

(No Model.)

C. WHITEHALL.
CULTIVATOR.

No. 330,761.

Patented Nov. 17, 1885.

Fig. 1.

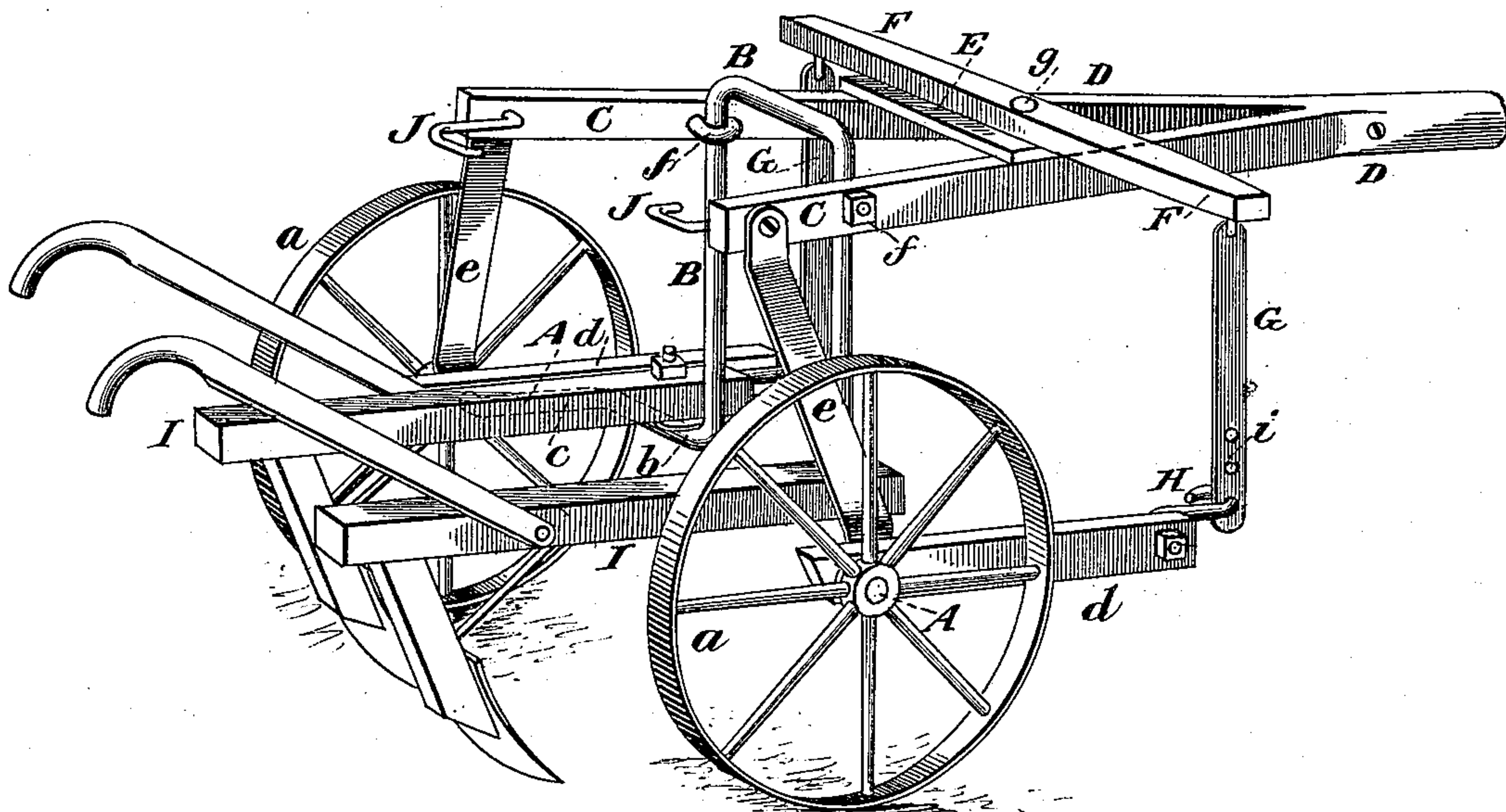


Fig. 2.

