

(No Model.)

G. S. BLACK.

DEVICE FOR JOINTING THE TEETH OF SAWS.

No. 353,659.

Patented Dec. 7, 1886.

Fig. 1.

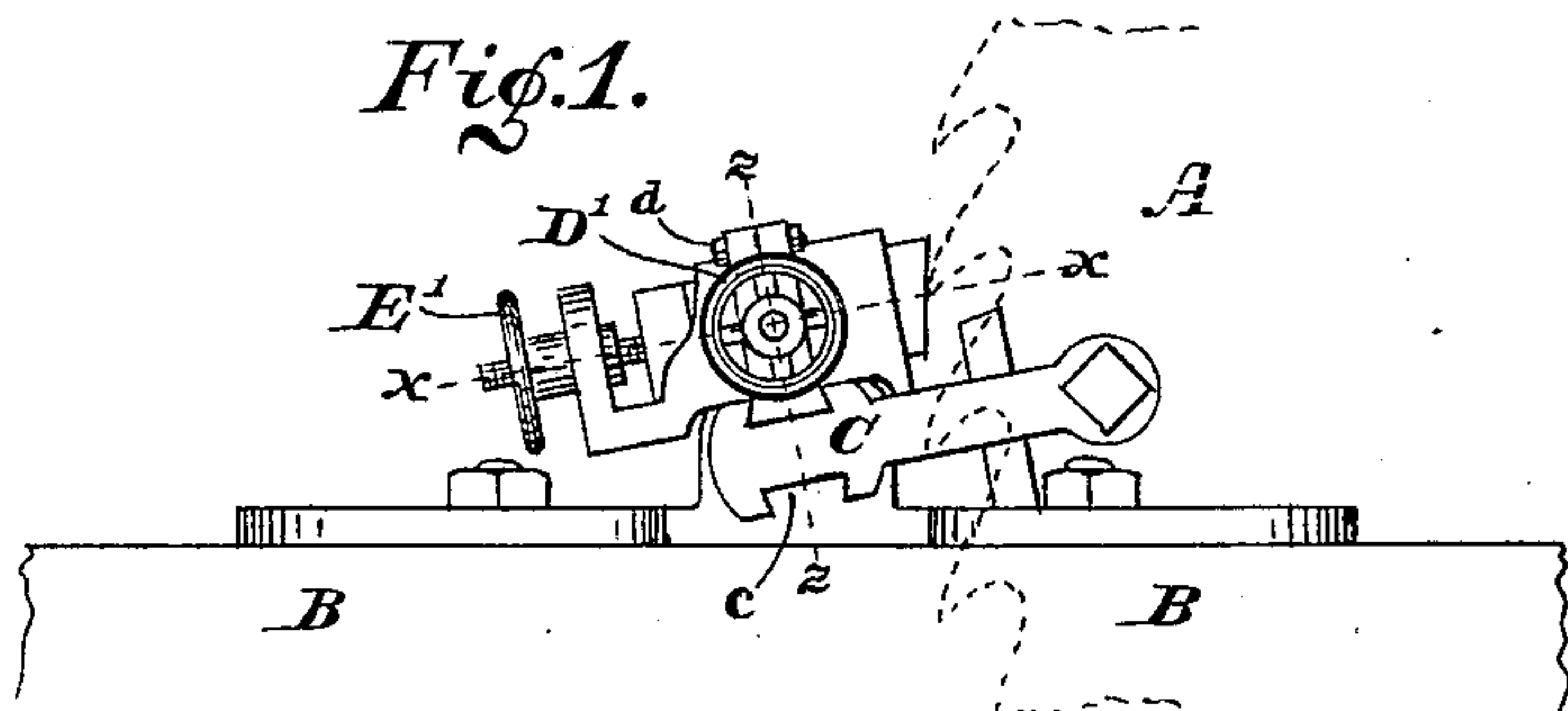


Fig. 2.

