

(No Model.)

J. B. SMITH.
TELEPHONE SWITCH.

No. 521,274.

Patented June 12, 1894.

Fig. 1.

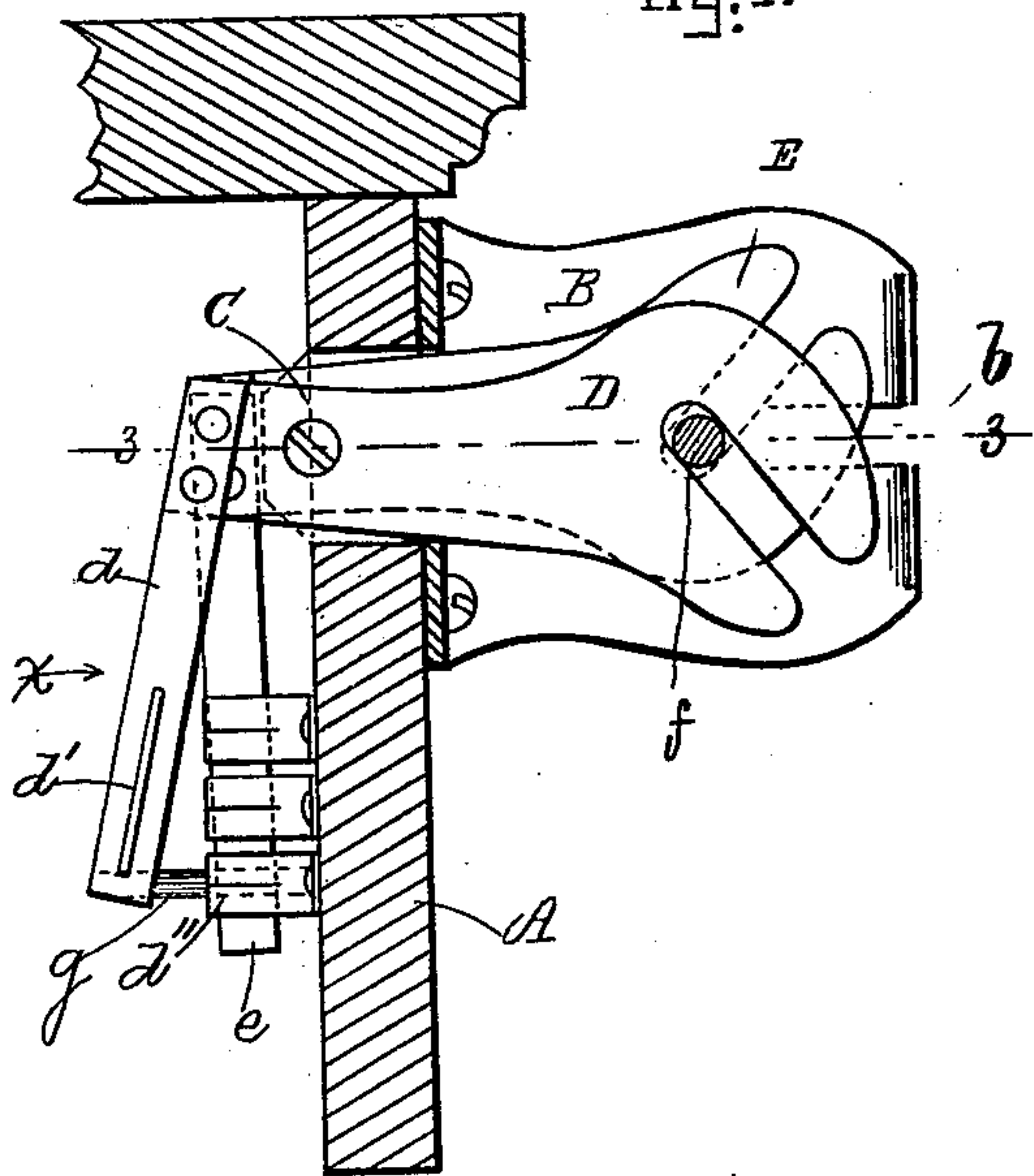


Fig. 2.

