

(No Model.)

J. H. BAILEY.
Cultivator.

No. 232,871.

Patented Oct. 5, 1880.

Fig. 1.

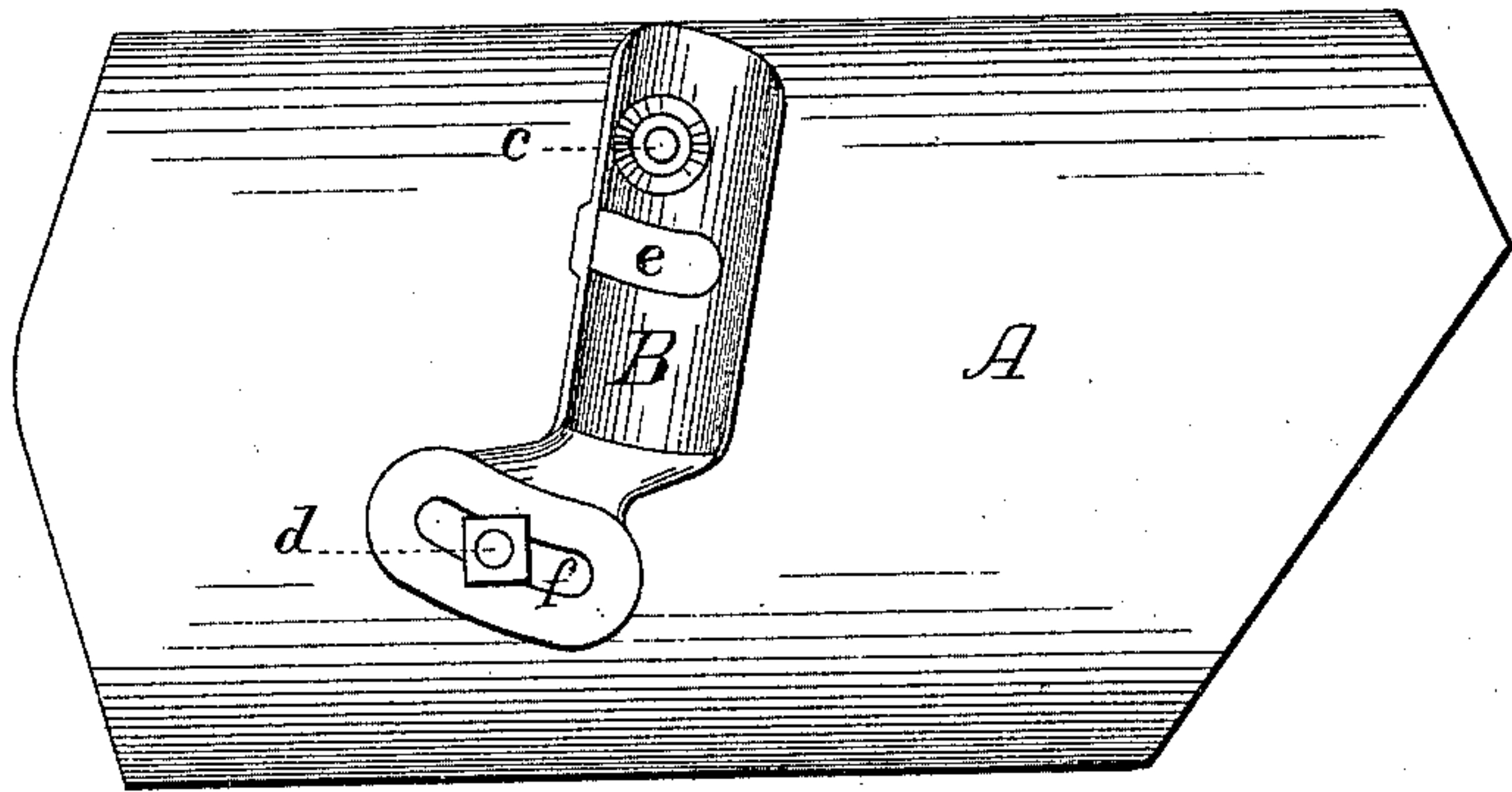


Fig. 2.

