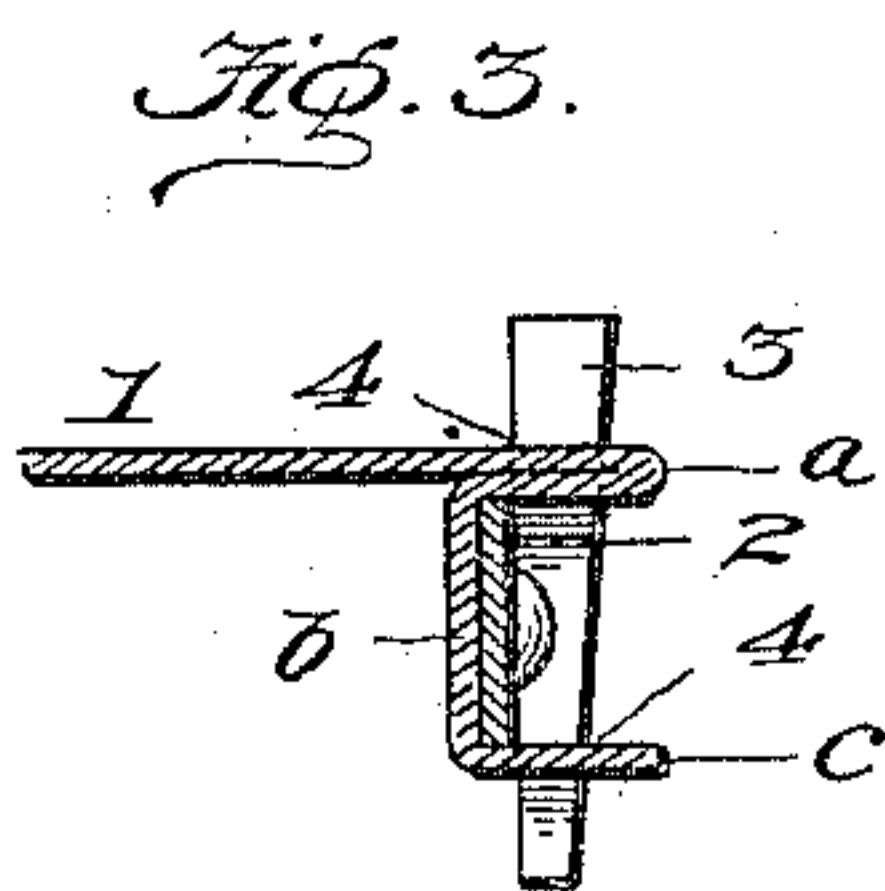
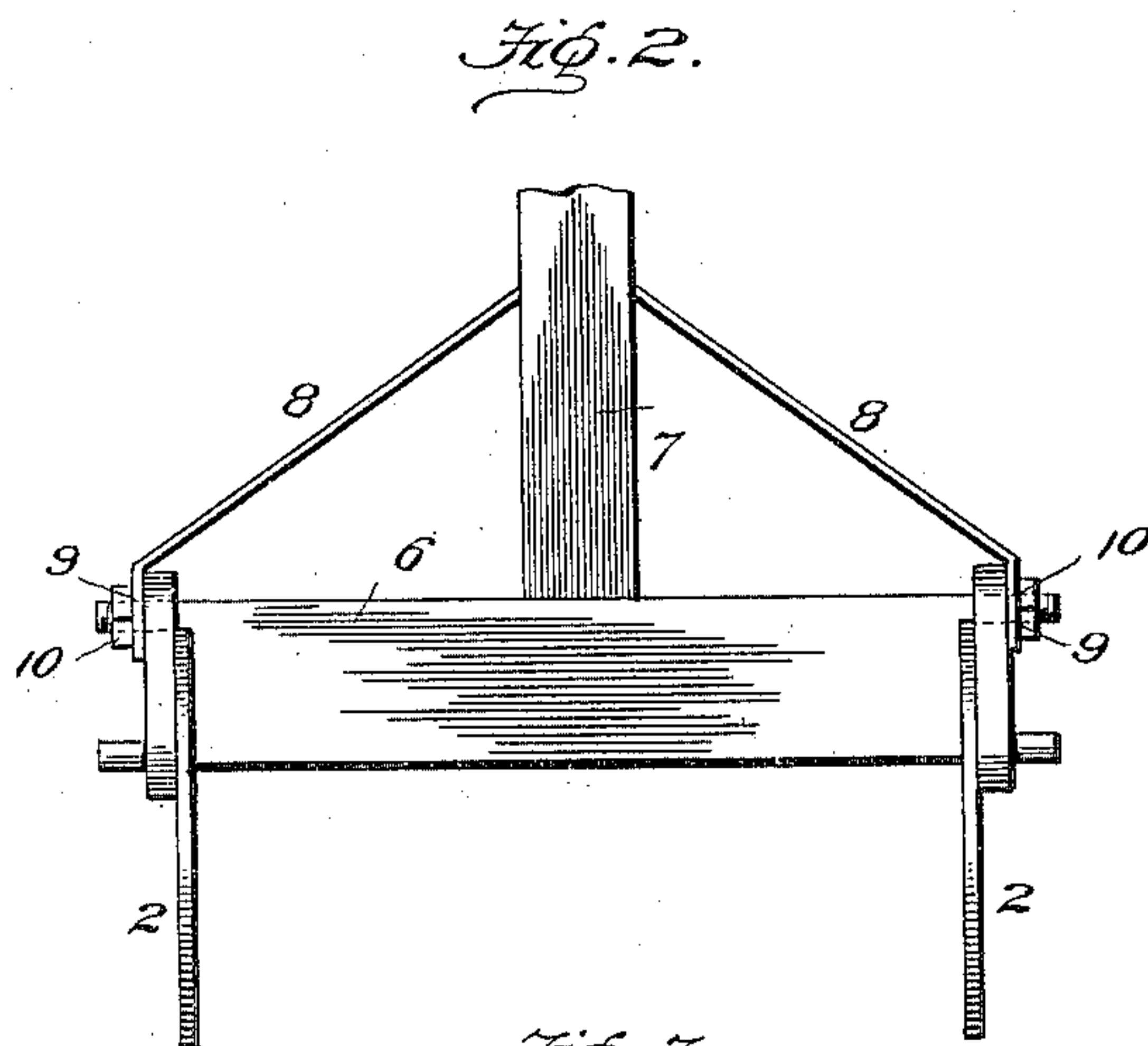
