

(No Model.)

W. B. PATTERSON.

CULTIVATOR.

No. 281,126.

Patented July 10, 1883.

Fig. 1

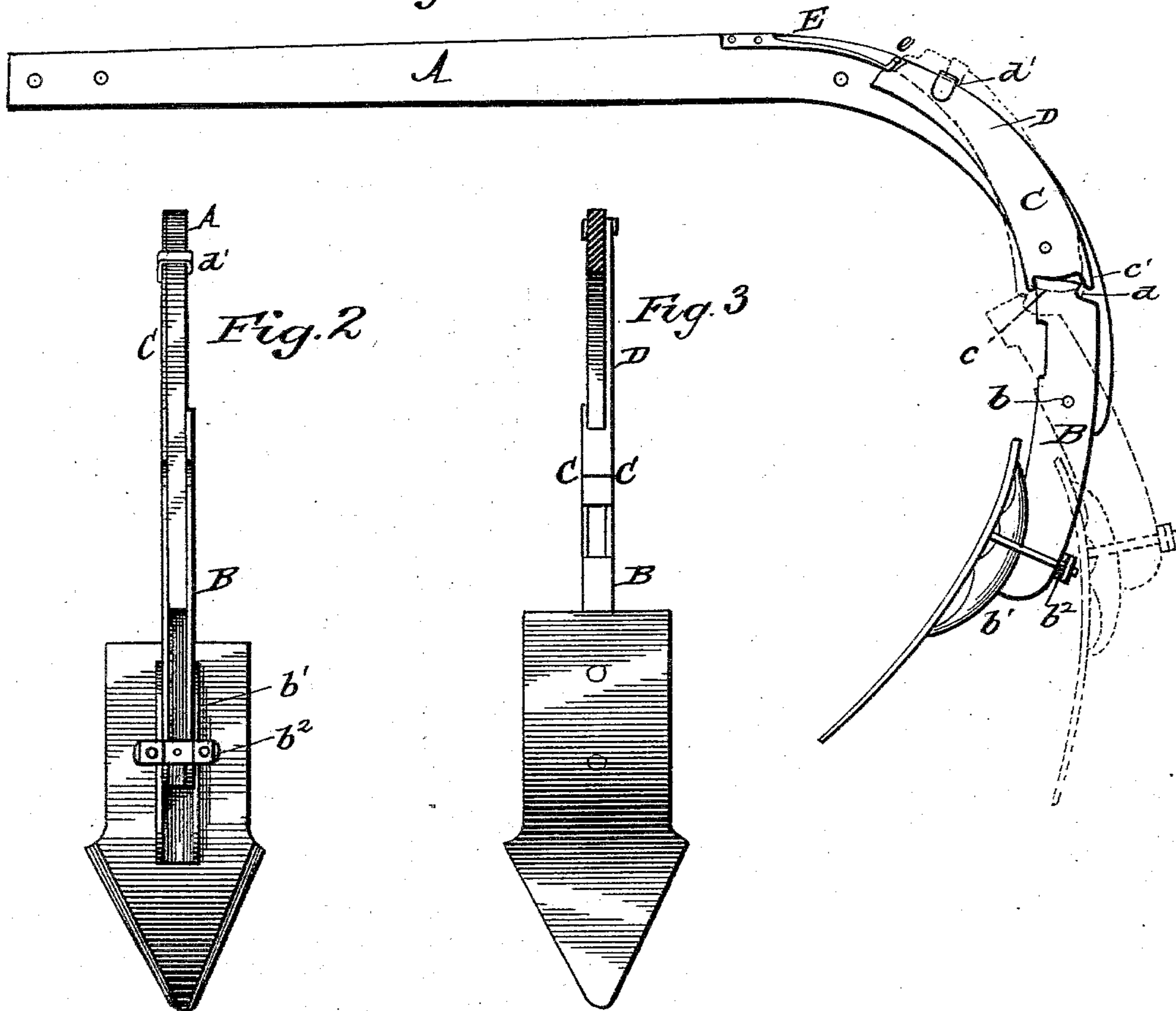


Fig. 2

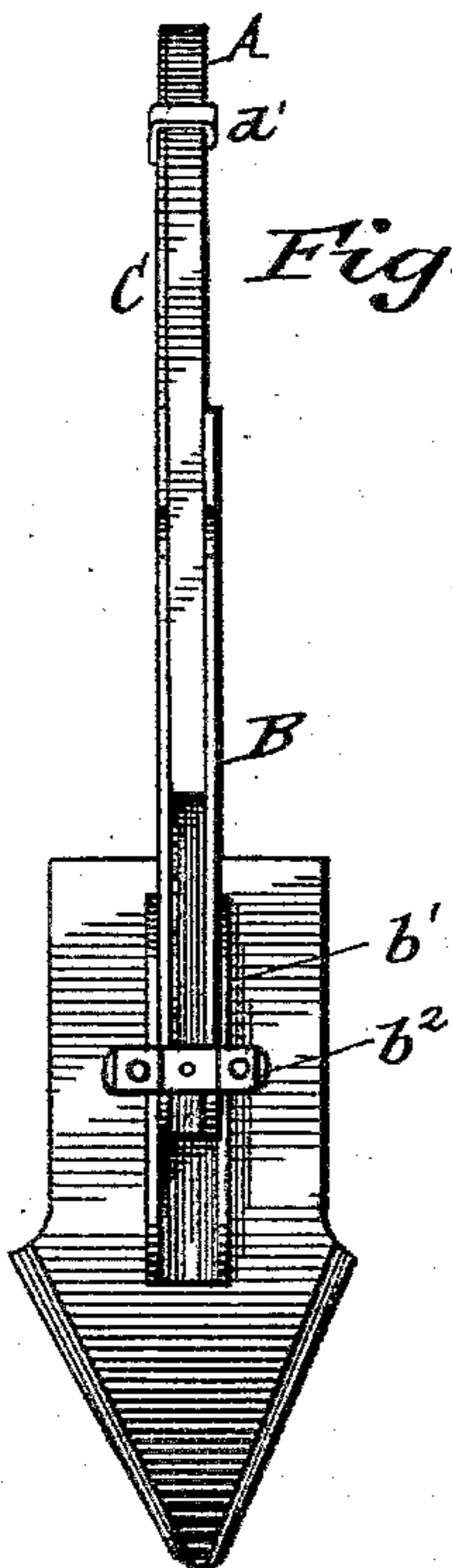


