

(No Model.)

2 Sheets—Sheet 1.

J. SHERMAN.

CULTIVATOR AND COTTON CHOPPER.

No. 300,649.

Patented June 17, 1884.

Fig. 1.

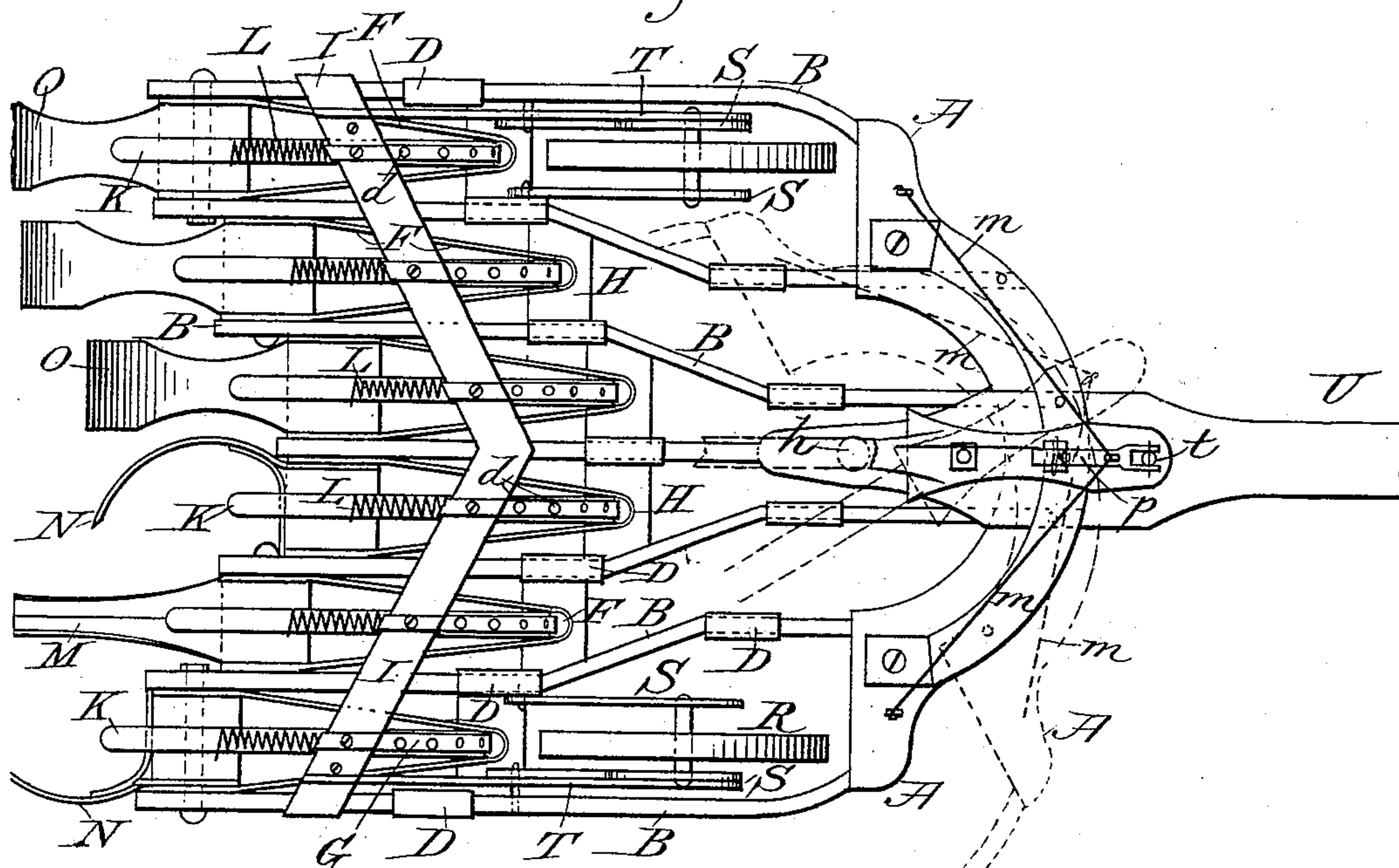


Fig. 2.