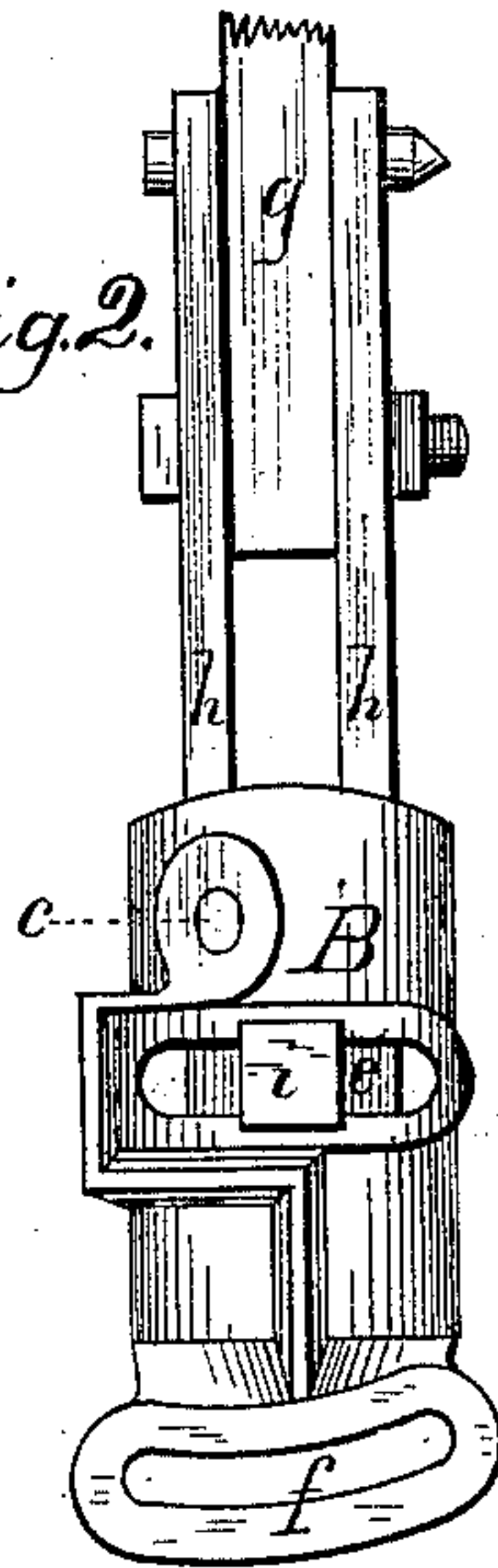


Fig. 4.

