

(No Model.)

J. SHANK.  
CULTIVATOR.

No. 411,906.

Patented Oct. 1, 1889.

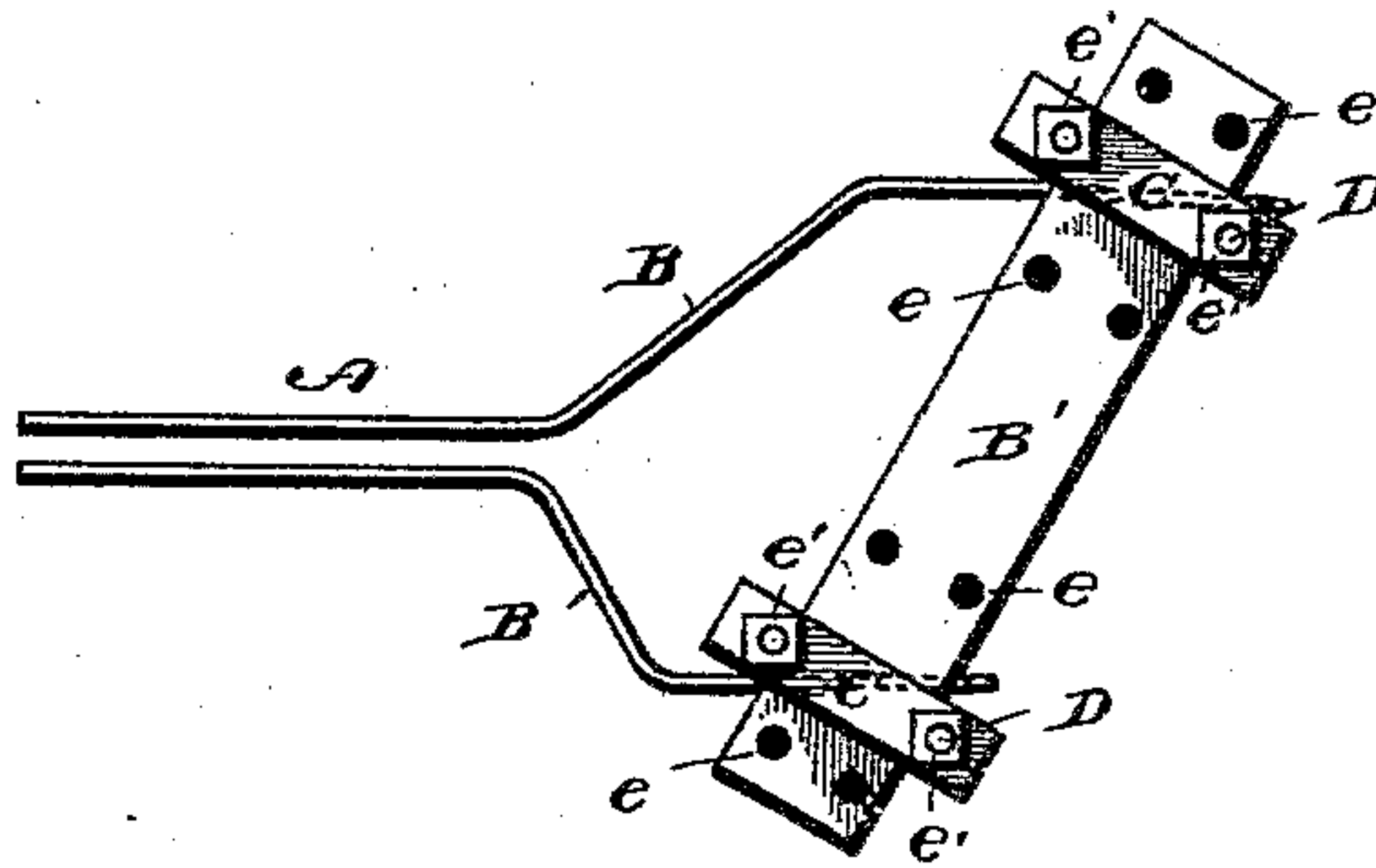


Fig. 1.