Fig. 3

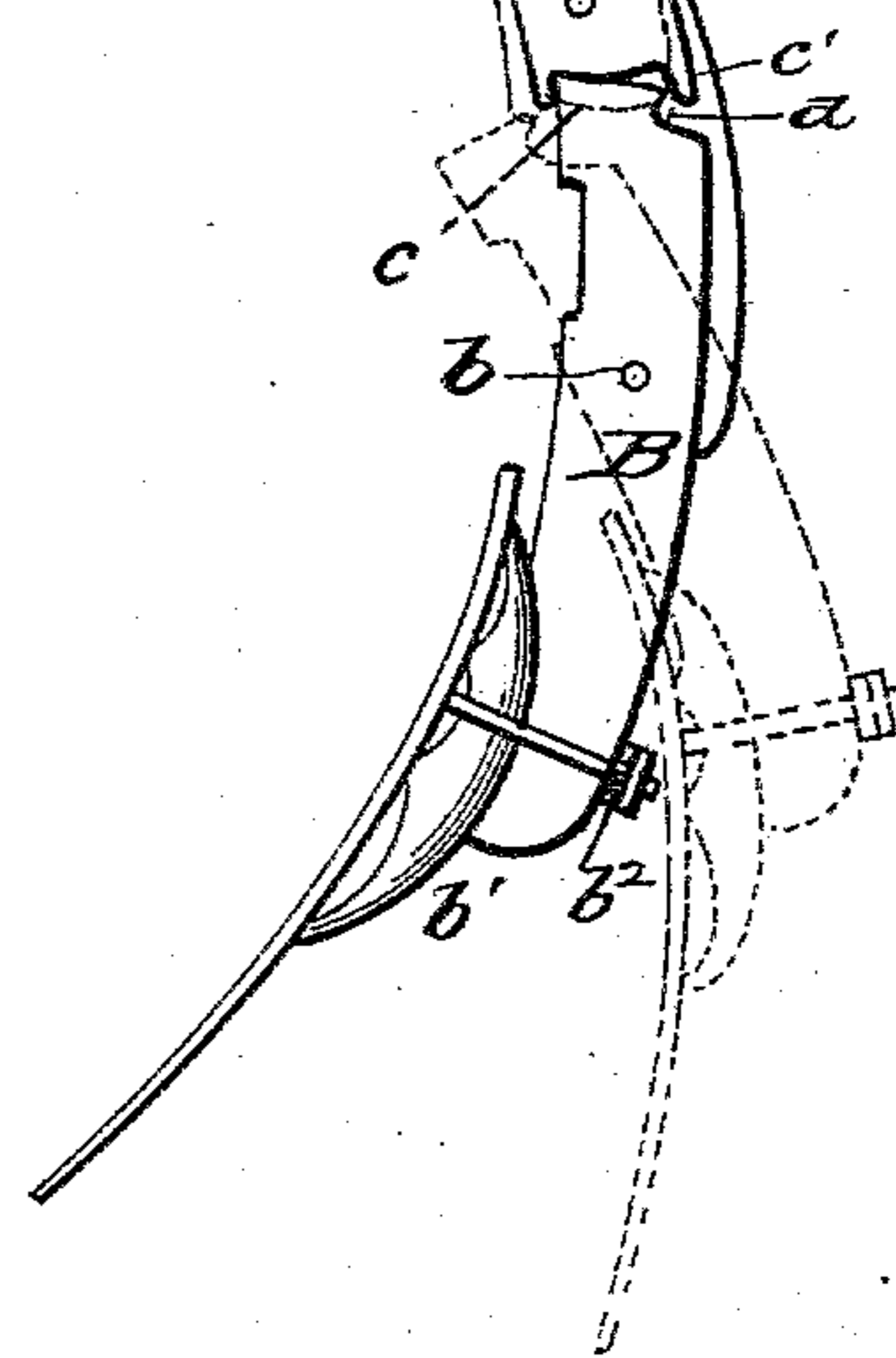
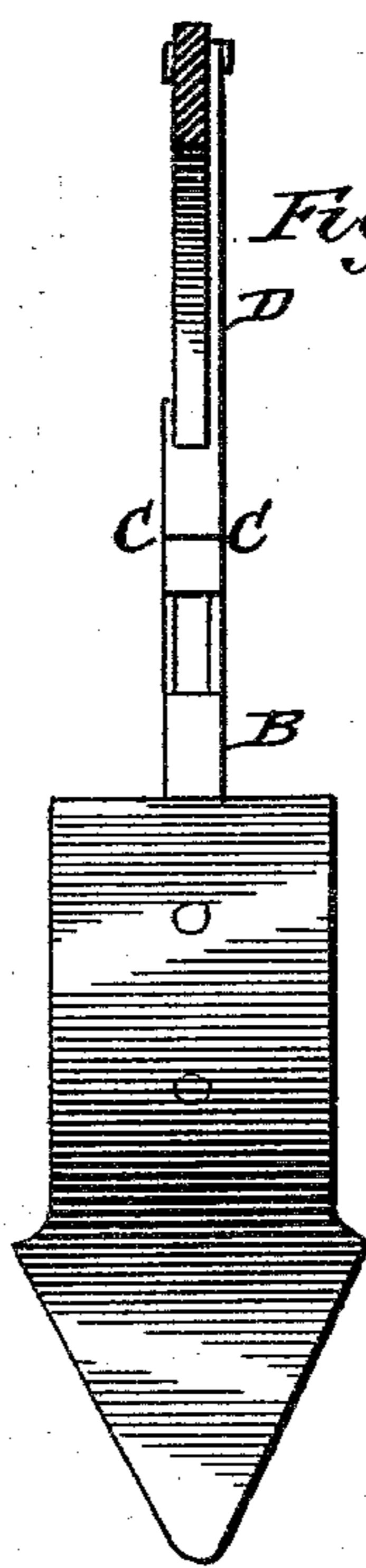


