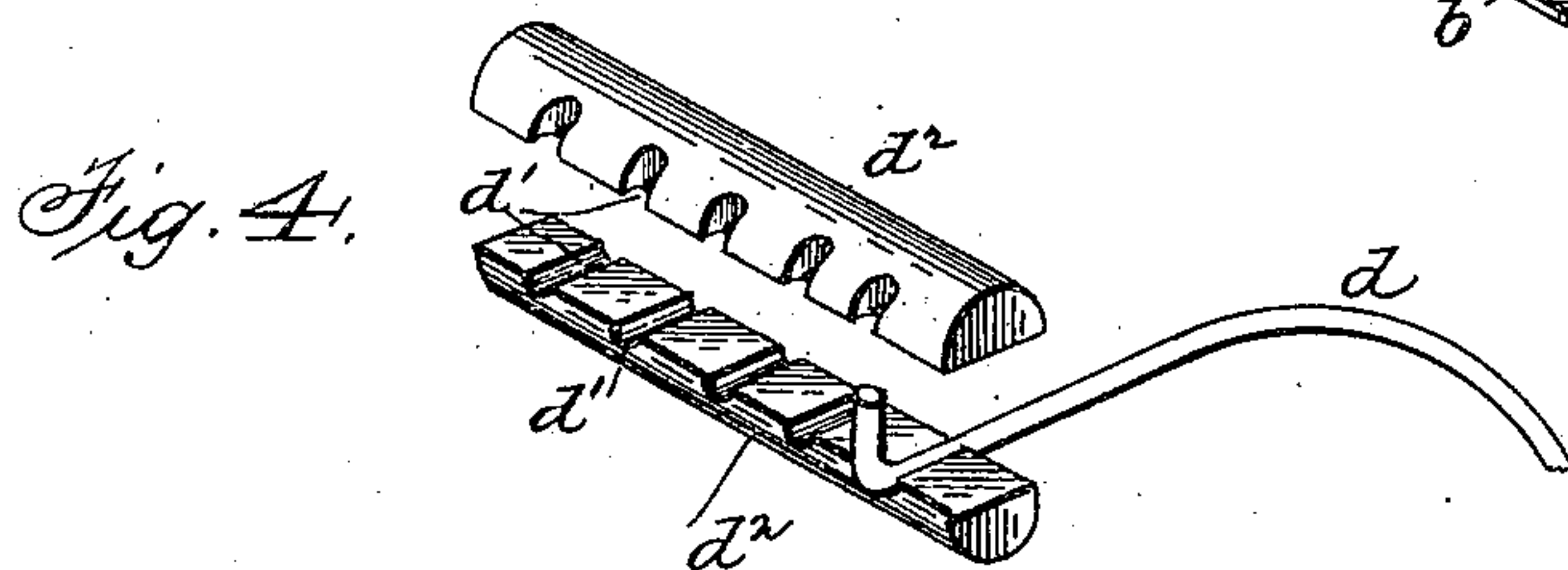
