

(No Model.)

A. H. TRIPP.
CULTIVATOR.

No. 444,800.

Patented Jan. 13, 1891.

Fig. 1.

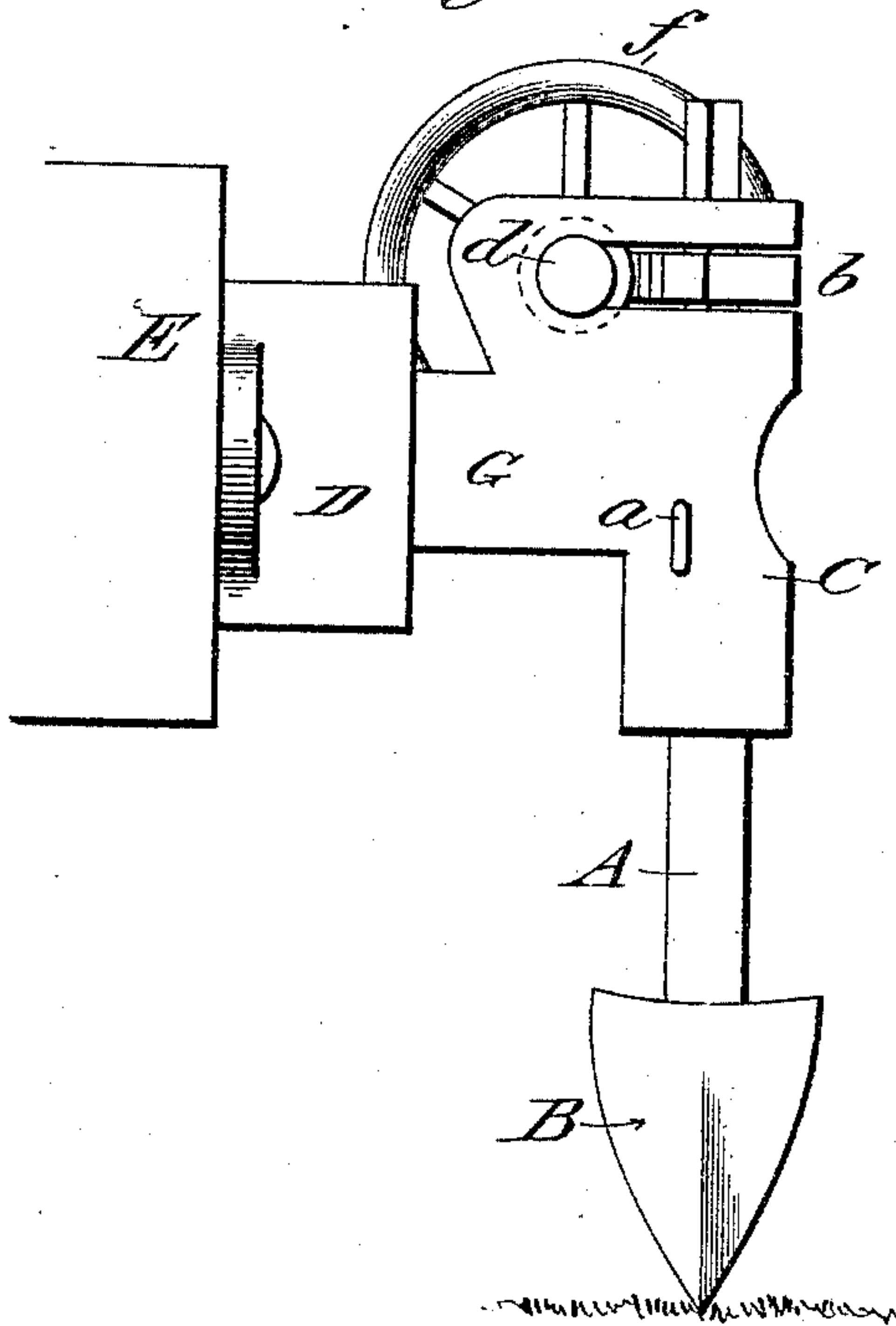


Fig. 2.