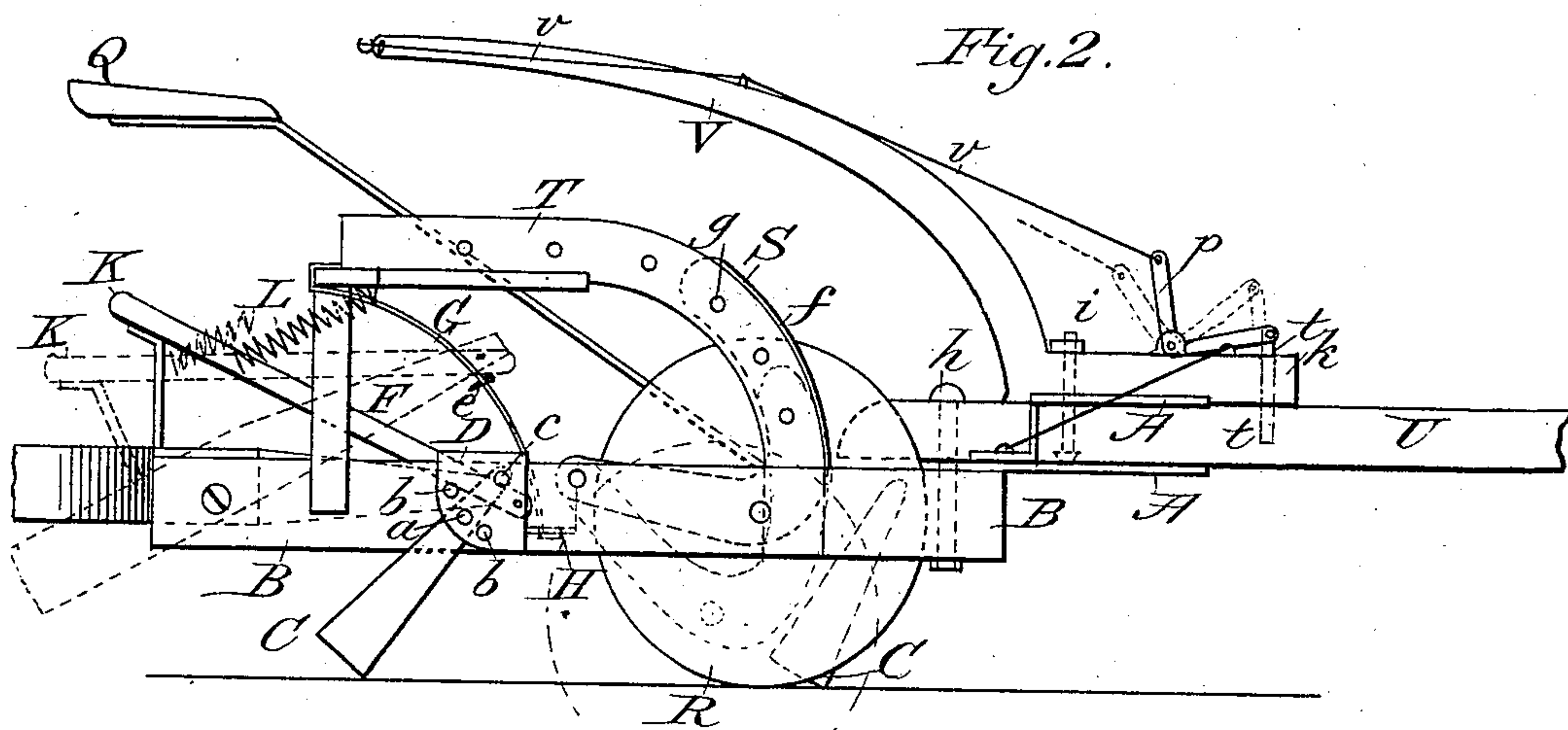
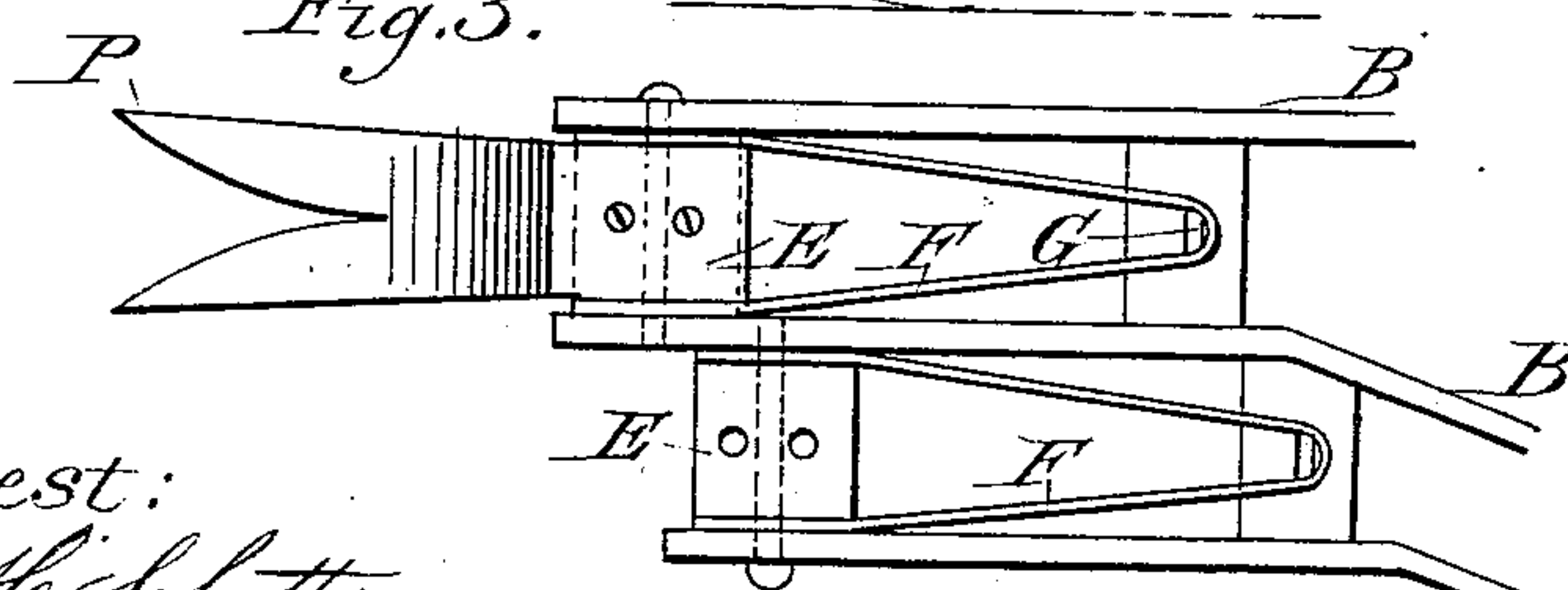


