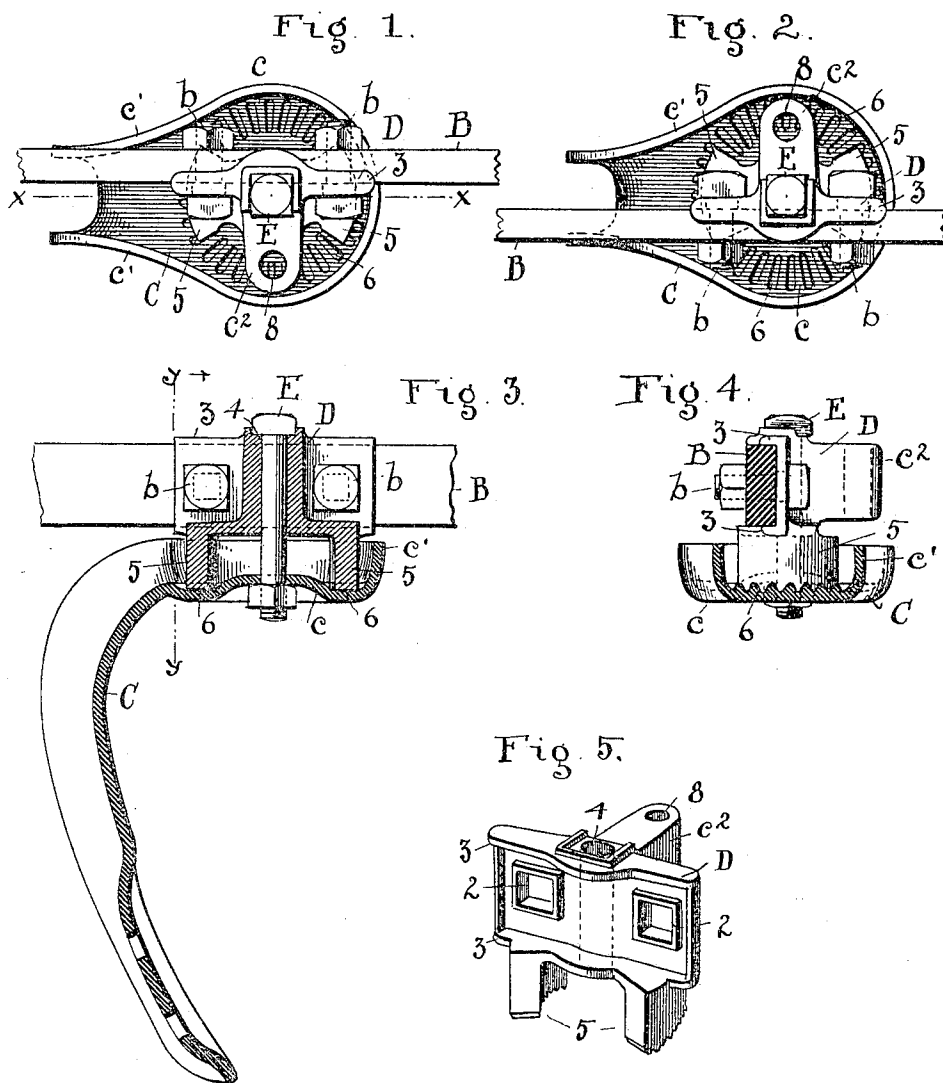


No. 818,760.

PATENTED APR. 24, 1906.

E. HAIMAN.
CULTIVATOR ATTACHMENT.
APPLICATION FILED DEC. 12, 1905.



ATTEST

R. B. Moser
A. J. Sutherland

INVENTOR.

Elias Haiman

BY *H. J. Moser* ATTY.

UNITED STATES PATENT OFFICE.

ELIAS HAIMAN, OF CLEVELAND, OHIO.

CULTIVATOR ATTACHMENT.

No. 818,760.

Specification of Letters Patent.

Patented April 24, 1906.

Application filed December 12, 1905. Serial No. 291,416.

To all whom it may concern:

Be it known that I, ELIAS HAIMAN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Cultivator Attachments; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in the class of cultivators, and more particularly to tooth-carrying standards and means for adjustably securing the same to the supporting beams or bars, all substantially as shown and described, and more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of the invention with the standard supported upon the lower side of the beam as the views stand; and Fig. 2 is a plan view of the invention, showing the standard supported on the opposite side of the beam, thus illustrating the reversibility of the invention in respect to the beam. Fig. 3 is a vertical sectional elevation of Fig. 1 on line *x x* through the center of the standard and lengthwise the axis of its support; and Fig. 4 is a cross-section on line *y y*, Fig. 3, looking to the right. Fig. 5 is a perspective detail of the bracket which supports the standard on the beam and which is adapted to be engaged with the beam, as hereinafter more particularly described.