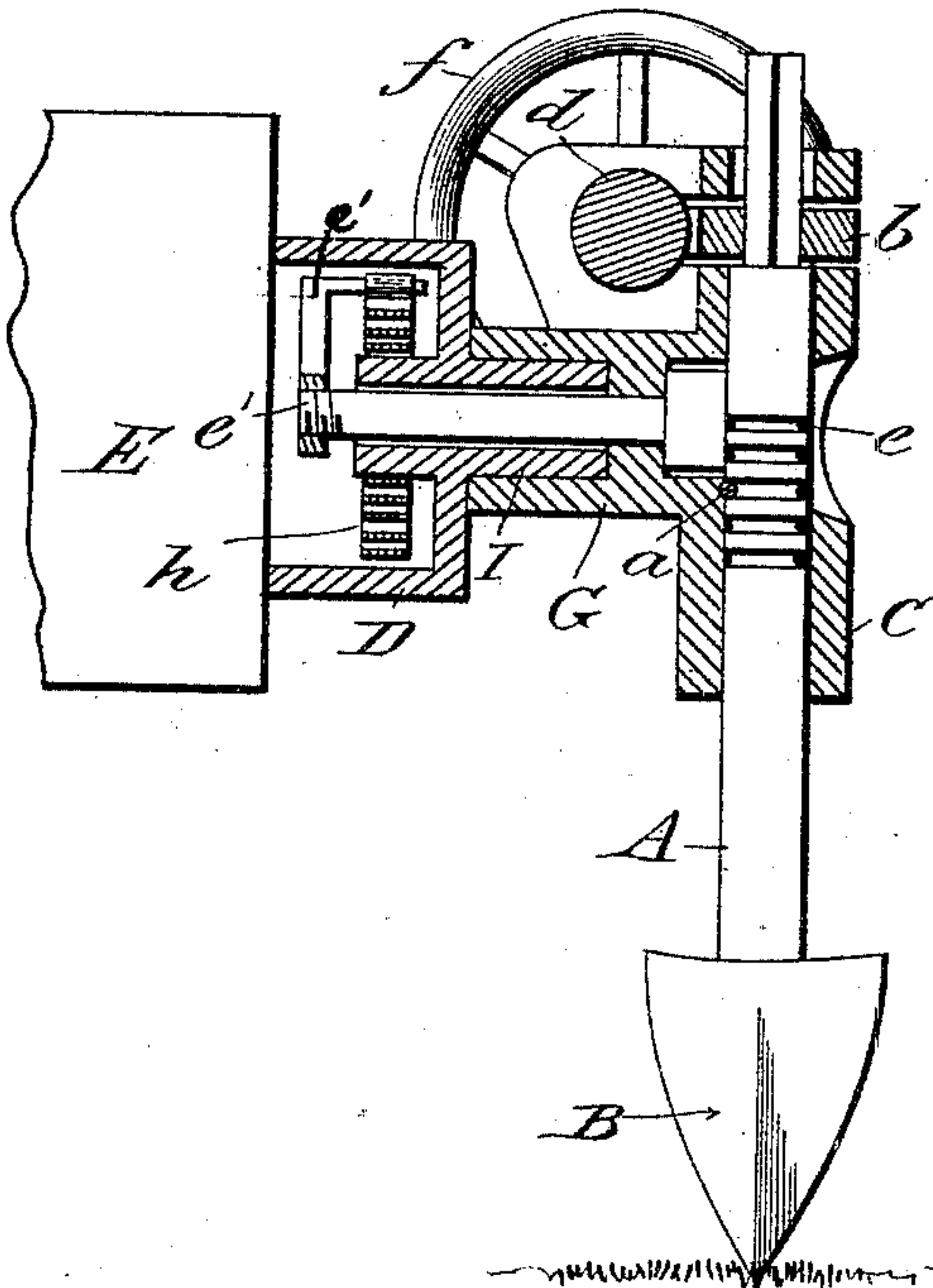


Fig. 3.