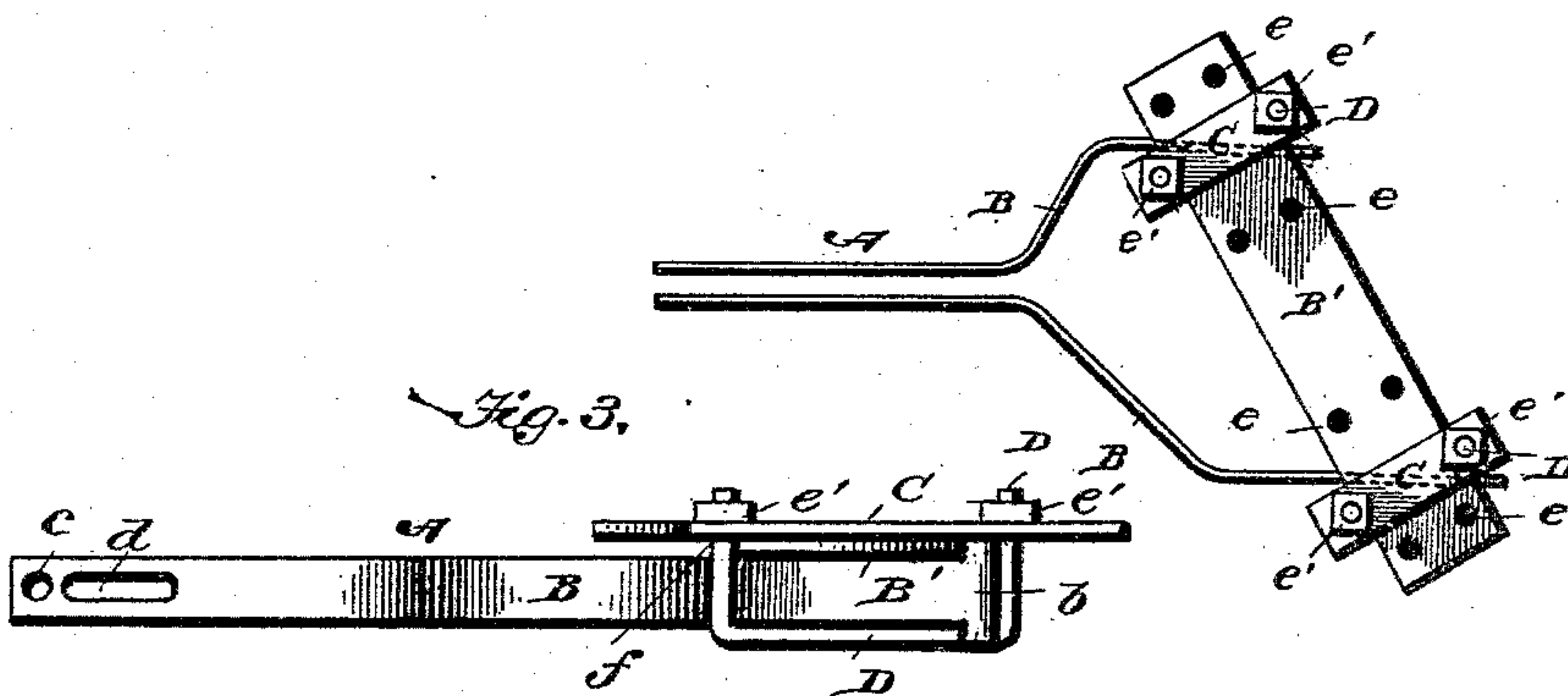


Fig. 2.

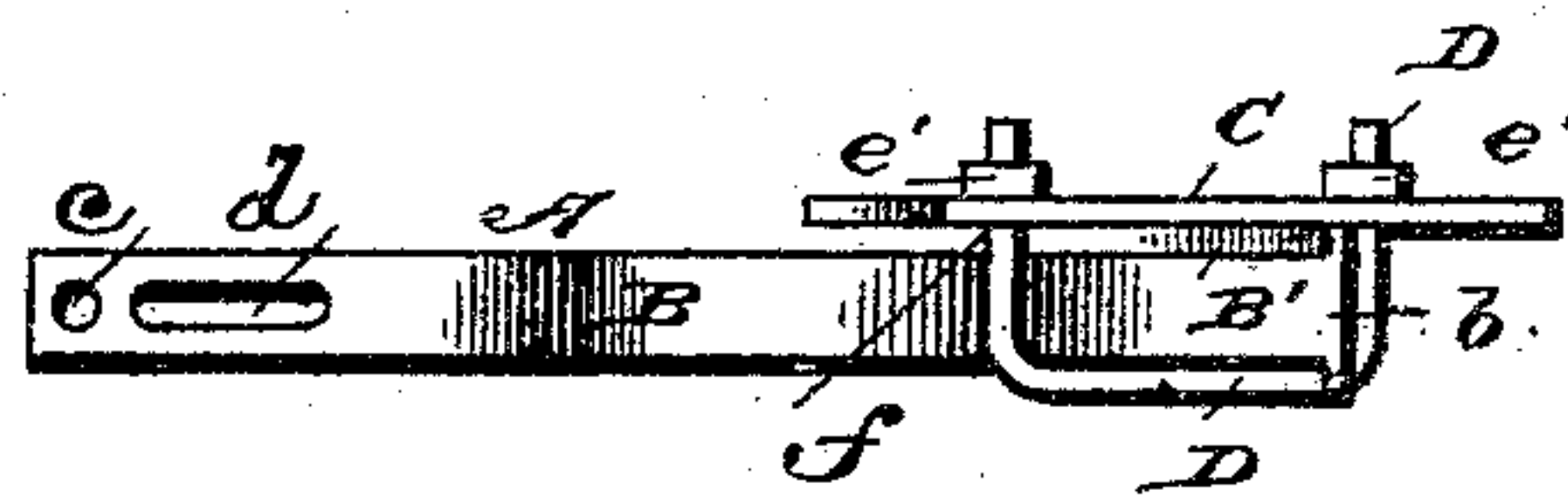
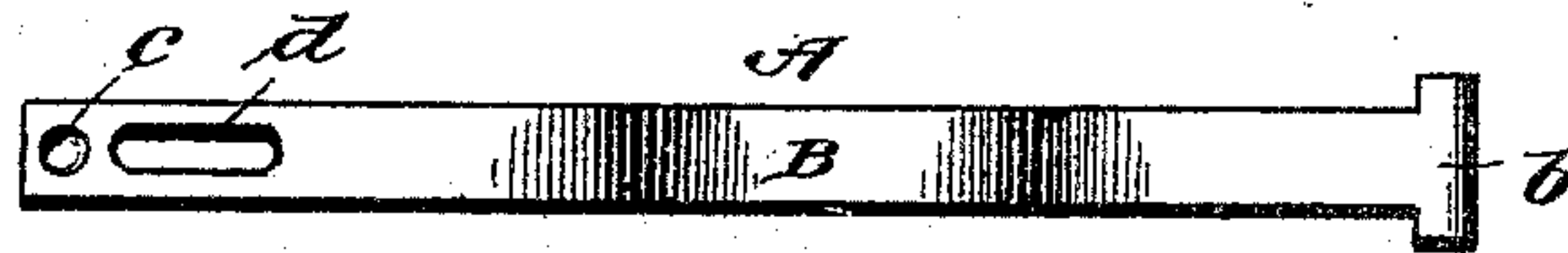