Fig. 3.



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F. H. Schott

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By J. C. Parker atty.

(No Model.)

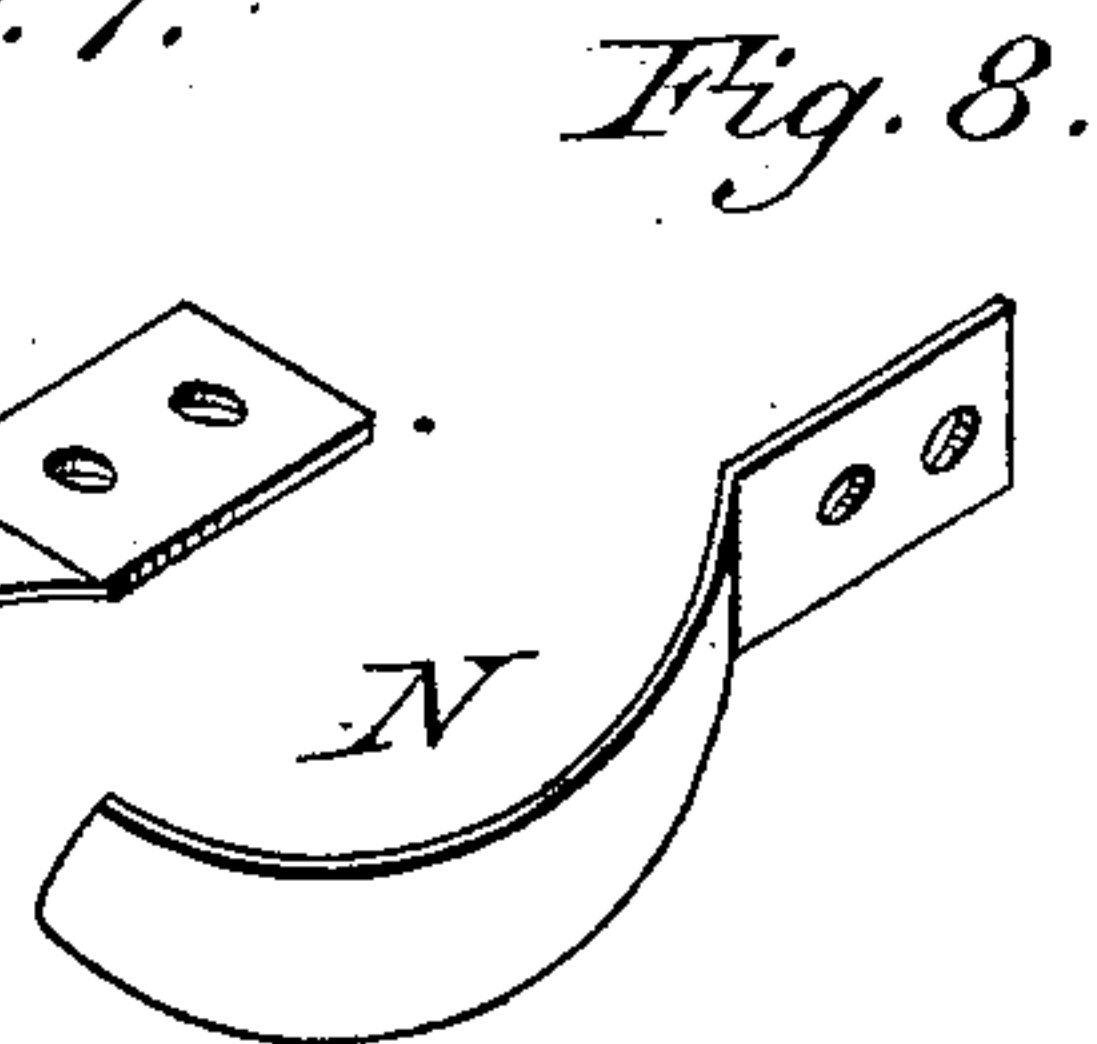
