

No. 736,872.

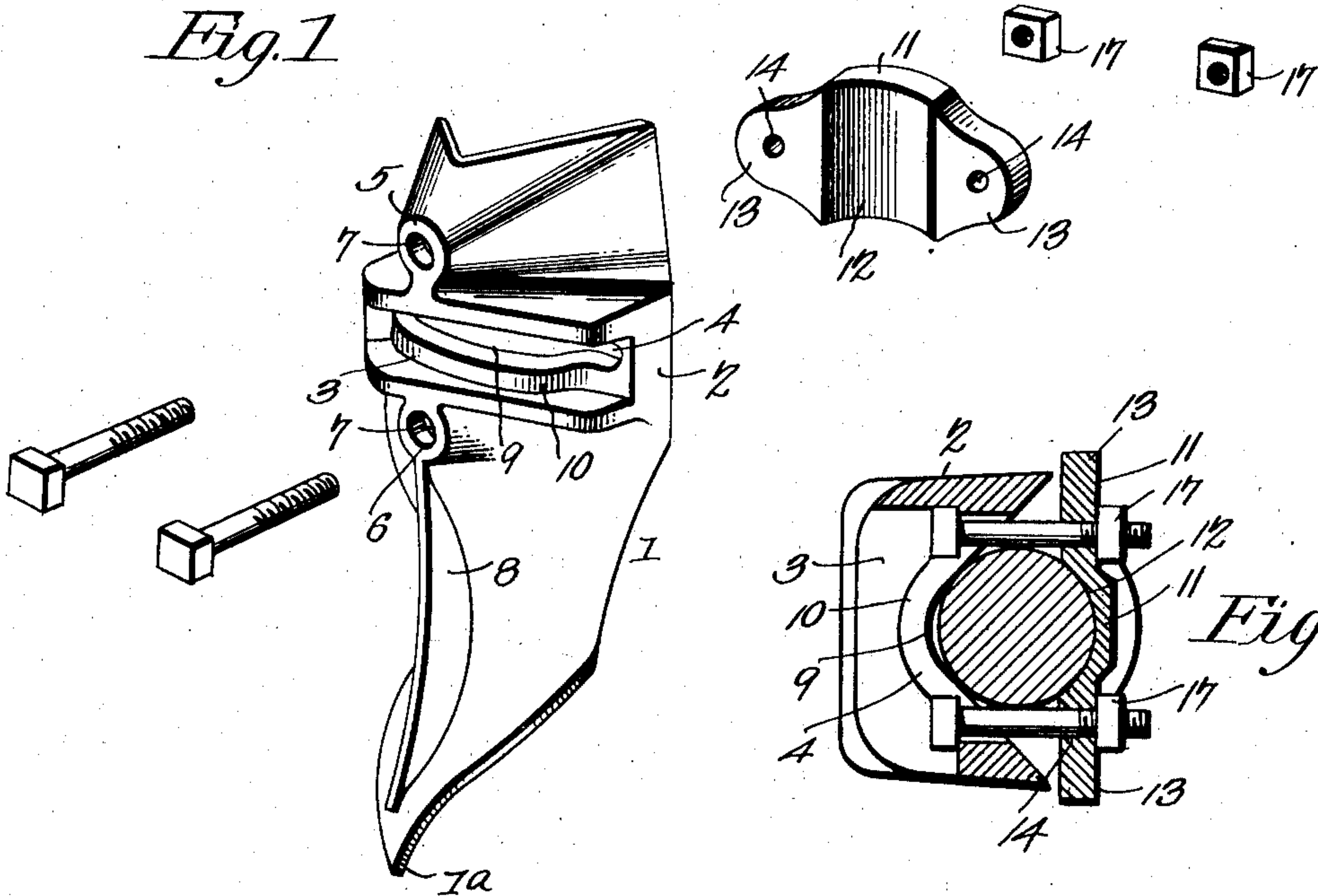
PATENTED AUG. 18, 1903.

H. M. PHILLIPS.  
CULTIVATOR.

APPLICATION FILED APR. 27, 1903.