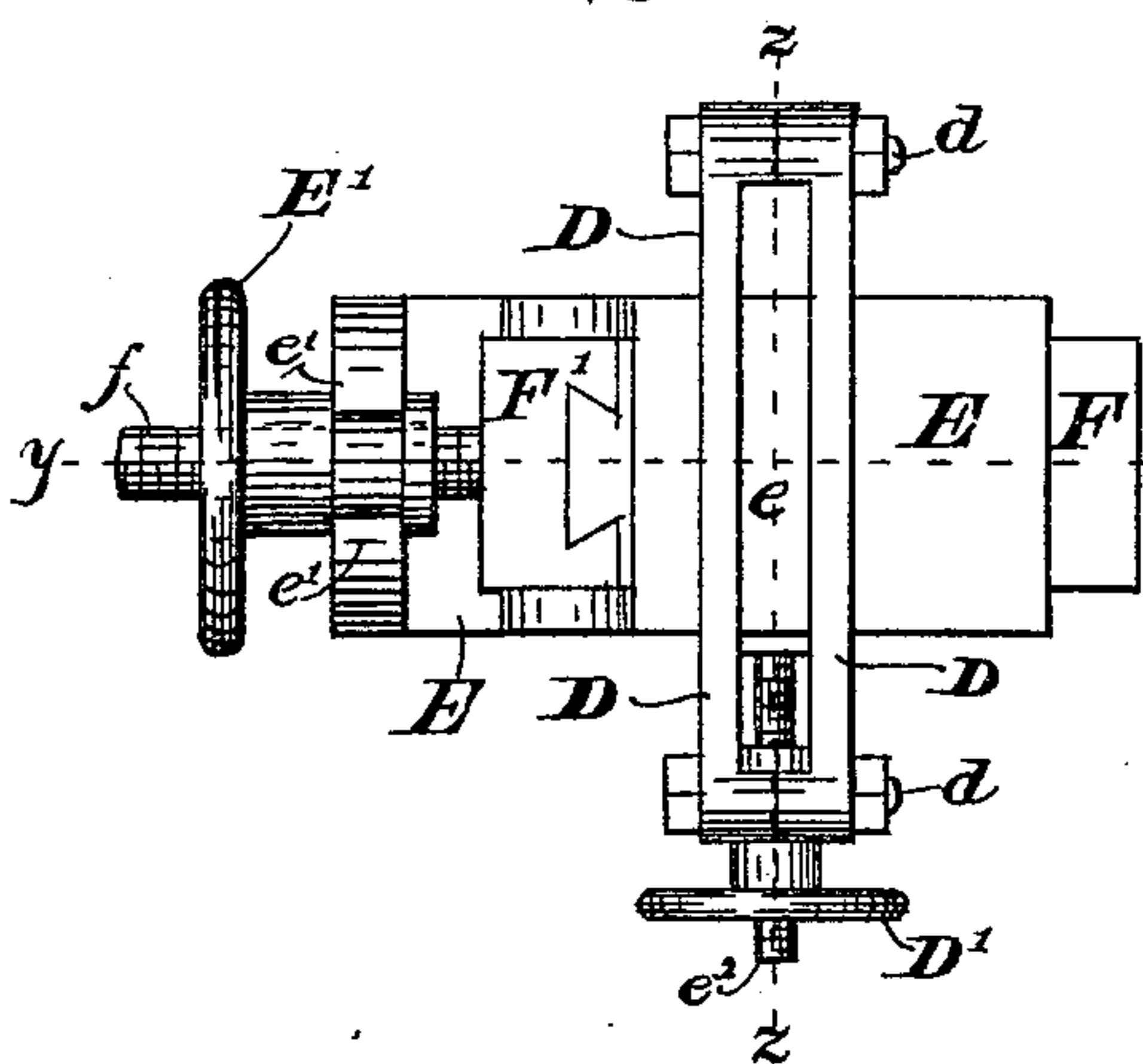


Fig. 3.

