

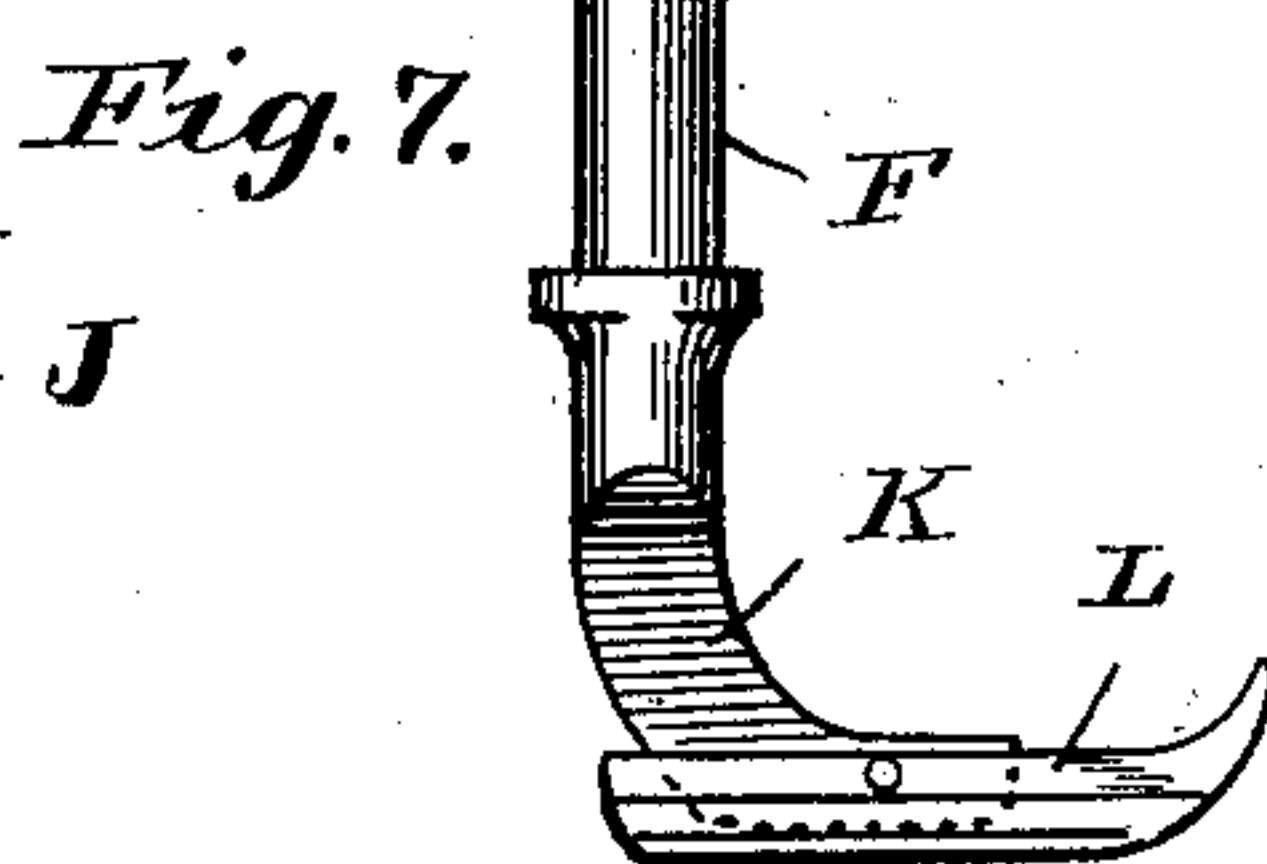
