

(No Model.)

3 Sheets—Sheet 1.

L. P. WHITAKER.
CULTIVATOR.

No. 582,407.

Patented May 11, 1897.

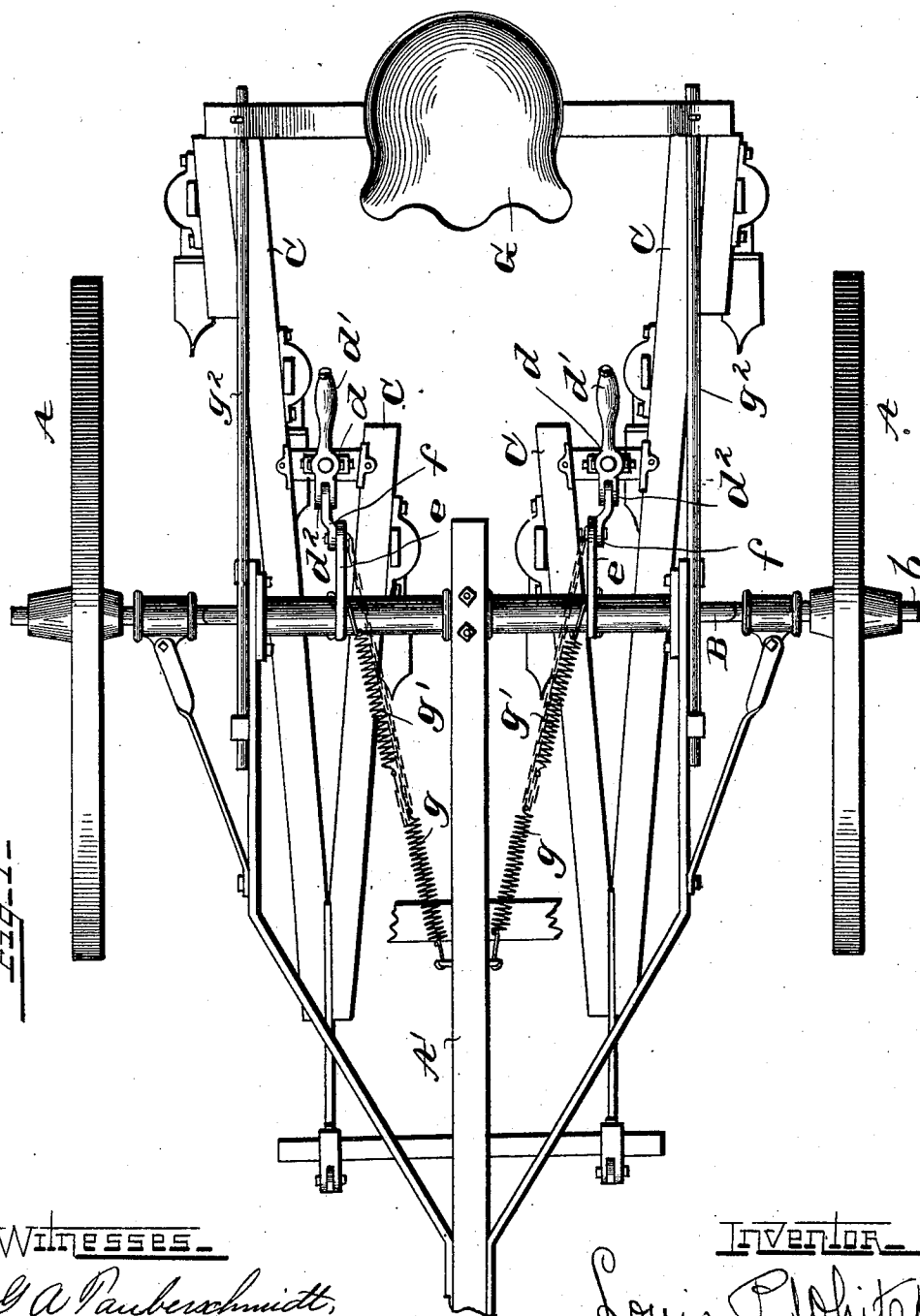


Fig. 1.

WITNESSES.

G. A. Pauberschmidt,
J. D. Kingsbury.

INVENTOR.

