858; neither do I claim, broadly, the frame of a cultivator with side beams pivoted in front and adjustable in width at the rear, for such is shown in the patent to N. A. Coates, dated October 1, 1867; but

What I claim as my invention is—

The combination, in a cultivator, of a center beam and two pivoted adjustable side beams with reversible shovels carried on tenoned wooden standards secured to the beams by double grooved metallic sockets, all arranged as described, and for the purpose set forth.

EPHRAIM BRIGGS.

Witnesses:

D. STEPHAN,
M. MAUREY.