

No. 686,972.

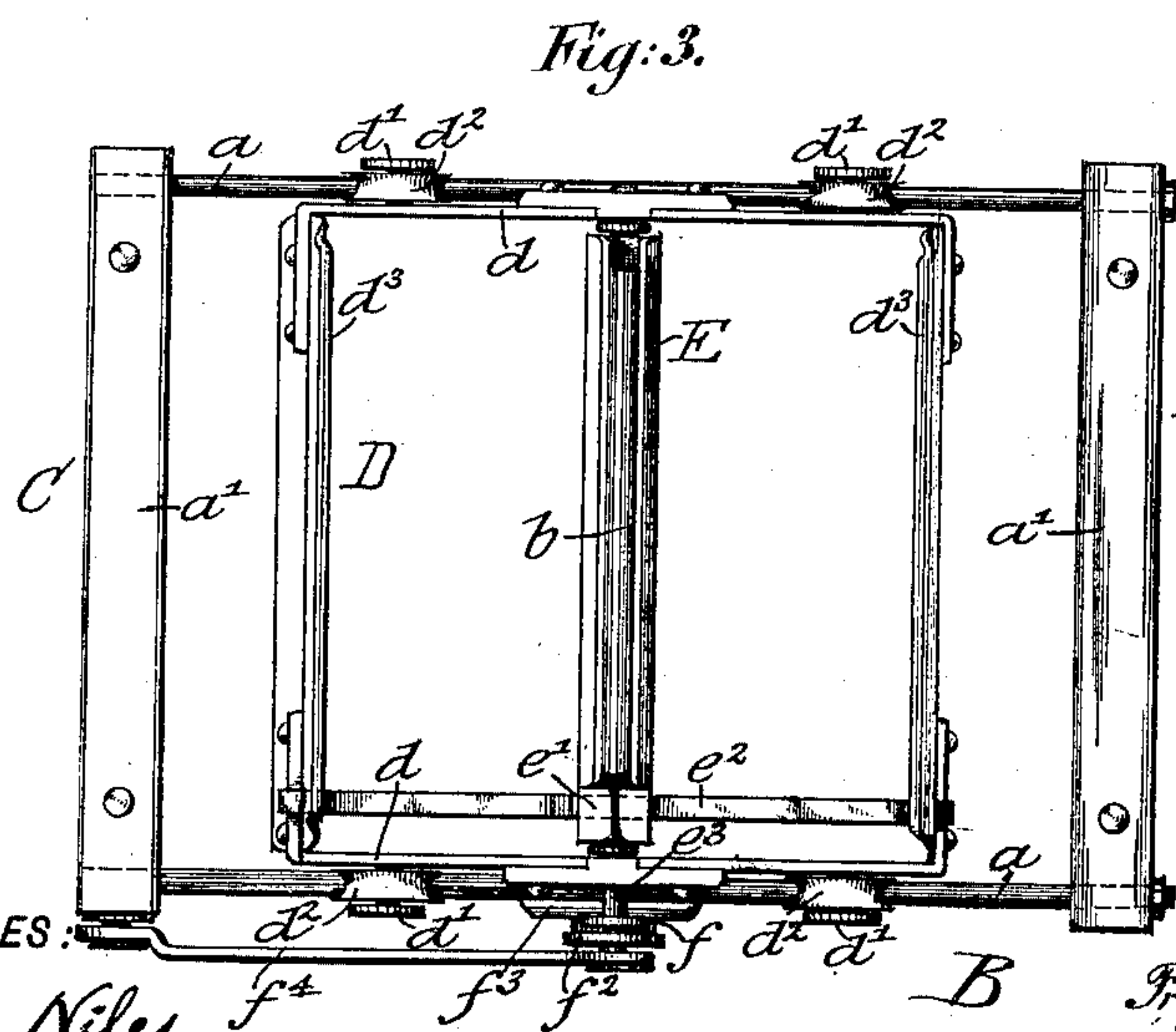
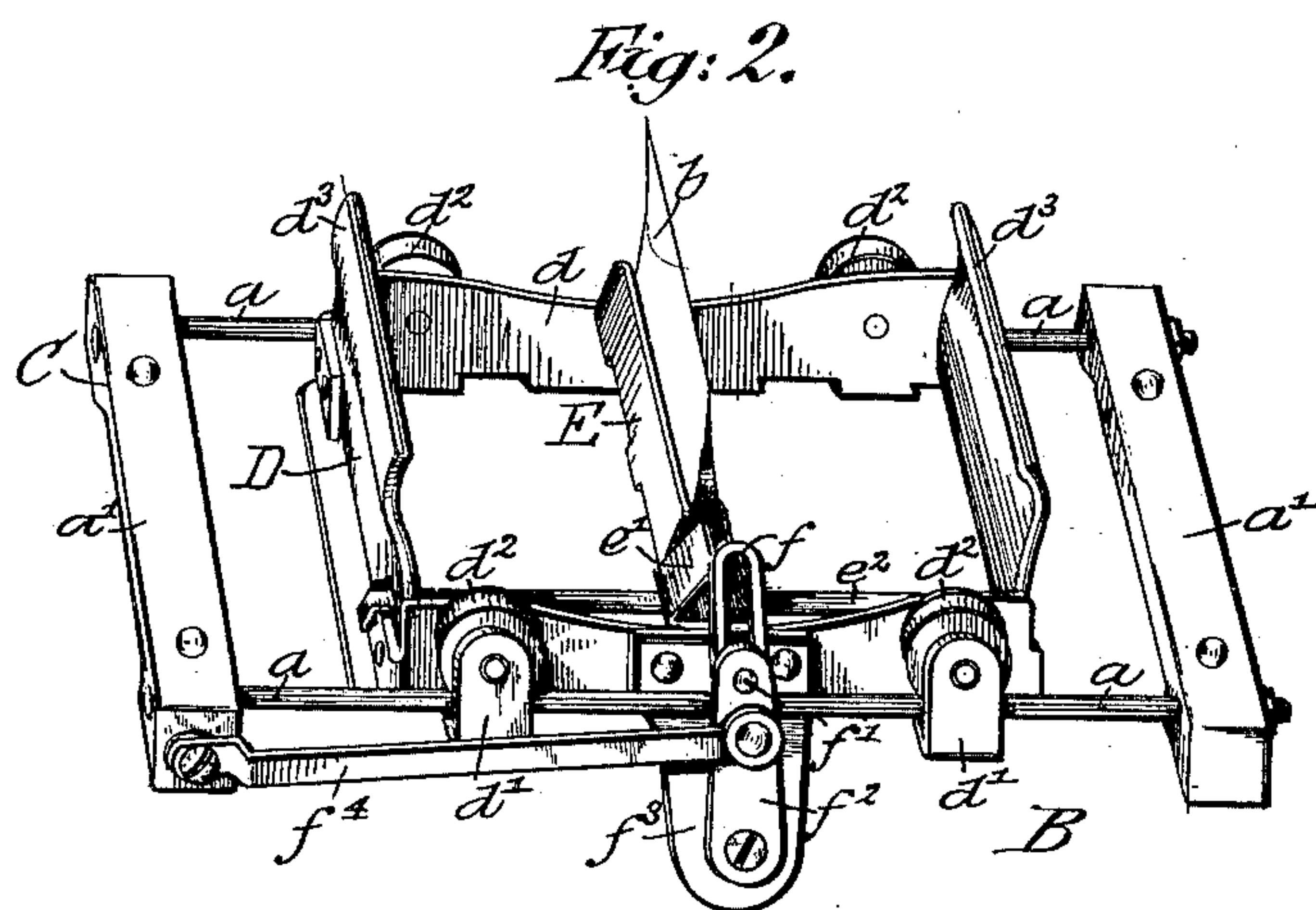
