

No. 777,160.

PATENTED DEC. 13, 1904.

T. A. UPSON.
BLIND FASTENER.

APPLICATION FILED AUG. 6, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

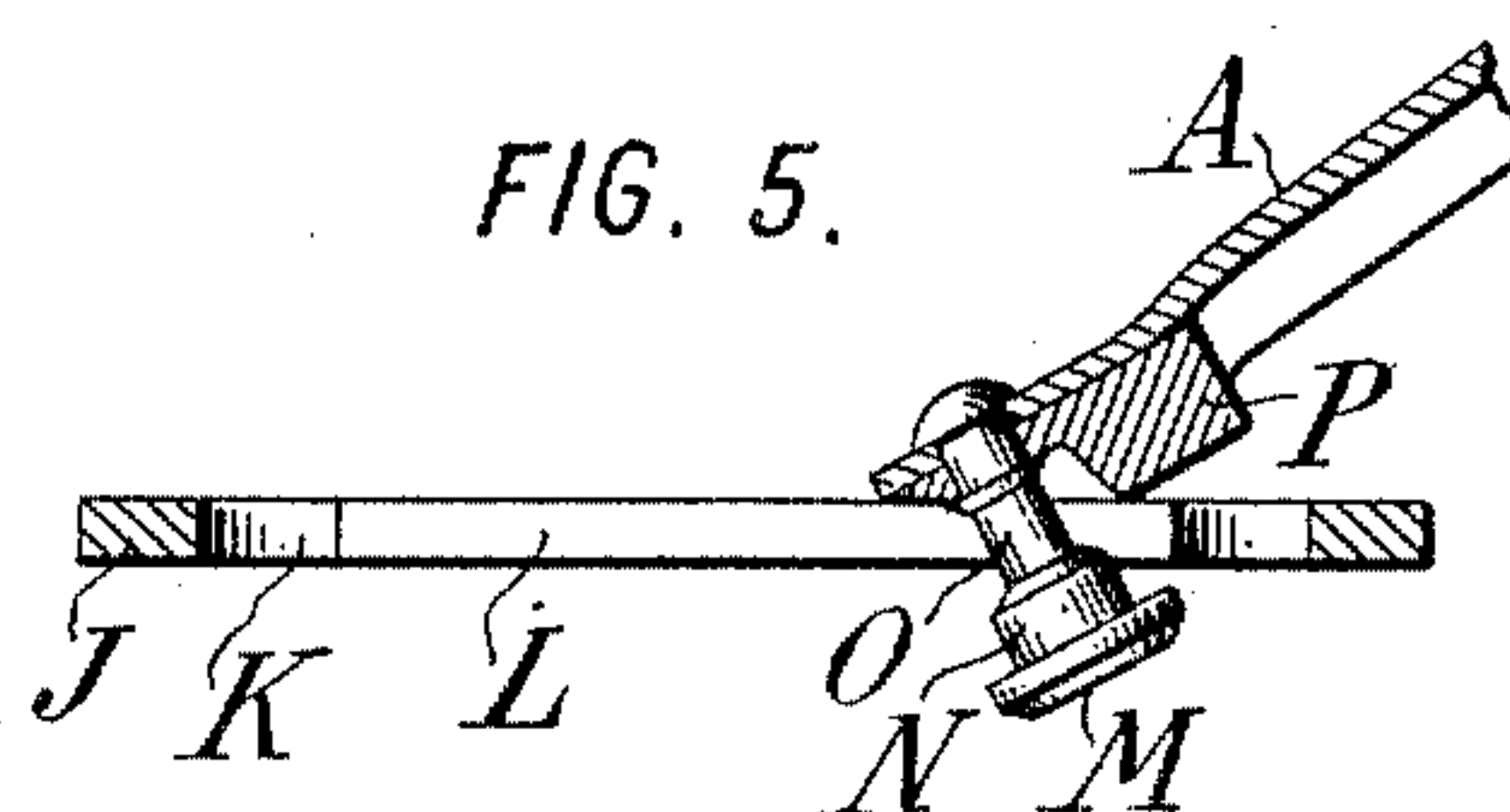
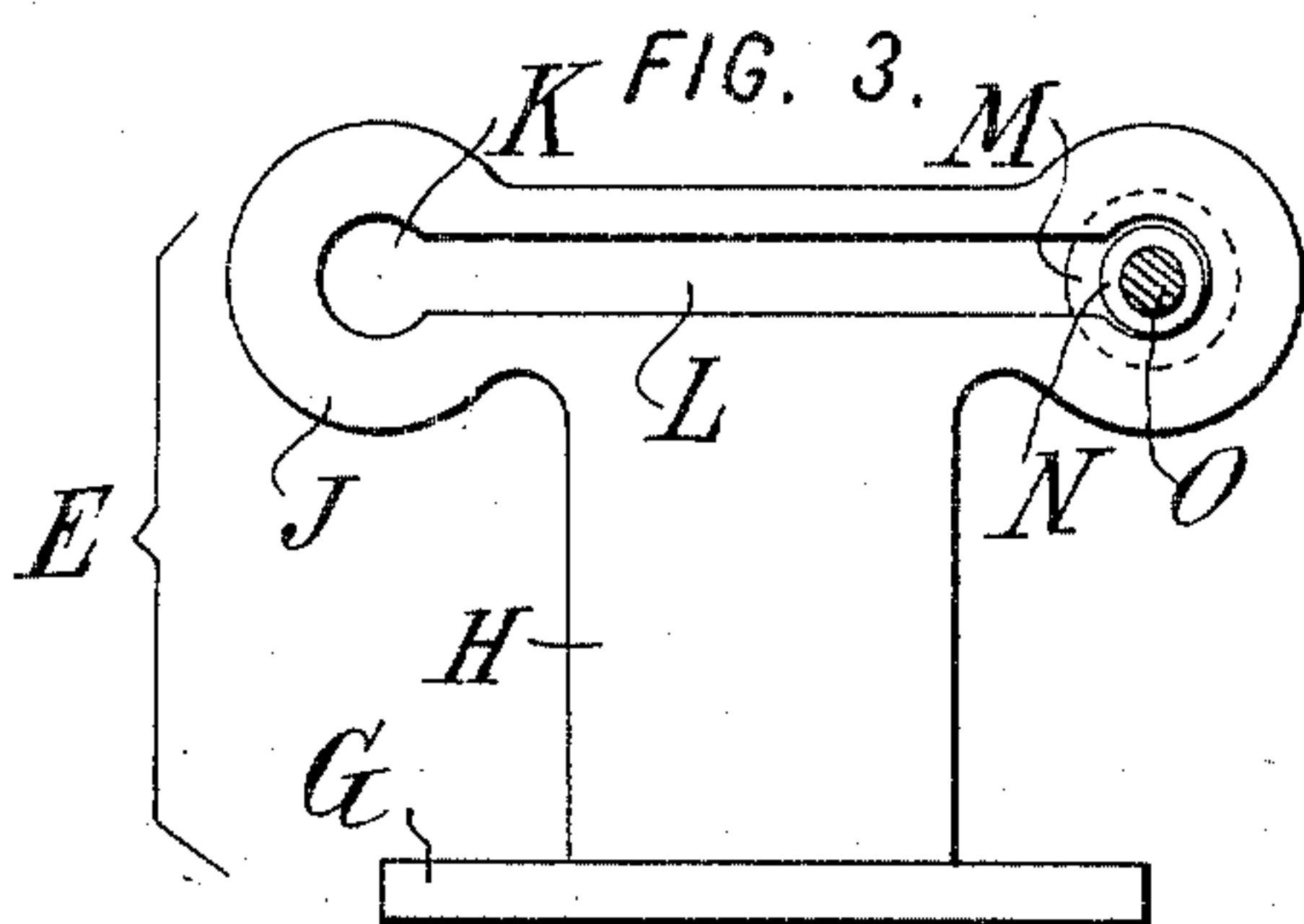
