

(No Model.)

E. FULMER.

MEANS FOR SECURING CULTIVATOR AND HARROW TEETH.

No. 287,531.

Patented Oct. 30, 1883.

Fig. 1

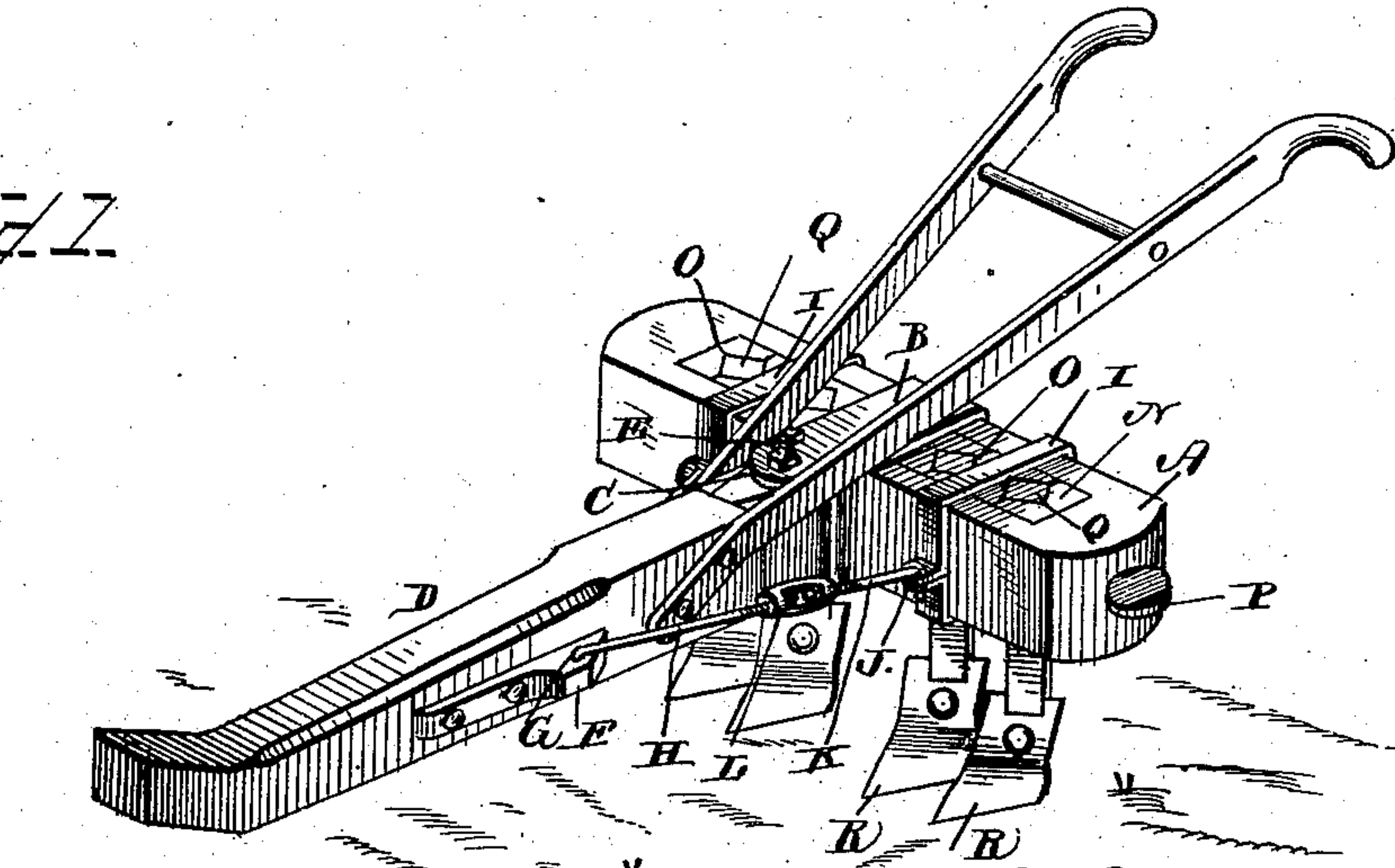


Fig. 2

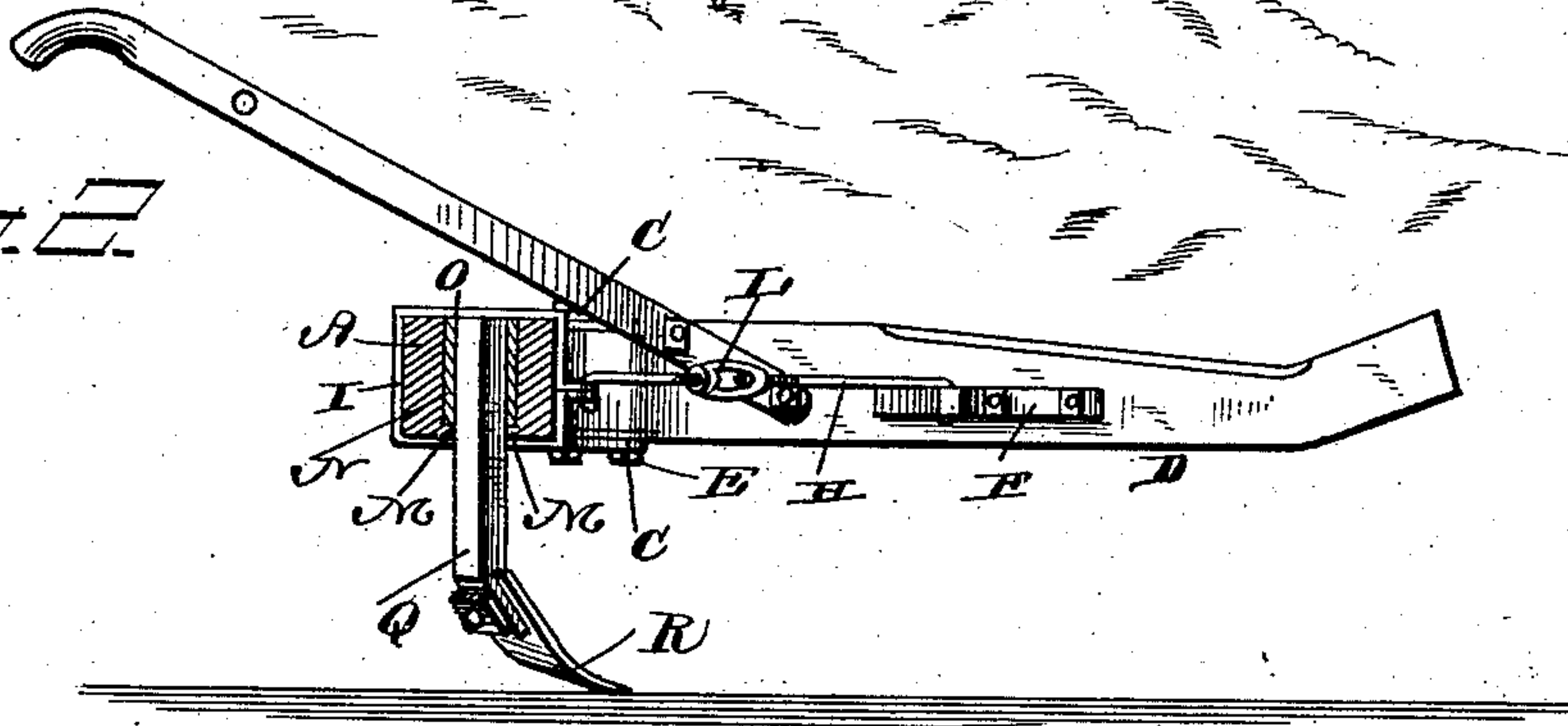