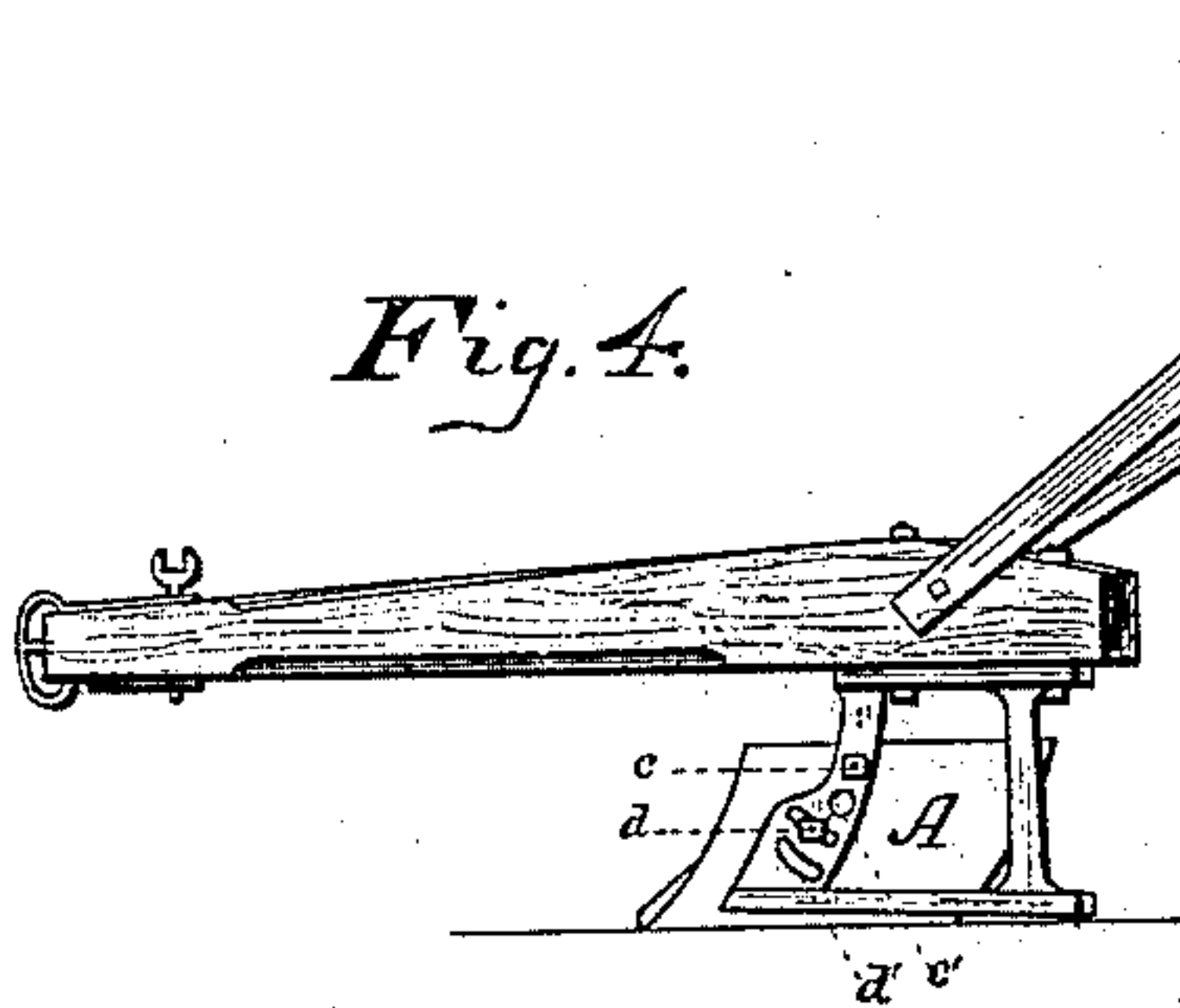
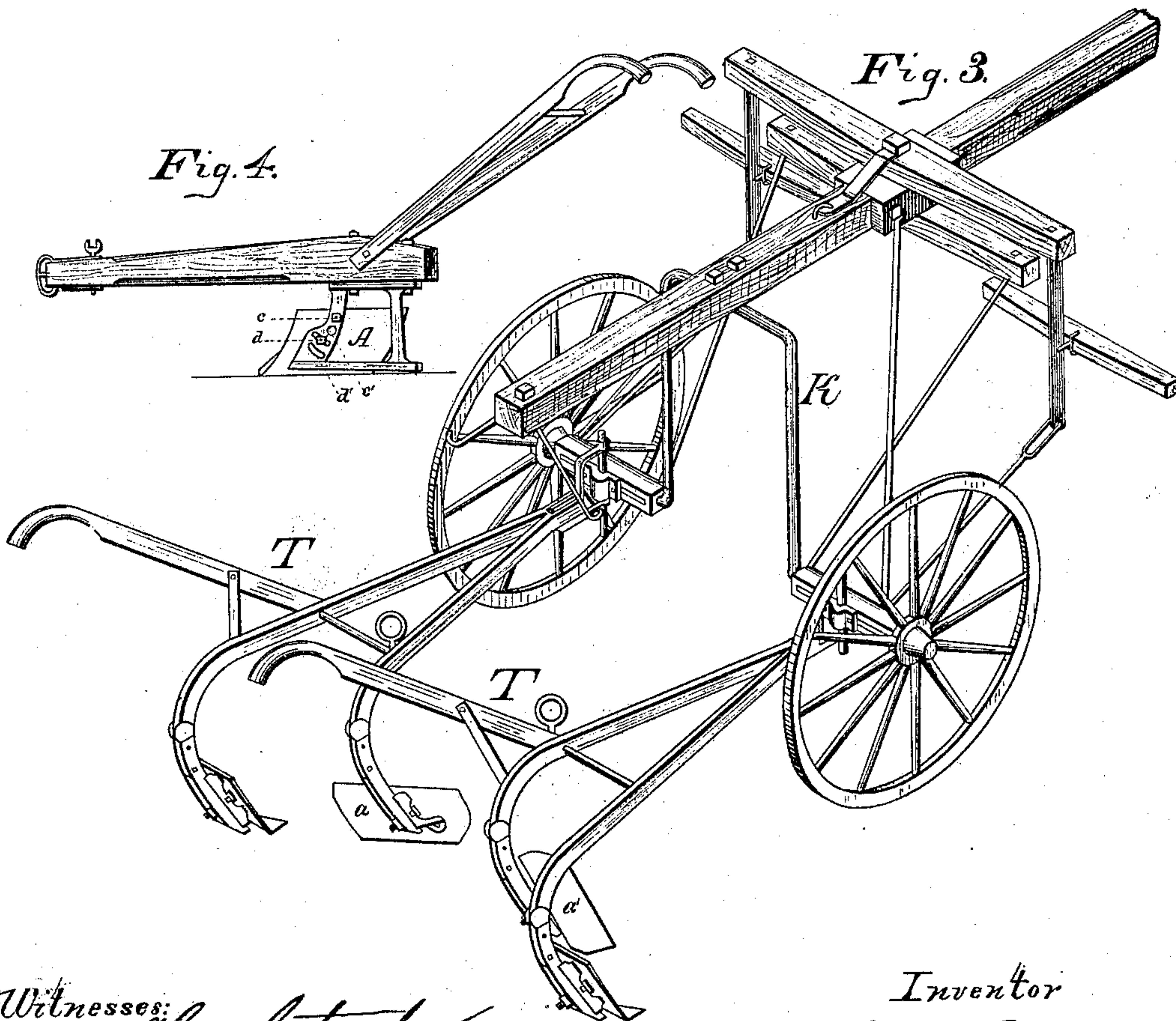


Fig. 3.