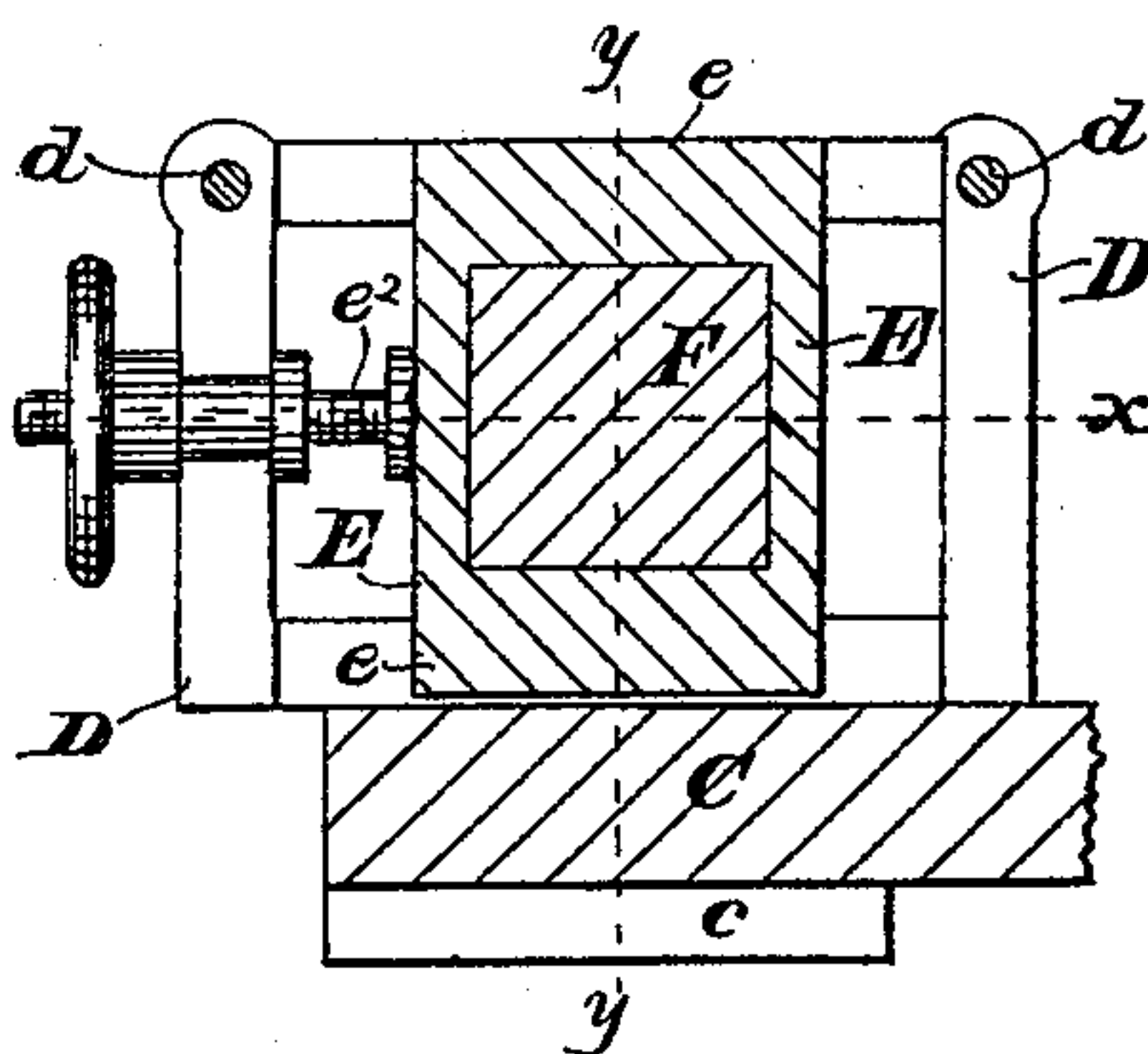


Fig. 4.