As thus shown, B represents a beam or bar, presumably constituting one of several beams or bars in a field-cultivator of the usual or any suitable pattern and in which there usually are central and side bars or beams and means for adjusting the side bars laterally in respect to the central bar or beam according to the land to be covered by the cultivator or as one work or another is to be done requiring greater or less width.

C represents the standard, and D the bracket which is interposed between the standard and beam B and is adapted to be fixed upon the said beam by means of bolts *b* through the holes 2 therein, as shown, and the said bracket is provided with flanges 3 along its beam-engaging channel adapted to rest upon or over the edges of the said beam and which with the bolts *b* serve to hold the bracket rigidly in place.

E represents a fastening-bolt which passes

down through hole 4 in the body of the bracket and is engaged through a corresponding hole in the head *c* of the standard, whereby the standard is locked upon the bracket, but is adapted to be horizontally and adjustably rotated, according to the use to which the standard is applied for the time being—that is to say, in some instances it may be used for a cultivator-tooth and in other instances for carrying a scraper of some kind, as for scraping cotton, or a sweep or plow or some other implement may be attached thereto—it being understood, of course, that while in this instance the invention is preferably employed in cultivators as such and probably in conjunction with a number of other standards involving the same principle it may be used in an implement having but a single standard. To these ends also it will be noticed that there are at the base of the bracket beneath beam B and oppositely disposed two serrated segments 5, the said serrations being adapted to engage with corresponding serrations or radial ribs 6 in the bottom of the head of the standard and on the inside of the said head, as shown. Hence when a desired adjustment rotarily of the standard is to be made in respect to the bracket and beam the bolt E is released or loosened to permit the standard to be turned, after which said bolt is again tightened, and then the entire structure is as rigid as if it were part of the beam itself. This novel construction of bracket and standard, furthermore, is convenient and desirable, because of its adaptation to either side of a beam without any change whatever except the mere turning of the bracket half around, as clearly illustrated in Figs. 1 and 2, where the bracket is on opposite sides of the same beam, and the standard sustains the same relation to the beam and the direction of travel in one case as in the other. This matter of interchangeability is very material and important, especially as compared with attachments which have no such convenience.

The standard C may be cast or struck up from sheet-steel, and head *c* is circular and provided with a flange *c'*, of a suitable depth all around about its top, which continues down along both edges of the standard to the bottom thereof. The serrations or teeth 6 are in a circle in the bottom of said head, and bracket D is adapted to engage therein all around, so that there is no position of the

standard possible wherein it cannot be fastened with equal facility and by the same means in all positions.

Inasmuch as the serrated segments 5 are struck on the same circle, I might have a complete circular portion, like a crown, extending all around instead of part way around, as shown, and said segments are of a depth equal to the depth of flange c' on the standard head, which leaves the standard free to be rotated beneath or in respect to beam B, as any desired adjustment may demand. From one side of the bracket there extends an arm or projection c^2 , which has a hole 8, through which connection with the bracket to some other part may be made when necessary, such as an expanding-bar in a cultivator. By the foregoing construction also the head of the standard is made to practically encompass the securing parts, as the bracket is no larger than the flanged head of the standard, and all the fastening means are brought together compactly within said head so far as outer contour is concerned, and the entire attachment consists of only three parts, easily assembled and locked together and absolutely secure against breakage.

Obviously any equivalent of serrations

may be employed on the parts C and D and not depart from my invention.

What I claim is—

1. The standard having a head with a central bolt-hole, in combination with a bracket having a beam-engaging surface at its side and provided with downward projections beneath said surface and a central bolt-hole to match the hole in the standard-head and a bolt through said holes locking said parts together, said standard and said bracket constructed to interlock at their engaging portions, thereby holding the standard steadily to its work.

2. The bracket having a flanged surface to engage a beam and bolt-holes through said surface and segmental projections on its bottom and a lateral projection opposite said surface, in combination with a standard having a head with a flange inclosing said projections about their outside and a bolt locking the standard on the bracket.

In testimony whereof I sign this specification in the presence of two witnesses.

ELIAS HAIMAN.

Witnesses:

R. B. MOSER,

A. F. SUTHERLAND.