

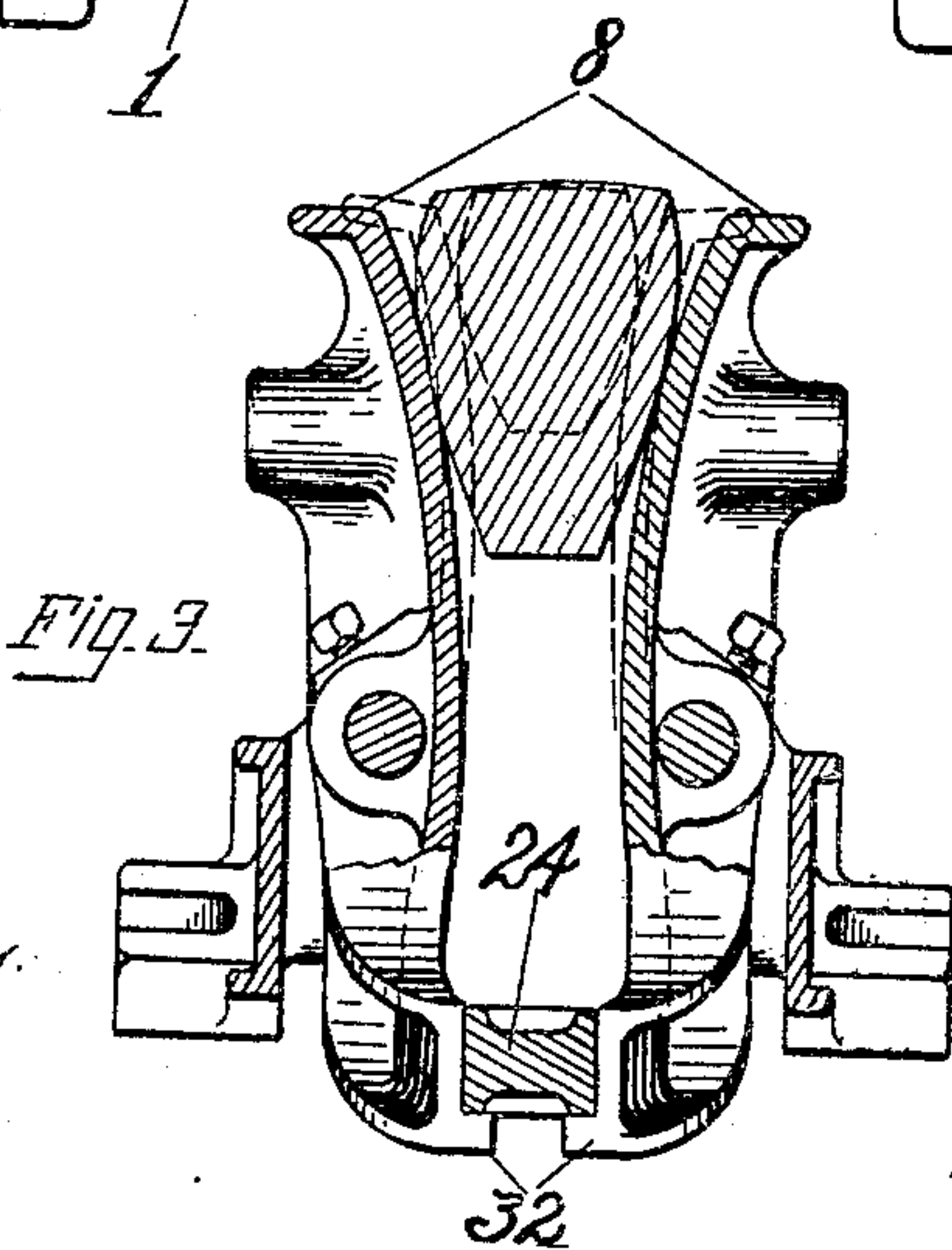