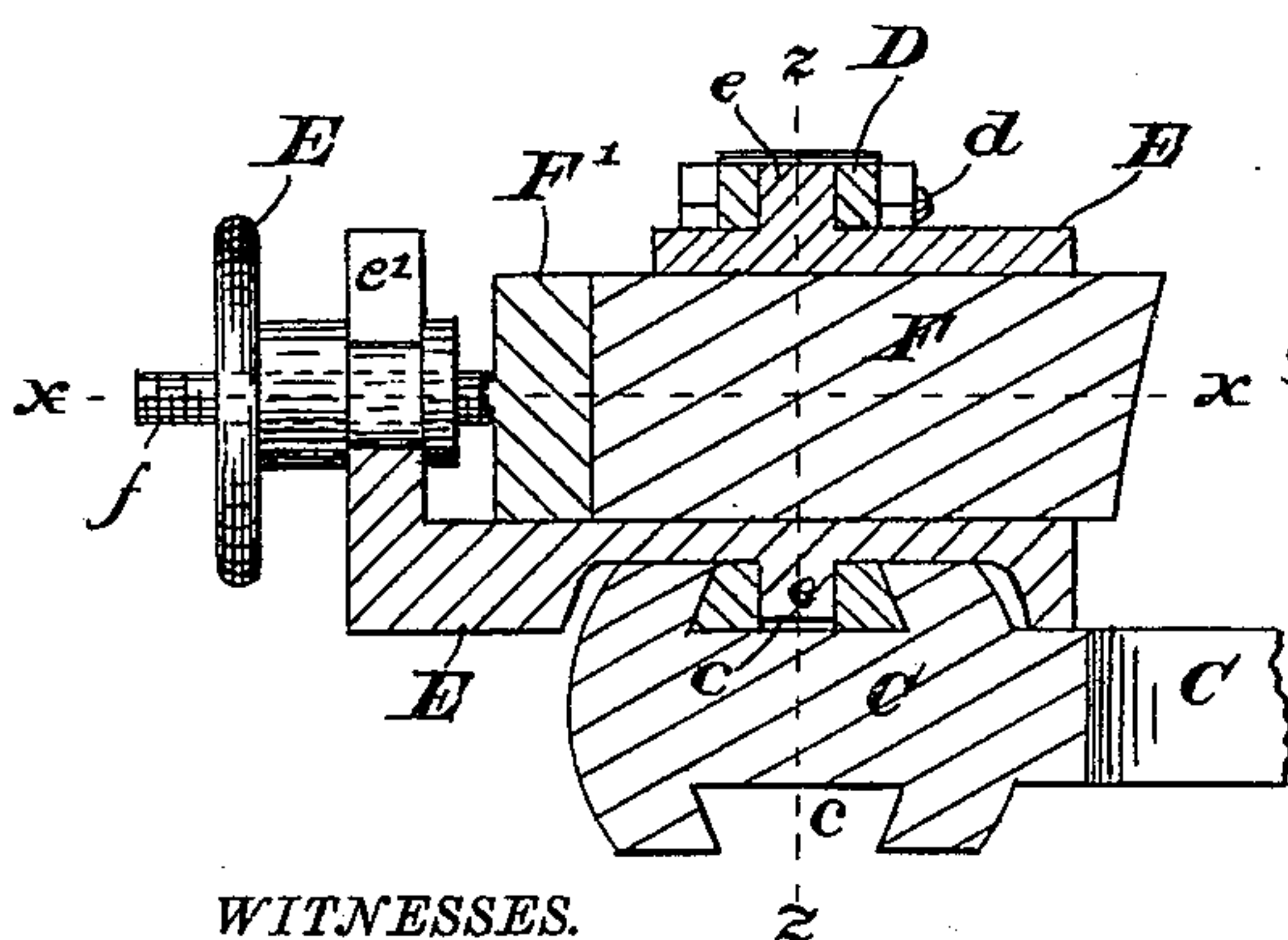