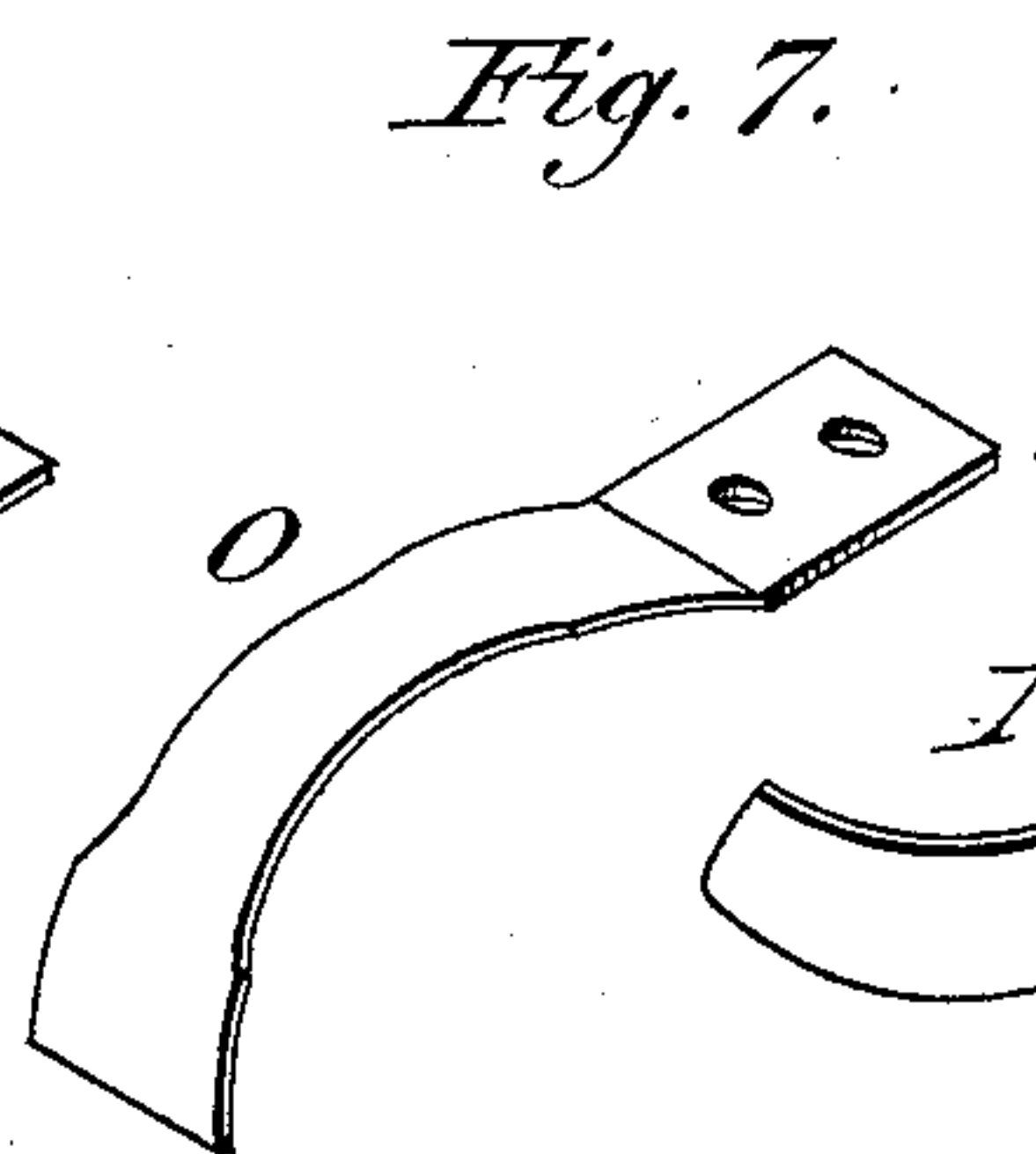
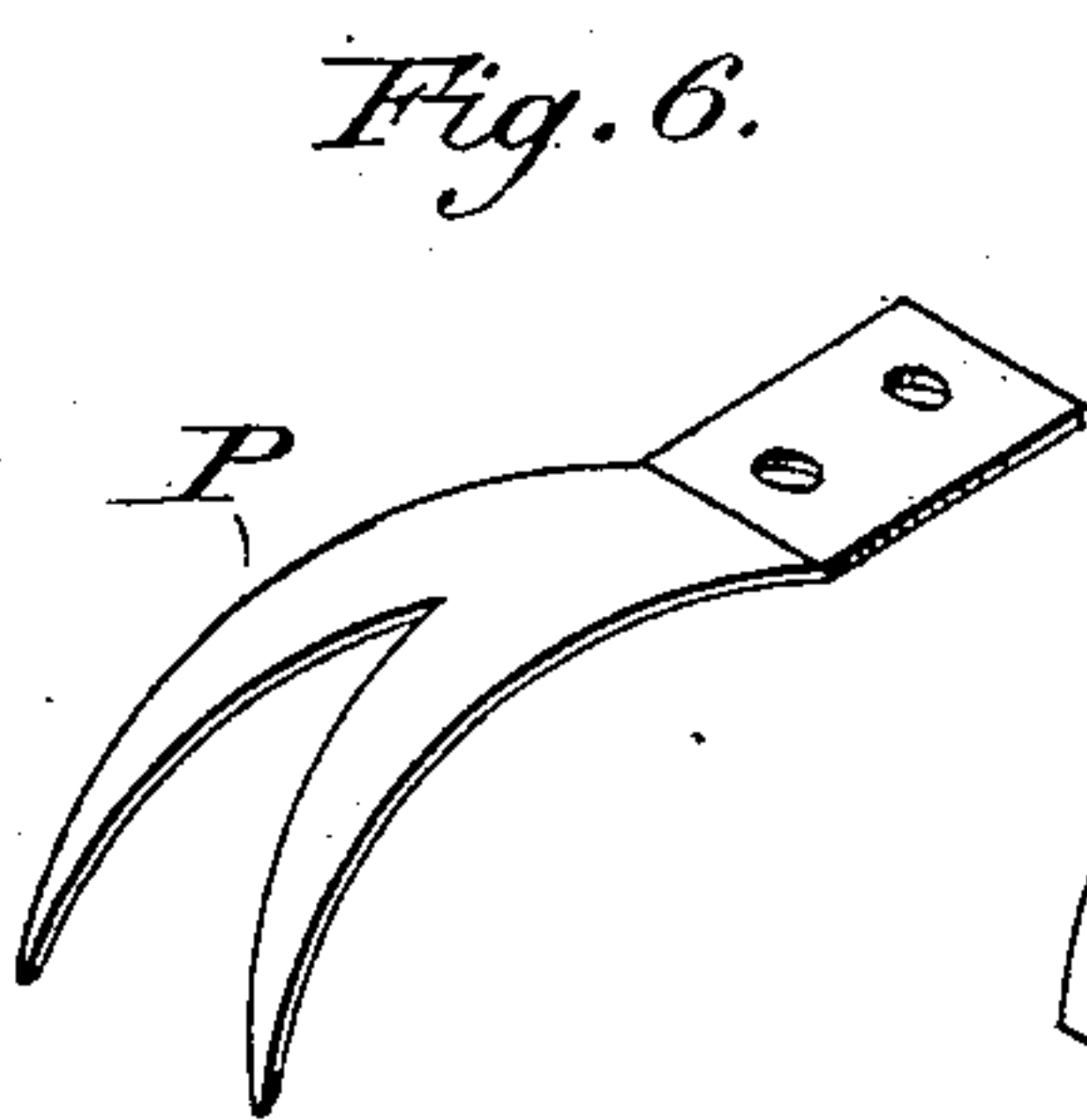