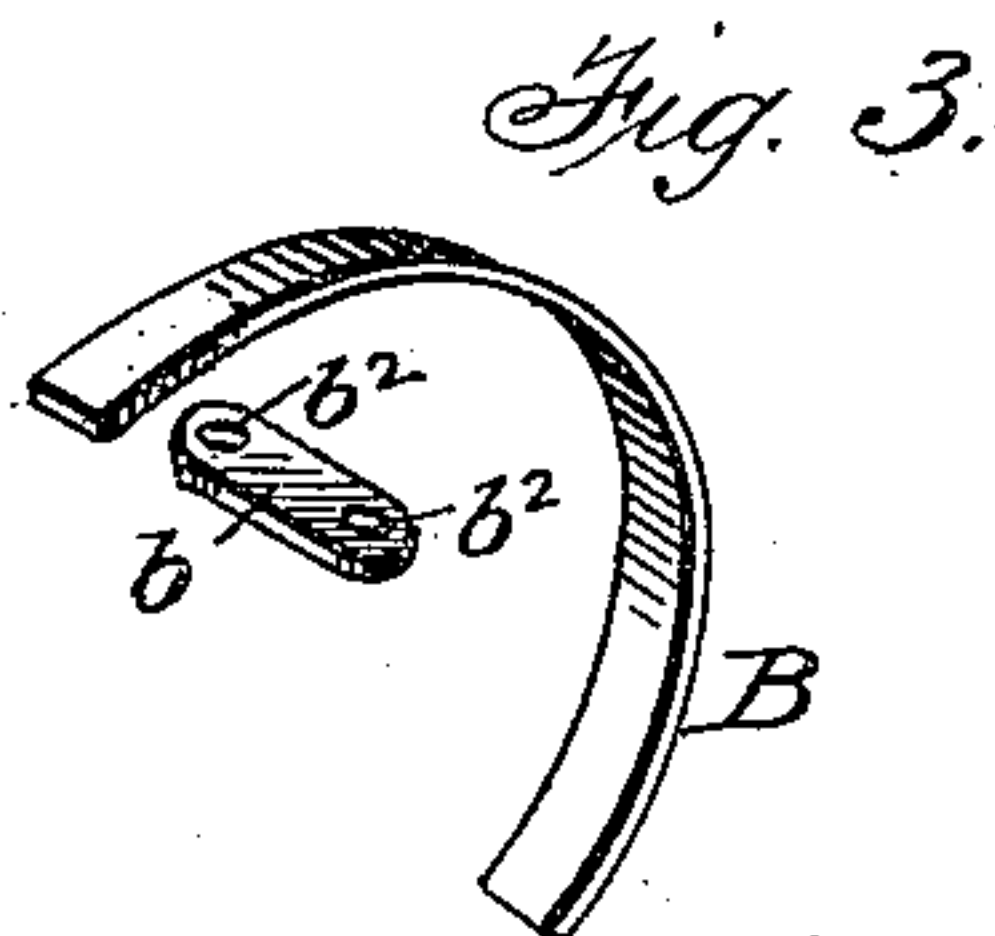
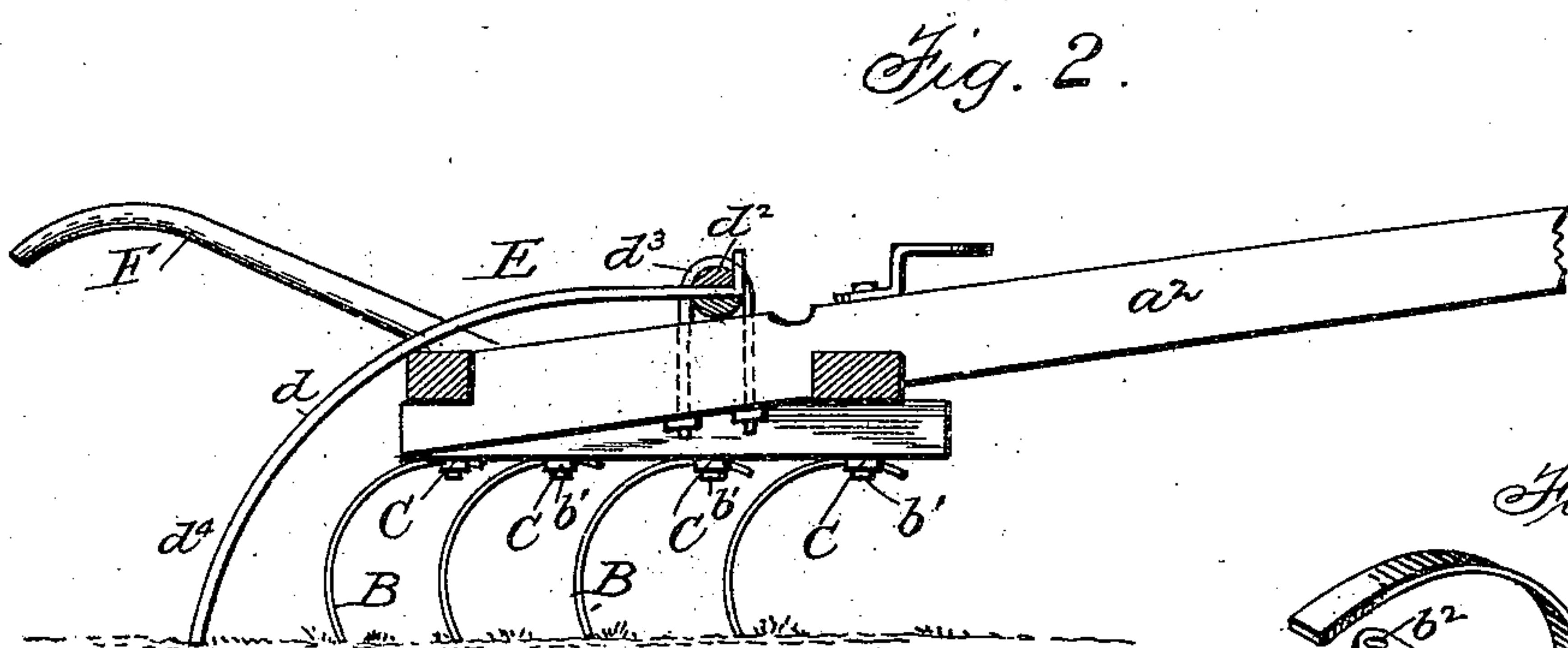
