

(No Model.)

E. M. MINTON.
HAND CULTIVATOR.

No. 574,555.

Patented Jan. 5, 1897.

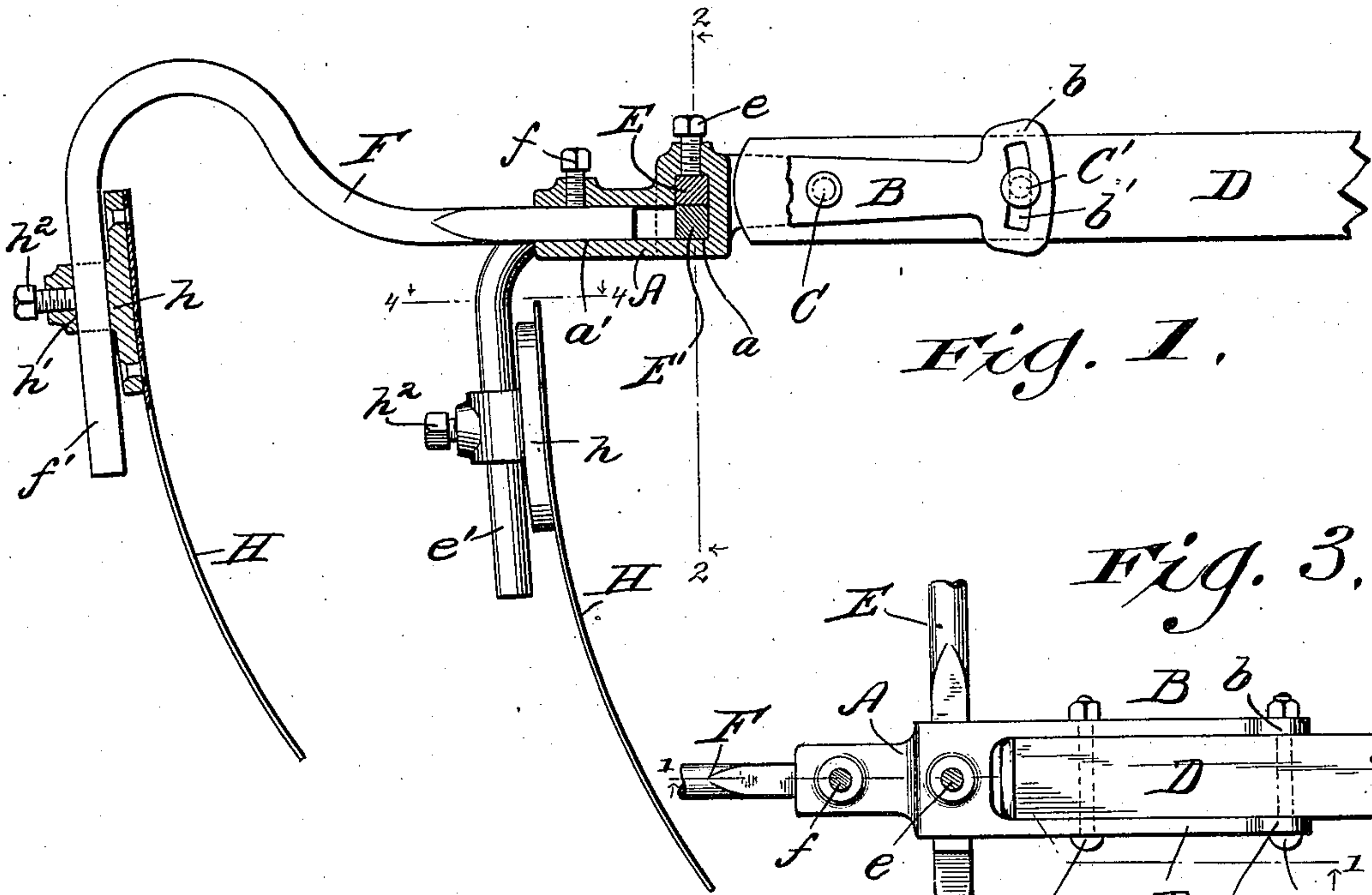


Fig. 1.