Louis P. Whitaker
By Whitaker & Rowland

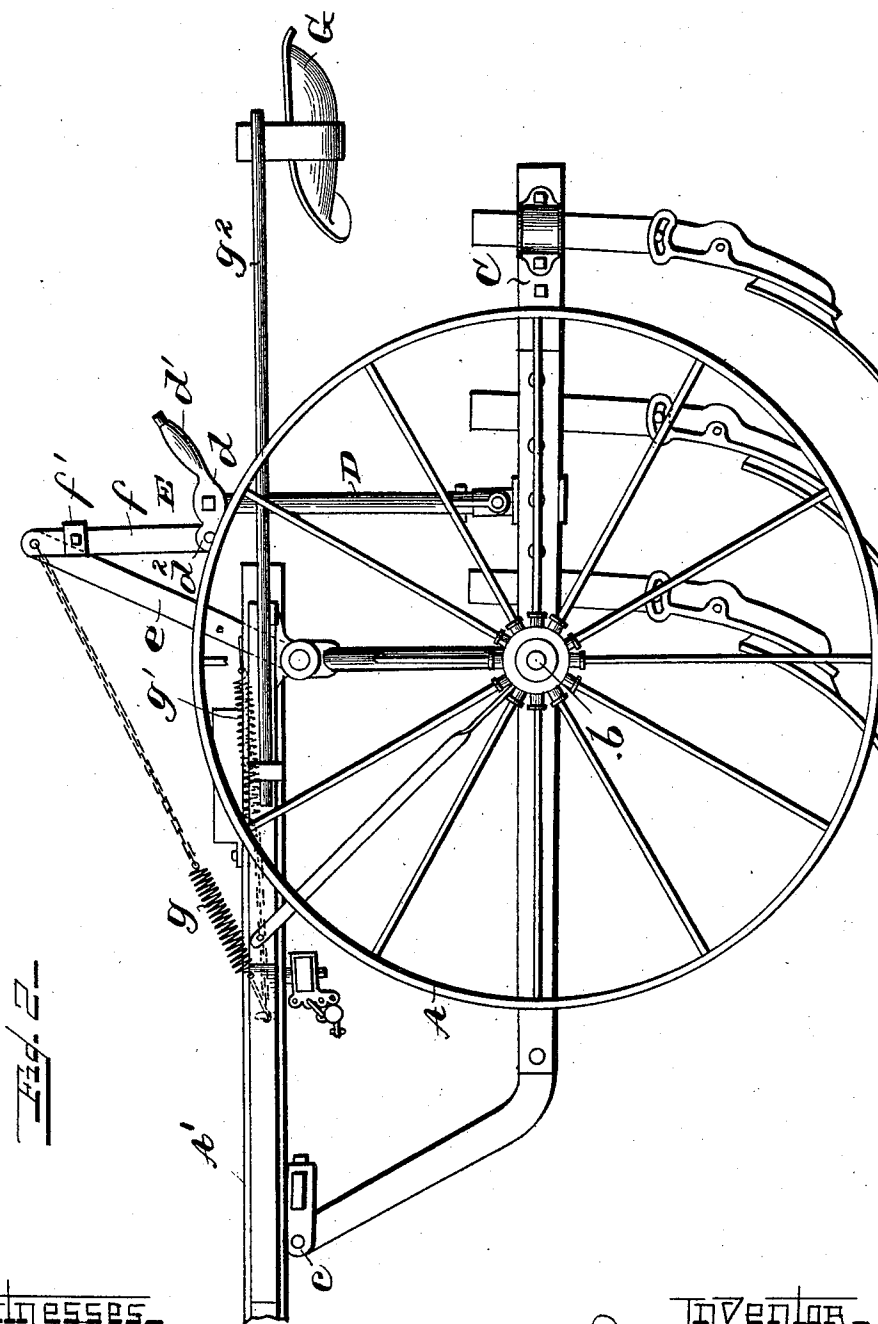
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WITNESSES.

G. A. Rauberschnitt
J. D. Kingstony

INVENTOR.

Louis P. Whitaker
By Whitaker & Purvost attys.

(No Model.)