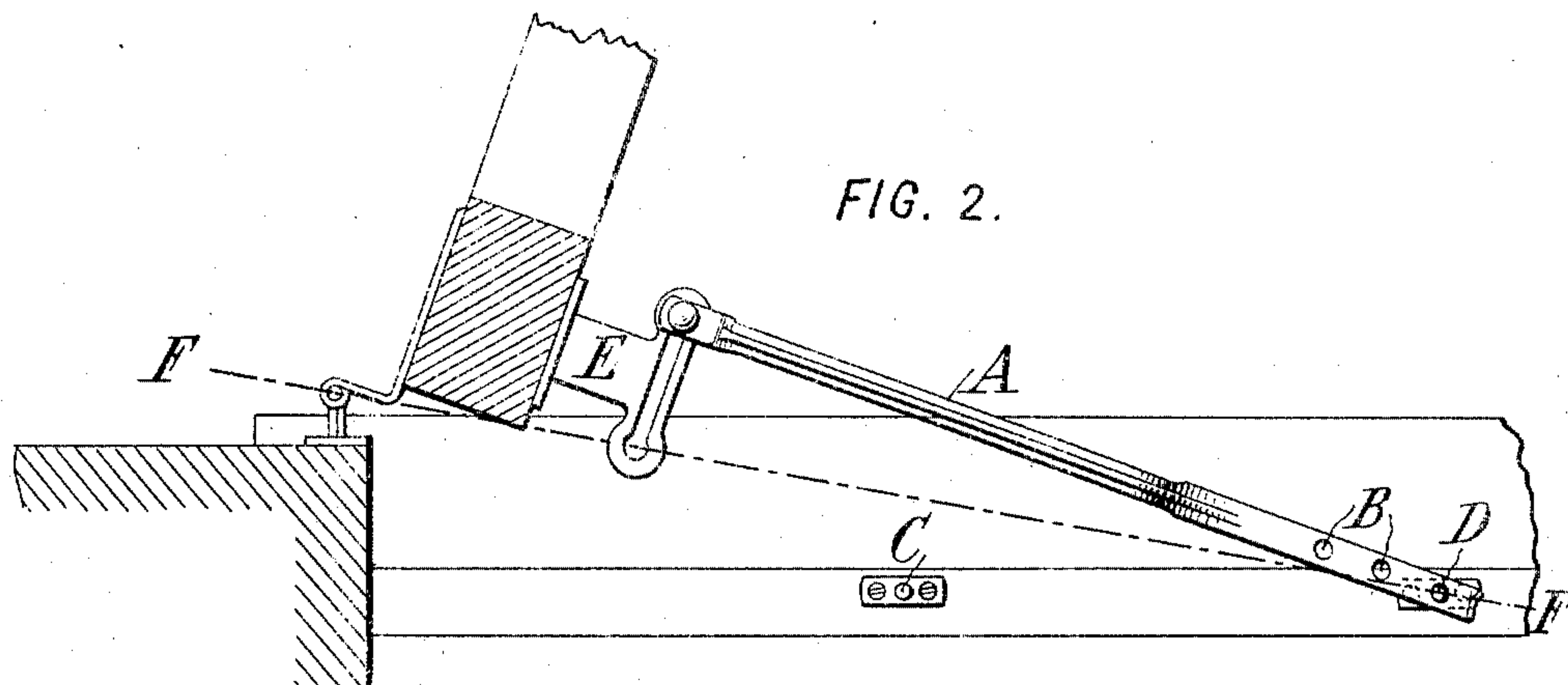
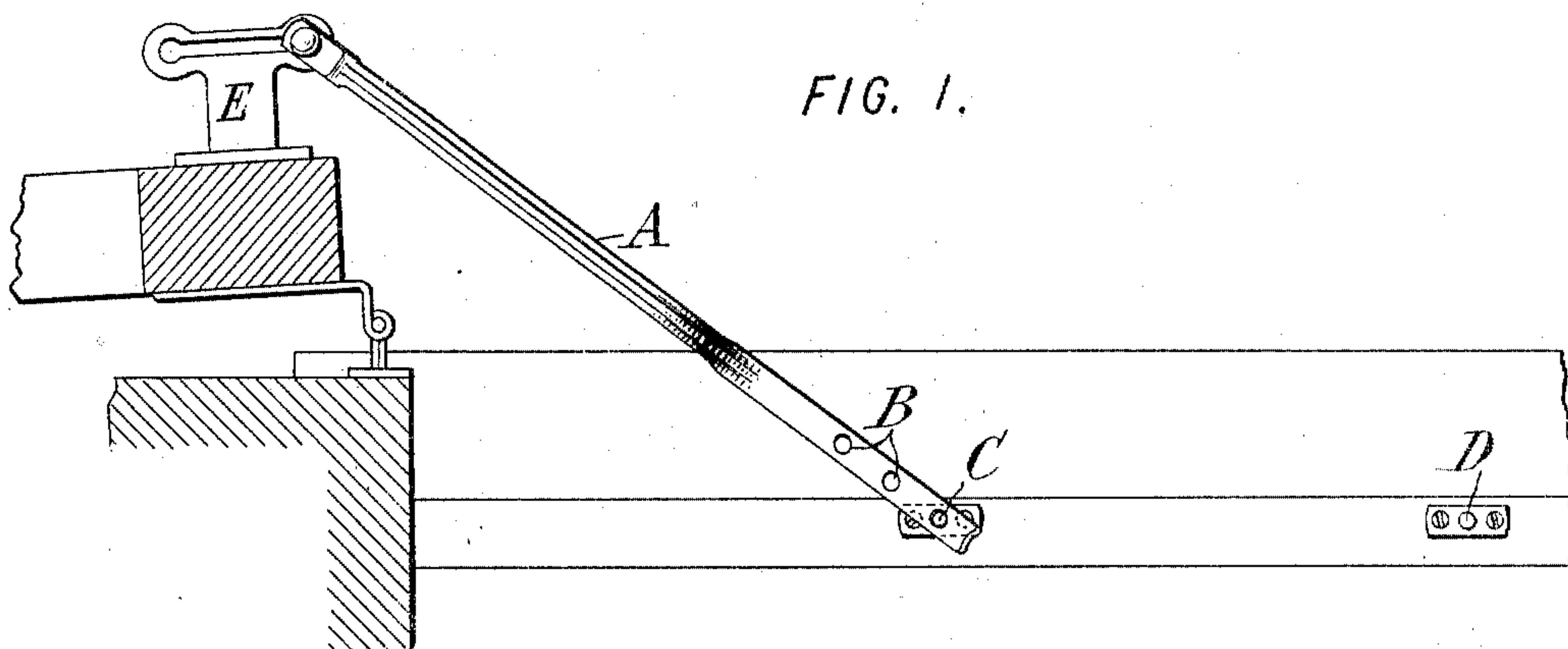
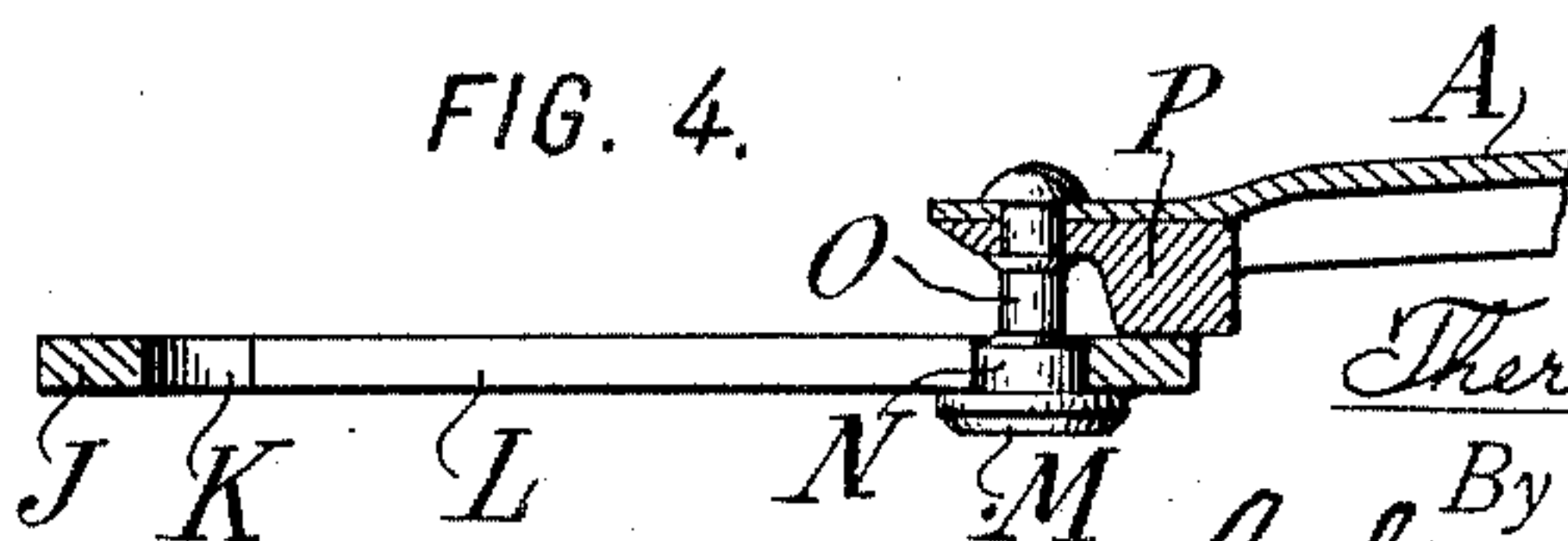