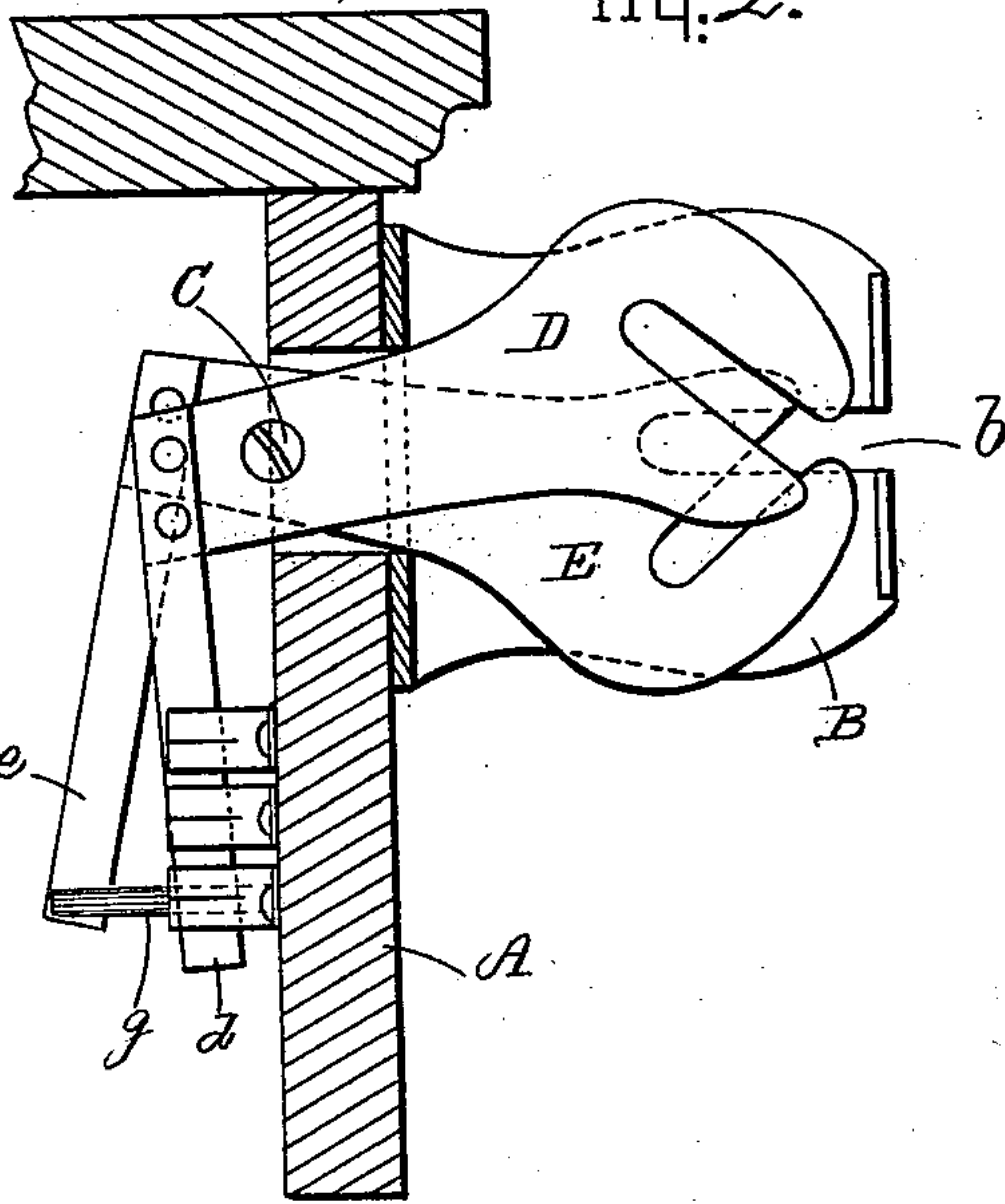


Fig. 4.