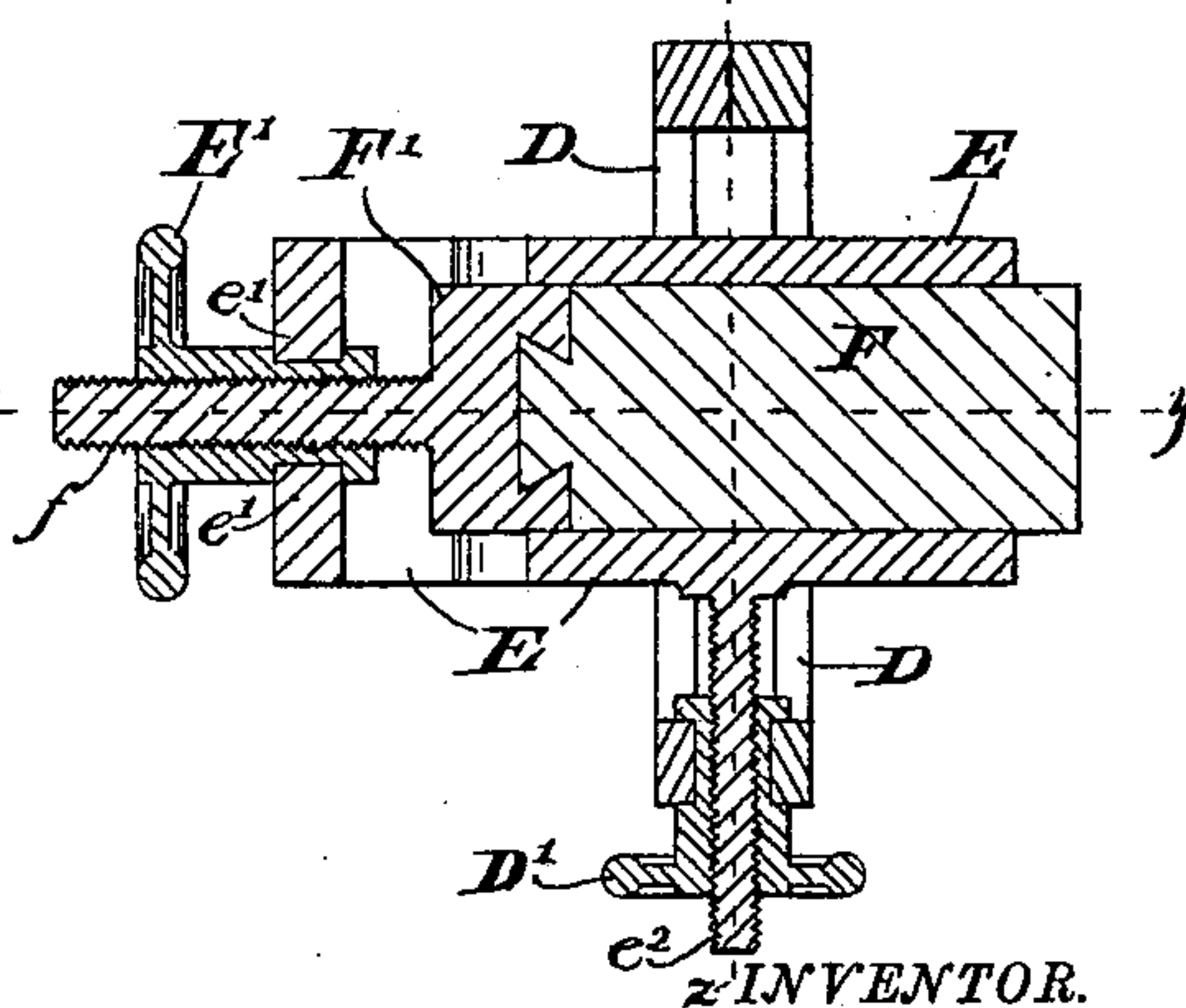