FIG. 4.



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2 SHEETS—SHEET 2.

FIG. 8.

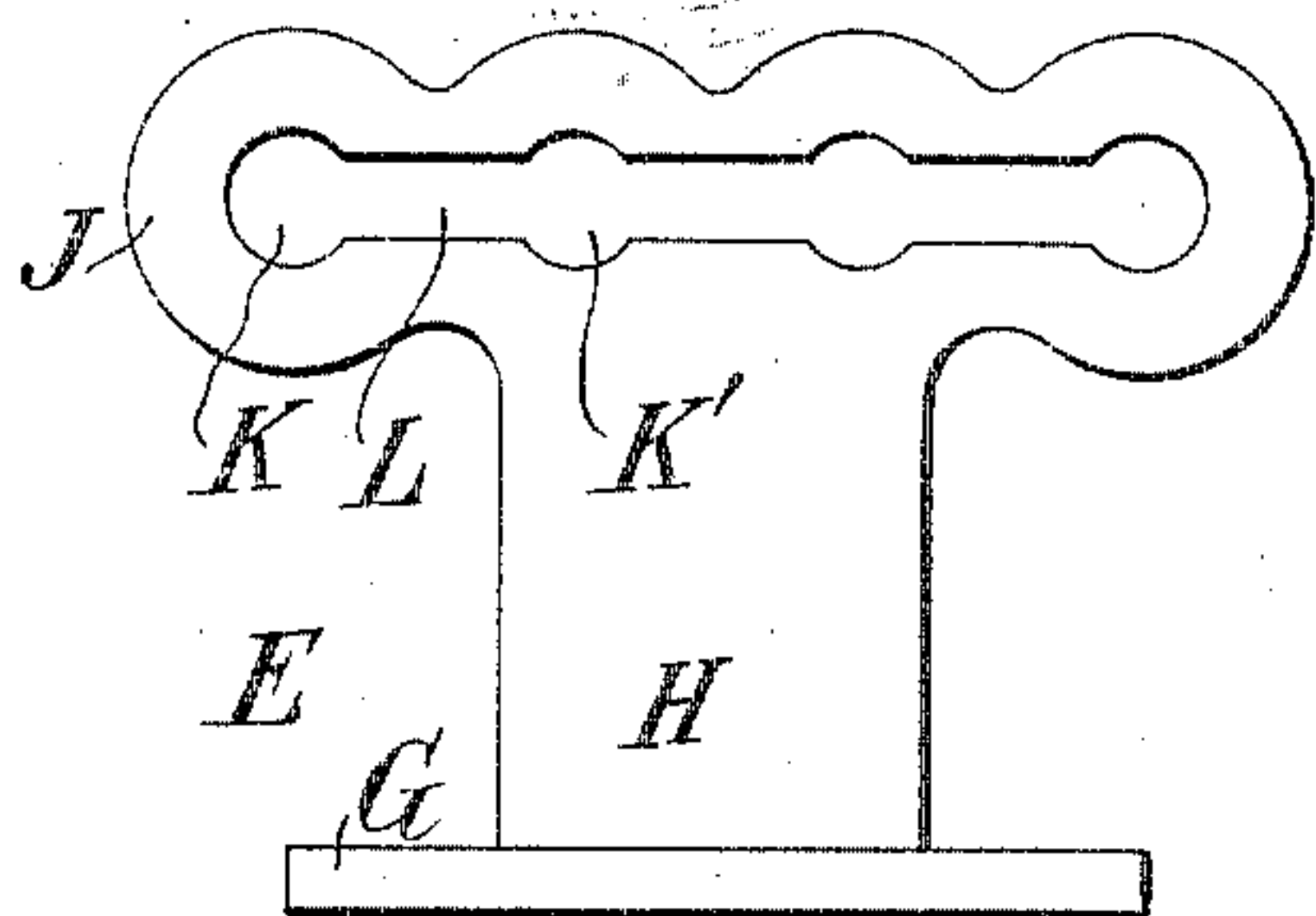


FIG. 7.

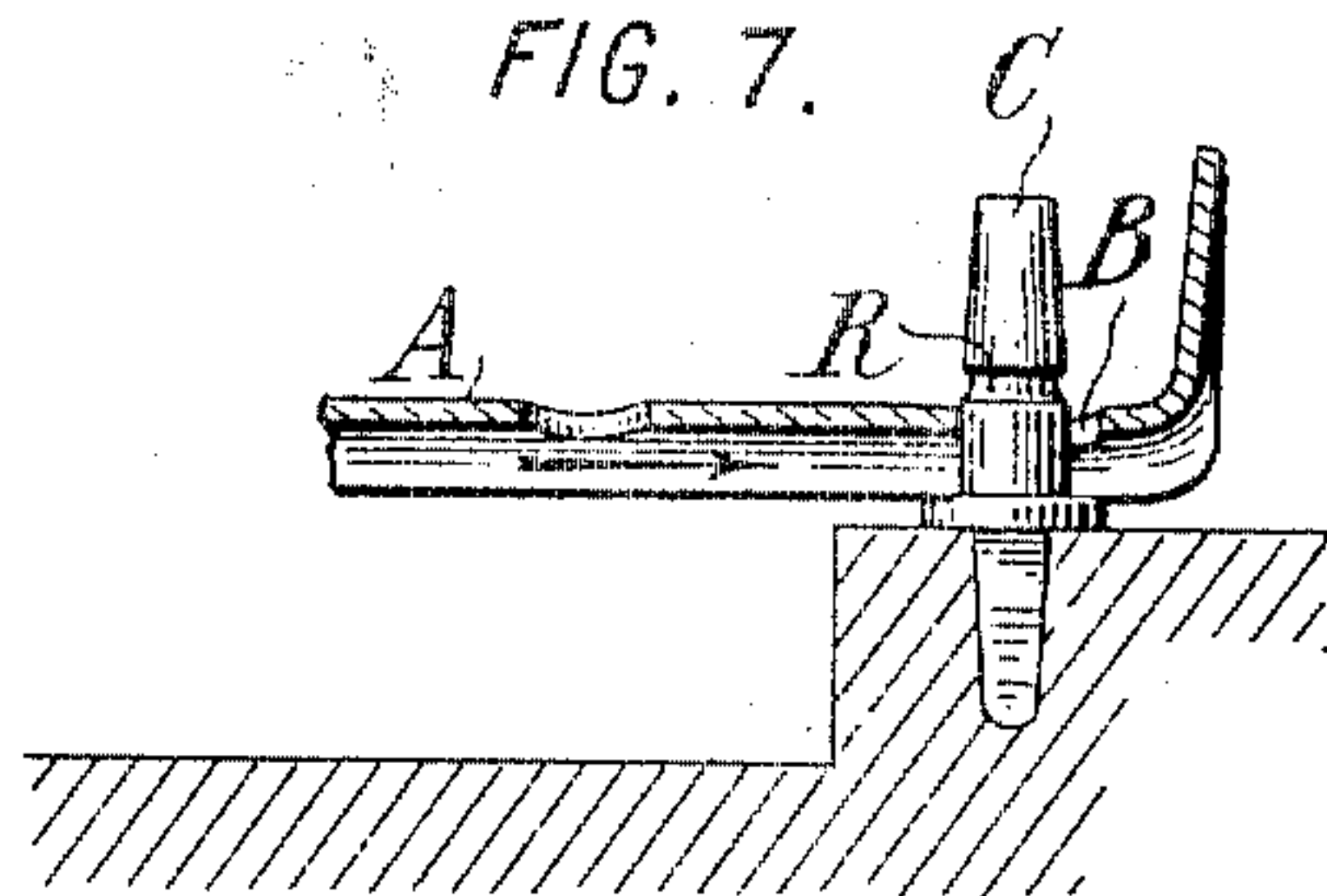


FIG. 9.