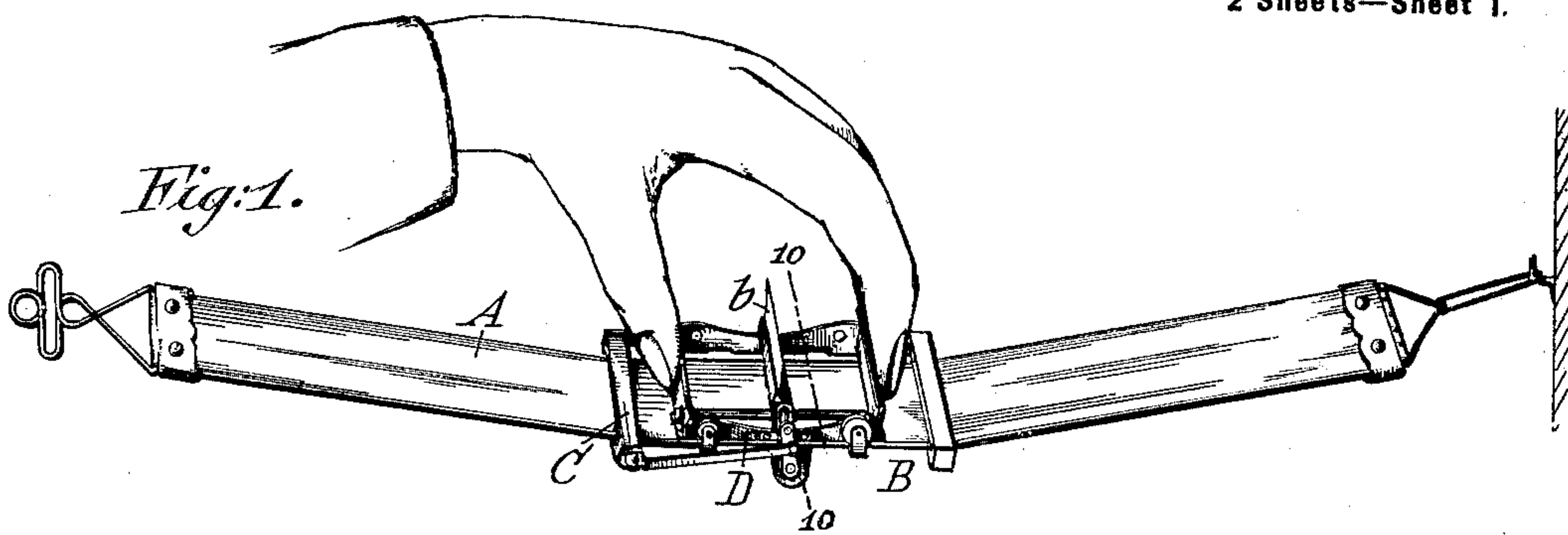
Patented Nov. 19, 1901.