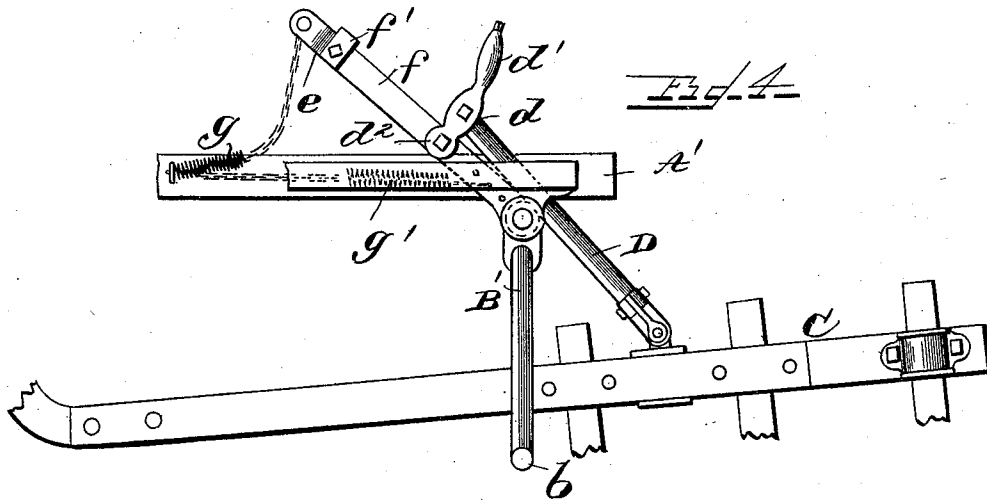
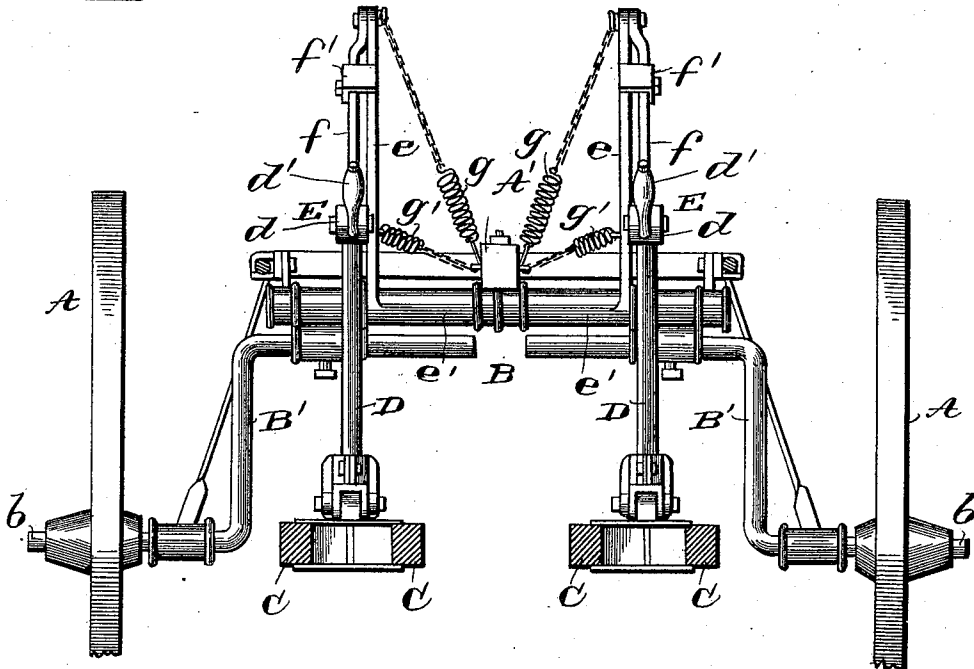
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Fig. 3.



WITNESSES.

G. A. Pauberschmidt,
J. D. Knigshury

INVENTOR.

Louis P. Whitaker
By *Whitaker & Perost* atty

UNITED STATES PATENT OFFICE.

LOUIS P. WHITAKER, OF WASHINGTON, DISTRICT OF COLUMBIA.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 582,407, dated May 11, 1897.

Application filed January 6, 1897. Serial No. 618,155. (No model.)

To all whom it may concern:

Be it known that I, LOUIS P. WHITAKER, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Cultivators; and I do hereby 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 is an improvement in cultivators; and it consists in the novel features hereinafter described, reference being had to the accompanying drawings, which illustrate one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claims.