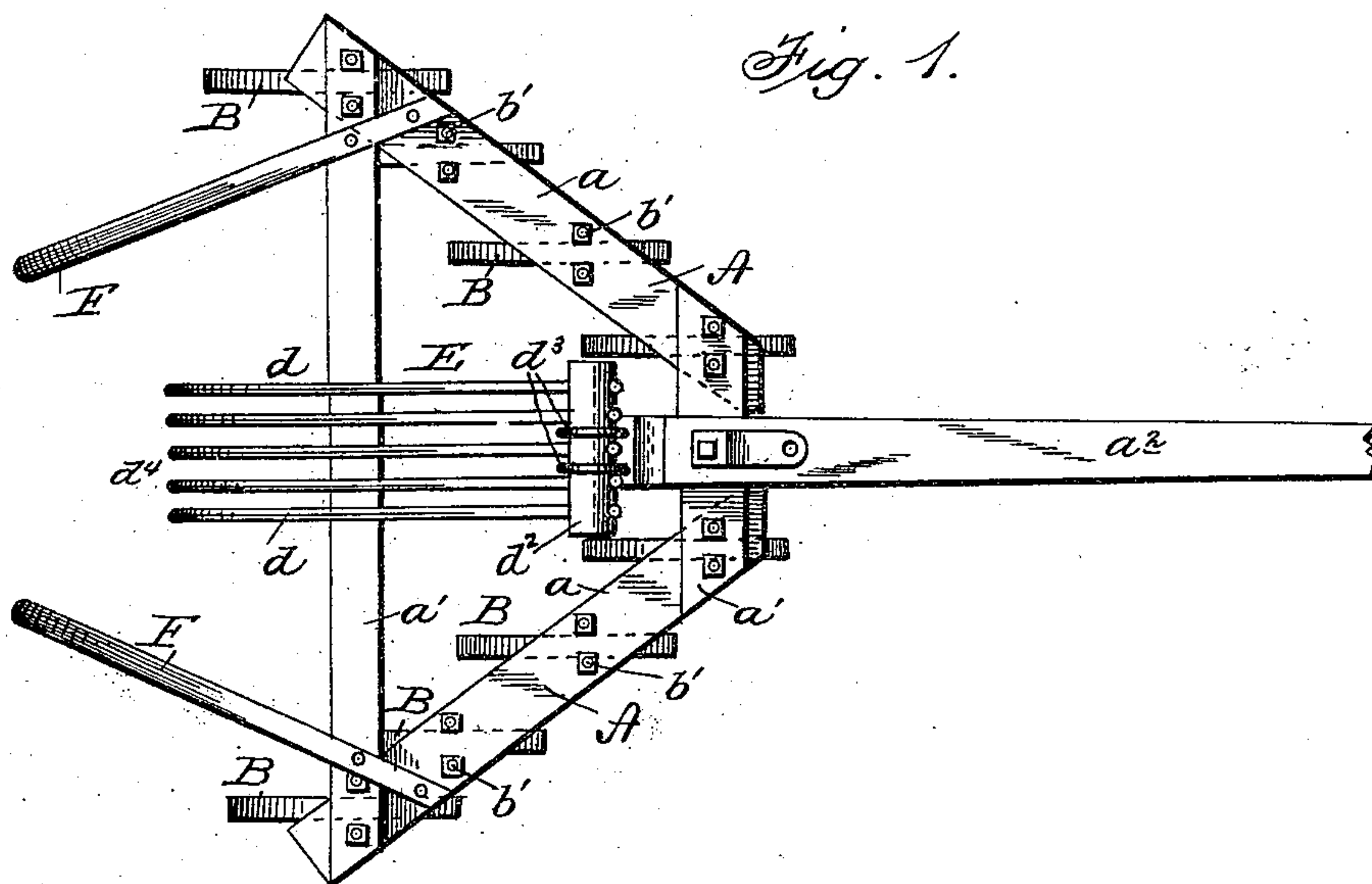