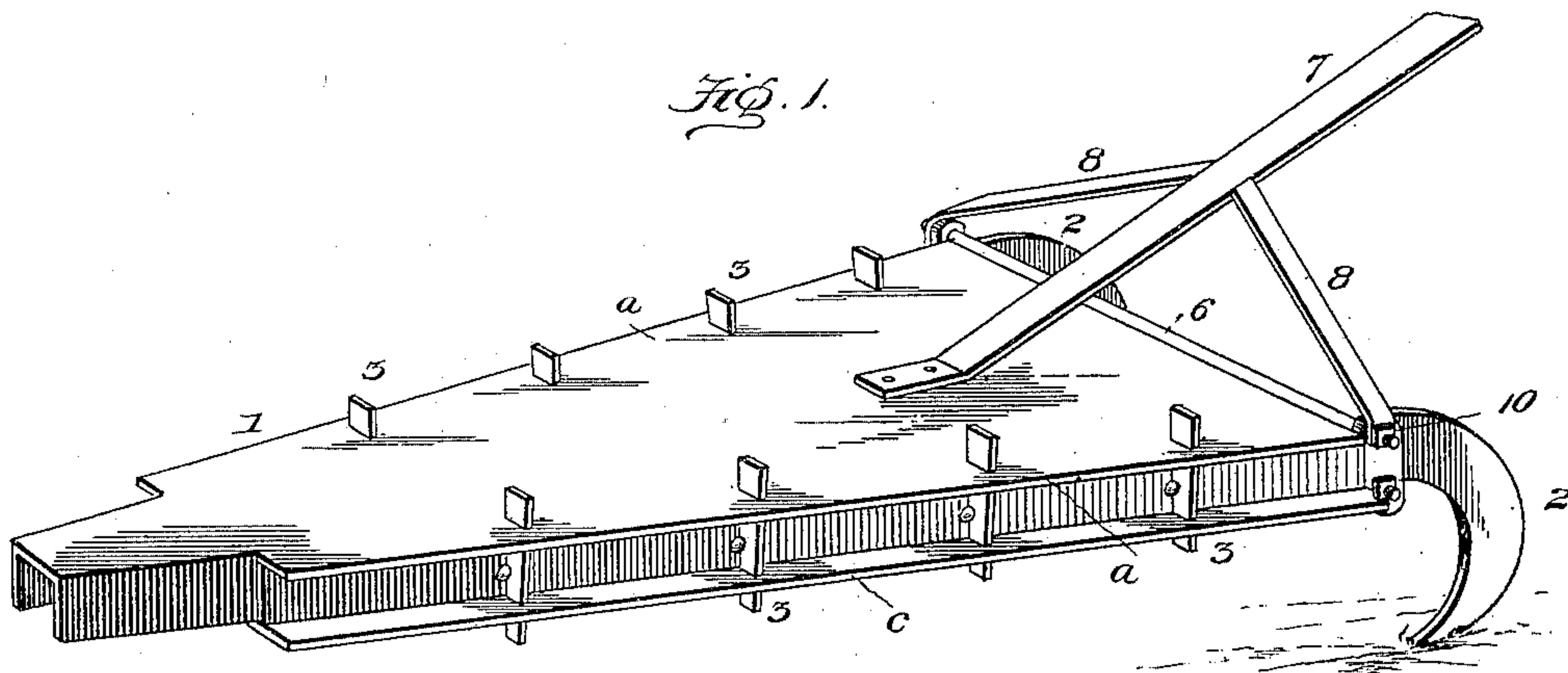