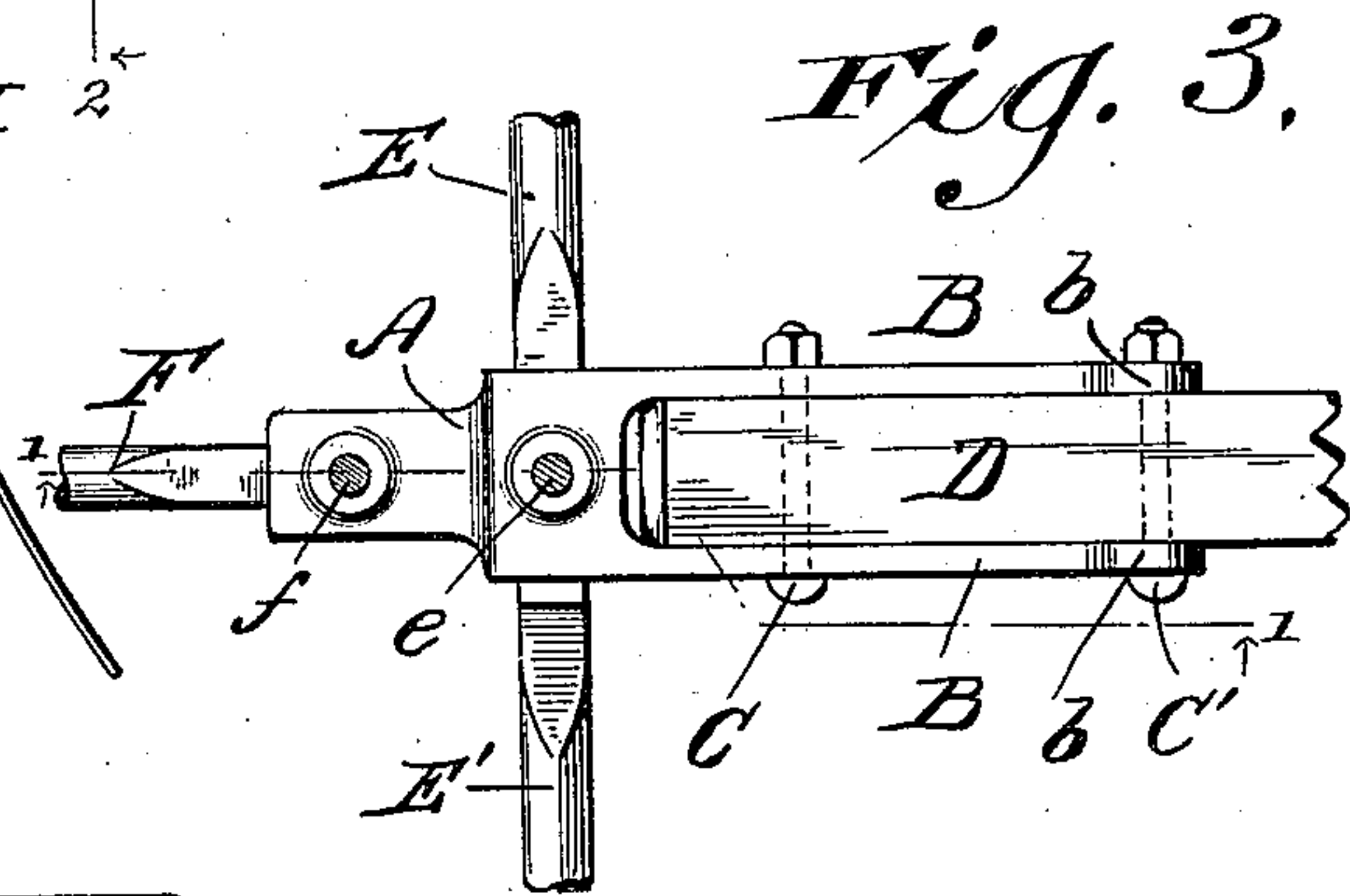


Fig. 3.