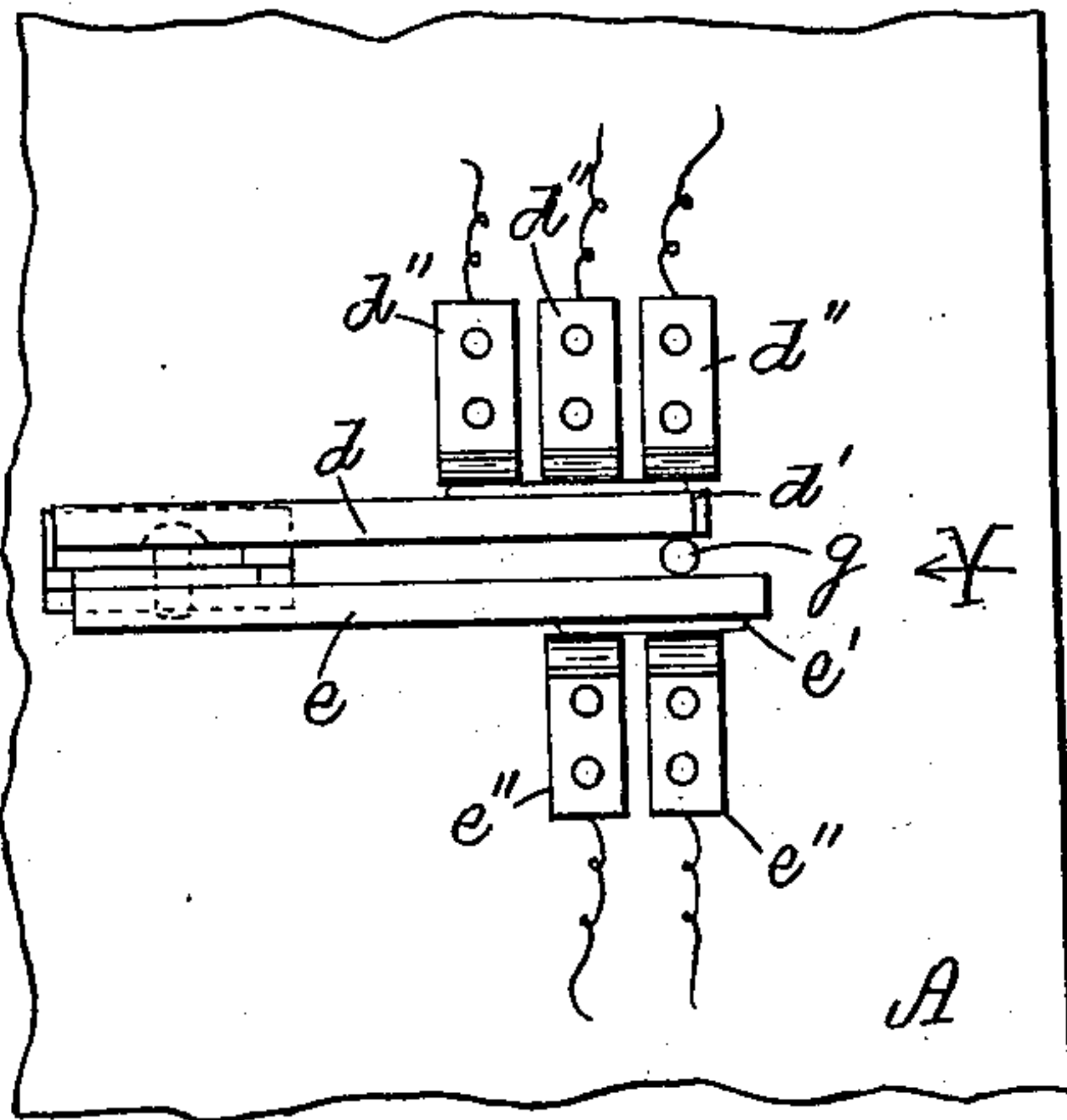


Fig. 3.