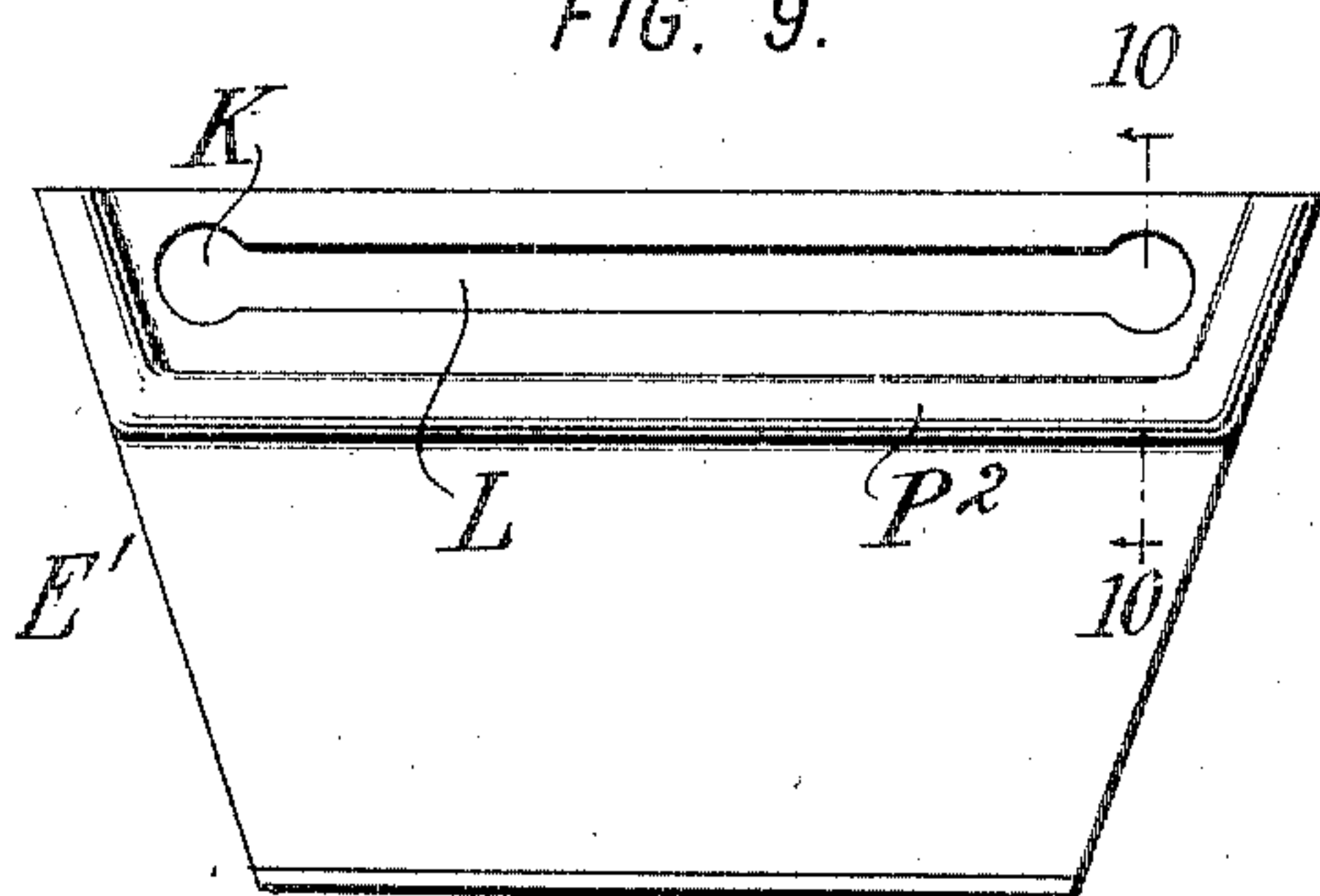


FIG. 6.

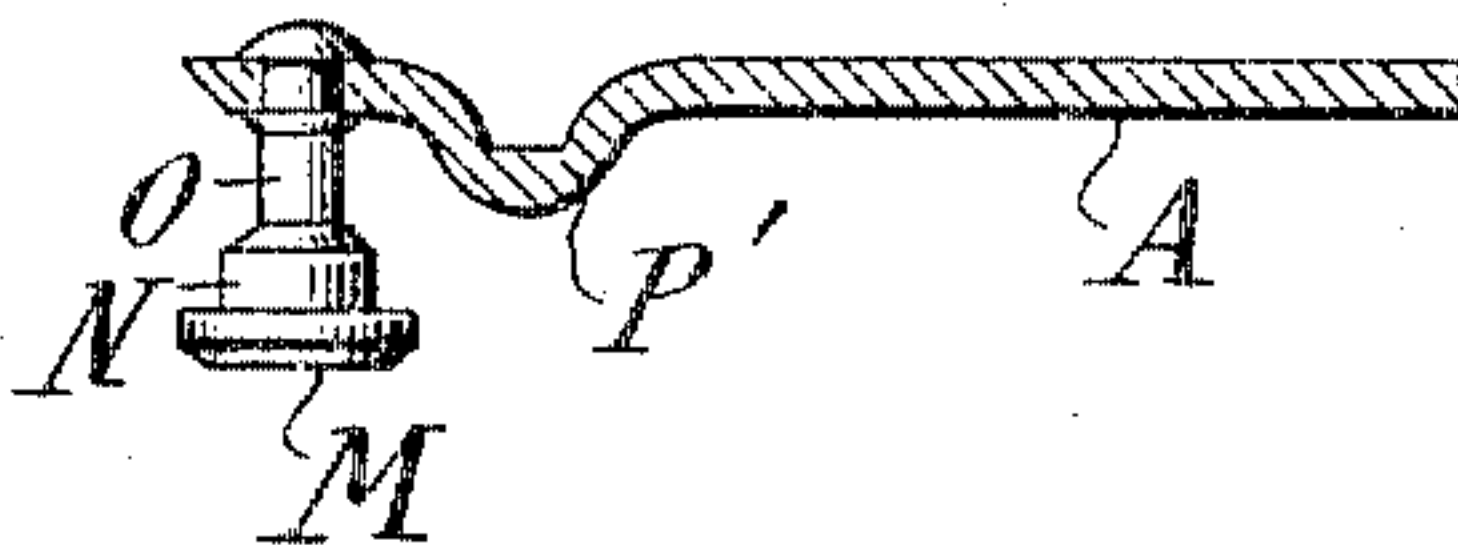


FIG. 10.