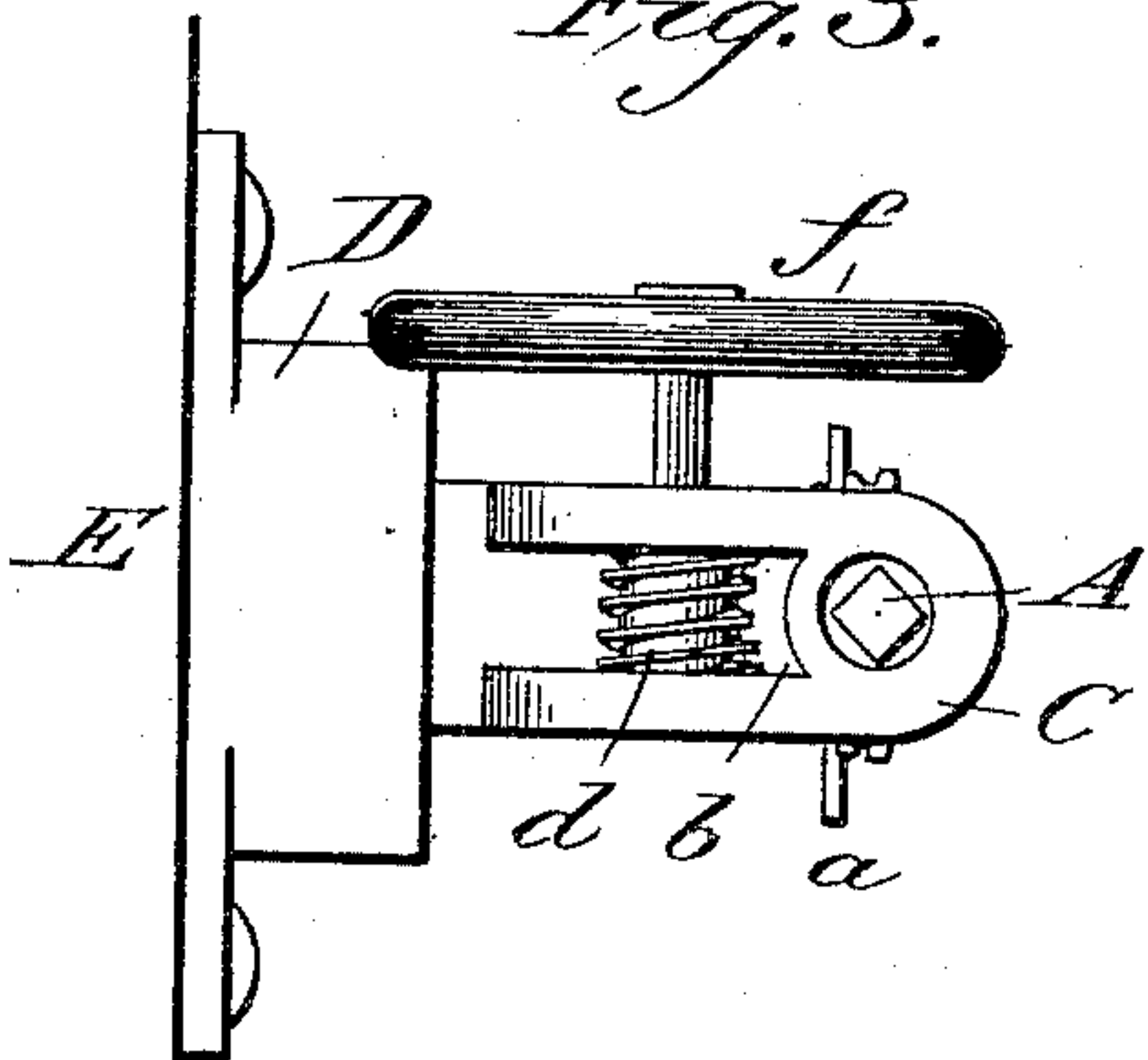
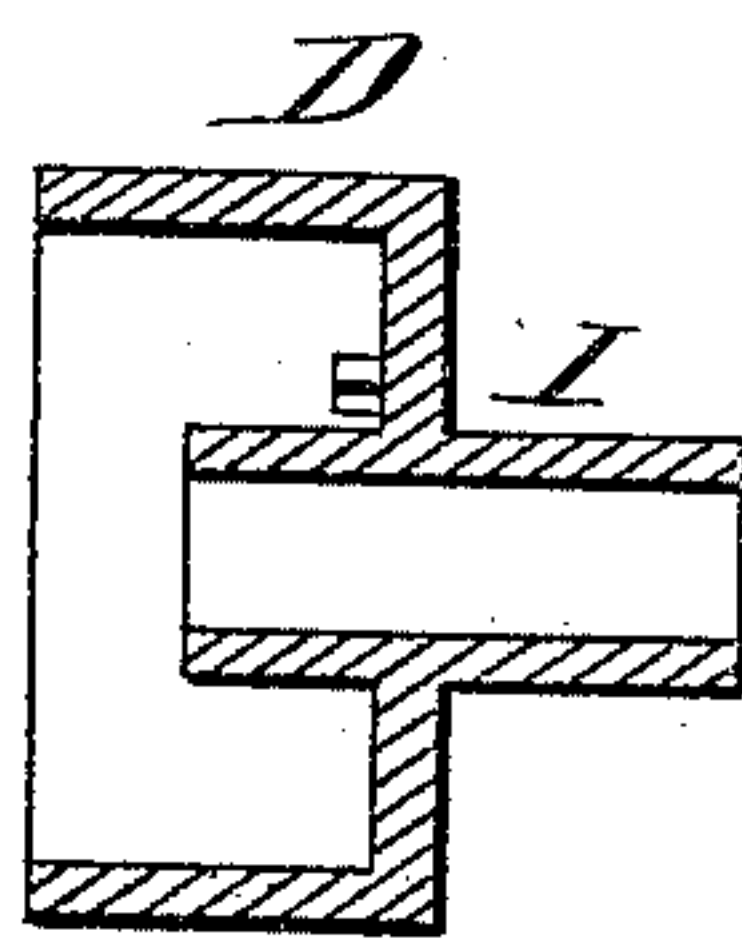


Fig. 4.