Fig. 5.



WITNESSES.

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GEORGE S. BLACK, OF NEW ORLEANS, LOUISIANA, ASSIGNOR TO E. C. ATKINS
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DEVICE FOR JOINTING THE TEETH OF SAWS.

SPECIFICATION forming part of Letters Patent No. 353,659, dated December 7, 1886.

Application filed April 6, 1886. Serial No. 198,017. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. BLACK, of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented certain new and useful Improvements in Saw-Jointers, of which the following is a specification.

My said invention consists in the construction of an improved saw-jointer, which is easily and quickly attached to the said frame and adapted to be adjusted either longitudinally or laterally of said frame, as will be hereinafter more fully described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of a portion of the frame of a circular saw having my invention mounted thereon; Fig. 2, a top or plan view of the jointer on an enlarged scale; Fig. 3, a transverse vertical section of the same on the dotted line $z z$; Fig. 4, a longitudinal vertical section on the dotted line $y y$, and Fig. 5 a horizontal section on the dotted line $x x$.

In said drawings, the portions marked A represent the saw; B, that portion of the framework of the mill near the front side of the saw; C, a saw-guide; D, the outside frame of the jointer; E, an adjustable frame in which the stone is mounted, and F said stone.

The saw A and frame B are or may be of any suitable construction, and form no part of my present invention, and therefore will not be described in this application, except incidentally in the description of the jointer to which this invention is confined.

The guide C is only new, so far as this present invention is concerned, in being provided with dovetailed grooves c , in which it is preferred to mount the jointer, as will be presently more fully described.

The frame D is preferably two rectangular frames, secured together at their top corners by bolts d , and held together at the bottom by the groove c , in which they are placed. The top and bottom pieces have their adjacent faces cut away for about half their thickness, so as to form a way in which the adjustable frame E slides, as will be presently described. In one end of this frame a bearing is formed, in which the hand-nut D' is journaled. The journal of said nut is formed smaller than its parts on

each side of the bearing, as shown, and the nut is thus held from longitudinal movement. Said nut is put in place before the two parts of the frame are secured together. The frame is shown as mounted in a dovetail groove, c , in the top of the saw-guide; but, if desired, said groove can be formed on the top of the saw-frame instead. A groove is shown as formed on each side of said guide, so that the jointer may be attached thereto as well when one side up as the other, said guide being adapted for use with both right and left hand mills.

The frame E is preferably of cast metal, and incases the stone. Across its top and bottom tongues e are formed, which fit into the ways formed in the top and bottom of the frame D, as shown. On its rear end the bottom is extended out and up a short distance, with an open bearing, e' , formed in said extension, in which the hand-nut E', which is similar in construction to the hand-nut D', is mounted. A screw, e^2 , is formed on one side of said frame E and extends through said hand-nut, and said frame is thus adapted to be adjusted by turning said hand-nut, as will be readily understood.

The stone F may be any suitable stone or file of the desired size and shape, but is preferably an emery stone. It is mounted in the frame or casing E, as before described, and adapted to slide therein. At its rear end it is dovetailed into a metal base, F', as shown. Said metal base has a screw, f , on its end, which extends out into the hand-nut E', with which it engages, and by which, through said screw, the stone is adjusted to and from the saw.

The operation of my improved saw-jointer may be briefly recapitulated, as follows: The several parts being in operative position, as shown, and it being desired to joint a saw, the base of the frame D is slid into the dovetail groove in the top of the guide or saw frame, and the stone F is then adjusted to and kept in the proper relation to the saw by means of the hand-nut E'. To prevent the face of the stone from becoming uneven from wear during the operation, it is moved back and forth laterally by means of the hand-nut D', the tongues e of the frame E sliding in the

ways in the top and bottom of the frame D, as before described.

Having thus fully described my said invention, what I claim as new, and desire to secure 5 by Letters Patent, is—

1. A jointer for circular saws, consisting of an outside frame secured on the saw frame or guide, an inside frame adjustably mounted therein, and a stone adjustably mounted in 10 said inside frame, substantially as described, and for the purposes specified.

2. The combination, in a saw-jointer, of the frame D, the base of which is mounted in a suitable groove on the saw-frame, the frame 15 E, provided on its top and bottom with tongues *e*, which slide in suitable ways in said frame D, and the stone F, adjustably mounted in said frame E, substantially as set forth.

3. In a saw-jointer, the combination of the 20 frame D, the hand-nut D', mounted in the end of said frame, the frame E, adjustably mounted within the frame D, and provided on one

side with a screw, *e*², which engages with said hand-nut D', the hand-nut E', mounted in the bearing *e*' on the rear end of the frame E, and 25 the stone F, having the metal base F', on which is formed a screw, *f*, secured to its rear end, said screw *f* engaging with and operated by the hand-nut E', substantially as shown and described, and for the purposes specified. 30

4. The combination, with the saw-guide C, of a saw-jointer mounted in a groove in said guide, consisting of an outside frame, D, a frame, E, adjustably mounted in said frame D, and a stone, F, mounted in said frame E, and 35 provided with means for longitudinal adjustment, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 11th day of February, A. D. 1886.

GEORGE S. BLACK. [L. s.]

In presence of—

E. W. BRADFORD,

CHARLES L. THURBER.