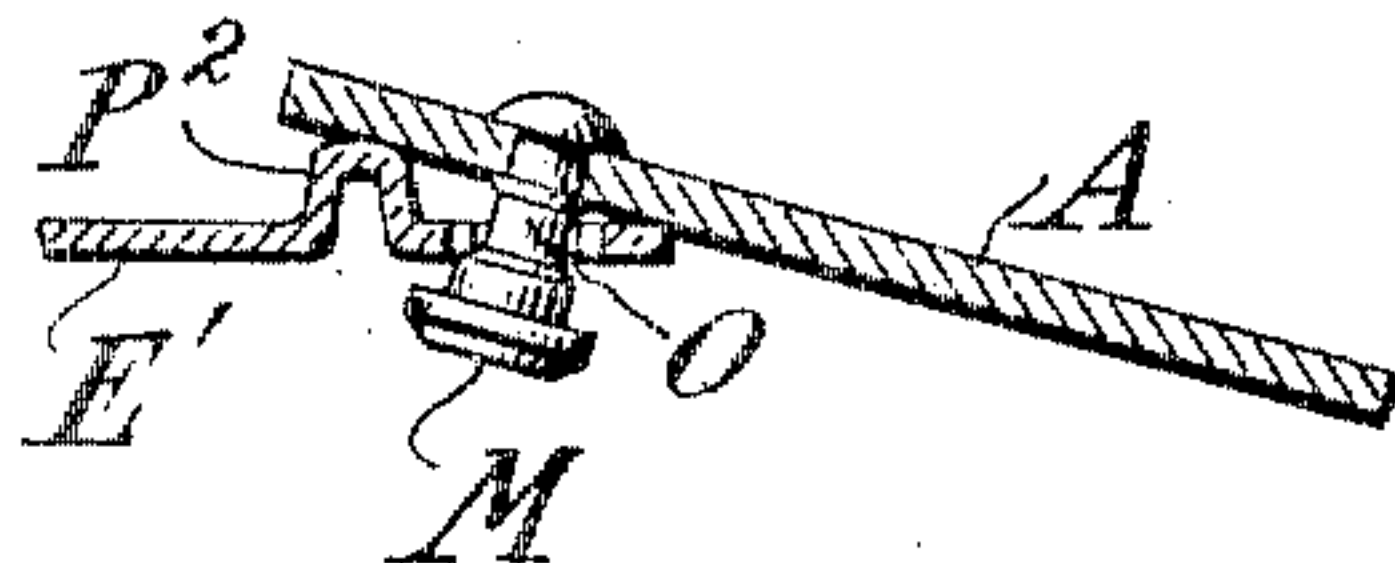


FIG. 11.

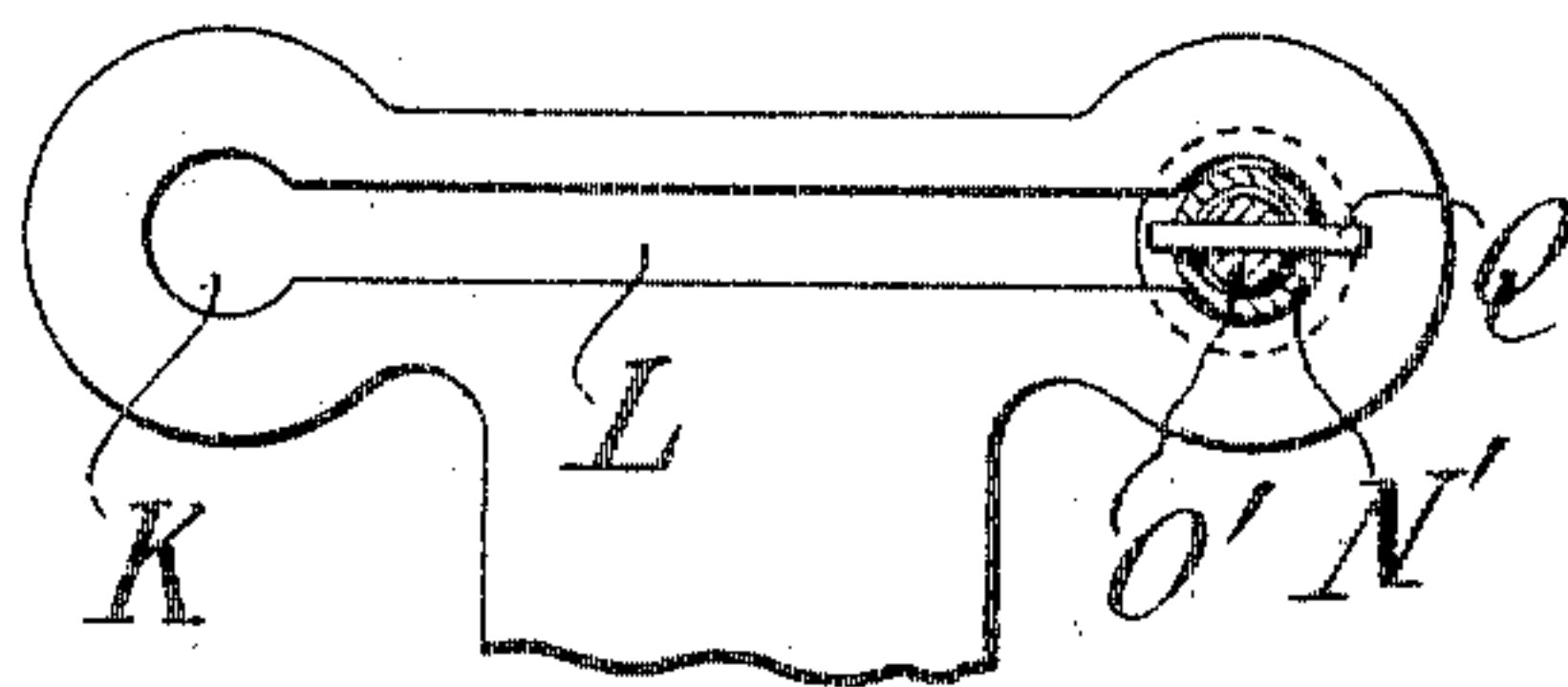
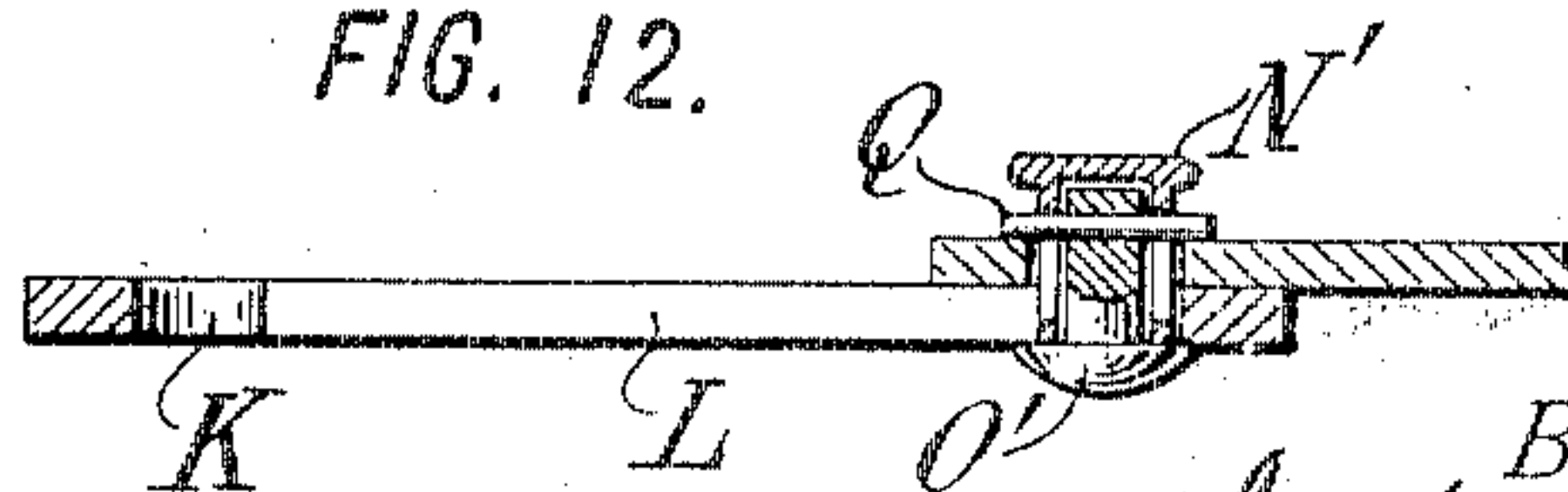