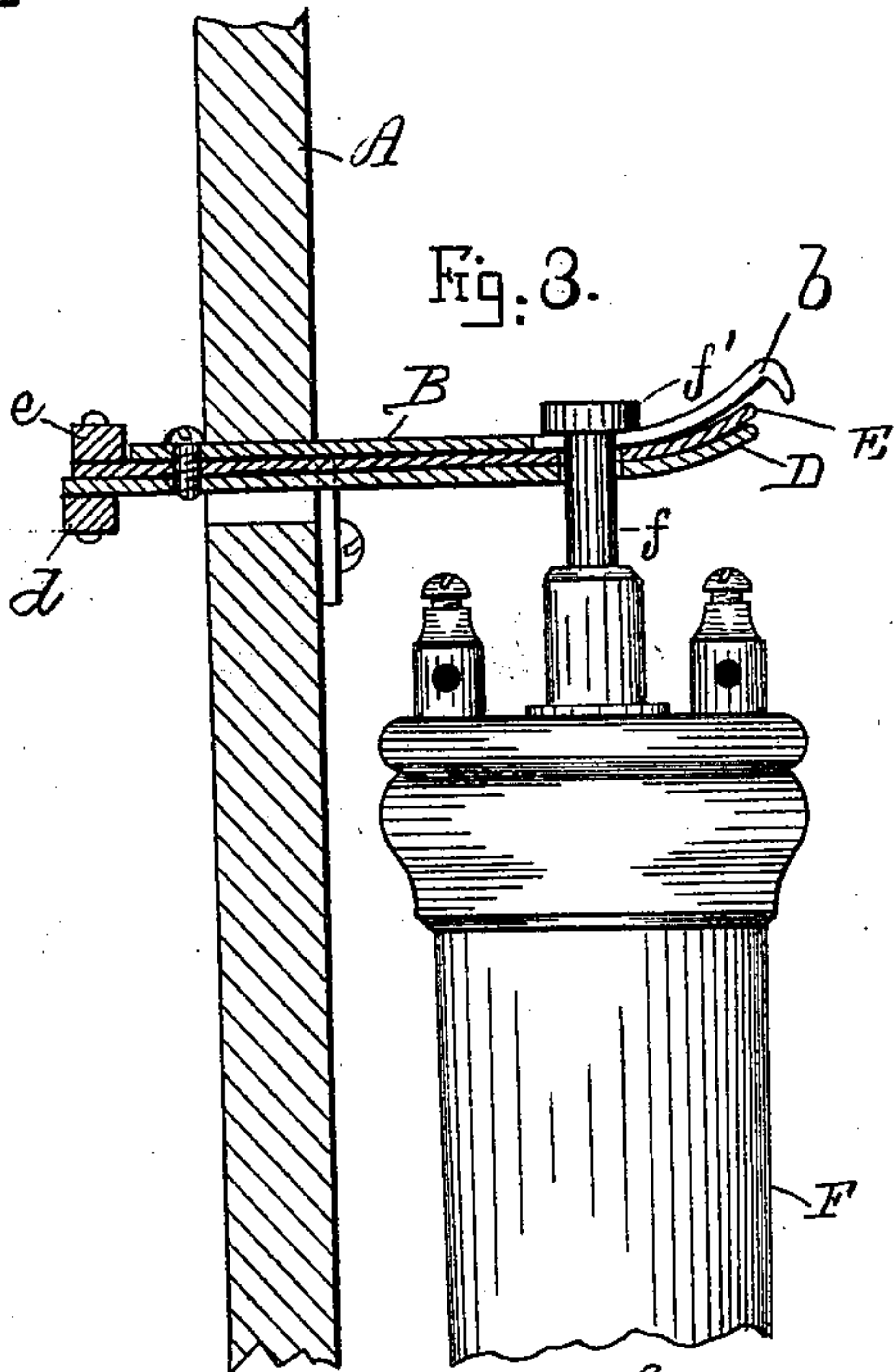
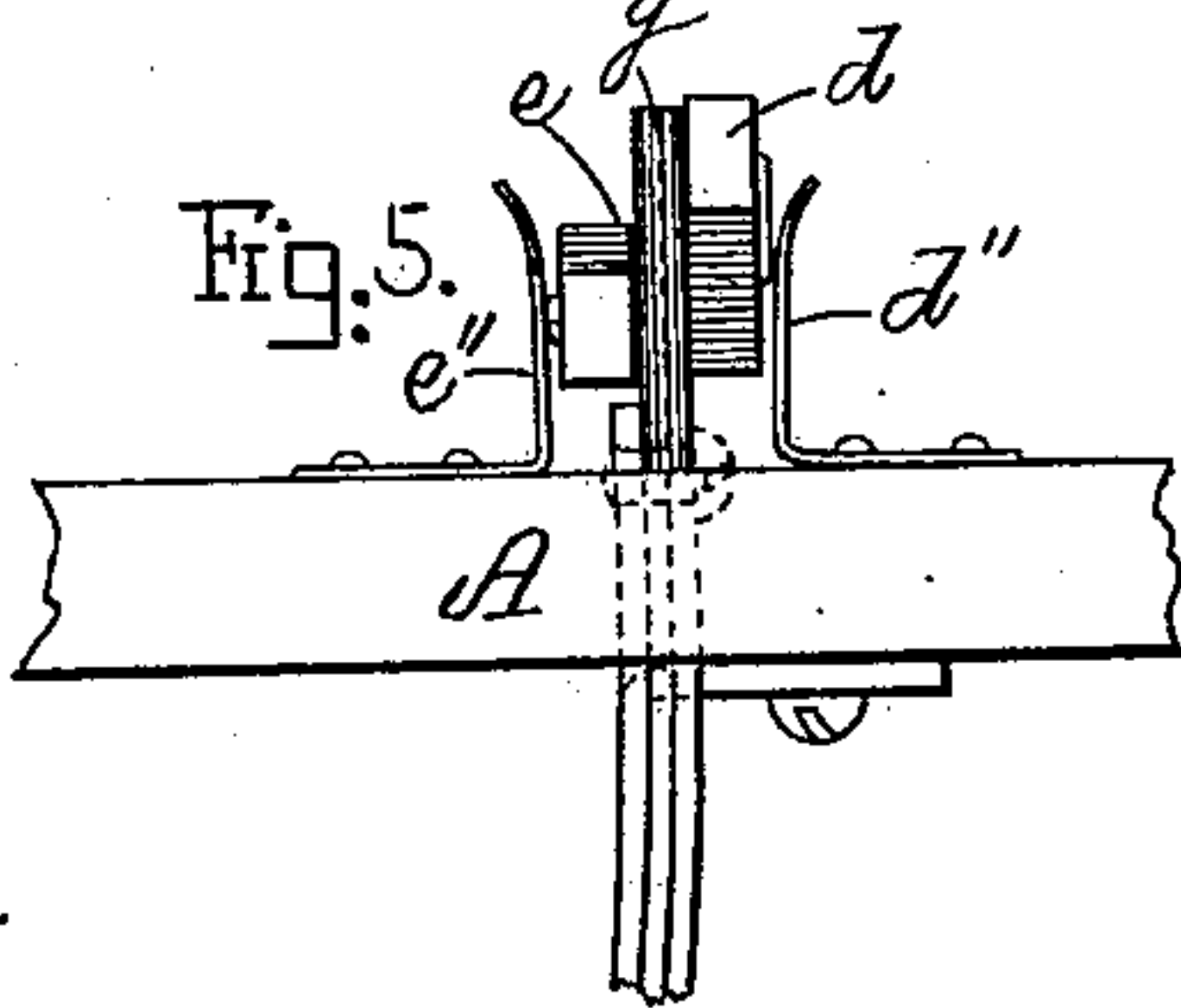