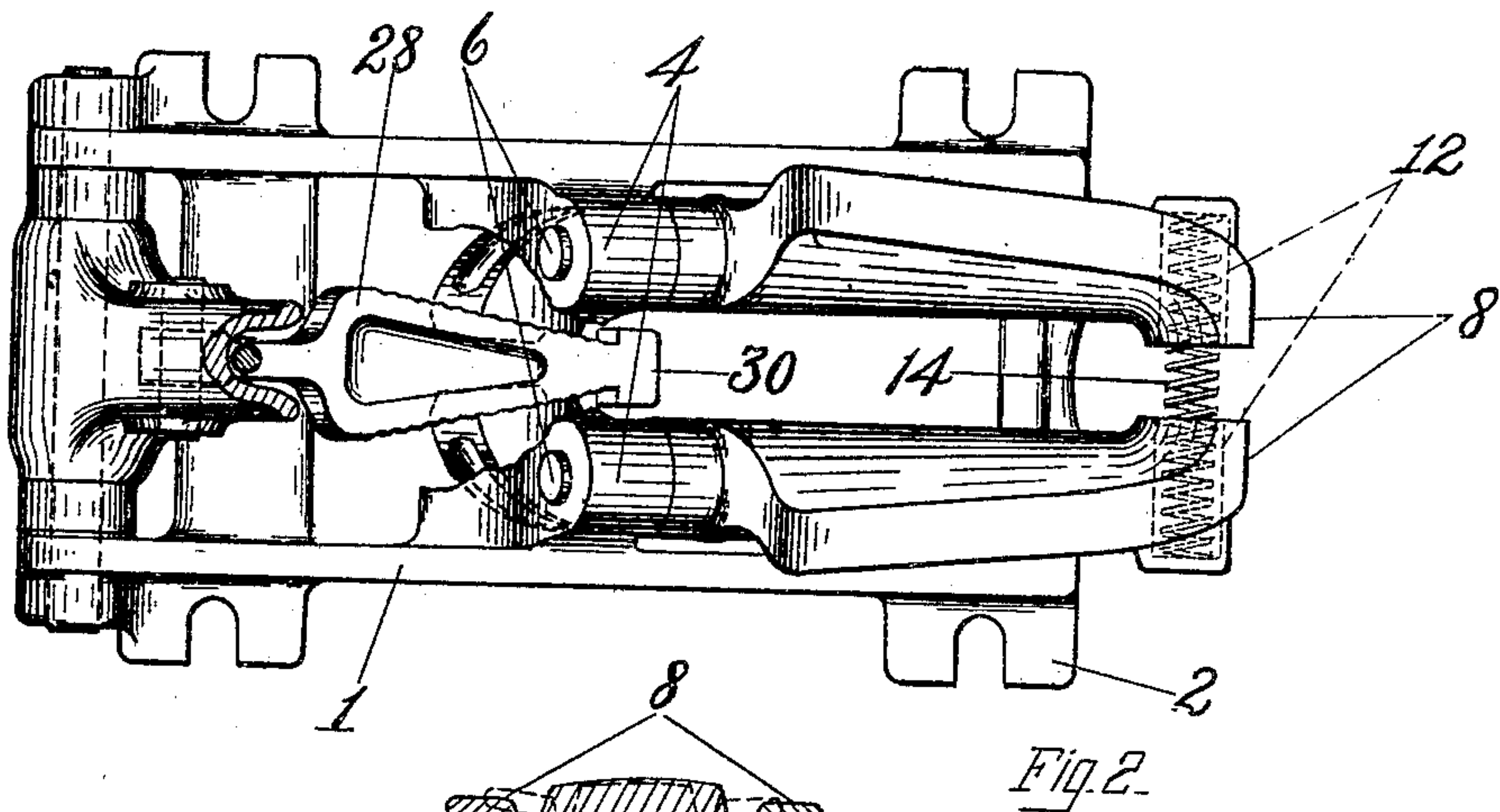