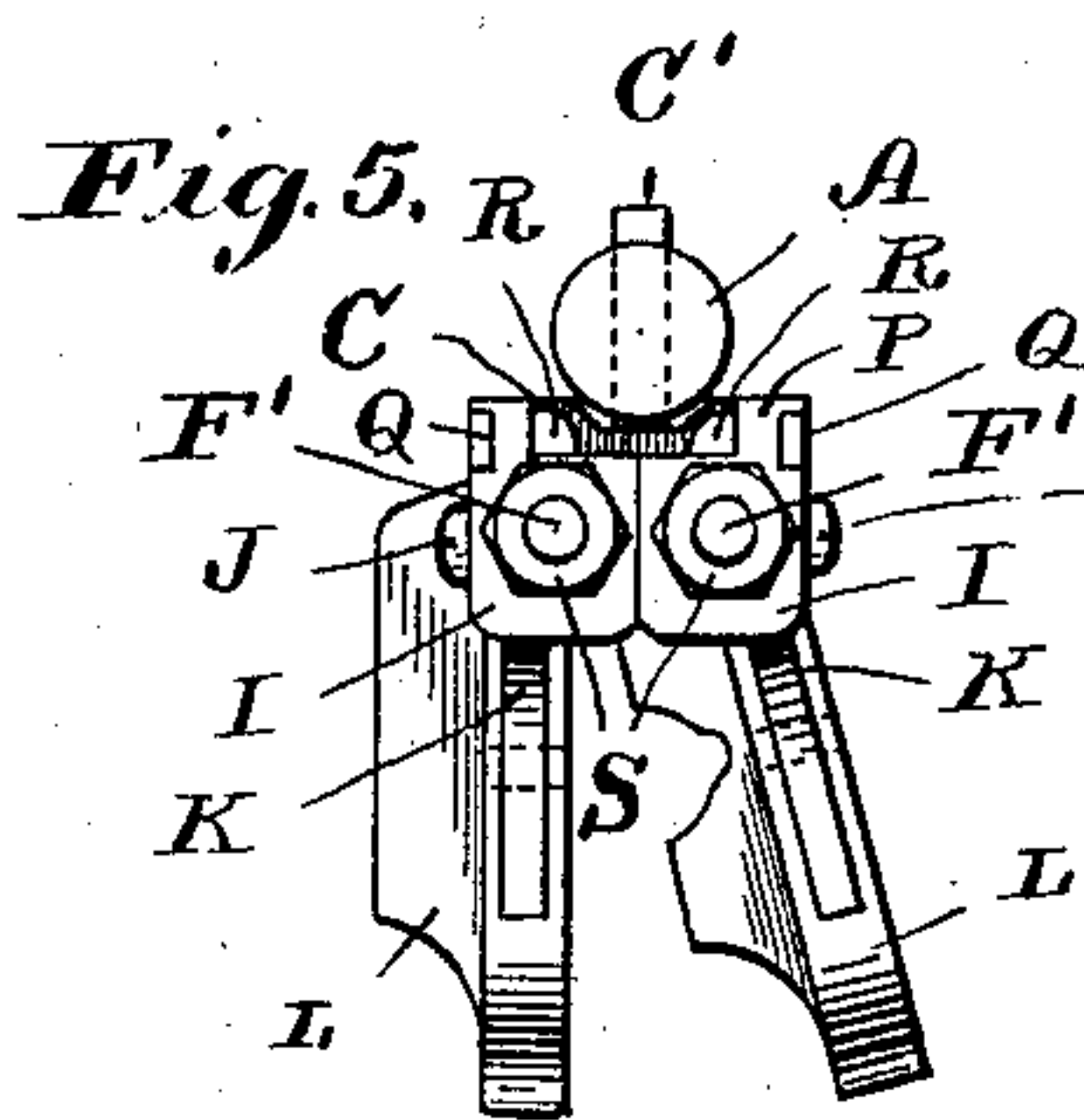
