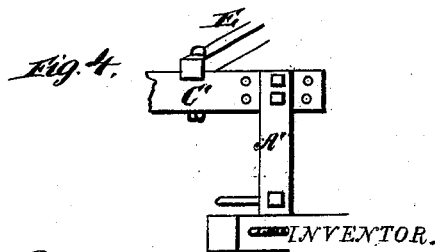
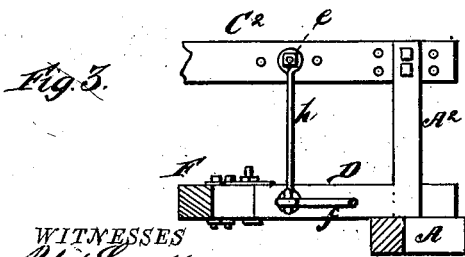
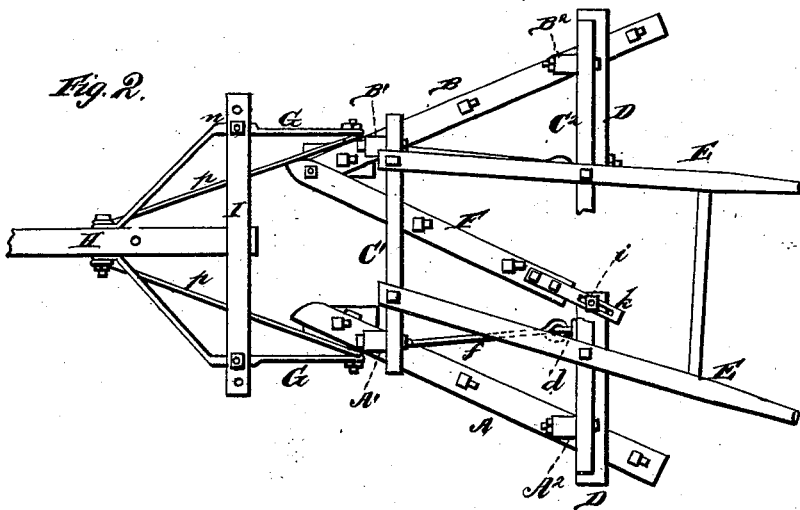
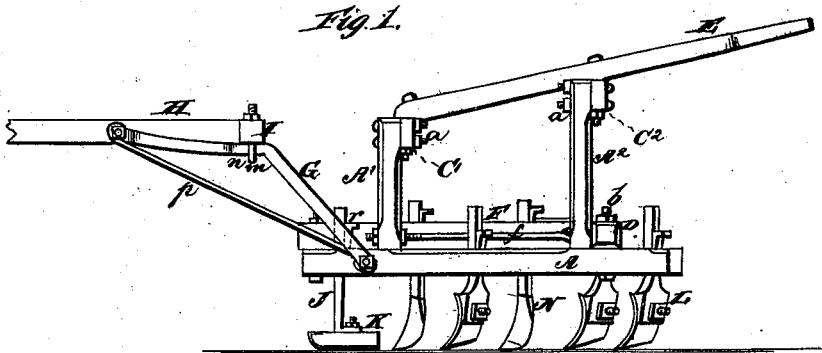


R. K. NIECE.
Cultivator.

No. 207,767.

Patented Sept. 3, 1878.



WITNESSES
Robert Everett
James J. Shuler

BY *Richard K. Niece*
Gilmore, Smith & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

REUBEN K. NIECE, OF FRENCHTOWN, NEW JERSEY.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 207,767, dated September 3, 1878; application filed July 27, 1878.

To all whom it may concern:

Be it known that I, REUBEN K. NIECE, of Frenchtown, in the county of Hunterdon and State of New Jersey, 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 drawings is a representation of a side of my cultivator. Fig. 2 is a top-plan view of the same, and Figs. 3 and 4 are details.

The nature of my invention consists in the construction and arrangement of a cultivator, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

A and B represent the two main beams of my cultivator, said beams being respectively provided with upright posts A¹ A² and B¹ B². The two front posts, A¹ B¹, are at their upper ends connected by a bar, C¹, and a similar bar, C², connects the two rear posts, A² B², said bars C¹ and C² being, however, of such length that the beams A B will diverge toward their rear ends.

The bars C¹ C² are fastened to their respective posts by means of bolts *a a*, and said bars have at their ends several sets of holes for said bolts, so that the beams A B can be adjusted at varying distances apart, as may be required, according to the kind of work to be done.

E E represent the handles secured on top of the bars C¹ C², as shown.

Each of the beams A and B is, near its rear end, provided with a short beam, D, adjustably fastened by a bolt, *b*, on top of the main beam and extending inward.

In the inner end of each beam D is fastened an eyebolt, *d*, and this eyebolt is, by a brace or brace-rod, *f*, connected with the corresponding post A¹ or B¹. The eyebolt *d* also passes through an eye in the lower end of a rod, *h*, which has a similar eye in its upper end, and this is fastened by a bolt, *e*, to the rear bar, C². The bolt *e* is movable in different holes in said bar C², so as to adjust the rod *h* according to the various adjustments of the other portions of the cultivator-frame.

In addition to the above beam a center diagonal or cross beam, F, is also used. This

beam F is fastened by a bolt to the front end of either of the beams A and B, while its rear end is, by a slotted plate, *k*, and bolt *i*, connected to the inner end of the opposite beam D.

To the outer side of each beam, A and B, near the front end, is pivoted a metal bar, G, which is bent, as shown—that is to say, its rear portion extends upward at an angle; then in the center it has a small part, *n*, extending forward, and the remaining portion extends forward and inward; and the extreme front ends of said two metal bars are fastened by a single bolt to opposite sides of the tongue H. This tongue is, at its rear end, provided with a cross-bar, I, to the ends of which the bars or hounds G G are fastened at their straight portions *n* by means of hook-bolts *m*, made adjustable in the cross-bar I, so as to adjust the hounds to the adjustment of the frame.

p p are straight brace-rods connecting the fastening-bolts at the front and rear ends of the hounds G, as shown.

Through the front ends of the beams A B are passed straight bars J J, which are fastened by keys *r*. The lower end of each bar J forms a foot, to which is bolted a steel shoe, K, for sliding over the ground. These shoes can be adjusted up and down, as required, to regulate the depth of the work to be done.

In the beams A B are adjustable shanks L, with plows M, and in the cross-bar N are adjustable teeth N, as shown.

This cultivator may be used for any purpose where a cultivator or harrow is needed.

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

1. A cultivator-frame consisting of the side beams A B, with posts A¹ A² and B¹ B², adjustable bars C¹ C², adjustable rear beams D D, and adjustable cross-beam F, substantially as set forth.

2. The combination of the beam A or B, beam D, eyebolt *d*, brace *f*, and rod *h* with adjustable bolt *e* in the bar C², for the purpose set forth.

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

REUBEN K. NIECE.

Witnesses:

A. P. WILLIAM,
WM. ROBERSON,