F., R. & O. KAMPFE.
STROPPING DEVICE FOR SAFETY RAZORS.

(Application filed Aug. 3, 1901.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

Joseph H. Niles.
Henry J. Furbur.

INVENTORS
Frederick Kampfe
Richard Kampfe
Otto Kampfe
BY
Samuel W. Hale
ATTORNEYS

F., R. & O. KAMPFE.
STROPPING DEVICE FOR SAFETY RAZORS.

(Application filed Aug. 8, 1901.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 4.

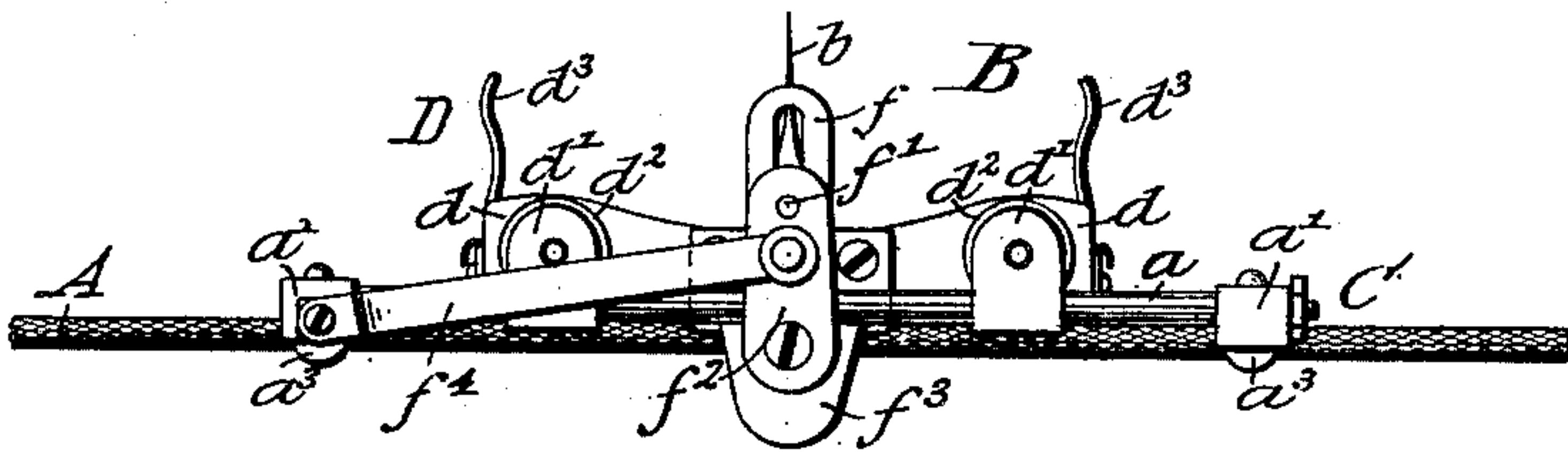


Fig. 5.

