

(No Model.)

W. J. ROE.
CULTIVATOR.

No. 438,447.

Patented Oct. 14, 1890.

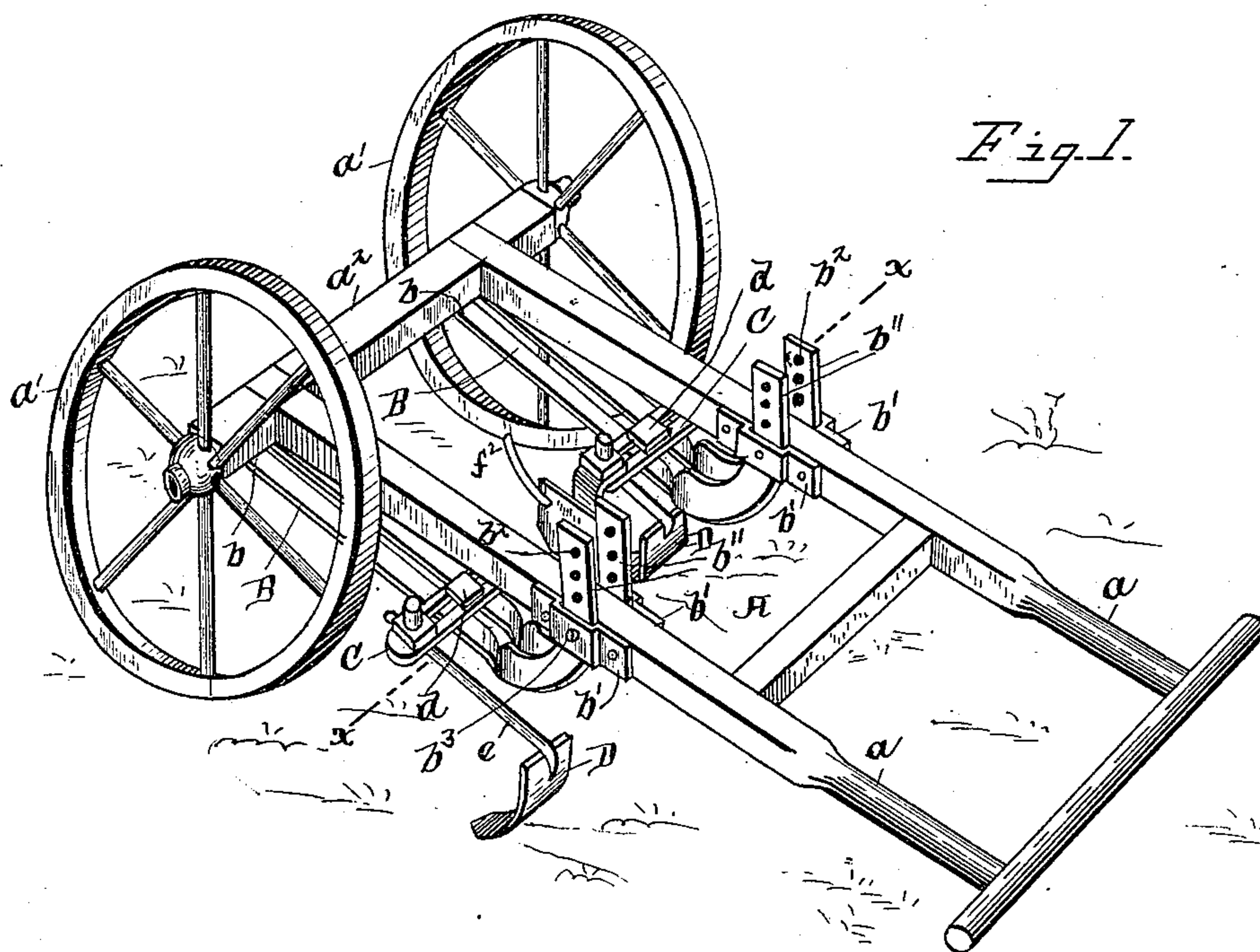


Fig. 1.