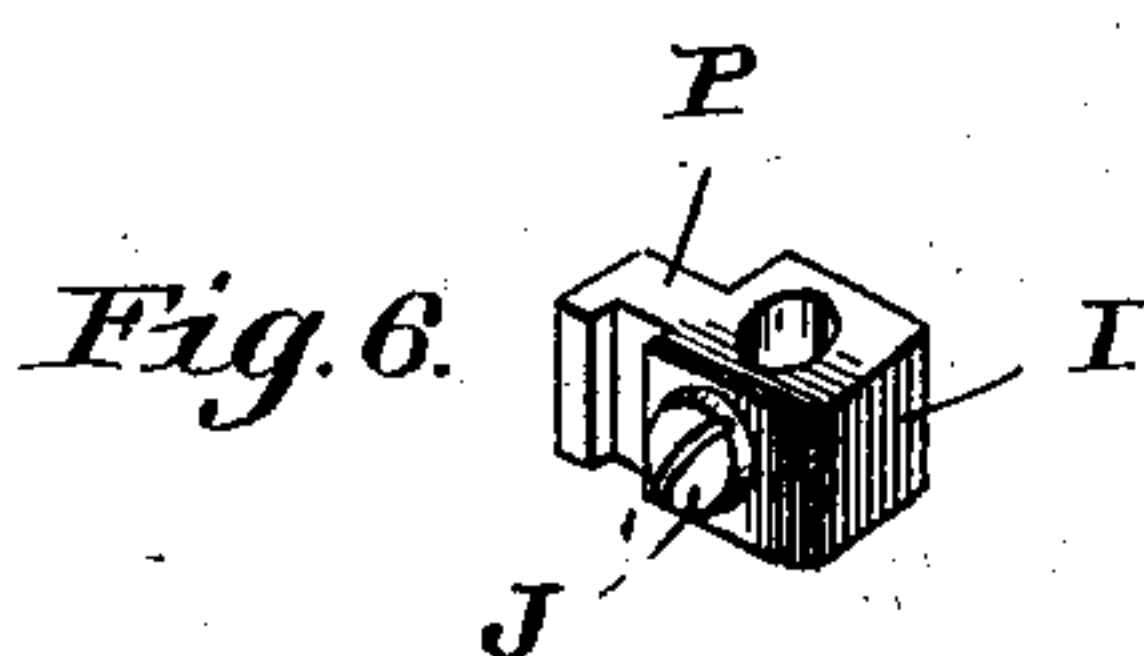
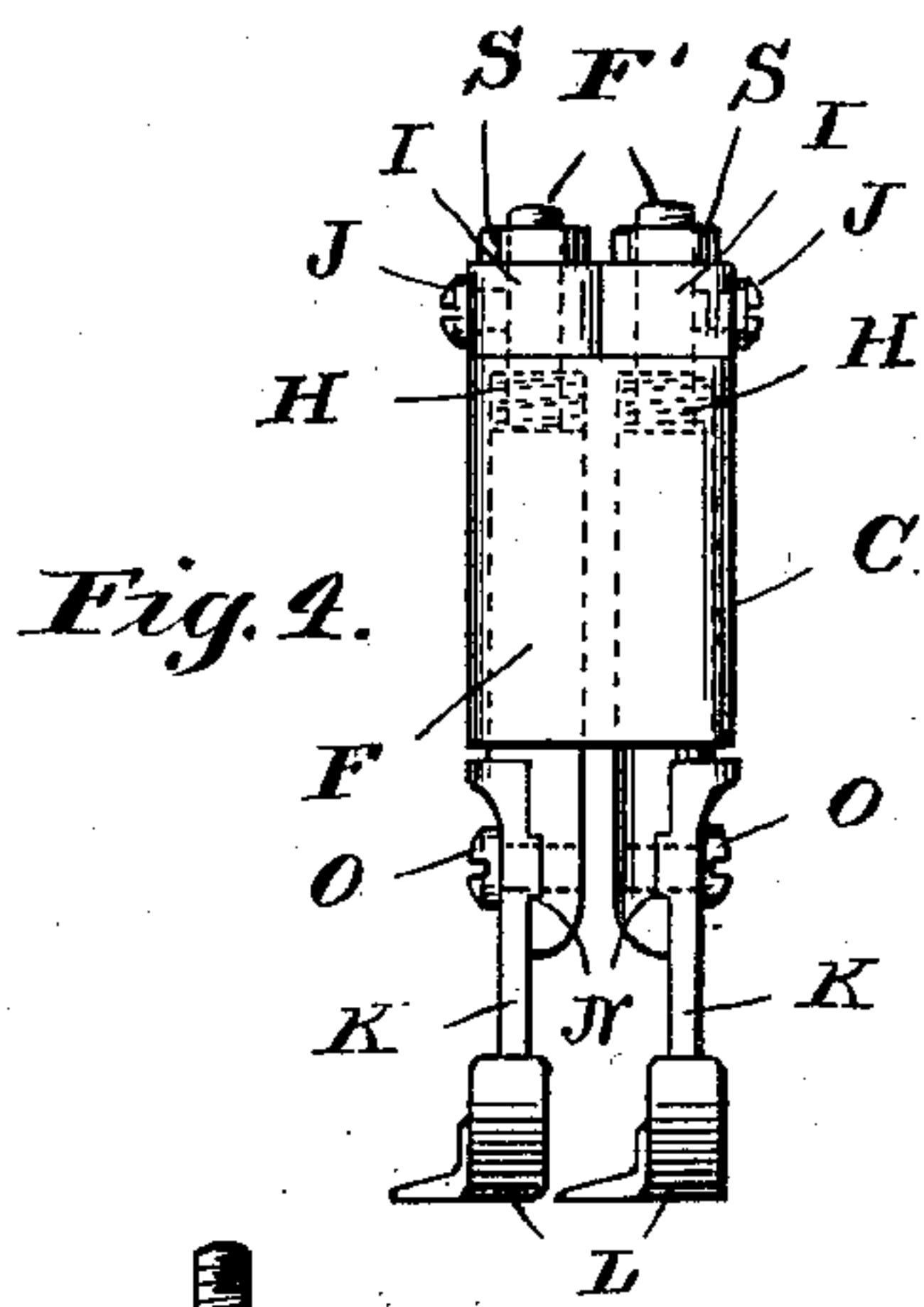