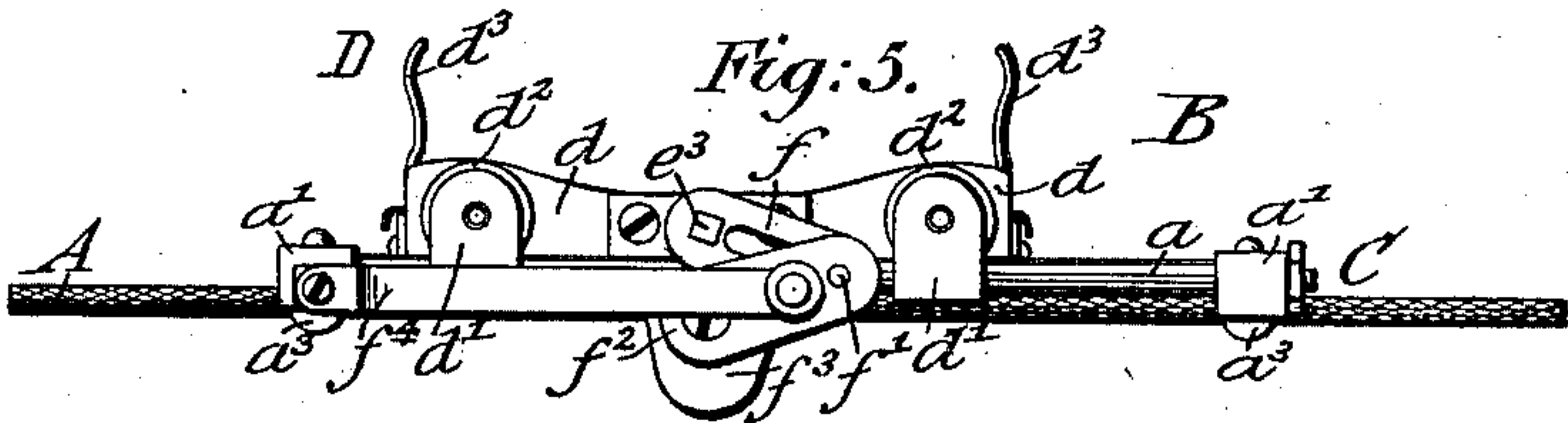


Fig. 6.

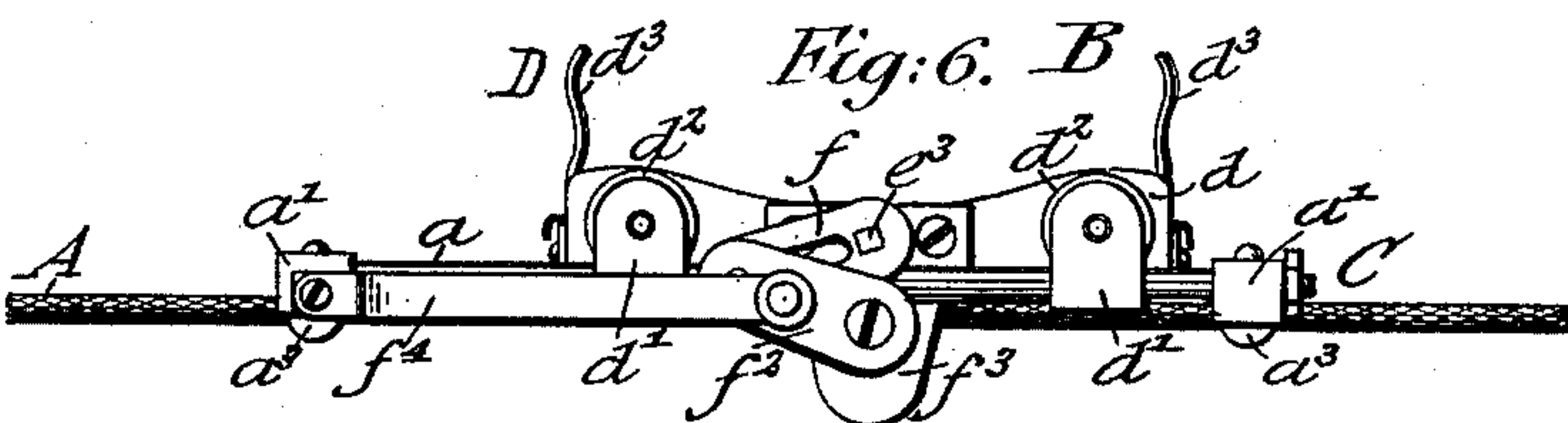


Fig. 7.