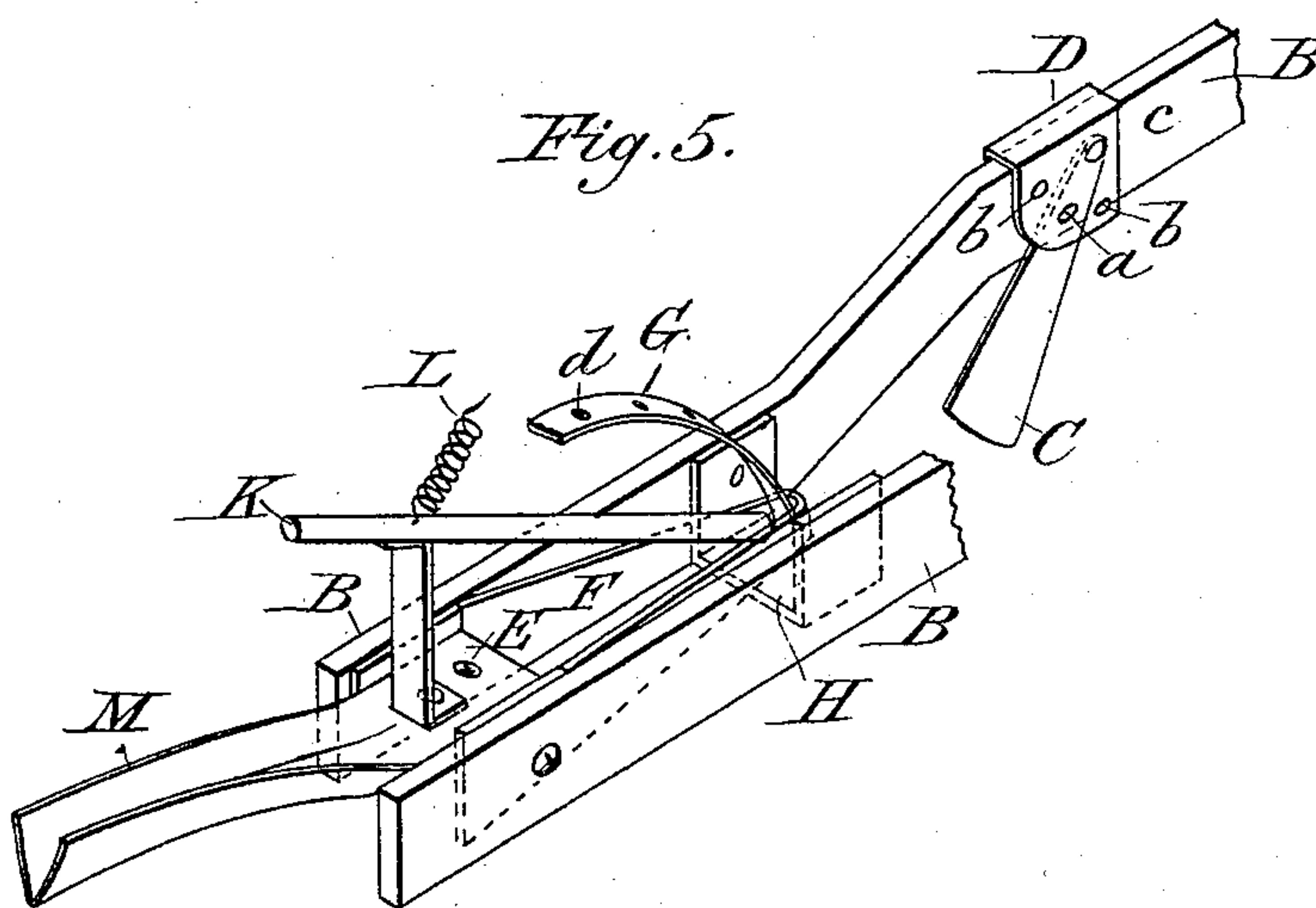
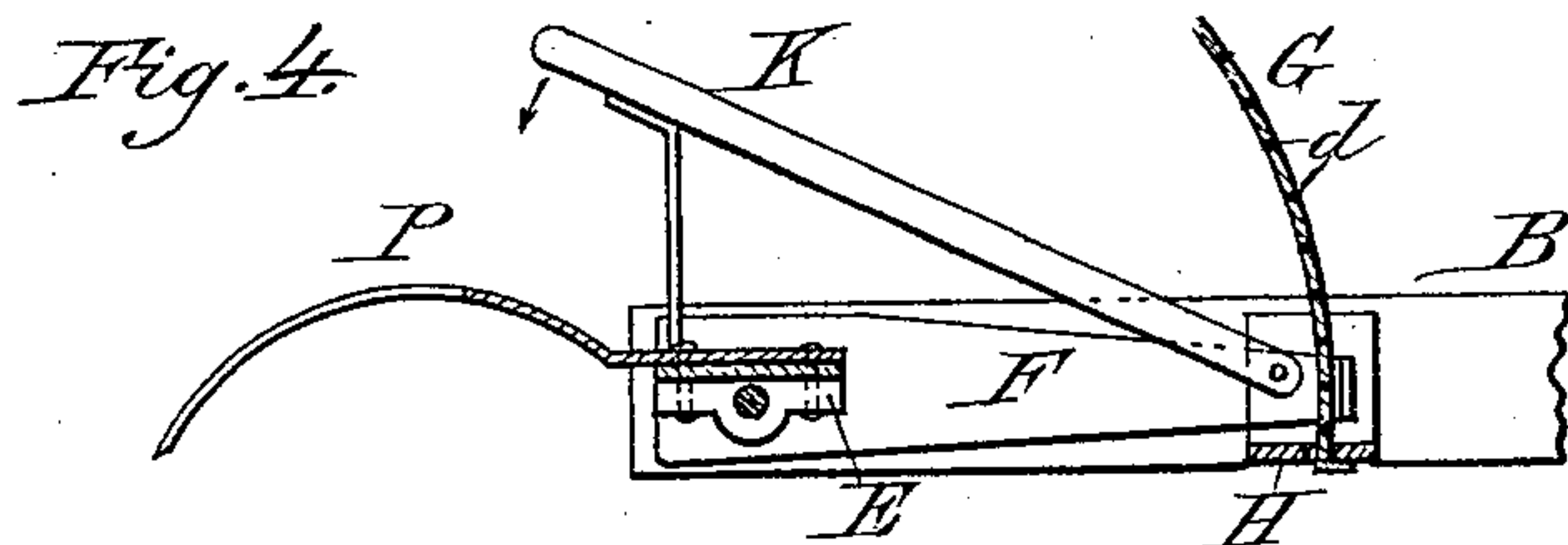
2 Sheets—Sheet 2.