(No Model.)

S. K. VAUGHN.  
CULTIVATOR.

No. 556,225.

Patented Mar. 10, 1896.



Witnesses:  
F. L. Ourand  
John Enders

Inventor:  
Stephen K. Vaughn.  
by J. Fred. Veily,  
his Attorney.



# UNITED STATES PATENT OFFICE.

STEPHEN KINGSLEY VAUGHN, OF CAMBRIDGE, VERMONT, ASSIGNOR OF  
ONE-HALF TO DENISON M. DICKINSON, OF SAME PLACE.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 556,225, dated March 10, 1896.

Application filed August 31, 1895. Serial No. 561,123. (No model.)

*To all whom it may concern:*

Be it known that I, STEPHEN KINGSLEY VAUGHN, a citizen of the United States, residing at Cambridge, in the county of Lamoille and State of Vermont, have invented certain new and useful Improvements in Cultivators; 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 of reference marked thereon, which form a part of this specification.

This invention contemplates certain new and useful improvements in cultivators, and it has for its object the production of simple and efficient means whereby plants may be cultivated and weeded at one operation and with the expenditure of but a minimum amount of labor.

The invention comprises the details of construction, and the peculiar combination and arrangement of parts, substantially as hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a top plan view of my improved cultivator. Fig. 2 is a longitudinal sectional view. Fig. 3 is a detail view of one of the cultivator-teeth and its securing-clip. Fig. 4 is a detail view of the weeder.

Referring to the drawings, A designates the main frame, which is made up of two side bars *a* arranged in approximately V shape, and cross-bars *a'* connecting the same, a tongue *a<sup>2</sup>* being secured to said cross-bars and projected beyond the forward edge of the frame.

B designates the cultivator-teeth, which are made from curved spring metal, and are adjustably secured to the under side of bars *a* by suitable clips C. These clips are composed of flat metallic plates *b*, which are passed beneath the under sides of teeth B, and are held in position by nutted bolts *b'* passed through suitable holes or openings *b<sup>2</sup>* in said clips and extended through the frame-bars *a*.

On that portion of tongue *a<sup>2</sup>* extending between the cross-bars *a'* is mounted the weeder E. This weeder consists of a series of spring-arms *d*, which are designed to rest in grooves

*d'* of a two-part clip or holder *d<sup>2</sup>*, which is secured to the tongue in any preferred manner, a clip *d<sup>3</sup>*, as shown, being considered most advantageous. The arms *d* extend over and beyond the rear cross-bar *a'* and are curved downward at *d<sup>4</sup>*, so that the ends *d<sup>5</sup>* thereof will be within a short distance of the ground. Handles F are secured to frame A for the purpose of guiding the cultivator in its operation.

The operation and advantages of my invention are at once apparent. It will be seen that by arranging the cultivator-teeth upon the V-shaped frame the cultivator has all of the advantages of a straddle-row, and at the same time the wires or arms *d* will pass between the plant-stalks, and without uprooting or injuring the plants themselves will uproot weeds and the like, which are not so strongly rooted.

A cultivator constructed as herein described is extremely simple and inexpensive, and being composed of but few parts is not liable to readily get out of order or become deranged.

I claim as my invention—

1. The herein-described cultivator, comprising a V-shaped frame, spring-teeth, clips for adjustably supporting said teeth, said clips comprising each a flat metallic plate, and securing rods or bolts therefor, and a weeder comprising a series of longitudinal spring-wires centrally located on said frame, substantially as set forth.

2. The herein-described cultivator, comprising a V-shaped frame, spring-teeth adjustably secured to said frame, and a series of longitudinal spring-arms centrally mounted on said frame and having downwardly-curved rear ends adapted to act as a weeder, substantially as set forth.

3. The herein-described improved cultivator, comprising a V-shaped frame, spring-teeth adjustably secured to said frame, a two-part clip centrally mounted on said frame, and a series of longitudinal spring-arms carried by said clip and having downwardly-curved rear ends adapted to act as a weeder, substantially as set forth.

4. The herein-described cultivator, comprising a V-shaped frame, spring-teeth ad-

justably secured to said frame, a two-part clip provided with grooves or recesses, a series of longitudinal spring-arms mounted in said grooves or recesses and having downwardly-curved rear ends adapted to act as a weeder, and a securing-clip for said two-part clip, substantially as set forth.

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

STEPHEN KINGSLEY VAUGHN.

Witnesses:

M. K. HUBBELL,  
M. J. LEACH.