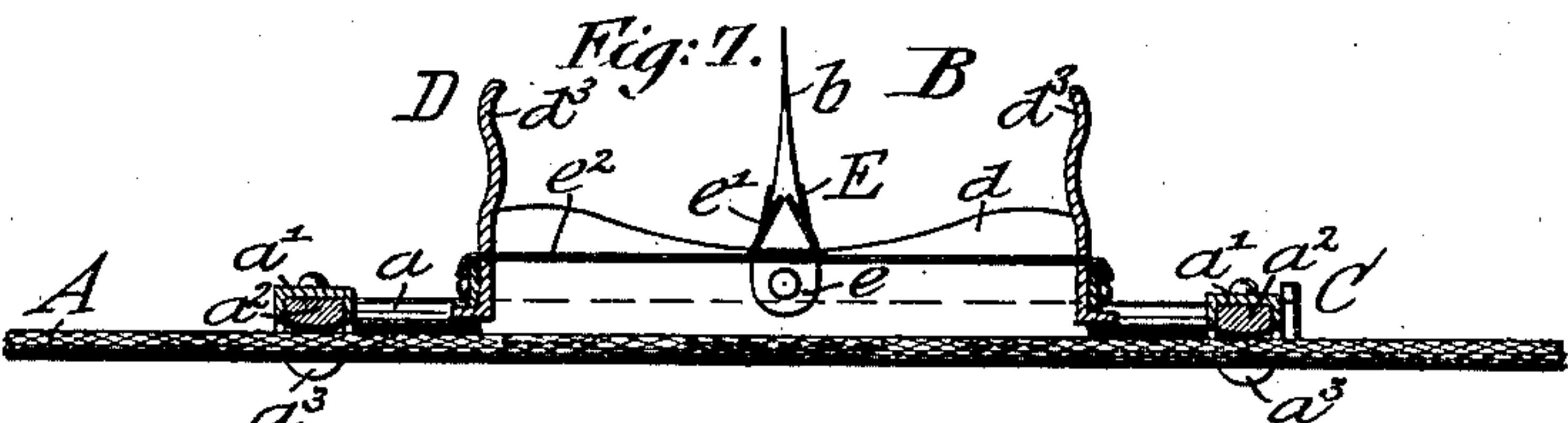


Fig. 8.

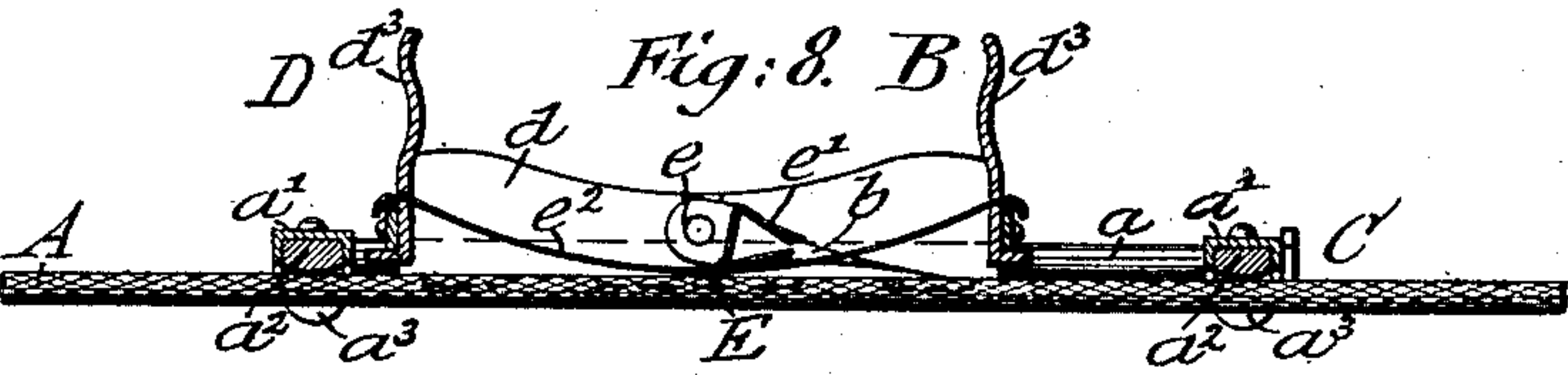


Fig. 9.