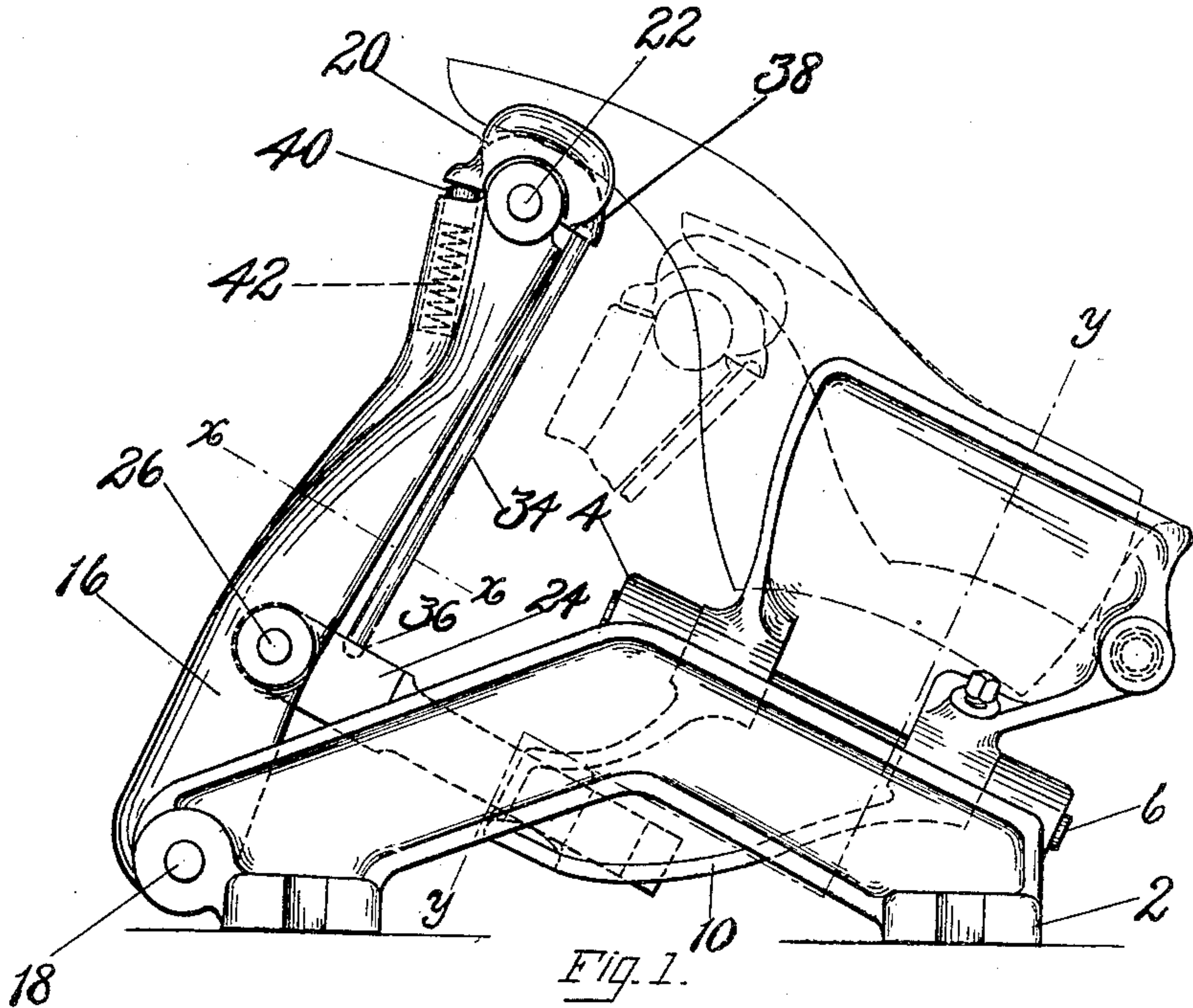
R. F. McFEELY.