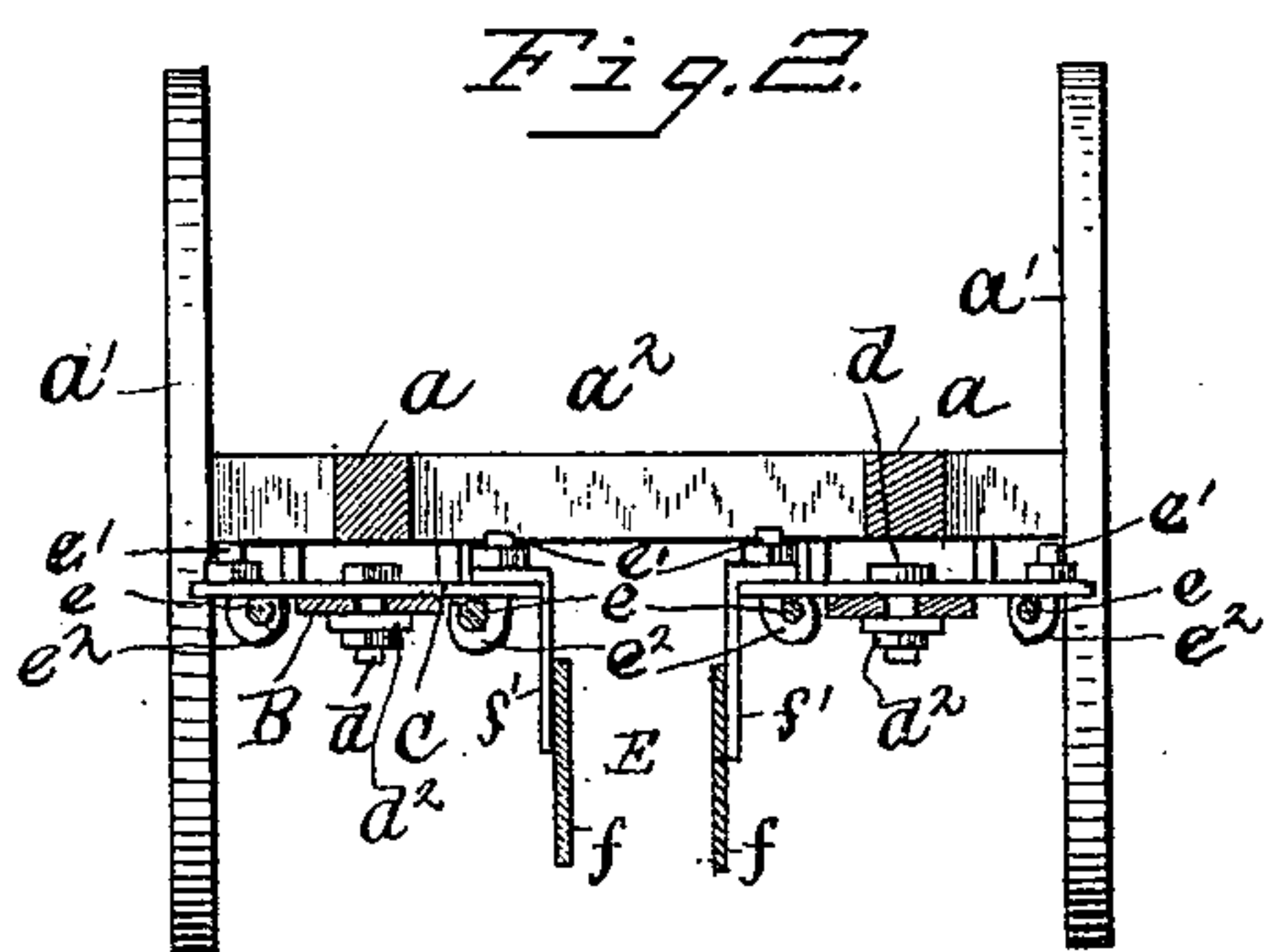


Fig. 2.