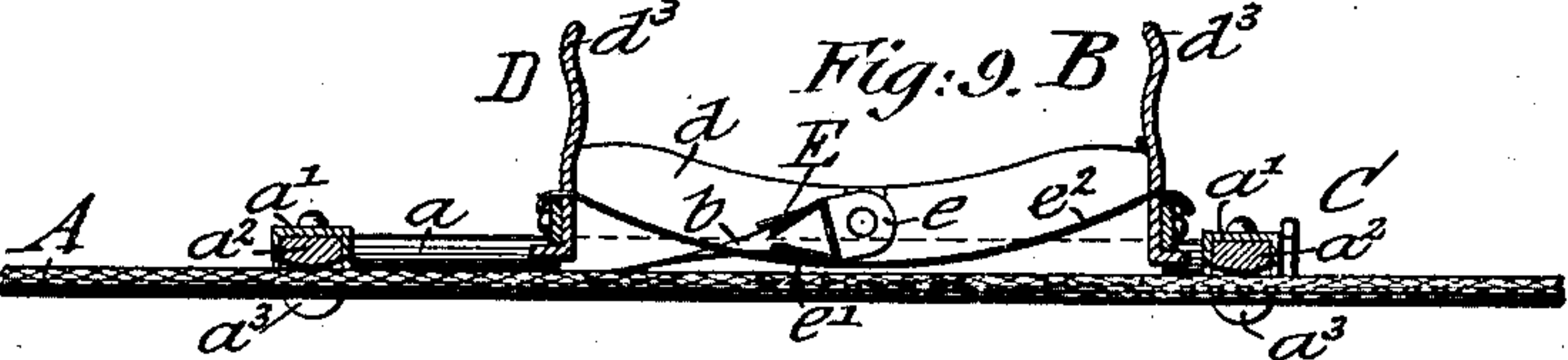
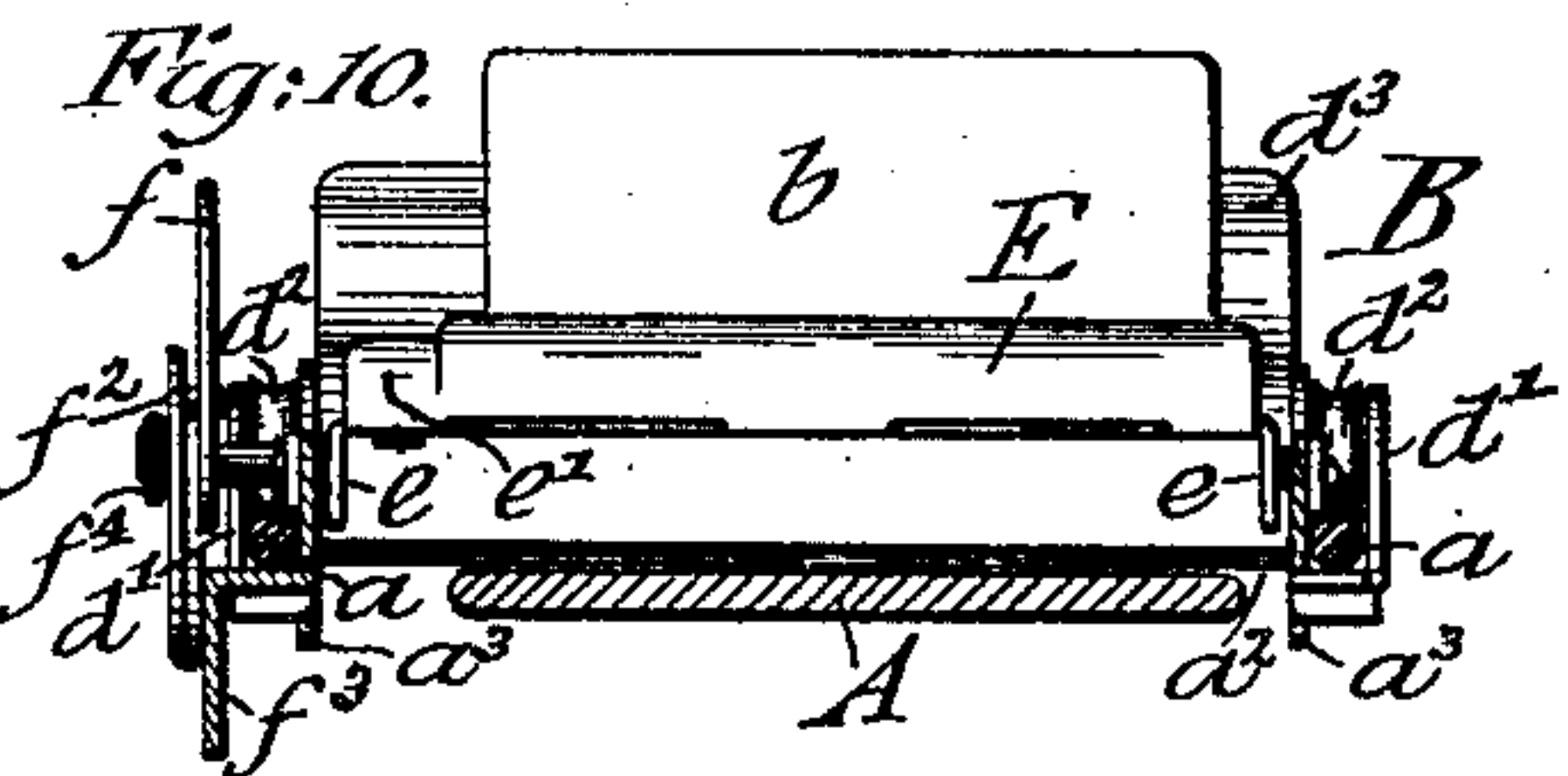