Fig. 3

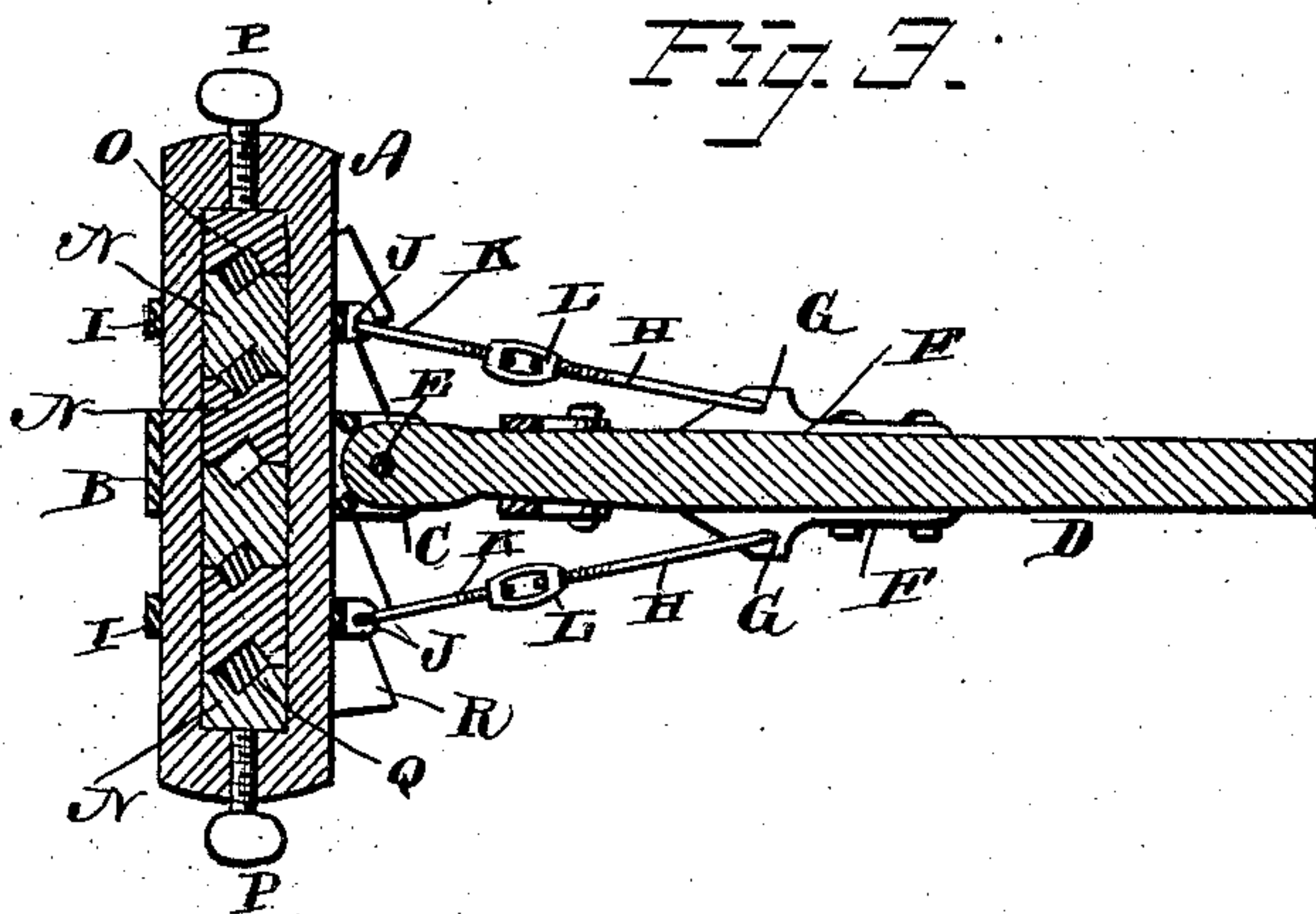
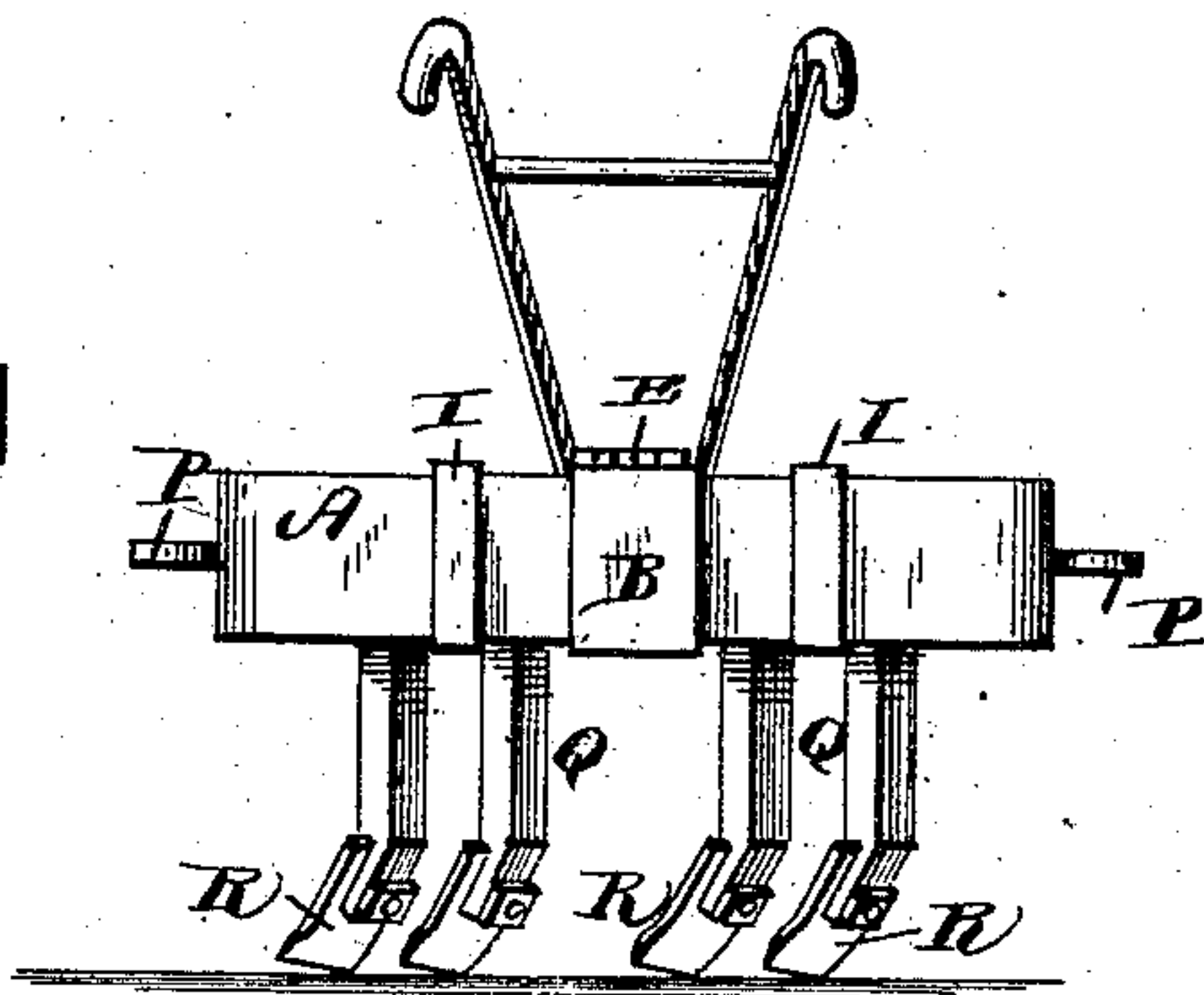