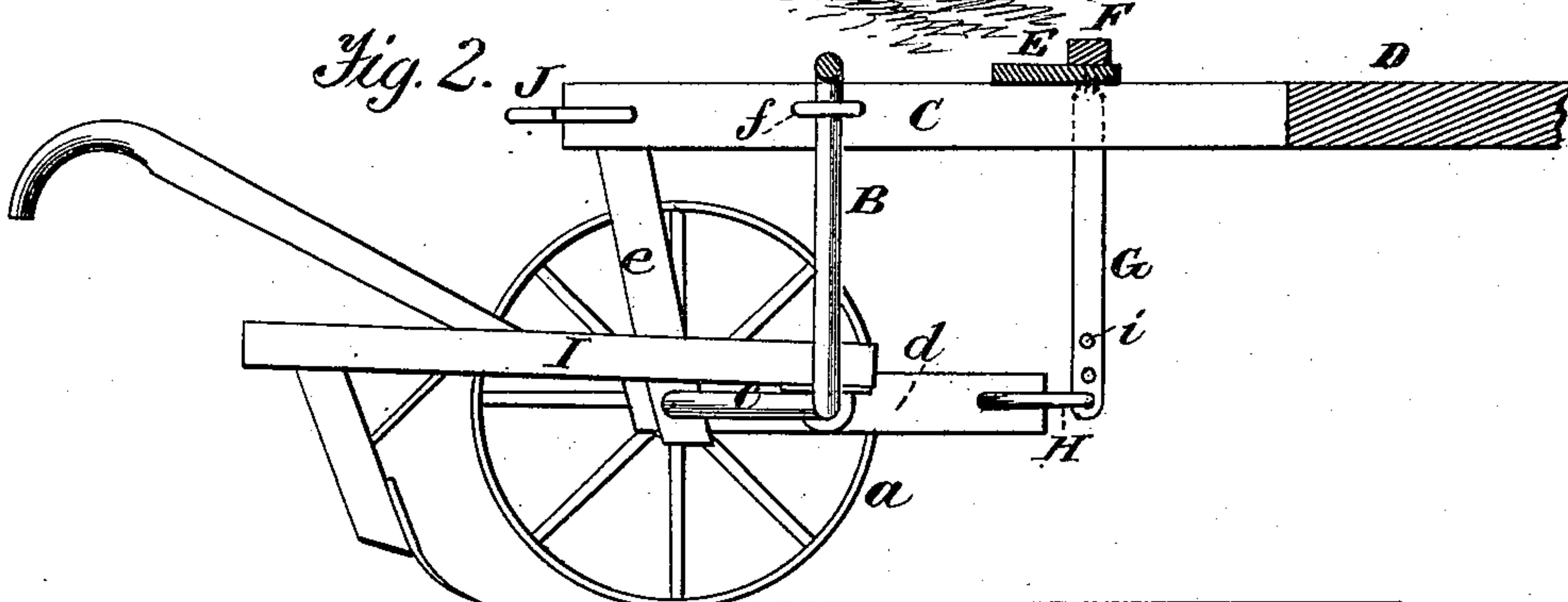


Fig. 3.