Fig. 10.



WITNESSES:

Joseph H. Niles.
Henry J. Fisher.

INVENTORS
Frederick Kampfe
Richard Kampfe
Otto Kampfe
BY
James W. Wable
ATTORNEYS

UNITED STATES PATENT OFFICE.

FREDERICK KAMPFE, RICHARD KAMPFE, AND OTTO KAMPFE, OF
BROOKLYN, NEW YORK.

STROPPING DEVICE FOR SAFETY-RAZORS.

SPECIFICATION forming part of Letters Patent No. 686,972, dated November 19, 1901.

Application filed August 3, 1901. Serial No. 70,765. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK KAMPFE, RICHARD KAMPFE, and OTTO KAMPFE, citizens of the United States, residing in New York, borough of Brooklyn, in the State of New York, have invented certain new and useful Improvements in Stropping Devices for Safety-Razors, of which the following is a specification.

10 The invention relates to an improved stropping device for safety-razors.

The object of the invention is to provide a device of this character which is constructed so as to be held between the thumb and fingers when in use in order to more evenly distribute the pressure of the razor on the strop and also facilitate the operation and the invention consists of a stropping device for safety-razors which comprises a base-frame 15 guided on the strop, a slide-frame mounted thereon and provided with handles for reciprocating it on the base-frame, a spring-actuated blade-holder pivoted to the slide-frame, and means for connecting the crank of the 20 blade-holder with the base-frame, so as to produce the tilting of the blade-holder and blade from one side to the other while the device is moved over the strop; and the invention consists, further, in certain details of construction and combinations of parts, which 25 will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a perspective view of our improved 35 stropping device for safety-razors, showing the same applied to the strop for sharpening a razor. Fig. 2 is a perspective view of the device drawn on a larger scale. Fig. 3 is a plan view of Fig. 2. Figs. 4, 5, and 6 are 40 side views showing the device respectively with the blade in central position and moved toward the right and toward the left. Figs. 7, 8, and 9 are vertical central sections through the stropping device corresponding to the positions of the blade shown in Figs. 4, 5, and 45 6; and Fig. 10 is a vertical transverse section of the stropping device on line 10 10, Fig. 1.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents an

ordinary strop, such as used by barbers for sharpening razors.

B indicates our improved stropping device, which is approximately of the width of the 55 strop and guided over the same by taking hold of it with the left hand, while the end of the strop is held by the right hand. The stropping device is composed of a base-frame C, a reciprocating slide-frame D, guided on 60 said base-frame C, a blade-holder E, pivoted to the reciprocating slide-frame, and mechanism for actuating the blade-holder so as to turn the same from one side to the other as the stropping device is moved over the strop. 65 The base-frame is made of oblong shape and provided with longitudinal side guide-rods *a*, which are connected at the ends by transverse bars *a'* of U-shaped cross-section, which are provided each with a filling-piece *a*², of 70 hard rubber and preferably of convex shape at its lower face, as shown in Figs. 7, 8, and 9, so as to pass with little friction over the strop. The transverse bars are provided at opposite 75 ends with downwardly-extending guide-lugs *a*³, which move along the edge of the strop when the stropping device is moved over the same. On the longitudinal guide-rods *a* is reciprocated the slide-frame D, which is made of 80 approximately square shape and provided with side bars *d*, having keepers *d'* and rollers *d*², so as to guide the slide-frame freely on the longitudinal guide-rods of the base-frame. The side bars are connected by transverse upwardly-extending plates *d*³, which are 85 rigidly attached to the side bars by any suitable means, said plates *d*³ serving as handles for moving the stropping device over the strop. To the center of the reciprocating 90 slide-frame D is pivoted, by means of downwardly-bent lugs *e*, a blade-holder E, into which the blade *b* of the safety-razor is inserted when the same is to be sharpened. The holder is made of approximately V shape 95 in cross-section so as to fit the blade, and is open at one end for inserting the blade and provided at the other end with a stop *e'*, formed by contracting the end of the holder E. This stop serves for arresting the blade 100 in proper position when inserting the same into the holder for stropping. The base of the blade-holder is acted upon by a flat spring