Fig. 5.



Witnesses.

Lauritz N. Möller.
Kittie M. Hanson.

Inventor:

Joseph Brodie Smith
by Urban Andrein
his atty.

UNITED STATES PATENT OFFICE.

JOSEPH BRODIE SMITH, OF MANCHESTER, NEW HAMPSHIRE.

TELEPHONE-SWITCH.

SPECIFICATION forming part of Letters Patent No. 521,274, dated June 12, 1894.

Application filed April 27, 1894. Serial No. 509,200. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH BRODIE SMITH, a citizen of the United States, and a resident of Manchester, in the county of Hillsborough and State of New Hampshire, have invented new and useful Improvements in Telephone-Switches, of which the following, taken in connection with the accompanying drawings, is a specification.

10 This invention relates to improvements in switches for telephones and has for its object the putting of a telephone positively into or out of the line circuit by removing the telephone from or replacing it on its support on the call box of the instrument.

15 The device is a positive one and is independent of springs, weights or the gravity of the telephones and is very simple and effective. It is carried out as follows, reference being had to the accompanying drawings, wherein—

Figure 1, represents a bottom plan view of the device showing the position of the switch arms when the telephone is suspended on the bracket and not in use. Fig. 2, represents a similar bottom plan view showing the telephone removed while in use. Fig. 3, represents a vertical section on the line 3—3 in Fig. 1 showing the telephone suspended at the side of the call box when not in use. Fig. 4, represents a side elevation seen from X in Fig. 1; and Fig. 5, represents an elevation seen from Y in Fig. 4.