Fig. 4.



Witnesses:

*James Shuck*  
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Inventor:

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# UNITED STATES PATENT OFFICE.

JAMES SHANK, OF CLAYTON, ILLINOIS.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 411,906, dated October 1, 1889.

Application filed March 27, 1889. Serial No. 305,008. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES SHANK, a citizen of the United States, residing at Clayton, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Cultivators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to cultivators, and more particularly to that class of cultivators shown and described in my Letters Patent granted April 10, 1888, No. 380,948; and the improvements will be fully understood from the following description and claims, when taken in connection with the annexed drawings, in which—

Figure 1 is a plan view of a portion of a cultivator embodying my improvements, and Fig. 2 is a side elevation of one section of a cultivator removed from the truck, showing the manner of securing the beams to the cross plate or bar. Fig. 3 is an enlarged view of the same, and Fig. 4 is an enlarged view of one of the beams.

Referring by letter to the said drawings, A indicates a portion of a cultivator adapted to be attached to any ordinary or approved truck.

The beams B may be of a form substantially as shown, having their rear ends curved outwardly and thence rearwardly, where they terminate in a cross-head *b*. The forward ends of these beams are brought parallel, as shown, and provided with an aperture *c*, whereby they may be attached by a bolt or otherwise to the forward aperture in the coupling of a cultivator-truck, an elongated slot *d* being provided in rear of the aperture *c* to receive a coupling-pin.

B' indicates a toothed bar or plate, which is provided with apertures *e* for the attachment of teeth or auxiliary beams. These toothed bars are arranged transversely on the beams B, and are secured in position by means of clips.

The plates or cross-bars B', which are designed to receive the teeth or auxiliary beams, are placed on the upper side of the beams B

and at the rear ends thereof, so that the upper projection of the cross-head *b* may abut against the rear longitudinal edge of the plate B'. A yoke or clip D is placed so as to straddle the rear ends of the beams B from beneath upwardly, and the upper branches are threaded and passed through apertures *f* in a transverse plate C, where they are secured by nuts *e'* or other suitable fastening devices. It will be observed that these yokes or clips D straddle the rear ends of the beams B, and also the plates or cross-bars, to which they are secured by means of the plates C, the cross-heads of the said beams abutting against the yoke on one branch and against the rear edge of the plates or bars at the other branch of the cross-head. By means of these couplings the beams may be readily removed and replaced by others, and the parts are adapted to serve with any thickness of coupling.

In the present illustration I have omitted the teeth from the bar, and also the handles, as it is obvious that handles and teeth of different forms may be employed.

By having the yokes and plates arranged obliquely with respect to the bars it will be seen that the ends of the beams may be conveniently straddled by the yoke and all liability of slipping prevented.

Having described my invention, what I claim is—

In a cultivator, the combination, with the beams formed as shown and having their rear ends provided with vertically-disposed cross-heads *b*, of the toothed bars or plates arranged above the beams and in engagement with the forward edge of the upper branch of the cross-head, the lower branch of said head being in engagement with the outer side of the yoke, the yokes straddling the beam and plates from below upwardly, and the plates and nuts for securing the yokes in position, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES SHANK.

Witnesses:

JONATHAN LAKE,  
CHARLES BELL.