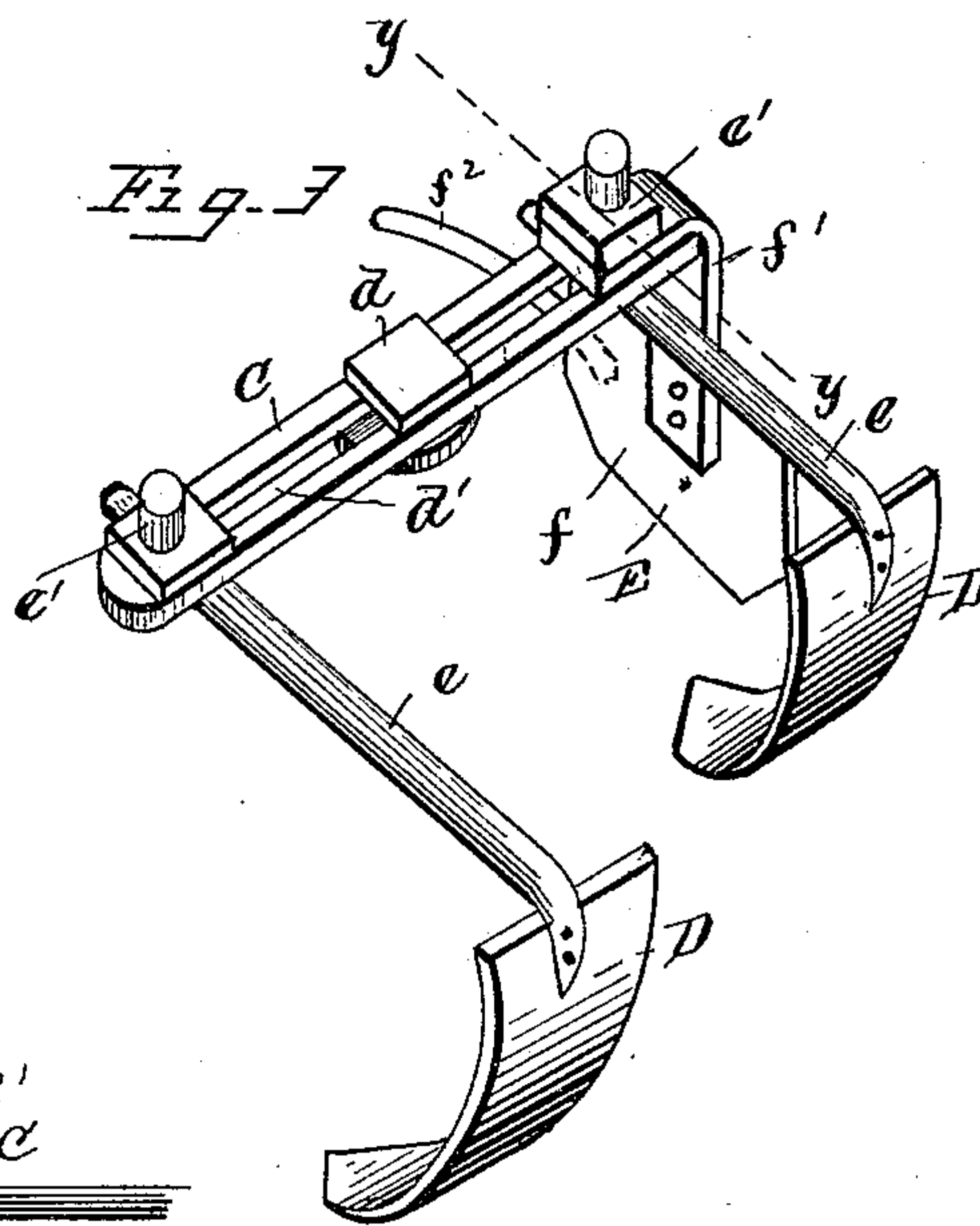
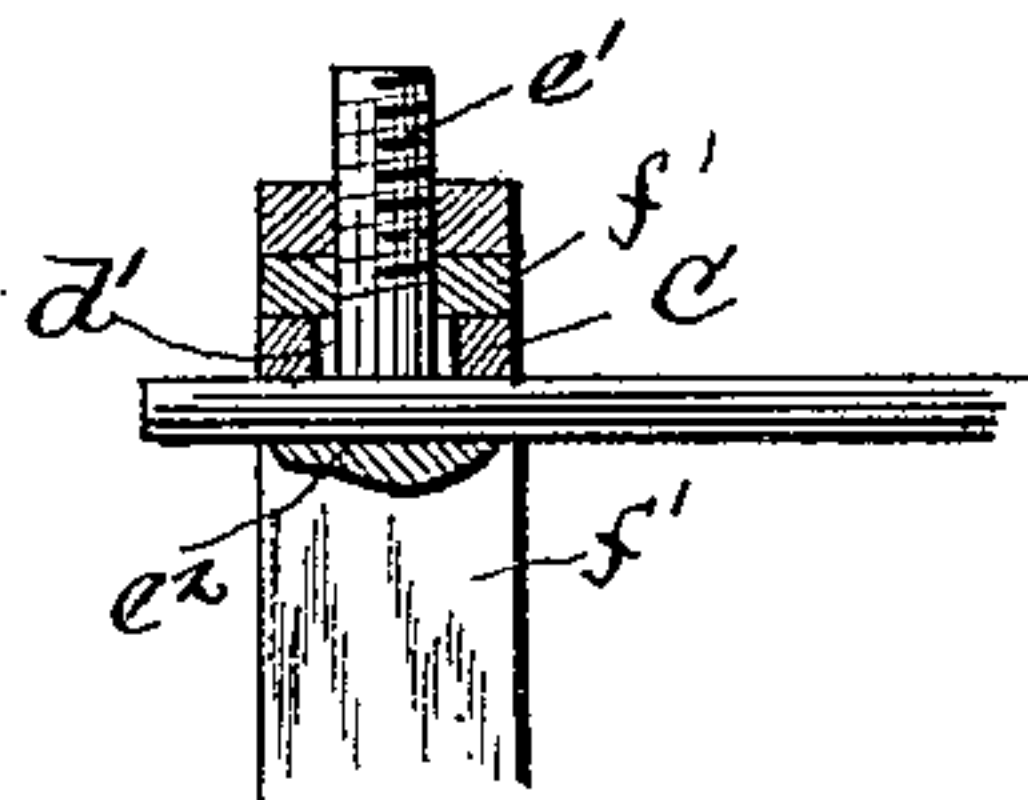