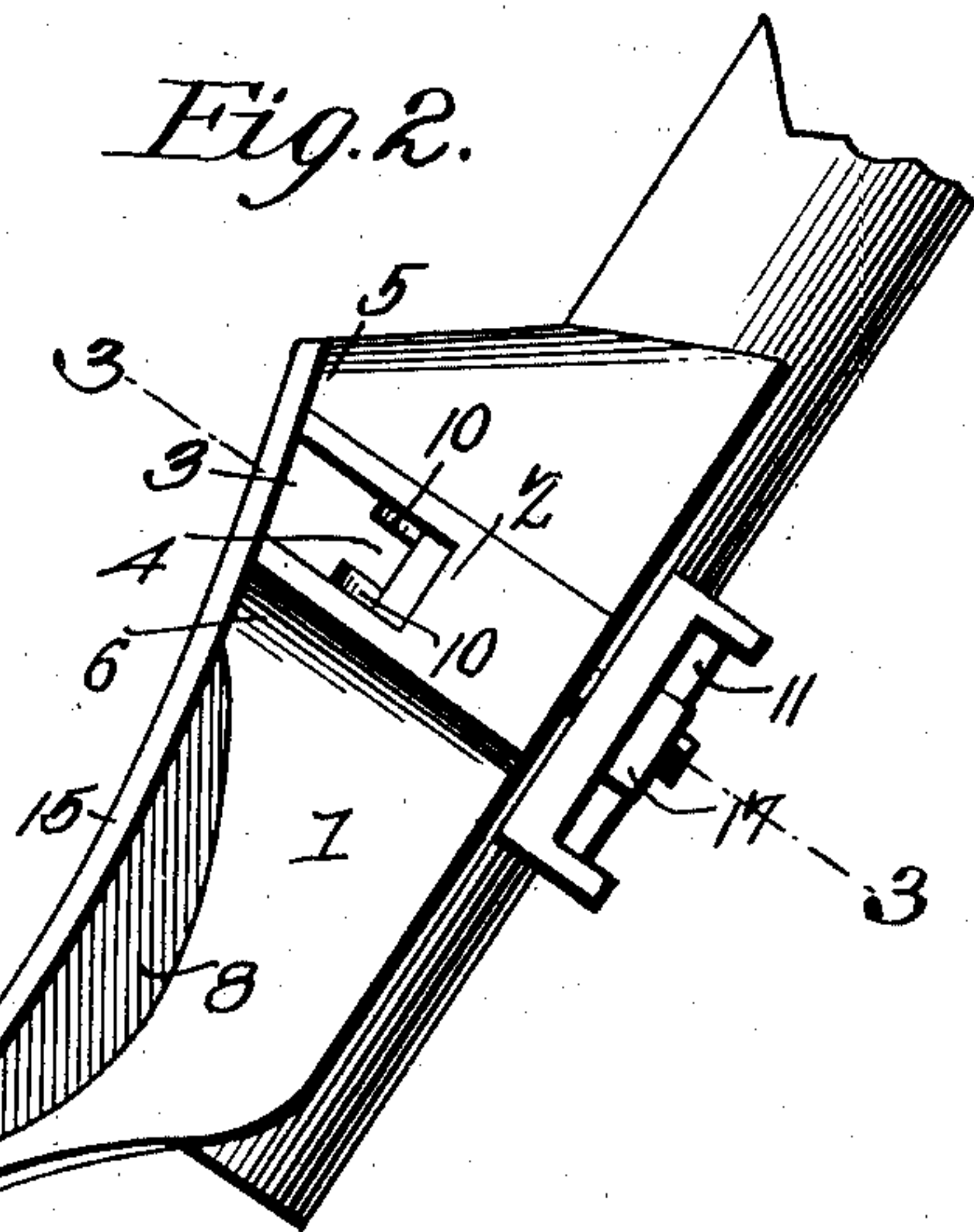
NO MODEL.