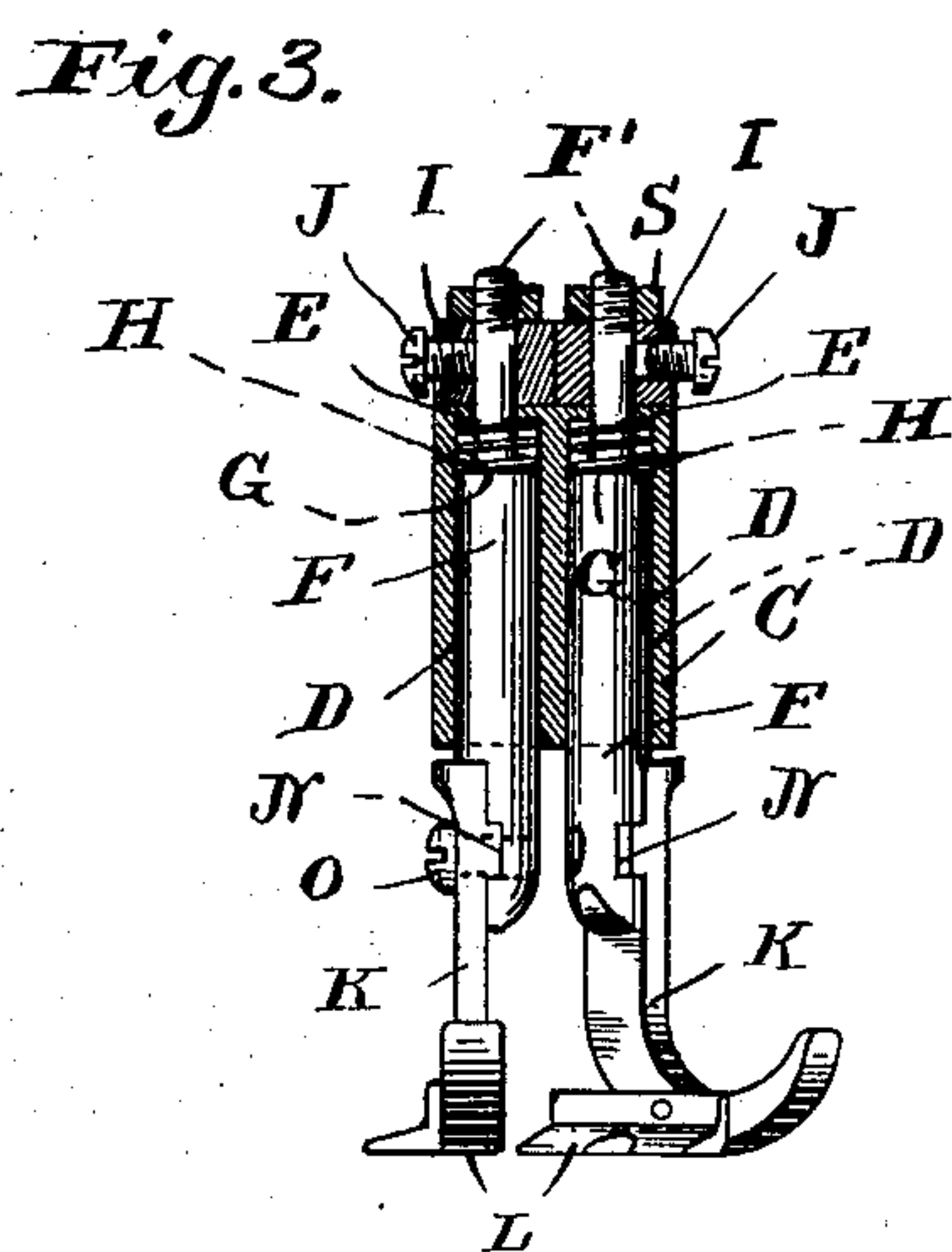