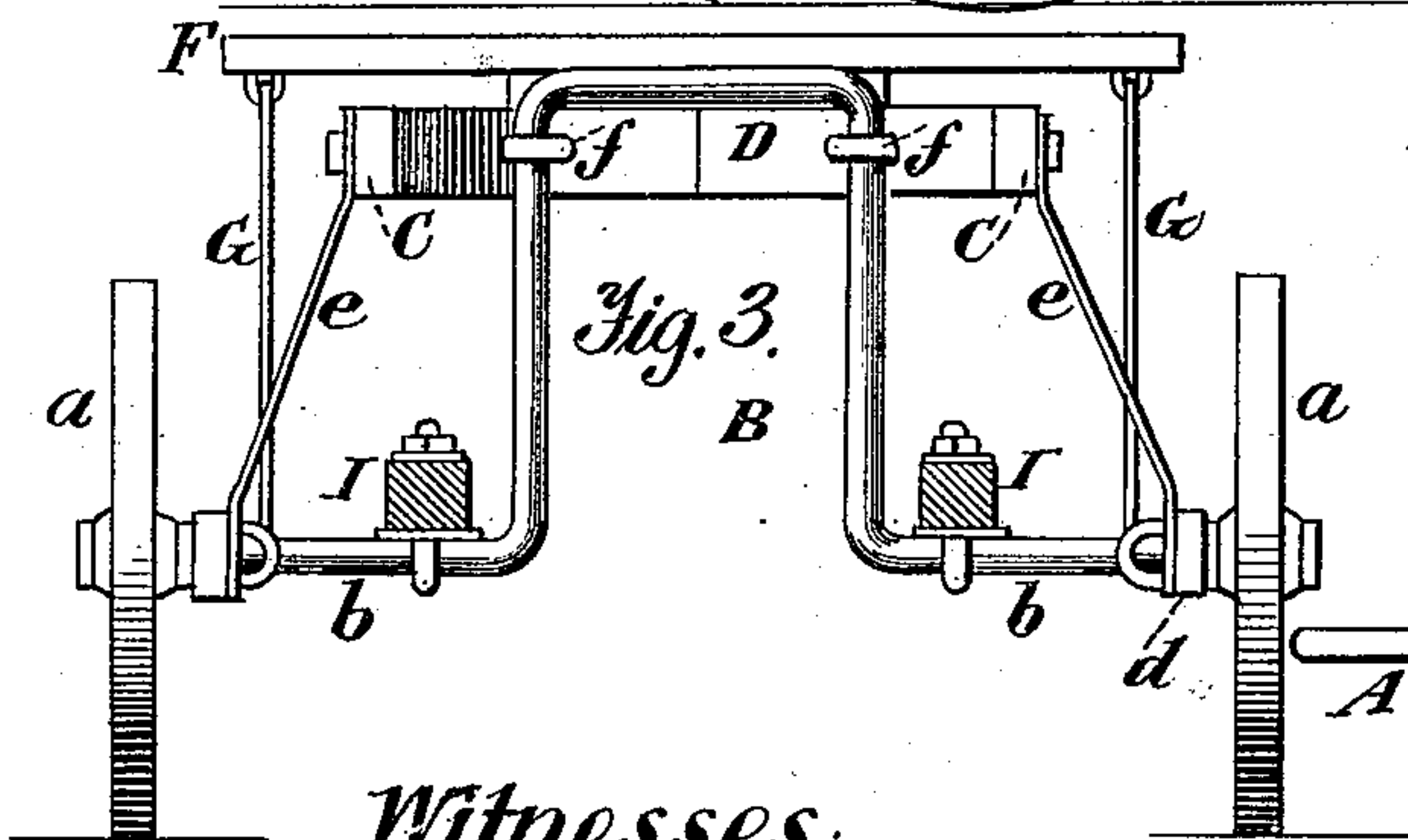
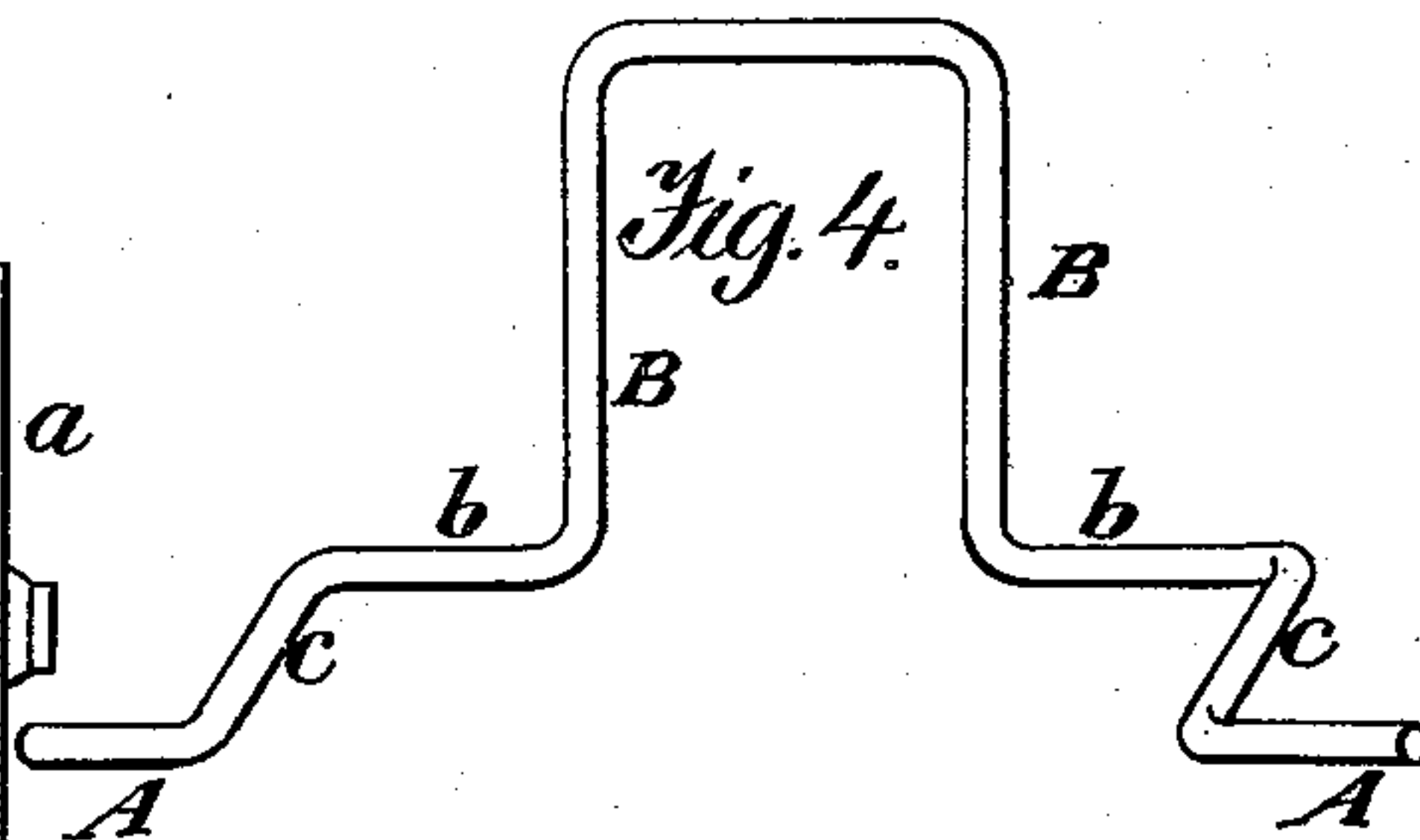