Fig. 4

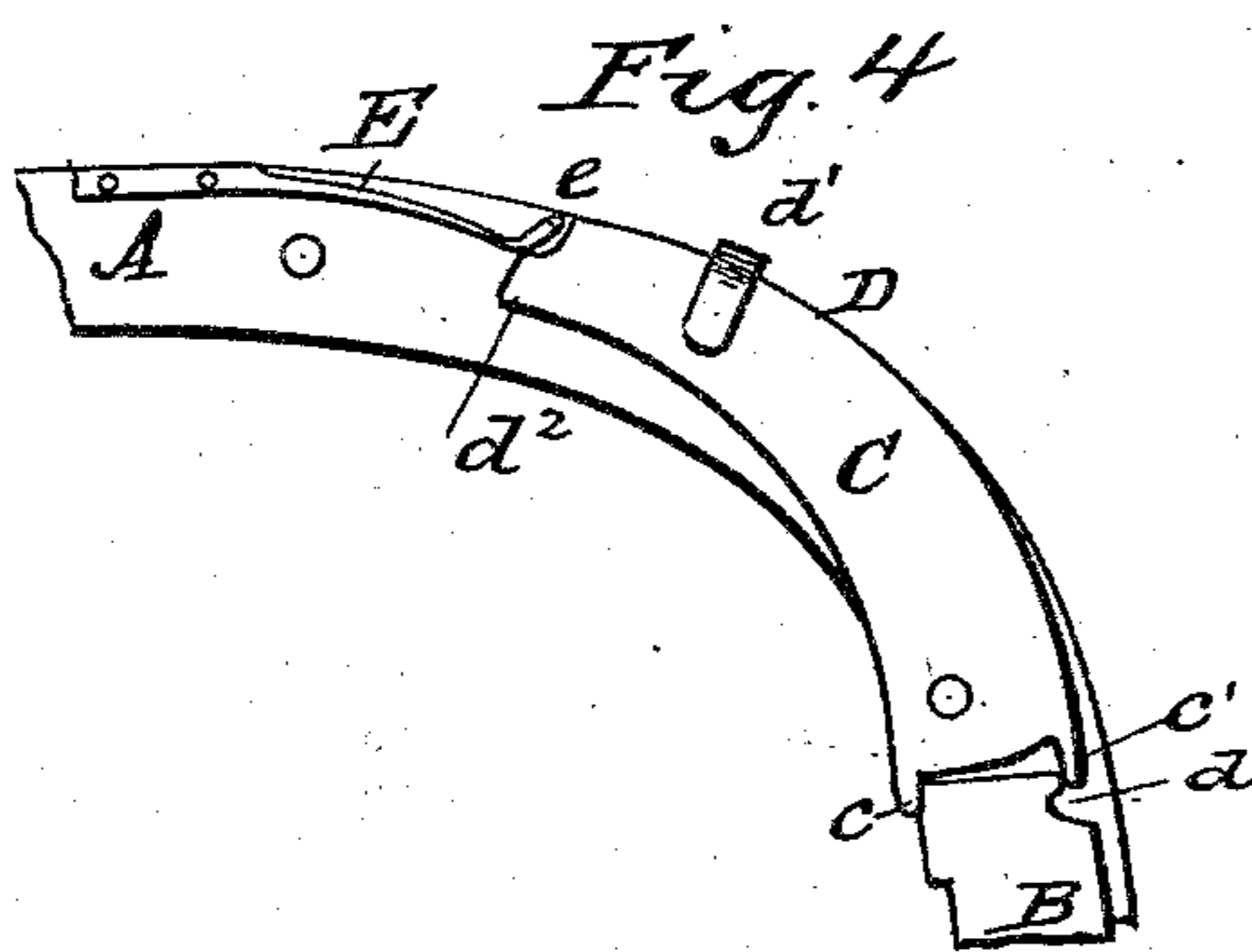
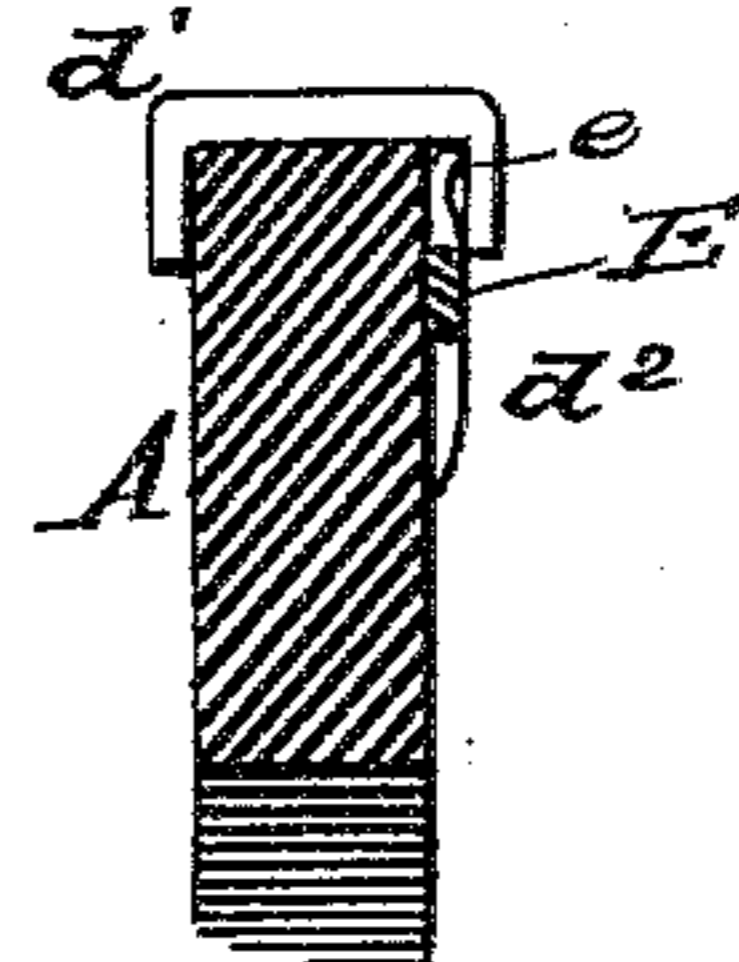


Fig. 5



WITNESSES:

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WILLIAM B. PATTERSON, OF SECOR, ILLINOIS.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 281,126, dated July 10, 1883.