Referring to the said drawings, Figure 1 is a top plan view of a cultivator having my invention embodied therein. Fig. 2 represents a side elevation of the same. Fig. 3 is a rear view of the cultivator. Fig. 4 is a detail view of one of the plow-beams and its lifting and supporting devices, showing the beam in elevated position.

The cultivator is constructed with an arched axle after the general form of the straddle-row cultivators. This axle may be made of one piece or it may be made, as shown in this instance, of three parts, the upper horizontal part B and two depending portions B' B', which have at their lower ends short horizontal portions b b, which receive the wheels A A. The tongue A' and the frame of the machine are secured to the upper horizontal portion of the axle B.

The cultivator or plow beams C are pivoted to the frame of the implement at some distance in advance of the axle, as at c, in such a manner that they have not only a free vertical movement, but the rear ends of the beams may be given considerable degree of lateral movement. These cultivator or plow beams may be composed of a single main beam or of two or more connected beams, as may be desired.

Each of the plow or cultivator beams is provided with a standard or upright D, having its lower end pivoted to the beam. Its upper end is connected with the main frame

by a toggle-lever construction, as shown. In this instance the toggle-lever E is composed of two parts e f. The part e is provided at its lower end with a sleeve e', turning freely upon the axle portion B. The part f is pivotally connected to the upper end of the standard or upright D. For convenience I prefer to secure the casting d to the top of the standard D, and this casting is preferably provided with a handle d' and an eye d². The part f of the toggle-lever is secured to this eye d². Springs g are connected to the upper part of the part e of the toggle-lever and spring g' to the lower part of the same to assist in raising the cultivator when it is desired to do so.

The object of the toggle-lever is to enable the plow or cultivator beams to be locked in a raised position by the two parts of the toggle being brought into approximate alinement without regard to the position of the standard or upright D.

I am aware that it has been heretofore proposed to lock a cultivator-beam in a raised position by placing a standard connected to the beam in approximate alinement with a link pivoted to the upper end of the standard and to the frame of the machine. This has proved objectionable, as the upper end of the standard would have to move the same distance as the upper end of the link. In the present construction the upper end of the standard moves only a comparatively short distance. It will be noted also that in the one case the locking is produced by bringing the standard into an approximate alinement with the link, while in this construction an entirely different principle of operation is introduced, which is the locking of the beam or beams by bringing the two parts of a toggle-lever into approximate alinement without reference to the position of the standard. As a result the change enables the operator to raise and lock the beams and to return them to an operative position with a much less expenditure of force than in the previous construction.

In order to prevent the part of the toggle from passing beyond the part e and into a position in which greater force would be required to return the cultivator to an operative position, either the part e or f is prefer-

ably provided with a stop. In this case the part *f* of the toggle is provided with the stop *f'*, as shown in Figs. 3 and 4.

The cultivator is provided with a seat G, 5 which is supported by rods *g*² *g*² on each side of the machine, and which are secured to the frame in any preferred manner, so that the rods may be adjusted so that the seat can be in position to suit different operators.

10 I do not claim as my invention the broad idea of a pivoted arm having springs connected to it adjacent to each end. So far as the springs are concerned I claim them only in connection with my toggle-lever construction 15 herein described.

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

1. In a cultivator, the combination with the main frame, of a plow or cultivator beam, a 20 standard pivoted to said beam and a toggle-lever connecting the upper end of the said standard with the main frame, substantially as described.

2. In a cultivator the combination with the 25 main frame, of a plow or cultivator beam, a standard pivoted to said beam, and a toggle-

lever connecting the upper end of the said standard with the main frame, one member of the said toggle-lever being provided with a stop, substantially as described. 30

3. In a cultivator the combination with the main frame, of a plow or cultivator beam, a standard pivoted to said beam, a toggle-lever connecting said standard and said main frame, and means for applying a spring-tension to 35 one arm of the said toggle, said spring-tension being applied near each end of said arm, substantially as described.

4. In a cultivator, the combination with the main frame, of a plow or cultivator beam, a 40 standard pivoted to said beam, a toggle-lever connecting the upper end of the standard to the main frame and the casting *d* interposed between the standard and toggle-lever, substantially as described. 45

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

LOUIS P. WHITAKER.

Witnesses:

J. ROSS COLHOUN,
J. D. KINGSBERRY.