Fig. 4



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EDWARD FULMER, OF MOUNT OLIVE, ALABAMA.

MEANS FOR SECURING CULTIVATOR AND HARROW TEETH.

SPECIFICATION forming part of Letters Patent No. 287,531, dated October 30, 1883.

Application filed July 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD FULMER, a citizen of the United States, residing at Mount Olive, in the county of Coosa and State of Alabama, have invented a new and useful Means for Securing Cultivator and Harrow Teeth, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to harrows and cultivators; and it consists in certain improvements in the construction of the same having for their object to produce a device which shall possess superior advantages in point of simplicity, durability, ease of adjustment for any desired purpose, and general efficiency, all as will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, Figure 1 is a perspective view. Fig. 2 is a longitudinal vertical sectional view, taken through the stock or frame of the machine. Fig. 3 is a horizontal sectional view of the same, and Fig. 4 is a rear view.

The same letters refer to the same parts in all the figures.

A in the drawings designates a rectangular frame, which is provided with a centrally-located clip or bail, B, the arms of which, C C, extend in front of the said frame. D is the beam or tongue, which is pivoted between the arms C C by means of a bolt, E. To the sides of said beam are secured wings or castings F F, having perforations G, in which are hooked rods H, the inner or rear ends of which are screw-threaded, as shown. To the frame A are secured straps I, having forwardly-projecting perforated lugs or ears J, in which are hooked rods K, the front ends of which are screw-threaded and connected by right and left hand threaded nuts L with the rods H. By this construction the connecting-rods on each side of the beam may be extended or contracted, thus enabling the beam to be held securely at any desired angle to the frame. The under side of the frame A is provided with inwardly-projecting flanges M, serving to sup-

port a series of blocks, N, the sides of which are provided with angular recesses O. The ends of the frame are provided with strong set-screws P, by means of which the blocks may be tightened together, so as to bind and retain securely in position the standards Q, which are fitted in the angular recesses in the sides of the said blocks. Washers may be placed between the blocks, so as to adapt the frame to two, three, or more of the standards. The latter may, by tightening the set-screws, be retained securely in place. By loosening the set-screws they may be adjusted vertically to any desired extent. The lower ends of the standards carry the harrow or cultivator blades R, of substantially the construction shown in the drawings.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. By varying the number of the teeth and the depth to which they are set, the machine may be adapted for a variety of uses, which will readily suggest themselves to skilled farmers. The adjustment is simple and easy and the machine easily manipulated.

I claim as my invention and desire to secure by Letters Patent of the United States—

The combination of the rectangular frame having inwardly-projecting flanges on its under side, the blocks fitted in said frame, and having angular recesses in their sides, the standards fitted in the angular recesses between the said blocks, and having the harrow or cultivator blades at their lower ends, and the tightening-screws in the ends of the rectangular frame, all arranged and operating substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

EDWARD FULMER.

Witnesses:

T. J. PENNINGTON,
FELIX L. SMITH.