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*Attest:*

*H. H. Schott*

*A. R. Brown.*

*Inventor:*

*Josiah Sherman.*  
*Per J. C. Taskewitz.*



# UNITED STATES PATENT OFFICE.

JOSIAH SHERMAN, OF ATLANTA, GEORGIA.

## CULTIVATOR AND COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 300,649, dated June 17, 1884.

Application filed October 4, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOSIAH SHERMAN, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Cultivators and Cotton-Choppers; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in cultivators and cotton-choppers; and it consists in the construction and arrangement of parts, as hereinafter more fully described and claimed.

In the annexed drawings, illustrating my invention, Figure 1 is a plan or top view of a two-horse cultivator embodying my improvements. Fig. 2 is a side elevation of the same. Fig. 3 is a plan view of the rear ends of the beams, showing the manner of attaching the rear cultivators. Fig. 4 is a sectional detail. Fig. 5 is a perspective view of one of the crooked beams and attached parts. Figs. 6, 7, and 8 are views of cultivating attachments.

Like letters designate like parts in the several views.

The frame of the cultivator consists of the curved or laterally-inclined front pieces, A A, and the crooked beams B B, of unequal length, which are secured to said front pieces, and extend backward, as shown in Figs. 1 and 2. The beams B B are bent, curved, or otherwise shaped into a crooked form laterally for the attachment of harrow-teeth C C, which may thus be placed in two or more lines upon the same beam. These beams are provided with cuffs D D, that embrace the upper end of the harrow-tooth, which is placed against the side of the beam, as shown in Fig. 5, and thus adjustably secured thereto at any desired angle by means of a bolt, *a*, passed through a perforation in the tooth and through either of the perforations *b b* in the cuff, the tooth being pivoted at *c*, so as to be readily turned to any desired position by withdrawing the bolt *a* and readjusting the tooth. It is obvious that any suitable number of harrow-teeth may thus

be adjustably secured to the crooked beams B, and these beams may have one or more bends, so as to bring said teeth into two or more lines upon the same beam, and thus present a greater or less harrowing-surface. In addition to the crooked beams B B, of which there may be any desired number, a central straight beam, B', Fig. 1, may also be arranged in the frame of the machine, its forward end being attached either to the front pieces, A A, or connected by any suitable means to the adjacent beams B B. This straight beam B' will be somewhat shorter than the others, which increase in length from the center of the machine, as shown. The straight beam B', when employed, will have adjustable harrow-teeth C C on each side attached by means of a cuff, D, as before described.