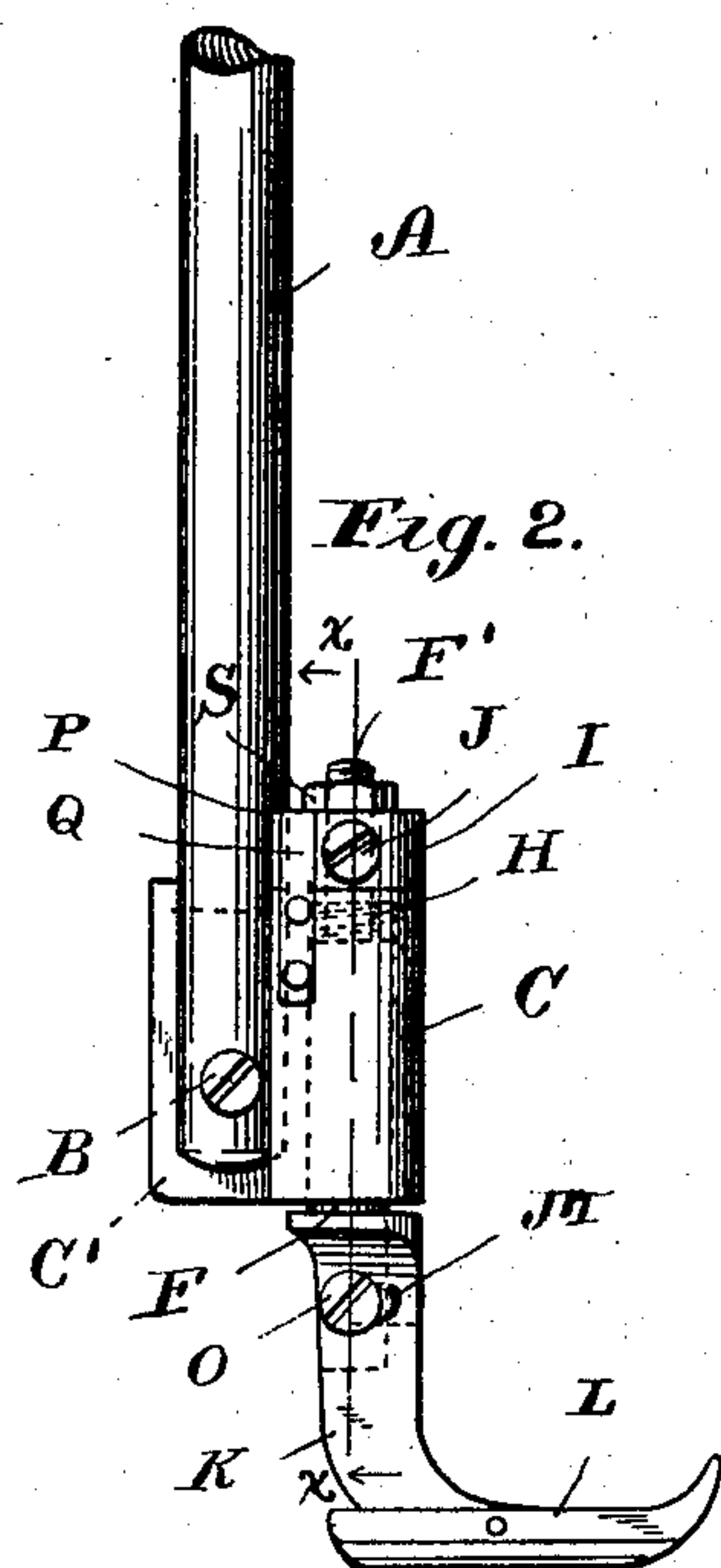