Fig. 3.

Fig. 4.



Witnesses

Wm. S. Hodge
D. A. Milbrick

Inventor
William J. Roe

By *Patrick O'Connell*

Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM JORDEN ROE, OF BOSTWICK, NEBRASKA.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 438,447, dated October 14, 1890.

Application filed July 26, 1890. Serial No. 359,982. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JORDEN ROE, a citizen of the United States of America, residing at Bostwick, in the county of Nuckolls and State of Nebraska, have invented certain new and useful Improvements in Cultivators, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to an improved cultivator, having reference more especially to the class of straddle-row; and it has for its object the provision of new and improved highly efficient means for clearing weeds or hilling garden-truck, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

20 In the accompanying drawings, Figure 1 is a view in perspective of my improved cultivator. Fig. 2 is a transverse sectional view on the line $x x$, Fig. 1. Fig. 3 is a view of a detail. Fig. 4 is a section on the line $y y$ thereof.

25 Referring to the drawings, A designates the frame; a , the extended handles, and a' the carrying-wheels, loosely secured to axle a^2 at the forward end of the frame.

30 B B designate parallel hanger-bars, pivotally secured in pairs at their forward ends b to the under side of axle a^2 , each pair being near one end of said axle. The rear ends of these hanger-bars are bent into vertical arms b'' , which are passed through loops or guide-plates B' , secured to opposite sides of the side bars of frame A. In the outer one of each pair of bars B is formed a series of holes b^2 , into any one of which a set-screw b^3 of the outer loop b' is designed to enter, whereby the handles can be regulated, as desired.

40 C C are adjustable plates, rigidly secured one to each pair of hanger-bars by a nutted screw or bolt d , passed through a slot d' thereof and extended between the bars B. The nut d^2 of each bolt binds firmly against the under side of said bars, and thus holds the plate C at the desired point and angle.

50 D D are two cultivator-teeth, having their draft rods or arms e rigidly secured to the under side of each plate C by nutted bolts e' , having lower hooked ends e^2 , which firmly bind the ends of said rods or arms.

Two fenders E E are rigidly secured to the inner opposite ends of plate C, so as to protect the truck during the cultivating opera-

tion. Each fender consists of a plate f and a bent or angular arm f' , through an aperture of which is passed the upper end of the inner nutted bolt e' , the nut of which holds the fender rigidly in the desired position. A curved arm or rod f^2 is also projected from the forward end of each fender and serves to guide the truck therebetween.

From the foregoing it will be seen that each cultivator-tooth and each fender is capable of independent adjustment, and that both teeth and the fender on each side can be jointly adjusted by sliding and securing plates C, and that the desired depth of penetration is readily secured by adjusting and securing the ends of the hanger-bars with relation to the cultivator-frame.

I claim as my invention—

1. The herein-described cultivator comprising a frame, hanger-bars pivotally secured at their forward ends to said frame and having vertical arms at their rear ends provided with holes, the guide-loops secured to said frame, set-screws passing through apertures of said loops and through said holes, and the cultivator-teeth secured to said hanger-bars and adjustable laterally in regard thereto, substantially as set forth.

2. The herein-described cultivator having hanger-bars arranged in pairs, the slotted plates adjustably secured on said bars, the cultivator-teeth, the hooked bolts securing said teeth, and the fenders having apertured arms rigidly secured by one of said bolts, substantially as set forth.

3. The herein-described improved cultivator, consisting of the frame, the hanger-bars arranged in pairs and pivotally secured at their forward ends and having vertical arms at their rear ends, the guide-loops secured to said frame, the set-screws working in said loops for holding said hanger-bars, the adjustable plates C, the nutted bolts having lower hooked ends, the teeth having their draft-rods or arms held by said hooked ends, and the fenders having their arms rigidly secured by one of said hooked bolts, substantially as set forth.

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

WILLIAM JORDEN ROE.

Witnesses:

JOSEPHINE MCPHERSON,
JOHN E. JONES.