WORK SUPPORT.

APPLICATION FILED SEPT. 22, 1906.

929,869.

Patented Aug. 3, 1909.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

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## WORK-SUPPORT.

No. 929,869.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed September 22, 1906. Serial No. 335,830.

*To all whom it may concern:*

Be it known that I, RONALD F. McFEELY, a citizen of the United States, residing at Beverly, in the county of Essex and Commonwealth of Massachusetts, have invented certain Improvements in Work-Supports, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to work supports and more particularly to supports for sustaining boots or shoes.

There is frequent occasion, in the manufacture or repair of boots or shoes, for sustaining a boot or shoe in a position permitting its bottom part to be worked upon. My invention is herein shown embodied in a work support for sustaining a boot or shoe in such a position.

It may be observed that a support embodying my invention is capable of general use and is not restricted to employment in connection with boots or shoes at any particular stage of manufacture. It may be advantageously employed at different points in the manufacture of boots and shoes, as well as at points subsequent thereto, as for example, in their repair.

The present embodiment of the invention includes a supporting means or rest upon which the work may be held by gravity and which is adapted to sustain securely a boot or shoe by engaging its exterior. The rest is adapted to support a boot or shoe with its bottom part in an exposed position permitting said bottom part to be acted upon conveniently, and to this end it is provided with a depression or cavity arranged to receive a boot or shoe and support the same by contact with the exterior of said boot or shoe. The work-receiving cavity shown is shaped to hold effectively the work from displacement while it is being operated upon. Its shape also permits the work to be quickly placed in position therein, as will be hereinafter pointed out.

An important feature of the invention consists in the provision of a rest in which the form of a work-receiving cavity may be changed for different sizes or forms of boots or shoes. According to the structure shown,

the parts forming said cavity are relatively adjustable to enlarge or reduce the space formed between them, and means are provided for holding these parts in the relative position to which they are adjusted.

A desirable feature of the invention consists in the provision of a toe rest arranged apart from the rest cavity and adapted to receive upon it the toe of a boot or shoe the heel part of which is received in said cavity. In the construction shown the toe rest is capable of adjustment toward or from the rest cavity or heel rest, and means are provided for securing said toe rest in operative position. Any change in width of the heel rest is preferably accompanied by a change in the position of the toe rest with relation to said heel rest, the relation of the changes in adjustment of the two rests being suitable to maintain the work support in proper condition to receive a boot or shoe. According to the arrangement shown it is unnecessary to adjust independently the two rests, as the construction is such that adjustments of said rests are made inter-dependently. This feature has among its advantages not only that it tends to insure that the parts of the work support will have a relation proper to sustain the particular boot or shoe to be acted upon, but also that it permits the support to be quickly altered to sustain a different size of boot or shoe.

I prefer to arrange the parts so that when the work is not in position upon the support, the rests may be freely actuated to secure a desired adjustment. When the work is placed in position upon the support, the parts are rigidly held or locked against relative movement.

Other features of the invention will be hereinafter described and pointed out in the claims.

In the drawings which illustrate a work support constituting one embodiment of the invention, Figure 1 is a view in side elevation of said support; Fig. 2 is a view in plan, partly in section, on the line  $x-x$  of Fig. 1; and Fig. 3 is a transverse sectional view on the line  $y-y$  of Fig. 1.

Referring to the drawings, a base 1 serves to support the several parts hereinafter described, and may conveniently be provided with slots 2 to receive bolts for attaching said



base to a suitable support. The base 1 is provided with lugs 4 which are adapted to pivotally support shafts 6. Heel rest members 8 are provided intermediate their ends with lugs bored to receive the shafts 6, and each member is provided with a set screw to hold it in position upon its respective shaft 6. It will be apparent that the shafts 6 serve as trunnions for the member 8 and that the arrangement shown permits the ready assembling or dismemberment of the parts.

The outer or upper ends of the members 8 form between them a cavity for receiving the heel part of a boot or shoe. As shown in Fig. 3 the acting part of this cavity flares upwardly. In practice when the object to be acted upon, for example a boot or shoe or last, is dropped bottom up into this cavity, said object tends to assume an upright position therein, so that but little attention need be paid to positioning the work upon the support. As will appear from Fig. 3 the sides of a boot or shoe lie in contact with flat faces of said cavity and there are no sharp corners in the acting faces of said cavity, which would tend to injure the work. The faces with which the work comes in contact may be padded if desired.

The cavity formed between the members 8 has preferably its upper or acting part tapered longitudinally, as shown in Fig. 2. This causes said cavity to conform more nearly to the shape of the heel part of a boot or shoe, which permits the boot or shoe to bear more evenly on the walls of the cavity. This feature is also advantageous in that it facilitates the positioning of the work and helps to maintain the work against displacement while the operator is acting upon it.

The bearings formed in lugs 4 may be arranged in an inclined position, so that a boot or shoe may be sustained in the rest cavity with its sole inclined longitudinally. I prefer to incline the rest toward its heel end. One of the advantages incident to an inclined arrangement of the rest is that it causes an increased tendency of the work while being acted upon to wedge itself securely in place in the rest cavity.