(No Model.)

D. B. MILES.
CULTIVATOR.

No. 604,773.

Patented May 31, 1898.



Witnesses
W. C. Oakes
J. B. Wilson by *A. B. Wilson & Co.*
Inventor
D. B. Miles
Attorneys

UNITED STATES PATENT OFFICE.

DAVID B. MILES, OF BLACKWATER, MISSOURI.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 604,773, dated May 31, 1898.

Application filed December 22, 1897. Serial No. 663,014. (No model.)

To all whom it may concern:

Be it known that I, DAVID B. MILES, a citizen of the United States, residing at Blackwater, in the county of Cooper and State of Missouri, 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.

My invention has relation to cultivators.

The object of the invention is to provide a simple, durable, and inexpensive cultivator the cultivating-shovel of which may be easily removed for the purpose of repair and as easily fastened in place.

With this object in view the invention consists of certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved cultivator. Fig. 2 is a rear view, and Fig. 3 is a sectional view.

In said drawings, 1 denotes the main frame of the cultivator, which is preferably made of sheet-iron, the edges of which are bent and folded to form beam-supporting flanges *a*, *b*, and *c*.

2 denotes the cultivator-beams, which snugly fit between the flanges *a*, *b*, and *c*, and are held in position by wedge-keys 3, that are driven down through aligned perforations 4 in the flanges *a* and *c*. To prevent these beams from drawing out should the keys by any possible means become loosened, I provide the beams with stop-lugs at points immediately in advance of each key, so that should the beams draw rearward the lugs will contact with the keys and prevent the beams entirely withdrawing from their position between the flanges.

6 denotes a rear brace provided with forked ends which embrace the rear ends of the cultivator-beams, and 7 denotes the handle-stock, which has one end fastened to the body of the cultivator and the other end projecting inwardly.

8 denotes braces that are connected to the handle-stock and have at their lower ends holes 9, through which one of the forks of the

beam-brace projects. Nuts 10 are screwed upon the ends of the forks and clamp the stock-braces and cultivator-beams in position.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of my invention will be readily understood without requiring an extended explanation.

The cultivator is strong and simple, and the parts are so assembled and connected that while the cultivator-beams may be easily removed for the purpose of repair or replacing them with new ones there is not the slightest possibility of their becoming accidentally detached.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a cultivator, the combination with the main frame having longitudinal side flanges, of cultivator-beams fitted between said flanges, and means for holding said beams in place, substantially as set forth.

2. In a cultivator, the combination with the main frame having flanges *a*, *b* and *c*, of cultivator-beams fitted between said flanges, and wedge-keys for holding said beams in place, substantially as set forth.

3. In a cultivator, the combination with the main frame having flanges *a*, *b* and *c*, of cultivator-beams fitted between said flanges and provided with stop-lugs, of keys inserted through flanges *a* and *c* immediately at the rear of the stop-lugs, substantially as set forth.

4. In a cultivator, the combination with the metallic main frame bent at its sides to form flanges *a*, *b* and *c*, the flanges *a* and *c* being provided with aligned perforations, of cultivator-beams fitted between said flanges and provided with stop-lugs, and wedge-keys inserted through the aligned perforations immediately at the rear of the stop-lugs, substantially as set forth.

5. A cultivator comprising in combination the following essential elements, to wit: a metallic main frame, formed at the sides with flanges *a*, *b* and *c*, the flanges *a* and *c* having aligned perforations, cultivator-beams fitted between said flanges and provided with stop-lugs, wedge-keys inserted through said per-

forations immediately at the rear of the stop-lugs, a handle-stock secured to the cultivator-frame, a beam-brace having forked ends which engage the rear ends of the cultivator-
5 beams, stock-braces having perforations in their lower ends that receive one of the forks at each end of the beam-brace, clip-plates, and nuts for clamping the clip-plate, culti-

vator-beams and stock-braces to the beam-brace, substantially as set forth. 10

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

DAVID B. MILES.

Witnesses:

J. E. MORRIS,
L. T. BAGBY.