*Fig. 1*

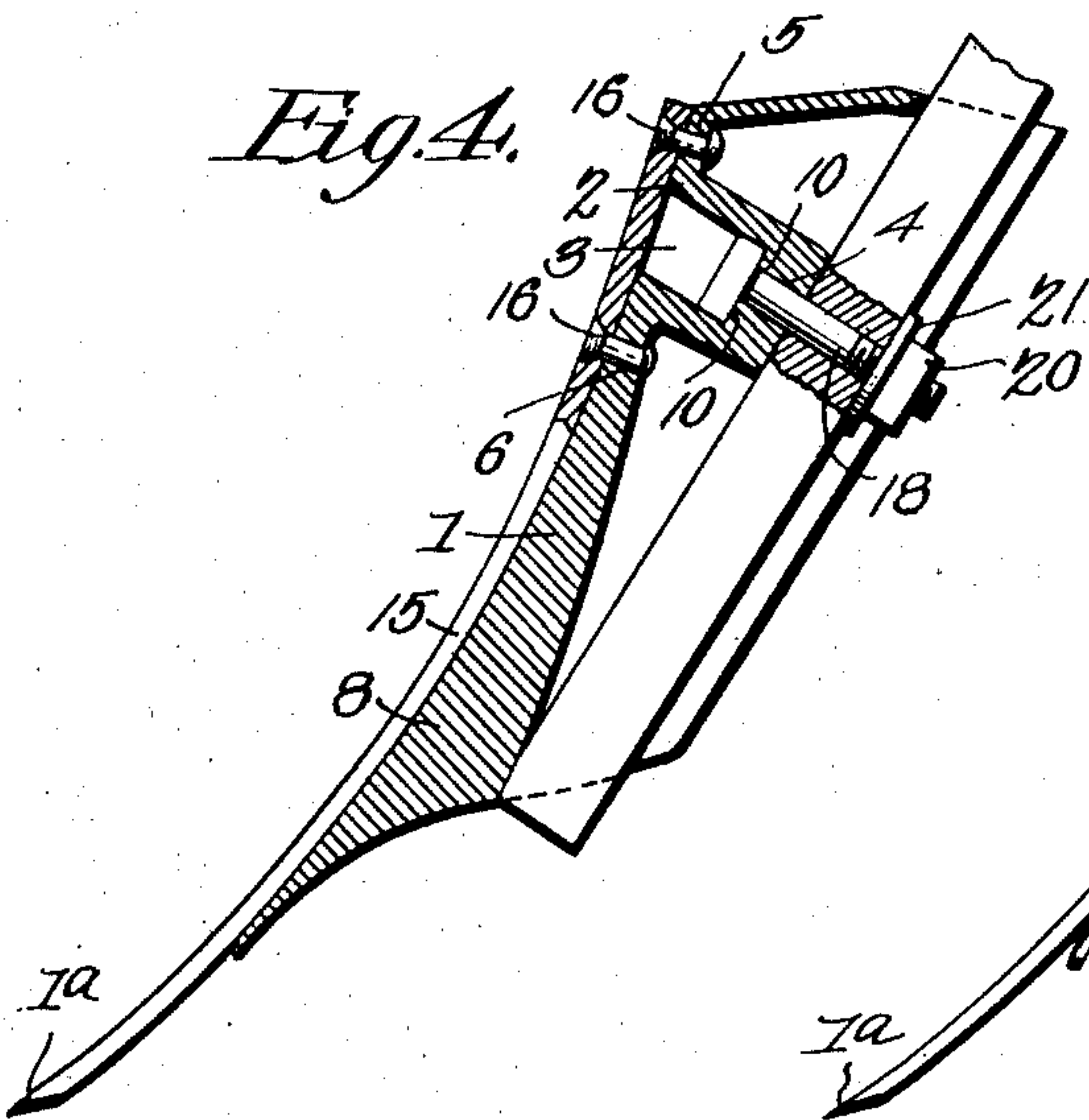


*Fig. 3.*

*Fig. 2.*



*Fig. 4.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

HENRY MIRON PHILLIPS, OF SPEARVILLE, KANSAS.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 736,872, dated August 18, 1903.

Application filed April 27, 1903. Serial No. 154,506. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY MIRON PHILLIPS, a citizen of the United States, residing at Spearville, in the county of Ford and State of Kansas, have invented a new and useful Cultivator, of which the following is a specification.

This invention relates to cultivators; and it has for its object to provide a block or back-  
ing for cultivator-blades which shall be adapted to blades of various sizes and shapes, which may with equal facility be mounted for operation upon round or flat cultivator-standards, and which shall be so constructed as to admit of their being readily detached from the standard of a cultivator without necessitating the removal of the blade from the block or back; thus enabling change or substitution to be made very quickly and readily.

With these and other ends in view, all of which tend to produce a device of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency, my invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view showing the parts constituting my improvement separated or detached from each other. Fig. 2 is a side elevation showing the device in position upon a round cultivator-standard. Fig. 3 is a horizontal sectional view taken on the line 3-3 in Fig. 2. Fig. 4 is a vertical sectional view showing my invention applied to a flat cultivator-standard.

Corresponding parts in the several figures are indicated by similar numerals of reference.