Witnesses:

Wm. Hempstead
Geo. H. Denton

Inventor

J. H. Bailey

UNITED STATES PATENT OFFICE.

JOHN H. BAILEY, OF ST. LOUIS, MISSOURI, ASSIGNOR TO DEERE, MANSUR & CO., OF SAME PLACE.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 232,871, dated October 5, 1880.

Application filed June 28, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. BAILEY, a citizen of the United States, residing at St. Louis, in the county of St. Louis and State of Missouri, 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 pertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to cultivators, and to an improvement in the construction of cotton-scaper and cultivating blades.

My invention consists in the introduction of a device in the standard or block to which the blade is attached, (either of a single or double scraper,) whereby the said blade may be adjusted to different angles of ridge.

To obtain the desired adjustment, in practice I have employed the upper bolt or rivet (connecting blade and block or blade and standard) as a center, and allowed the lower bolt to pass through a slotted arc in said block or standard.

In the accompanying drawings, Figure 1 is a rear projection, on a vertical plane, of a right-hand scraper blade and block of the construction which I have adopted for attachment to riding and walking cultivators. Fig. 2 is a front view of right-hand scraper-block attached to sleeve of cultivator, and shows the surface of the block to which the scraper-blade is attached. Fig. 3 is a view in isometric perspective of a walking-cultivator with right and left hand scraper-blades attached, in position for work as a double scraper. Fig. 4 is a view of a single cotton-scraper embodying the principles of my invention, and showing one form of arrangement of slotted holes, &c., by which the angle of inclination of cutting-edge of blade may be changed.

Identical parts in the drawings are designated and referred to by like letters.

In Fig. 1, A represents one of a pair of double scraping-blades designed for attachment to a walking or riding cultivator. The outlines and surfaces of such blades may be of the form best suited to the crop under cultivation or the condition of the soil to be cultivated.

B is the block or device by which the scraper-blade is attached to the cultivator-sleeve. This block is fastened to the scraper-blade at *c* and *d*. *c* may be a rivet, screw, or bolt, which shall so make the connection as to allow the blade a certain amount of motion around it as a center. At *d* the blade and block are clamped together by a bolt or clip capable of being loosened. The slotted hole *e* in the block B permits the introduction of a bolt by which the combination of blade and block is bolted to cultivator-sleeve.

As the blade A may be moved about its center of motion *c* through an arc corresponding to the slotted hole *f*, and as it may be clamped at any position in this arc by the bolt *d*, it is evident that the cutting-edge of the scraping-blade may be quickly adjusted to the various angles of different ridges which it may be desirable to cultivate and easily secured in its position.

In Fig. 2, *g* represents the lower part of a cultivator-standard, and *h* the iron loop or sleeve to which, in all ordinary constructions, the regular cultivating blades and blocks are attached. The front surface of the block B is shown in this view, the scraper-blade being removed to show the connection of block and sleeve. This connection is made through the slot *e* by means of the bolt *i*. By loosening this bolt the block may be moved to right or left as far as permitted by the slot *e*, or the bolt and block may be raised or lowered on the sleeve *h* and clamped on this sleeve at any desired height.

It will be remembered that the scraping-blade, being attached to the block in the complete implement, partakes, with the block, of the movements just described. I am aware that, so far as these two movements are concerned, this construction is not new on double-shovel plows, walking-cultivators or riding-cultivators, or on the blades which are usually attached to them.

In the particular form of block here shown, and which I have adopted in practice for attachment to walking and riding cultivators, the center of motion, *c*, is situated on a raised boss at a distance from the main surface of the block. The surface surrounding the slot *f* is also sufficiently removed from the main

surface of the block to cause the blade to bear or ride at the point *c* and upon the elliptical surface immediately adjacent to the slot *f*. This construction facilitates the desired adjustment, and at the same time secures a recess between the back surface of the scraper-blade and the main body of the block, so that the free motion of the bolt *i* in the slot *e* is thereby permitted.

10 In the walking-cultivator shown by Fig. 3, *K* represents the arch, supported by wheels, and *T T* the double-shovel plows coupled to it by one of the suitable methods adopted in practice. *a'* and *a* are right and left hand
15 scraper-blades attached, as in practice, to the cultivator-shovel sleeves.

Having thus fully described my invention,

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

The combination of the curved scraper *A*, 20 having the shape shown and described, with the block *B*, attached so as to swivel on the boss *c*, and having the straight slot *e* and curved slot *f*, receiving, respectively, the screw-bolts *i* and *d*, which control and fix the relative po- 25 sitions of the scraper and block, all substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 31st day of May, 1880.

J. H. BAILEY.

Witnesses:

FAY HEMPSTEAD,
GEO. H. BENTON.