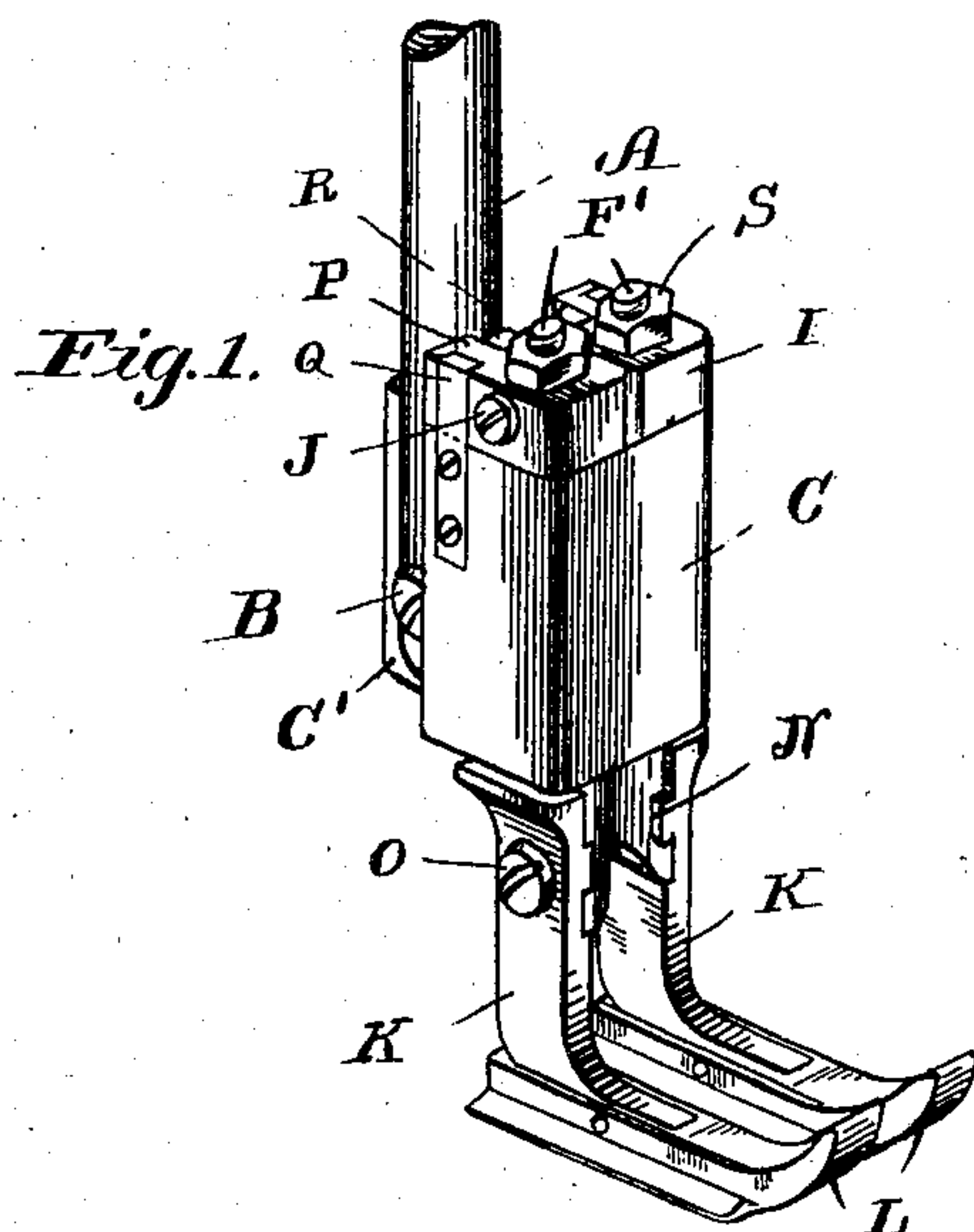
No. 732,719.