30 Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

40 A, represents one of the inclosing sides of a telephone call box as usual, and to the outside of the same is secured in a suitable manner a preferably metal forked bracket B having a slot *b* as shown. To said bracket or other stationary part of the call box is pivoted at C a pair of slotted arms D, E, having inclined slots D' E' as shown in the drawings. The respective slots *b*, D', E', are all open at their outer ends as shown in Figs. 1 and 2.

45 To the inner ends of the arms D, E, are secured the respective switch levers *d*, *e*, which are made of suitable insulating material and provided with the respective metal contact pieces *d'* *e'* as shown.

50 *d'' d'' d''* are metal electrodes against which

the metal contact piece *d'* on the lever *d* is metallically connected when the telephone F is removed from its support as shown in Fig. 2; and *e'' e''* are similar metal electrodes against which the metal contact piece *e'* on the lever *e* is metallically connected when the said telephone F is suspended at the side of the call box as shown in Figs. 1 and 3.

The telephone F has a central metal pin *f*, secured to its upper end terminating as a head or projection *f'* shown in Figs. 1 and 3.

In the drawings Figs. 1, 2 and 3 I have shown the rocker arms D, E, as arranged below the bracket B but this is not essential and in practice I may arrange said arms above the said bracket and I wish to state that I may arrange the bracket above or below said rocker arms without departing from the essence of my invention.

When the arms D, E, and their respective switch levers *d*, *e*, are in the positions shown in Fig. 1 (at which time the telephone is on the support) the hand telephone is cut out as well as the secondary winding of the induction coil at the same time as the battery circuit of the transmitter is open and the bell magnet cut in.

When the arms D, E, and their respective levers *d*, *e*, are in the position shown in Fig. 2 (at which time the telephone is removed from the support) the hand telephone and secondary winding of the induction coil are cut in, the battery circuit is closed through the primary circuit of the induction coil, and the bell magnets are cut out from the line circuit by the wire connections usually employed in telephones and need not here be referred to or described in detail.

If the telephone has been used and it is desired to hang it up on the side of the call box all that is necessary to do is to place the shank *f* in the slot *b* on the bracket B and press it toward the box causing it to enter the inclined slots D' E' by which the arms D, E, and their switch levers *d*, *e*, are rocked from the position shown in Fig. 2 to that shown in Fig. 1 for the purpose stated and thereby causing the telephone to be properly suspended until again needed for use.

When needed all that the operator has to do is to move the telephone away from the

call box in a horizontal direction causing its shank *f* to pass out through the bracket slot *b* and out through the inclined slots D' E' by which the arms D, E, and their switch levers *d, e*, are automatically caused to assume the positions shown in Fig. 2, thus automatically cutting in and out the parts of the telephone above mentioned.

g in Figs. 1, 2, 4 and 5 is a guide pin secured to the inside of the box A between the switch levers *d, e*, for the purpose of properly guiding said switch levers and causing them to be brought in contact with the respective electrodes *d'' e''*.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

1. The herein described improved telephone switch consisting of a pair of slotted pivoted rocker arms having secured thereto respective switch levers combined with electrodes *d'' e''* and a detachable hand telephone, substantially as and for the purpose set forth.

2. The herein described improved telephone switch consisting of a stationary slotted bracket B and a pair of slotted pivoted rocker arms D, E, having inclined slots therein and the respective switch levers *d, e*, secured to

said arms substantially as and for the purpose set forth.

3. The herein described improved telephone switch consisting of a stationary slotted bracket and a pair of pivoted slotted rocker arms combined with a hand telephone having means substantially as described for actuating said rocker arms and suspending said telephone when not in use as and for the purpose set forth.

4. The herein described improved telephone switch consisting of a stationary slotted bracket and a pair of slotted rocker arms provided with switch levers combined with electrodes for alternately changing the calling and speaking circuits and a hand telephone having means for actuating said arms and adapted to be suspended on the switch device when not in use substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 13th day of April, A. D. 1894.

JOSEPH BRODIE SMITH.

Witnesses:

ALBAN ANDRÉN,
KITTEE M. HANSON.