Application filed April 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BELL PATTERSON, of Secor, in the county of Woodford, and in the State of Illinois, have invented certain new and useful Improvements in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, and in which—

Figure 1 is a side elevation of my invention; Fig. 2, a rear view of the same; Fig. 3, a front view thereof; Fig. 4, detail side elevation of Fig. 1; Fig. 5, detail cross-section of Fig. 1.

This invention relates to certain new and useful improvements in that class of devices for attaching cultivator teeth or shovels to their beams, by which the tooth or shovel is permitted to swing backward when it encounters an obstruction, and more particularly to the class of devices in which the usual wooden break-pin is dispensed with.

The invention has for its object the production of an effective and durable device for such purpose, involving simplicity and cheapness in its construction; and to this end the invention consists in novel features of construction and combination and arrangement of parts, all as will be hereinafter fully described, and set forth in the claims hereto annexed.

In the drawings, A represents the usual metal cultivator-beam, the lower curved portion serving as a stock or standard for supporting the shovel foot or sleeve B, which embraces the standard or beam, and pivotally connected thereto by a pivot-pin, *b*, and which is also connected to the grooved block secured to the back of shovel by a yoke, *b'*, passing under said block, with its screw-threaded ends connected by a plate, *b''*, passing over the lower end of foot or sleeve B, and secured by screw-nuts in the usual manner.

C represents a lever pivotally connected to and embracing the standard or beam, and having at its lower end a projection, *c*, for embracing the under side of foot or sleeve B, and projecting lugs *c'*, adapted to engage notches *d d* on the upper edges of said foot or sleeve for securing the shovel in its working position.

The longer arm, D, of said lever C has near its upper end a clip, *d'*, for embracing the top side of beam, and also a notched and beveled end, *d''*, with which the free end of a spring, E, (secured to the side of the beam,) engages for assisting in locking the shovel in position. The spring E performs a two-fold function: first, to hold the upper end of the lever C down to lock the shovel in position when no obstructions are encountered; and, secondly, by a lateral pressure, to hold the longer arm D of lever C against the beam, due to the upper end of longer arm, D, being beveled at its lower and outer edge, so as to admit of its easy entrance between said spring and beam, and the spring having an outwardly-curved end, *e*. The spring being forced outward as the arm D passes between it and the beam, exerts a lateral pressure to hold the arm against the beam. The clip *d'* also assists in holding the longer arm of lever in position by embracing the beam, as before described, when the shovel is in its working position.

The spring and devices for locking the lever to the foot or sleeve are adapted to hold the shovel in working position against all clods and other objects encountered which can be penetrated by the shovel; but in striking a stone, stump, or other hard object liable to injure the shovel, will cause it to be thrown backward out of a working position (see dotted lines, Fig. 1,) whereby breakage is prevented. To be again ready for use the shovel is raised up and pushed forward by a quick movement, and it is in working position.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the pivoted shovel foot or sleeve B, and the curved portion or upright of a cultivator-beam, of a locking-lever pivotally connected to and embracing said beam, with its lower end engaging the upper end of said foot or sleeve, and a spring for locking the shovel in working position, substantially as herein shown and described.

2. The combination, with the curved or upright portion of a cultivator-beam, of the notched shovel foot or sleeve B, and the locking-lever pivotally connected to and embracing said beam, and provided with the projec-

tion, *c*, lugs *c' c'*, and clip *d'*, and a locking-spring, substantially as and for the purpose herein shown and described.

3. The combination, with the curved or up-
5 right portion of a cultivator-beam, of the piv-
oted foot or sleeve B, pivoted lever connected
to and embracing said beam, and having the
longer arm, D, of said lever notched and bev-
eled, as described, and the spring E, having
ic an outwardly-curved end, *e*, all constructed

and arranged to operate substantially in the
manner, as and for the purpose herein shown
and described.

In testimony that I claim the foregoing I
have hereunto set my hand this 27th day of 15
March, 1883.

WILLIAM BELL PATTERSON.

Witnesses:

THOS. SLADE,

IRVING UNDERHILL.