Witnesses:

John Grice
Lyman H. Raymond

Inventor:

Albert H. Tripp

UNITED STATES PATENT OFFICE.

ALBERT H. TRIPP, OF RAGO, KANSAS.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 444,800, dated January 13, 1891.

Application filed May 1, 1890. Serial No. 350,221. (No model.)

To all whom it may concern:

Be it known that I, ALBERT H. TRIPP, a citizen of the United States, residing at or near Rago, in the county of Kingman and State of Kansas, 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 relates to cultivators; and it consists in certain improvements in the construction of the same, as hereinafter described and claimed, the object of the invention being to so construct the shovel-standard and standard-holder of a cultivator that the shovel may be adjusted in any position and the standard have a yielding movement when brought in contact with an obstruction and will return to its proper position when the obstruction is passed.

In the accompanying drawings, Figure 1 is a front view of a cultivator-shovel standard provided with my improvements. Fig. 2 is a section taken through the standard-holder and the box containing the actuating-spring. Fig. 3 is a top view of the devices for turning the standard which adjusts the shovel in position. Fig. 4 is an interior view of the box containing a spring.

A designates a cultivator-standard having a shovel B secured thereto, the standard being secured in a tubular holder C by means of a spring-key *a*, which is passed through the holder and in an annular groove *c* in the standard. Several grooves *c* are made in the standard for its vertical adjustment, also for the adjustment (by removing spring-key) of the standard upward and downward in tubular holder, thereby causing the shovel to enter the soil any desired depth and being held into position by returning spring-key into holder.

The standard A is squared at or near its upper end and has a worm-wheel or segmental gear *b* placed thereon, which is loosely connected to the standard and admits of the standard passing upward and downward through the worm-wheel, as provided for. The said worm-wheel is in position to be engaged by a worm-shaft *d*, which is mounted

in the holder C, and is provided with a hand-wheel *f*. By turning the hand-wheel the standard may be turned in either direction, and thus the shovel may be adjusted in position toward or from a row of corn, as desired. The box D is secured to the sides of a cultivator-beam or drag-bar and has the tubular pivot or stud I extending into the tubular arm G of the holder C. It is secured in position by the crank-pin or break-pin *e'*, which passes through the tubular arm G of holder C and through the tubular pivot I of box D, and being immediately turned at a right angle with and extending to or near the side of box, and is of elbow or staple form, with one end engaging a coil-spring *h* at the end of the outer coil, the other end of the spring being secured in the box within which the spring is placed.

When the shovel B comes in contact with a large stone or other obstruction as the cultivator is drawn forward, the standard A yields to the pressure and is pressed backward. The holder C, turning on its pivotal connection with the box D, causes the coil-spring in said box to be compressed, and when the obstruction is passed the standard is immediately returned to its normal position by the action of the spring. The face of the shovel may be readily adjusted toward either side by a movement of the hand-wheel *f*, the standard being turned by the action of the worm and segmental gear and held in position by the worm-shaft.

I claim—

1. The combination, with a cultivator-beam and a standard having a shovel secured thereto, of a tubular standard-holder having a tubular arm extending at right angles therefrom, a box secured to the cultivator-beam, said box having a tubular arm or pivot extending into and pivotally connected with said holder-arm, a coil-spring in said box, and a crank or break pin within said box, serving to secure the box and standard-holder together and to allow the shovel-standard to yield to obstructions, substantially as shown and described.

2. The combination, with a tubular holder adapted to be secured to a beam of a cultivator, of a worm-shaft mounted in said holder

and adapted to be turned by hand, and a standard A, carried by said holder and provided with a gear-wheel in position to be engaged by said worm-shaft, substantially as
5 set forth.

3. The combination, with a grooved standard A, provided with a shovel, of the holder C, worm-shaft *d*, mounted in said holder and

provided with a hand-wheel, gear-wheel *b* on standard A, and a spring-key for securing the standard in the holder, substantially as and for the purposes described.

ALBERT H. TRIPP.

Witnesses:

J. H. NICKELL,

ROBERT M. BLODGETT.