FIG. 12.



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THERON A. UPSON, OF BROOKLYN, NEW YORK.

BLIND-FASTENER.

SPECIFICATION forming part of Letters Patent No. 777,160, dated December 13, 1904.

Application filed August 6, 1904. Serial No. 219,786. (No model.)

To all whom it may concern:

Be it known that I, THERON A. UPSON, a citizen of the United States, residing in the borough of Brooklyn, county of Kings, city and State of New York, have invented certain new and useful Improvements in Blind-Fasteners, of which the following is a specification.

This invention aims to provide certain improvements in blind-fasteners which are especially applicable to the well-known type known as "adjusters," comprising a rod pivoted at one end to the blind and adapted to be attached at its other end to the sill in different positions, so as to hold the blind either closed or wide open or bowed. According to this invention the point of connection of such a rod to the blind is adjustable, so as to permit a variation in the position of the blind for a fixed position of the inner end of the rod, so as to make the device reversible right to left, and thus permit the use of the same device at either side of the window instead of having to make a special fastener for each side, as is now the case, so as to obtain a greater range of movement of the rod relatively to the blind member or bracket, to reduce the possibility of vibration of the blind to a minimum, and to provide various other advantages referred to in detail hereinafter.

The accompanying drawings illustrate embodiments of the invention.

Figure 1 is a horizontal section through a window with the fastener in position for holding it wide open. Fig. 2 is a similar view with the blind in a bowed position. Fig. 3 is a plan of the blind member or bracket. Figs. 4 and 5 are longitudinal sections through the slot thereof, showing the manner of adjusting the point of connection. Fig. 6 illustrates a modified form of the outer end of the rod. Fig. 7 shows in vertical longitudinal section the inner end of the rod in place on the holding-pin on the sill. Fig. 8 is a plan of a modified form of bracket. Figs. 9 and 10 are respectively a plan and cross-section of another style of bracket and rod for effecting the desired adjustment. Figs. 11 and 12 are a plan and longitudinal section, respectively, illustrating still another style of adjustable connection.

Referring now to the embodiment illustrated, the rod A has at its inner end provisions for attachment to one or more fixed points, preferably upon the sill. For example, the inner end may be provided with the usual holes B for fitting upon pins C and D, mounted on the sill, or any other known or suitable equivalent for this style of connection may be used. The blind member is a bracket E, fastened to the blind near its hinged edge, so that when the blind is closed the point of connection with the outer end of the rod A will be between the hinge and the point of connection of the inner end of the rod either at C or at D. The bracket E projects outward from the face of the blind and brings the point of connection with the rod A in such position as to permit the rod to swing past the plane of the blind to hold the latter in the wide-open position of Fig. 1. In case the blind cannot swing entirely backward, because of an angular wall or other obstruction, its position can be adjusted by putting the first, second, or third of the holes B over the pin C. Likewise when the blind is bowed, as in Fig. 2, it can be held in any one of three intermediate positions by dropping the appropriate one of the holes B over the pin D.

According to this invention a greater capability of adjustment is afforded by making adjustable the point of connection of the outer end of the rod. For example, in Figs. 1 and 2 the outer end of the rod may be connected to either one of two points on the bracket E. Thus for each fixed position of the inner end of the rod there are two possible positions of the blind. It is advantageous also to open the blind as far back as possible, so as to prevent the wind coming behind it and rattling it, loosening the hinges and fasteners and causing great annoyance. The point of attachment of the rod is so near the hinge that the movements provided for by the holes B, usually about an inch apart, make a great difference between two consecutive positions of the blind. According to my improvement the adjustment is by much smaller steps. Another advantage of this adjustability of the outer end connection of the rod is seen in the bowed position of Fig. 2. If the connection

of the outer end of the rod remained always at the same point, it would for a bowed position of the blind come substantially in the line F, passing through the hinge and the pin 5 D, to which the inner end of the rod is fastened. Consequently there would be a toggle effect at the outer end of the rod, which would permit a wide swaying of the blind back and forth and would cause a severe strain on the 10 hinges. By shifting the outer end of the rod to the opposite end of the bracket E, as shown, this toggle effect and strain are practically eliminated. At the same time the number of possible bowed positions is multiplied in accordance with the number of positions of adjustment provided for the outer end of the 15 rod.

The bracket E is preferably symmetrical, as shown, and the end of the rod is shiftable 20 from one end of the bracket to the other. Therefore by shifting the point of connection and swinging the bracket around to its proper position it might obviously be attached to the right-hand blind as well as to the left-hand 25 blind shown.

The bracket E comprises, preferably, a flange G, Fig. 3, for attachment to the blind, and a web H, having lateral extensions J at its outer edge and having holes K in said extensions for attachment of the end of the rod. 30 The shape of this bracket provides for a wide swing of the rod without any stop, so that it may swing clear back until it strikes the edge of the blind. At the same time the extensions J give a broad bearing or support which holds the rod up in a horizontal position when its inner end is free—as for example, when it is being manipulated to change the position 35 of the blind.