PATENTED JULY 7, 1903.

E. DE VILLE.  
ADJUSTABLE CLOTH PRESSER FOR SEWING MACHINES.

APPLICATION FILED AUG. 30, 1902.

NO MODEL.



Witnesses

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# UNITED STATES PATENT OFFICE.

EDWARD DE VILLE, OF BRIDGEPORT, CONNECTICUT.

## ADJUSTABLE CLOTH-PRESSER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 732,719, dated July 7, 1903.

Application filed August 30, 1902. Serial No. 121,594. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD DE VILLE, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Adjustable Cloth-Pressers, of which the following is a specification.

My invention relates to new and useful improvements in cloth-pressers, such as are employed on various kinds of manufacturing sewing-machines, particularly the high-speed buttonhole and hemstitch machine. These cloth-pressers belong to the class of sewing-machine presser-feet and in a sense operate in conjunction therewith.

Heretofore considerable trouble has been experienced in producing a durable cloth-presser which would perform the several offices required and would permit of the interchanging of a very great number of different styles of presser-feet. In the majority of instances special holders have been made to accommodate the different presser-feet, and consequently when it was desirable to change these presser-feet the holders had to be removed with them, thus requiring an expensive lot of accessories with each machine before it could be used for all of the purposes required.

It is therefore the object of my invention to provide a single attachment which will perform all of the offices required of pressers employed on the ordinary manufacturing-machine with the changing only of the presser-feet proper, to so construct the device that said presser-feet will be vertically adjustable and yieldable to better accommodate different thicknesses of cloth, retaining a uniform delicate pressure upon the same, to so arrange the feet that they may be adjustable to and from the operator or to the right or left of the needle, all of which movements are particularly desirable in the attachment of my device to the several styles of machines and to perform the several operations of such machines.

As illustrated, the presser shown is of a double construction, providing for the employment of two presser-feet, both of which may act independently and are subject to the same changes of adjustment. Consequently

they may be used singly or doubly, as required, and with very little trouble of alteration.

With the above objects in view my invention resides and consists in the novel construction and combination of parts shown upon the accompanying sheet of drawings, forming a part of this specification, upon which similar letters of reference denote like or corresponding parts throughout the several figures, and of which—

Figure 1 shows a perspective view of my improved presser complete, including a pair of presser-feet comprising one style used on manufacturing-machines and a portion of a presser-bar, such as are at present used on all machines of this class and to which my presser is attached in a well-known manner. Fig. 2 is a side elevation of the construction shown in Fig. 1. Fig. 3 is a central vertical cross-section taken on line *x x* of Fig. 2, showing the internal arrangement of the parts and how the pressers are adjustable in the several directions indicated. Fig. 4 is a front elevation of the presser shown in the preceding views. Fig. 5 is a plan view, one of the presser-feet being deflected to the right, effecting an increased separation between the two feet. Fig. 6 is a detail perspective view of the guide-collar shown on the top of the secondary presser-bar illustrated in the preceding figures, and Fig. 7 is a modification illustrating the manner in which the secondary presser-bar and its shank may be formed integral.

As there are a large variety of presser-feet employed on this class of sewing-machines for various kinds of work, and whereas the construction or design of these particular feet do not form any particular part of my invention, I have deemed it advisable to show but one form, which is uniformly illustrated throughout the several figures.

Referring in detail to the reference characters marked upon the drawings, A represents a presser-bar, which, properly speaking, is a part of a sewing-machine head. (Not shown.) The lower end of this bar is split and provided with a locking-screw B, by means of which my improved presser is attached.

C represents the main body of my presser,



which is provided with a central web C' on the far side to fit into the before-mentioned slot in the presser-bar A and by means of which the device is detachably connected to said bar.

5 This part C is in consequence fixed rigidly to the presser-bar and is only subject to such vertical movements as may be imparted to the bar by the operator through the medium of the ordinary lift (not shown) that is employed in connection with presser-bars of  
10 sewing-machine heads. Within this part C is mounted the operative parts of my presser, which, as before intimated, comprise substantially two separate constructions of pressers,  
15 both of which are alike in detail and which for convenience I will refer to with the same reference characters in the following paragraph.

20 Within the part C are located two vertical bores D, situated side by side, both having a reduced opening through the top, forming a shoulder E on the inside. Within each of these bores is located a secondary round adjustable presser-bar F, having a shoulder G  
25 and a reduced threaded top end F', corresponding to and extending through the reduced openings of the bores D, before mentioned. A spring H is placed intermediate of the shoulders E and G in a manner to im-  
30 part a downward thrust to the secondary bars to afford a top pressure to the cloth placed beneath the feet. These secondary bars are provided near their lower end with a transverse groove N and a lock-screw O, by means  
35 of which the shanks K of the presser-feet L are attached, said shanks being provided with transverse ribs to engage the grooves N in the bars and also with elongated openings M to provide for the transverse adjustment of  
40 said shanks on the bars. Thus it will be apparent that different styles of feet may be attached by the simple use of a screw-driver and that they can be easily adjusted to properly register with the needle.