Between the rear ends of the beams, and pivoted thereto, are boxes E E, for the attachment of various cultivating devices and their operating mechanism. These boxes are provided with yokes F, the forward ends of which pass around curved standards G, that are attached to braces H, between the beams. The standards G G support a foot-rest, I, and each standard is provided with a series of perforations, *d d*, for the passage of pins *e*, to hold the yokes F and attached boxes E at any desired inclination. The boxes E are each provided with a lever, K, that is connected by a spring, L, to the foot-rest I, or other convenient point.

To the pivoted boxes E E may be detachably secured any appropriate cultivating device, according to the character of work to be performed with the machine. In Fig. 1 a furrow-forming device, M, is shown attached to one of these boxes, the adjacent ones on each side being provided with coverers N N, while the rest of the boxes are provided with hoes or cotton-choppers O O, it being understood that either or all of these may be displaced, as required, by other suitable devices, such as the bifurcated harrow-tooth P, (shown in Figs. 3, 4, and 6,) or other appropriate implement. It is also obvious that instead of these cultivating devices rollers may be attached between the rear ends of the beams, if desired. The levers K K, by which these different forms of cultivating devices are adjusted and operated, may be of such length as to



be readily controlled by the driver from the seat Q, the central levers being short, for operation by pressure with the foot, while the outer ones are sufficiently long to be reached  
5 with the hands.

On each side of the machine is a wheel, R, that is hung in a pivoted bearing, S, having a curved arm, *f*, provided with perforations *g g*, for the passage of a pin by which it may  
10 be held at any point upon a perforated arch or segment, T, the wheels being thus raised or lowered, so as to correspondingly lower or raise the frame of the machine with its attached cultivators. It will be seen that the  
15 cultivating devices can thus be simultaneously raised from the ground or be projected into the soil to any desired depth. A tongue or pole, U, is pivoted to the frame of the machine at *h*, and to this pole is pivoted at *i* a horizontally-moving lever, V, having a foot, *k*, that  
20 is connected by rods *m m* with the ends of the front pieces, A A. By turning the lever V to either side the driver can readily guide the machine or turn it to any desired angle with  
25 the line of draft without turning the horses.

In order to lock the lever V and pole U in line, a bell-crank, *p*, is provided, in the forward bifurcated end of which is pivoted a bolt, *t*, that passes through an aperture in the  
30 pole and foot *k*, the bell-crank being operated to withdraw the bolt *t* by means of a cord, *v*, that is passed to the upper end of the lever V, which is within reach of the driver.

The operation of the machine in preparing  
35 the soil, and in chopping cotton, or in cultivating various plants is exceedingly simple and efficient, and will be readily understood.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—  
40

1. In a cultivator, the combination of the front pieces, A A, the crooked beams B B, of varying length, each being bent to form two or more broken lines for the attachment of  
cultivating devices, the cuffs D, adjustable  
45 harrow-teeth C, and the pivoted boxes E, carrying cultivating mechanism, substantially as described.

2. In a cultivator, the combination, with the beams B B, of cultivating devices pivoted between the rear ends of the adjacent beams, and  
50 provided with levers K K and springs L L, whereby a vibratory or oscillating movement is imparted to said cultivating devices, substantially as described.

3. In a cultivator, the combination, with the beams B B, of the pivoted boxes E E, carrying cultivating devices, and provided with adjusting mechanism, substantially as described.

4. In a cultivator, the combination of the  
60 beams B B, pivoted boxes E E, carrying cultivating devices, and provided with levers K K, springs L L, and yokes F F, the perforated curved standards G G, and pins *e e*, substantially as described.

5. In a cultivator, the combination, with the frame A B and pole U, of the lever V, having foot *k*, the rods *m m*, bell-crank *p*, bolt *t*, and cord *v*, whereby the machine may be turned  
70 and held to any desired angle with the line of draft, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSIAH SHERMAN.

Witnesses:

A. R. BROWN,  
E. L. WHITE.