The members 8 are provided with depending arms 10, having opposed faces adapted to be engaged by means hereinafter described for controlling the extent to which said members 8 are spaced apart in their operative position. The members 8 are provided at the heel end of the cavity with sockets 12 arranged in an opposed relation and adapted to receive a spring 14 tending to hold said members apart.

Upon the end of base 1 opposite to that on which the heel rest members 8 are mounted, an arm 16 is pivoted at 18 to swing about a horizontal axis to or from the heel rest. The arm 16 carries at its upper end a toe rest 20 pivoted at 22 upon the arm 16, and prefer-

ably curved longitudinally and transversely as shown in Fig. 1. A bar 24 is pivoted to the arm 16 at 26 and is provided with an acting wedge shaped part 28 arranged to lie between the opposed faces of arms 10, and hold the arms 10 apart. The sides of the wedge 28 and the portions of arms 10 with which said wedge comes in contact are preferably corrugated. The free end of the bar 24 is provided with an enlargement 30, which serves as a stop to limit outward movement of the bar 24 from between the arms 10. The arms 10 are provided with shoulders 32 upon which the bar 24 is supported as will appear from Fig. 3. The upper faces of these shoulders may be convex as shown in Fig. 1.

A rod 34 rests in a socket 36 on the bar 24 and its upper end fits in a socket 38 in the under side of the rest 20. A pin 40 is held outwardly against the opposite side of the rest 20 by a spring 42, said pin and spring being contained in a socket in the arm 16. It will be seen that as the arm 16 is moved toward or away from the heel rest, the rest 20 will be tilted about its pivot 22. This construction insures that the upper face of the rest will be maintained in proper position to be engaged by the toe of a shoe to whatever position the arm 16 may be adjusted. Figs. 1 and 3 show in dotted lines a position of the parts suitable for a small shoe.

In the preferred mode of use of the work support shown, the toe rest is moved about its pivot 18 to a position suitable for the length of the boot or shoe to be sustained. When the toe rest has been so positioned it will be found that the heel rest is of the proper width to receive the shoe. It will be seen therefore that the necessary adjustment in width of the heel rest is secured in manipulating the toe rest. As the arm 16 carrying the toe rest is moved about its pivot 18, the toe rest is moved about its pivot 22 into a position suitable to engage evenly the toe of the boot or shoe. Before the introduction of the work the arm 16 is maintained in the position to which it may be adjusted by the resistance to movement of the wedge 28 between the opposed faces of arms 10. When the work has been placed within the heel rest it serves to hold the arms 10 in engagement with the corrugated faces of the wedge 28 and thereby rigidly locks the parts from relative movement.

The support herein shown and described is adapted to sustain boots or shoes varying widely in size. It will be seen that a shoe sustained upon the support is supported so that convenient access may be had to its bottom portions to carry out any of the operations commonly performed upon this part of a shoe. Moreover, the shoe is securely held from displacement, accidental change in position of the parts of the support being prevented. Also such adjustment as may



be necessary to accommodate a different size of shoe is quickly and easily performed.

Having described my invention, what I claim as new and desire to secure by Letters

5 Patent of the United States is:—

1. In a device of the class described, the combination with a heel rest formed to receive and support the heel part of a boot or shoe and adjustable in width to receive different sizes of boots or shoes, of a toe rest adjustable toward and from the heel rest, and means controlled in accordance with the position of the toe rest with relation to the heel rest, for controlling the width of said heel rest.

2. In a device of the class described, a heel rest, a toe rest, means for pivotally supporting said toe rest arranged to permit the toe rest to be moved to or from said heel rest to accommodate shoes of different lengths, and means for mechanically adjusting the toe rest in its movement, to maintain an acting face of said toe rest in position to be engaged by the toe part of a boot or shoe.

3. In a device of the class described, the combination with a heel rest comprising two members relatively movable to receive different widths of boots or shoes, of a toe rest adjustable with relation to the heel rest, and a member movable with the toe rest and arranged to limit separating movement of said members and constructed to permit different relative positions to be given said members.

4. In a device of the class described, the combination with a heel rest adapted to receive and support the heel part of a boot or shoe, of a toe rest adjustable with relation to the heel rest and means for locking said rests from relative movement arranged to be rendered effective by the presence of a shoe upon said rests.