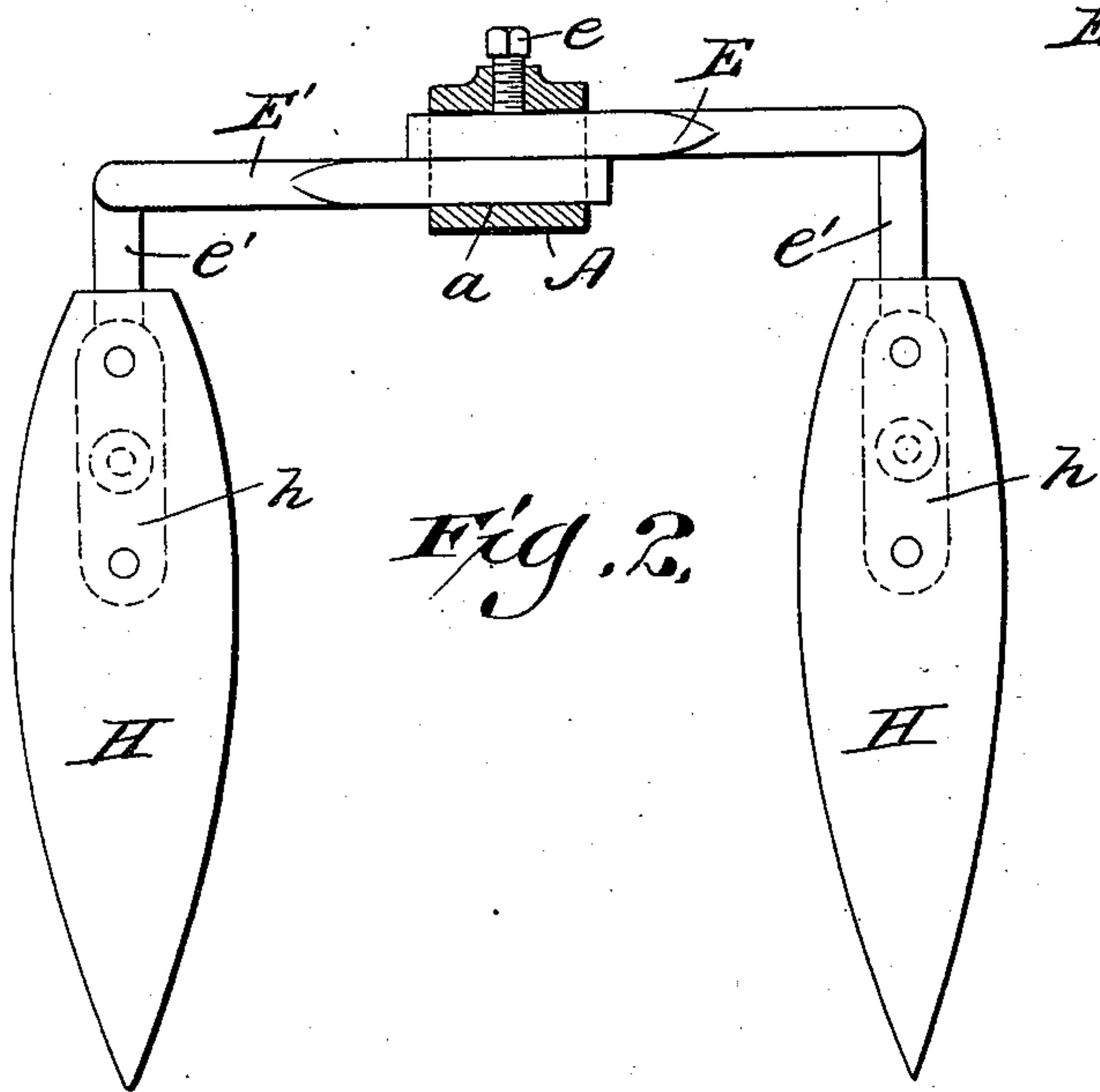
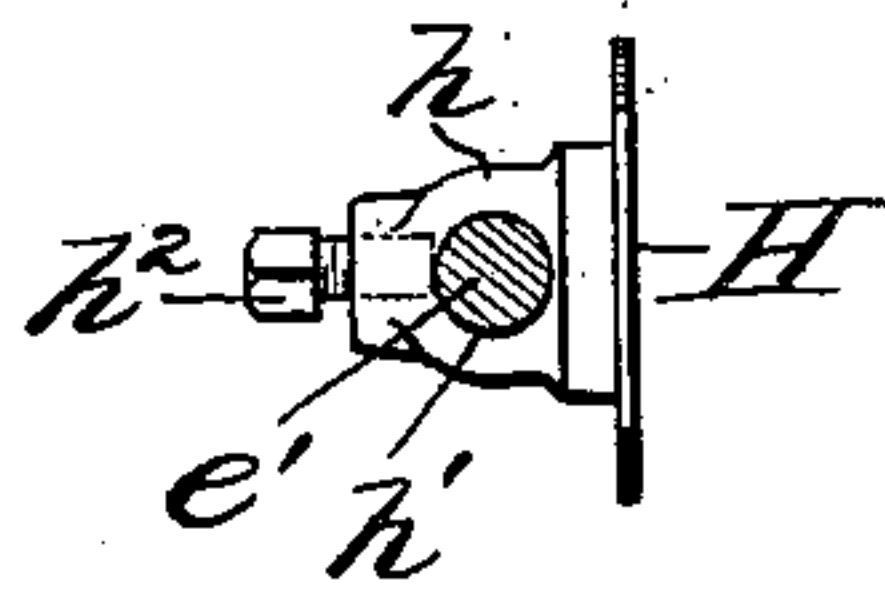


Fig. 2.

Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD M. MINTON, OF UNION GROVE, WISCONSIN.

HAND-CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 574,555, dated January 5, 1897.