My improved block or back, which is designated 1, consists of a casting, which may be described as being concavo-convex in cross-section, tapered downwardly and forwardly to a point 1<sup>a</sup> and provided upon its front convex side with a flange 2, surrounding the upper and lower sides and end of a recess 3, the bottom of which has a slot 4 extending between the ends of said recess. Adjacent to the upper and lower edges of the flange are formed bosses 5 and 6, having perforations 7,

and downwardly from the lower boss 6 to the point of the block is formed a web or fin 8. The rear side of the block or casting 1 is mainly concave, but is provided adjacent to the edges of the slot 4 with a seat 9, adapted to fit upon a round cultivator-standard of ordinary dimensions. The bottom of the recess 3 upon the front side of the block or casting 1 is provided with flanges 10, affording seats for the heads of the connecting-bolts used in connection with my invention. A clamping-plate 11 is also provided, the face of which has a curved recess or concavity 12 and the ends of which are provided with lugs 13, having perforations 14 for the passage of the connecting-bolts.

In practice the cultivator-blade, which is designated 15, is secured upon the front side of the block or back by fastenings extending through the perforations 7 in the bosses 5 and 6. This attachment may, if desired, be permanent, as by means of rivets; but it may also be effected by means of bolts, as 16, the heads of which will be countersunk in the face of the blade, while the nuts upon the rear ends of said connecting-bolts will find ample accommodation in the concave rear side of the block or fastening member. Connecting-bolts for mounting the latter upon the standard are inserted through the slot 4, with their heads seated in the recess 3 upon the flanges 10. If connection is to be made with a round standard, two bolts are used, and said bolts engage the outer sides of the standard, and they will be extended through the perforations 14 in the clamping-plate 12, which engages the rear side of the standard, the nuts 17 being tightened against the rear side of said clip. If connection is to be made with a flat standard, a single connecting-bolt 18 is used, said bolt being extended through a suitable perforation 19 in such flat standard and secured upon the rear side of the latter by means of a nut and washer 20 and 21. The insertion and removal of the connecting-bolts may be effected through the open end of the flange 2, which surrounds the transverse slot 4 in the block, as hereinbefore described.

This improved block or back for cultivator-blades affords a firm and durable seat for the blade, which enables it to be mounted upon the cultivator-standard quickly and ef-



ficiently and in such a manner as to avoid the liability of accidental displacement. The fin or web 8 affords a support for the blade throughout the length of the latter, and being thus braced and reinforced it will resist wear and injury much more efficiently than where such a support is lacking. The general construction is simple and inexpensive, and the device is adapted to cooperate with blades of various kinds, as well as with standards of any description, interchange being easily effected whenever desired.

I have in the foregoing described a simple and preferred construction of my invention; but I desire it to be understood that I do not limit myself with regard to the structural details of the same, but reserve the right to any changes, modifications, and alterations within the scope of my invention which may be resorted to without departing from the spirit or sacrificing the utility of the same.

Having thus described my invention, I claim—

1. A back for cultivator-blades, comprising a casting approximately concavo-convex in cross-section, said casting having a slot, a flange partly surrounding said slot and forming a recess, and flanges forming a seat within said recess.

2. A back for cultivator-blades, comprising a casting having a transverse slot, a flange partly surrounding said slot and a seat formed by flanges within said recess, in combination with a clip-plate and connecting-bolts.

3. A back for cultivator-blades, comprising a suitably-shaped casting having a transverse slot, a flange partly surrounding said slot and

forming a recess, a seat formed within said recess adjacent to the slot, and perforated bosses adjacent to the upper and lower edges of the flange, in combination with a blade mounted upon said back and connecting means extending through the perforated bosses.

4. A back for cultivator-blades, comprising a suitably-shaped casting having a transverse slot, a flange partly surrounding said slot and constituting a recess, a seat within said recess adjacent to the slot, and headed connecting-bolts engaging said seat, in combination with a blade mounted upon the front side of said back.

5. A back for cultivator-blades comprising a suitably-shaped casting having a transverse slot, a flange partly surrounding said slot and forming a recess, a seat within said recess adjacent to the slot, perforated bosses formed adjacent to the upper and lower sides of the flange surrounding the slot and a web connecting the lower boss with the point of the casting, in combination with a blade mounted upon the front side of said casting, connecting means extending through the perforated bosses, and headed bolts seated in the recess of the block and extending through the slot of the latter for connection with a cultivator-standard.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY MIRON PHILLIPS.

Witnesses:

JOHN R. BAIRD,  
HARDIN W. DORSETT.