5. In a device of the class described, the combination with a base of a heel rest comprising two separate members extending from said base, the outer portions of said members being arranged to receive and support between them the heel part of a boot or shoe, pivots for said members carried by the base and situated at a point removed from their outer ends, a toe rest movably supported on said base and arranged to be adjusted toward or from the heel rest, and means for retaining said toe rest and heel rest members in operative position constructed to insure their simultaneous adjustment.

6. In a device of the class described, the combination with a base, of a heel rest comprising two separate members extending from said base and pivoted intermediate their ends upon said base, the outer portions of said members being arranged to receive and support between them the heel part of a boot or shoe, a toe rest movably supported upon

said base and adjustable toward and from said heel rest, a slide connected to and movable with said toe rest, and arranged between the inner portions of said members to limit separating movement of their outer portions, said slide being provided with an acting part having successive portions of different width to permit different relative positions to be given said members, and means tending to hold said members with their outer portions apart.

7. In a device of the class described, the combination with a heel rest, adapted to receive and support the heel part of a boot or shoe, and adjustable to receive different widths of boots or shoes, of a toe rest adjustable with relation to the heel rest and means for correlating the adjustments of said rests in a predetermined relation.

8. In a device of the class described, a rest comprising parts arranged to be engaged by the side of a boot or shoe and constructed to receive and sustain said boot or shoe between them with its bottom part in an exposed position, means supporting said parts constructed to permit their relative adjustment to vary the effective width of said rest, and means for restraining said parts from separating movement arranged to be maintained in effective position by the presence of a shoe between said parts.

9. In a device of the class described, a rest provided with a work-receiving cavity flaring in transverse section and tapering longitudinally, and means for sustaining said rest in position to incline said cavity longitudinally with its end of less width lowermost.

10. In a device of the class described, a frame, a heel rest carried by said frame, an arm pivoted upon said frame to swing about a horizontal axis toward or from said heel rest to accommodate shoes of different lengths, a toe rest pivotally sustained upon the free end of said arm, and means for automatically tilting said toe rest in the movement of said arm.

11. In a device of the class described, the combination with a rest comprising parts arranged to receive a boot or shoe between them and to support the same against downward pressure, said parts being relatively adjustable to vary the width of the space between them of means for locking said parts from separating movement from a predetermined relative position, said means being rendered ineffective by the removal of the work from the rest.

12. In a device of the class described, the combination with a heel rest adjustable in width to receive different sizes of boots or shoes, and a toe rest adjustable with relation to the rest, of means for controlling adjustment of said rests inter-dependently.

13. In a device of the class described, a rest having a cavity for receiving the heel



part of a boot or shoe, said cavity being flaring in transverse section, tapering longitudinally and arranged in a longitudinally inclined position with its end of less width lowermost, and a toe rest arranged to sustain the toe part of a boot or shoe received in said cavity.

14. In a device of the class described, the combination with a heel rest formed to receive and support the heel part of a boot or shoe and adjustable in width to receive different sizes of boots or shoes, of a toe rest adjustable to fit different sizes of boots or shoes, and means for adjusting the heel rest arranged to be brought into operation by adjustment of the toe rest.

15. In a device of the class described, a frame, a heel rest carried by said frame, an arm pivoted upon said frame to swing about a horizontal axis toward or from said heel rest, a toe rest pivotally sustained upon the free end of said arm, a rod resting upon a movable member supported from said arm and having its upper end engaging the under surface of said toe rest on one side of its pivot, and yielding means acting against said toe rest on the opposite side of its pivot

whereby said toe rest is tilted when said arm is moved.

16. In a device of the class described, a base, a heel rest comprising two members pivoted intermediate their ends to said base, the outer portions of said members being arranged to receive the heel portion of a boot or shoe between them, an arm pivoted to said base, a toe rest pivoted upon the free end of said arm, a slide movably connected to said arm and arranged to adjust the amount of separation of the outer portions of said members, rigid means sustained by said slide and engaging said toe rest upon one side of its pivot, and yielding means acting upon said toe rest on the opposite side of its pivot in opposition to said rigid means, whereby said toe rest is tilted when said arm is moved to adjust the amount of separation of said members.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RONALD F. McFEELY.

Witnesses:

CHARLES E. GRUSH,  
ARTHUR L. RUSSELL.