Application filed March 18, 1895. Serial No. 542,168. (No model.)

To all whom it may concern:

Be it known that I, EDWARD M. MINTON, a citizen of the United States, residing at Union Grove, county of Racine, State of Wisconsin, have invented certain new and useful Improvements in Hand-Cultivators; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to new and useful improvements in hand-cultivators; and it consists in the matters hereinafter described, and pointed out in the appended claims.

In the accompanying drawings, illustrating my invention, Figure 1 is a longitudinal vertical sectional view of my improved device, taken on line 1 1 of Fig. 3. Fig. 2 is a transverse vertical sectional view taken on line 2 2 of Fig. 1. Fig. 3 is a top plan view showing parts broken away. Fig. 4 is a detail sectional view taken on line 4 4 of Fig. 1.

Referring by letter to said drawings, A designates a suitable head which is adapted for attachment to a handle and which is preferably constructed so as to enable it to be adjustably engaged with said handle in the manner shown, said head being provided with two plates B B, adapted to be engaged with opposite sides of the handle. The extremities of the plates B B are conveniently widened, as shown at *b b*, and provided with slots *b' b'*, and the plates B B are secured to the handle D by means of two bolts C and C', the former of which serves as a pivot and the latter having adjustable engagement with the slots *b' b'* in the manner shown. By this means the head may be adjusted upon the handle so as to assume a desired angle with respect thereto.

The head A is preferably provided with a lateral passage or opening *a* and a longitudinal passage or opening *a'* in the manner shown, for the reception of the shanks of the cultivator-blades. Said shanks are preferably three in number, and the shanks E and E' are suitably shaped to fit within the transverse passage *a*, one upon the other, as shown, in which position they are secured by means of a set-screw *e*. A shank F is suitably secured in the opening or passage *a'* by means

of a set-screw *f*. The extremities of the shanks E, E', and F are turned downwardly, as shown at *e'*, *e'*, and *f*, for engagement with the cultivator-blades.

H H designate the cultivator-blades, which are provided upon their rear faces with suitably-shaped attaching-blocks *h h*, having vertically-disposed channels *h' h'* for the reception of the downturned ends of the shanks E, E', and F, and set-screws *h² h²* are threaded into said attaching-blocks and arranged to engage with said downturned ends of said shanks to retain said cultivator-blades in engagement with the shanks.

The shanks E and E' may be adjusted in or out in an obvious manner, so as to adjust the blades H H, connected therewith, nearer or farther from each other, as may be desired, and the shank F may be similarly adjusted within the passage or opening *a'*, so as to bring the blade H, secured thereto, to a desired position with respect to the first-mentioned cultivator-blades.

The blades H H may be adjusted up or down upon their respective shanks by means of the set-screws in an obvious manner; or, if desired, said blade may be adjusted upon said shanks so as to assume any desired angle with respect to the handle, so as to enable the said blades to throw earth sidewise, as may be desired.

If desired, the shank F with the cultivator-blade H might be detached and the other two blades only used, or, if desired, a different-shaped blade, such as an ordinary hoe, might be substituted.

By my improvement I am enabled to provide a hand-cultivator of such construction that the parts are all made adjustable with respect to each other and to the handle, and I am enabled to provide an improved cultivator which is adapted for use in a great many kinds of work where the ordinary forms of implements of this character would be incapable of satisfactory operation.

My improved device is at once very simple in its construction and durable.

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

1. A hand-cultivator comprising a bifurcated head adapted to embrace the end of a

handle and for pivotal engagement therewith, and the furcations of said head being provided in their extremities with slots for engagement with a retaining-bolt to secure the head in an adjusted position upon the handle, 5 said head being further provided with sockets for the reception of shanks, a plurality of shanks having downturned ends and adapted for adjustable and removable engagement 10 with said sockets, and a plurality of blades provided with apertured bosses for adjustable engagement with the downturned ends of said shanks and having suitable set-screws for securing them in their adjusted positions, 15 substantially as described.

2. A hand-cultivator comprising a bifurcated head adapted to embrace the end of a handle and for pivotal engagement therewith, and the furcations of said head being pro-

vided in their extremities with slots for en- 20 gagement with a retaining-bolt to secure the head in an adjusted position upon the handle, said head being provided with a longitudinal and a transverse socket or passage, a plural- 25 ity of shanks having downturned ends and adapted for engagement respectively with said sockets or passages, and a plurality of blades provided with apertured bosses for ad- justable engagement with the downturned 30 ends of said shanks, and provided with set-screws for securing them in their adjusted positions thereon, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

EDWARD M. MINTON.

Witnesses:

P. W. CRANE,
W. H. OSBORN.