e^2 , which is attached at its ends to the transverse handle-plates d^3 , said spring serving to return the blade-holder into its normal vertical position when the device is not used for stropping. One of the pivots e^3 of the blade-holder is extended beyond the side bar d , and to the same is rigidly secured a slotted crank f , which engages a pin f' at the upper end of a link f^2 , that is pivoted to a downwardly-extending lug f^3 of the slide-frame, said link being connected by a pivot-rod f^4 with one end of the base-frame. When the slide-frame is reciprocated by hand, the blade-holder and blade are simultaneously tilted from one side to the other by the intermediate actuating mechanism described. It is obvious that in place of this tilting mechanism for the blade-holder any other equivalent mechanism may be used for producing the tilting of the blade while the device is moved over the strop.

Our improved stropping device is used as follows: The blade to be sharpened is inserted into the blade-holder and the same placed in position on the strop. The device is then reciprocated to and fro over the strop, the motion of the slide-frame in one direction on the base-frame producing the tilting of the blade-holder and blade in a direction opposite to the motion of the slide-frame, so that the edge is moved over the strop, while the reciprocating motion of the slide-frame in opposite direction produces likewise the tilting of the blade-holder and blade in opposite direction, so that the opposite side of the edge is passed over the strop and sharpened thereby. The change in the direction of motion of the base-frame and slide-frame over the strop produces the simultaneous tilting of the blade-holder and blade, so that the blade is thereby quickly tilted and moved to and fro over the strop, so that its edge is quickly sharpened. It is preferable to bend the upper edges of the handle-plates of the reciprocating slide-frame inwardly, so as to give a good hold to the fingers on the same, as shown in Fig. 2. Figs. 4 to 9 illustrate the different positions of the blade—in its position of rest as well as in opposite directions on the strop. When the stropping action is complete, the blade is removed from the holder and a new blade inserted in the same, which is then sharpened in the same manner. After use the stropping device can be placed in a suitable box for storing away.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A stropping device for safety-razors, consisting of a base-frame adapted to be guided

over the strop, a slide-frame guided on said base-frame, a spring-actuated blade-holder pivoted to said slide-frame, and means for tilting the blade-holder and blade inserted therein while the slide-frame is reciprocated on the base-frame, substantially as set forth.

2. A stropping device for safety-razors, consisting of a base-frame provided with means for guiding the same over the strop, a reciprocating slide-frame guided on said base-frame, a spring-actuated blade-holder pivoted to the slide-frame, said slide-frame being provided with transverse handle-plates at its opposite ends, and means for tilting the blade-holder and blade inserted therein while the slide-frame is reciprocated on the base-frame, substantially as set forth.

3. The combination of a base-frame provided with longitudinal guide-rods, and means for guiding the same over the strop, a slide-frame guided on the guide-rods of the base-frame and provided with transverse handle-plates for taking hold of the same, a blade-holder pivoted to said slide-frame, and mechanism between a pivot of the blade-holder and said slide-frame for imparting a tilting motion to the blade-holder while the slide-frame is reciprocated on the base-frame, substantially as set forth.

4. The combination, with the base-frame, provided with longitudinal guide-rods, of means for guiding said base-frame over the strop, a slide-frame provided with keepers and guided on the base-frame, transverse handle-plates attached to the slide-frame for reciprocating the same, a spring-actuated blade-holder pivoted to the slide-frame, a blade in said holder, a slotted crank attached to the pivot of the blade-holder, an oscillating pivot-link provided with a pin engaging the slotted crank, and a pivot-rod connecting said oscillating pivot-link and the base-frame, substantially as set forth.

5. In a stropping device for safety-razors, a pivoted blade-holder made of approximately V shape in cross-section for receiving the blade, and a stop device for arresting the blade, at one end of the same, substantially as set forth.

In testimony that we claim the foregoing as our invention we have signed our names in the presence of two subscribing witnesses.

FREDERICK KAMPFE.
RICHARD KAMPFE.
OTTO KAMPFE.

Witnesses:

PAUL GOEPEL,
HENRY SUHRBIER.