The connection of the rod with the bracket 40 is preferably a permanent one, so that when the bracket is detached from the blind, as the device is usually sold, the blind member and the rod shall be always connected together, 45 which not only avoids the accidental losing of one of the parts, but makes one less connection for the carpenter to make in putting up the fastener, and at the same time insures that the connection shall be a durable one. This 50 effect is preferably obtained by providing a slot L between the two holes K in the opposite extensions J of the bracket and arranging a pin M on the end of the rod, which has an enlarged portion N, fitting snugly within the holes K, and a smaller portion O, adapted 55 to be slid along the slot L. This construction secures a close fit, there being substantially no play of the enlarged portion N of the pin in the holes K. The pin is preferably 60 riveted to the end of the rod, as shown. The rod is provided with a projection P engaging the face of the lateral projections J of the bracket and by the weight of the rod holding the pin up with its enlarged portion in 65 the hole K. In order to shift the connection

from one hole K to another, it is only necessary to tilt the rod A in the manner shown in Fig. 5, forcing the enlarged portion N of the pin out of the hole K and substituting the 70 smaller portion O, which can then be slid along the slot, as explained.

Instead of providing only two operative points of attachment of the rod with the bracket any number of such points may be provided—as, for example, by forming enlargements or holes K', Fig. 8, at suitable intervals along the slot L. The rod A might 75 then be slid along to any one of the holes K or K' and held there by bringing it down to its normal horizontal position. 80

Numerous constructions may be provided differing in detail for obtaining the desired connection. As illustrated in Fig. 6, for example, the projection P' may be formed by bending down a portion of the rod A. In 85 Fig. 9 a projection P² may be formed on the bracket E', surrounding the holes K and slot L on the ends and on one side, so that the rod A can only be moved from one connection to another by swinging it around until it over- 90 lies the outer edge of the bracket, as in Fig. 10, or the bracket E and the rod A may both be flat and plain, and a composite pin may be provided comprising a smaller central portion O', around which fits an annular portion 95 N', the two being held together by a pin Q and having their heads at opposite ends. The member N' is slotted so that it can be lifted out of the holes K, leaving only the smaller member O', which can then be slid 100 through the slot L, carrying with it the end of the rod, and the larger member N' being again lowered when the next hole K is reached.

Where the ordinary style of rod is used 105 with one or more holes in its end fitting over a pin on the window-sill, I prefer to use the style of pin C indicated in Fig. 7 and which is provided with a circumferential groove R at a point slightly above that at which the 110 rod A ordinarily rests. It is found that in a high wind, especially when the blind is bowed, there is a constant pulling and pushing of the rod, which sometimes causes it to jump up off the pin. The groove R opposes this tendency, 115 being arranged to catch either edge of the hole B which is pressed against it, and thus prevent the rod from rising. For example, in the position shown the rod is pushed inward, so that its outer edge bears hard against 120 the pin, and if the rod should rise such outer edge would be forced into the groove R and held from jumping off the pin.

The member P, Fig. 5, being at the weakest point of the rod A and also at the point 125 where the vertical bending strain comes in use, reinforces the rod, and thus prolongs the life of the device. In previous fasteners having such a rod it is found that failure is most apt to occur at this point, the rod being 130

weakened by the rivet-hole and by the absence of the stiffening-flange which usually extends throughout the remaining portion of the rod.

5 Though I have described with great particularity of detail certain specific apparatus embodying my invention, yet it is not to be understood therefrom that the invention is limited to the specific embodiments disclosed. Various
10 modifications thereof in detail and in the arrangement and combination of the parts may be made by those skilled in the art without departure from the invention.

What I claim is—

15 1. In combination, a blind, a rod pivotally connected thereto at its outer end, and means on the window-sill for detachably engaging the inner end of said rod and holding said rod in its extreme outward position so as to hold
20 said blind wide open, the rod being adjustably connected to the blind to vary the position of the blind for a given position of the inner end of the rod upon the sill.

2. In combination, a blind member, a rod
25 which at its outer end is permanently pivotally connected to said member when the latter is detached from the blind, and means adapted to be fixed in use for detachably engaging and holding the inner end of said rod,
30 said rod being also adjustably connected to the blind member to vary the position of the blind for a given position of the inner end of the rod.

3. In combination, a blind member, a rod
35 connected thereto at its outer end and having a free inner end with a plurality of holes therein, and a pin adapted to be fixed in use and to fit said holes to hold the inner end of the rod in any one of a plurality of positions, said rod
40 being adjustably connected to said blind member to vary the position of the blind for each one of the positions of the inner end of the rod.

4. In combination, a blind, a rod pivotally
45 connected thereto at its outer end, and means for connecting the inner end of the rod to the sill, the point of connection of the outer end of the rod with the blind being between the blind-hinge and the point of connection of the
50 inner end with the sill when the blind is closed, and said point of connection of the outer end of the rod being adjustable.

5. In combination, a blind member or bracket E, and a rod A pivotally connected

at its outer end to said bracket, said bracket 55 comprising a horizontal web H, said rod being pivoted near the outer edge of said web, and said web having an unobstructed face to permit a free swinging of said rod over the web.

6. In combination, a blind member or bracket E, and a rod A pivotally connected thereto, said bracket including a web H and lateral extensions J near its outer edge, and the point of connection of said rod being ad- 65 justable from one to the other of said lateral extensions.

7. In combination, a blind member or bracket, a rod permanently connected to said bracket when the latter is detached from the 70 blind, and means for adjusting the point of connection.

8. In combination, a blind member having therein holes K connected by a slot L, and a rod carrying a pin having an enlarged portion N fitting said holes and a smaller portion O fitting said slot, means for holding said pin with its enlarged portion N in a hole K, and means for replacing the enlarged portion by the smaller portion so as to permit the pas- 80 sage of the pin through the slot from one hole to another.

9. In combination, a blind member or bracket E having therein holes K connected by a slot L, and a rod A having in its end a 85 pin M with an enlarged portion N fitting said holes and a smaller portion O fitting said slot, and said rod having also a projection P serving to lift said pin and hold its enlarged portion N in one of said holes and to permit the 90 lowering of said pin and the replacing of the enlarged portion by the smaller portion.

10. In combination, a blind-fastener rod having a hole, a pin adapted to be fixed in position and to be engaged in said hole to hold 95 the rod, said pin having a circumferential groove R above the normal position of the rod and adapted to engage the hole at either side to prevent the rod being lifted from the pin by a pulling or pushing strain. 100

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

THERON A. UPSON.

Witnesses:

THOMAS F. WALLACE,
THEODORE T. SNELL.