45 To the reduced extensions F' of the secondary bars are fitted guide-collars I, which are secured thereto by a set-screw J and are provided with extensions to reciprocate between vertical guides Q and R and between which  
50 guides said extensions are permitted to move vertically with the movement of said secondary presser-bar, insuring the retention of the latter in a true alinement with that of the face of the machine when set-screw O is fastened with that in view. Should it be desired to spread one or both of the feet, as indicated in Fig. 5, the set-screw J would be  
55 loosened, as shown in Fig. 3, whereupon either the needle or work can be gotten at with but little trouble. As shown, the guide Q is in the form of a separate piece, being adjustably secured to the body by means of small screws in order that the wear which occurs between the said guide and extension may be taken  
60 up. To the exposed extremity of this extension F' is applied an adjusting-nut S, by means of which the normal vertical position

of the presser-foot and its bar is determined, and consequently the tension of the spring is controlled and both feet brought to press  
70 alike.

In Fig. 7 I have shown a construction wherein the presser-bar F and the shank K are formed integral, since in a few instances the changing of the presser-feet would not be necessary and neither would the forward-and-backward adjustment be required. 75

From the foregoing construction it will be seen that in the first place the presser-bar and its spring being inclosed the latter cannot get clogged with dirt. Secondly, by means of the nut at the top of the bar the same can be conveniently set to any elevation and the two feet adjusted to register exactly with each other without the use of a file. Third, either  
80 presser-foot can be quickly deflected outward (see Fig. 5) from the needle to allow access to the needle or work. Further, by reason of the transverse grooves and screw connection the shank can be adjusted forward or backward on the bar, and different styles of feet  
85 can be applied without the removal of the entire device.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is— 95

1. In a sewing-machine cloth-presser, the combination with a body having means for its attachment to a presser-bar, of a pair of spring-actuated secondary presser-bars therein, adjustable collars on said bars and guides for said collars to determine the alinement of said bars. 100

2. In a sewing-machine cloth-presser, the combination with a body having means for its attachment to a presser-bar, of a spring-actuated secondary presser-bar therein, a collar on said bar, guides for said collar to determine its alinement, means for adjustably turning the bar within the collar to move the  
105 presser-foot to the right or left. 110

3. In a sewing-machine cloth-presser, the combination with a body having means for its attachment to a presser-bar, of spring-actuated secondary presser-bars therein, adjustable collars on said bars bearing extensions, fixed and adjustable guides on said body between which the extensions of the collar move vertically. 115

4. In a cloth-presser for sewing-machines, the combination with a body having connections for its attachment to a presser-bar, of vertical bores through said body having shoulders in their upper end, secondary presser-bars in said bores, inclosing springs between the shoulders and bar to force the latter down, collars on said bars bearing a guide, a fixed and adjustable way between which said guide operates, a nut above the collar to adjust the secondary bar vertically with respect to said collar, and means to permit either foot to be adjusted sidewise to and from the needle. 120 125 130

5. In a cloth-presser for sewing-machines, the combination with a presser-bar, of an at-



5 tachable body having a vertical bore there-  
through, a secondary presser-bar fitted in  
said body, an inclosed spring interposed be-  
tween the body and bar to force the latter  
10 down, means for retaining the alinement of  
the bar comprising a collar and guides be-  
tween which said collar operates with means  
for adjusting one of said guides to take up  
any wear.  
15 6. In a cloth-presser for sewing-machines,  
the combination with a presser-bar, of an at-  
tachable body, a shouldered bore there-  
through, a secondary presser-bar fitted to said  
bore and bearing a shoulder, an inclosing  
20 spring intermediate of the said shoulder, a  
guide-collar fitted to the secondary bar with  
ways between which said collar operates and  
whereby the said bar is retained in proper

alinement, means for locking the bar to the  
collar and a nut for vertically adjusting the 20  
bar.

7. In a sewing-machine cloth-presser, the  
combination with a body having means for  
its attachment to a presser-bar, of a pair of  
spring-actuated secondary presser-bars there- 25  
in bearing presser-feet, collars on said bars,  
vertical guides for the collars, means for ad-  
justably turning the bars within the collars  
to throw the feet to and from the needle-bar.

Signed at Bridgeport, in the county of Fair- 30  
field and State of Connecticut, this 23d day  
of August, A. D. 1902.

EDWARD DE VILLE.

Witnesses:

C. M. NEWMAN,  
WILLIAM V. DEVITT.