Fig. 4.



Witnesses:
A. Ruppert.
C. Ruse.

Inventor:
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att'y

UNITED STATES PATENT OFFICE.

CURTIS WHITEHALL, OF NEWTOWN, INDIANA.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 330,761, dated November 17, 1885.

Application filed July 14, 1885. Serial No. 171,634. (No model.)

To all whom it may concern:

Be it known that I, CURTIS WHITEHALL, of Newtown, in the county of Fountain and State of Indiana, have invented certain new and useful Improvements in Cultivators, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a cultivator embodying my improvements. Fig. 2 is a vertical longitudinal section. Fig. 3 is a vertical transverse section, and Fig. 4 is a detail.

Similar letters indicate similar parts in the respective figures.

My invention consists in so constructing and combining the several parts of a cultivator as to give greater control over the plows, to lighten the weight of the cultivator on the horse, and to make the draft easier, as will be hereinafter explained.

In the drawings, A A are the axles, to which the wheels *a* are attached in the ordinary way.

B is the arch of the cultivator, which is formed of the same piece of metal as the axles, but situated forward of the line of the axles. This is accomplished by bending the axle at a right angle forward in a horizontal line, as shown at *c*, to the required distance, then bending it at a right angle on the same line toward the center of the cultivator, as shown at *b*, then at a right angle perpendicularly to the proper height to form the arch, and so on to make both sides alike.

Fig. 4 shows in perspective the axles and arch detached from the cultivator.

To the outer side of each of the parts *c* is secured a block, *d*. These blocks *d* are perforated to allow the axle A to pass through them and extend forward a sufficient distance to allow the attachment thereto of the compound evener, as will be hereinafter explained.

D is the tongue, which is divided at its rear end, forming a fork, C C, as shown. The rear ends of the fork C C are connected to the axles A by means of the braces *e*. The arch B extends up inside the fork C C, and is attached to it on each side by means of the eye-bolts *f*, the sides of the arch fitting loosely in the eyes of the bolts, thus enabling it to have a vertical movement independently of the fork or tongue.

E is a block connecting and bracing the two sides C of the fork.

F is a bar, which is centrally pivoted to the block E at *g*, and which extends on each side of the tongue to a distance about on a line with the blocks *d*. At each end of the bar F is suspended a rod, G, which rods G are each connected to one of the blocks *d* by means of a hook, H. The bar F, rods G, hooks H, and blocks *d* constitute the compound evener before mentioned. The rods G are perforated at *i*, these perforations being for the purpose of attaching the single-trees.

I I are plow-beams, the front ends of which are pivoted to *b*, thus bringing the points of the beams forward of the axles and on a line with the arch.

J J are hooks attached to the fork C for the purpose of holding the plow-beams I I up when not in use.

The advantages of my construction are as follows, viz: By attaching the plow-beam at a point forward of the axle, and by so connecting the arch to the tongue as to allow the arch to have an independent vertical movement, the operator has greater control over the plow, inasmuch as the rising and falling movement of the wheels, caused by uneven ground, will not be communicated to the plow-beams, and thus the jerking motion of the plows will be obviated. It will also be seen that when the plow-beams are hung on the hooks J the weight of the plow is thrown almost directly upon the wheels, thus taking it off from the tongue and relieving the necks of the team. The hitching is also more directly on a line with the hame-hook, thus giving greater ease to the team, and at the same time better control over the tongue.

Having described my invention, I claim—

In a cultivator, the axles and arch A B, formed of one piece of metal, combined with the braces *e*, forked tongue C D, and the compound evener consisting of the blocks *d*, bar F, rods G, and hooks H, substantially as set forth.

In testimony whereof I have hereunto set my hand and seal this 22d day of June, A. D. 1885.

CURTIS WHITEHALL. [L. S.]

Witnesses:

JAMES H. VOLIVA,
TILLFORD DAGGER.