

No. 682,325.

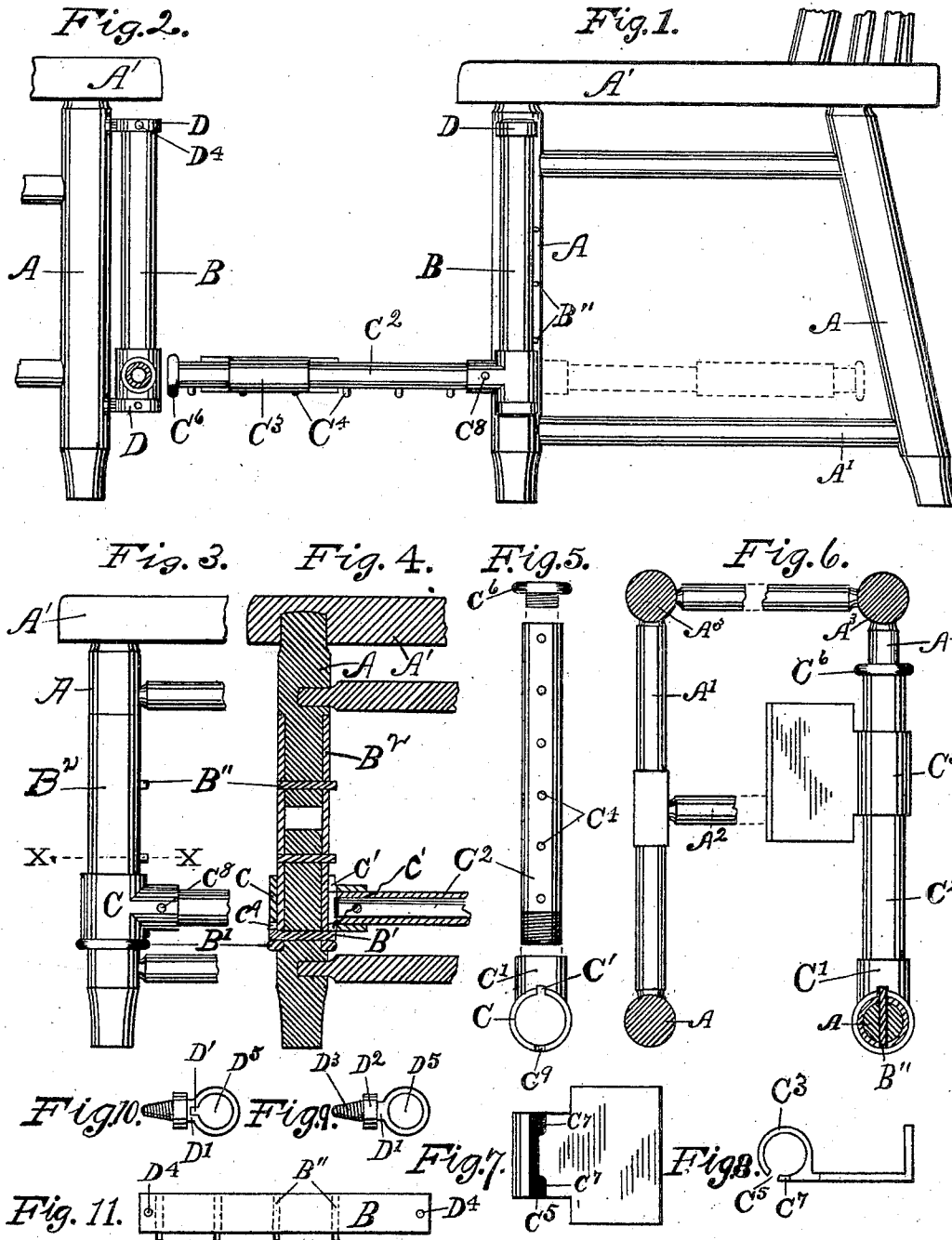
Patented Sept. 10, 1901.

J. C. GARRETT.

FOOT REST.

(Application filed Dec. 22, 1900.)

(No Model.)



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FOOT-REST.

SPECIFICATION forming part of Letters Patent No. 682,325, dated September 10, 1901.

Application filed December 22, 1900. Serial No. 40,743. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. GARRETT, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented a new and useful Improvement in Foot-Rests, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

10 This invention relates to foot-rests.

The principal object of my present invention is to provide a foot-rest by means of which persons engaged in sewing, nursing, or similar occupations will be relieved from the necessity of sitting in a contorted or unsanitary posture by providing a mechanism by means of which the foot-support may be raised or lowered and extended or contracted horizontally to conform to the requirements of the user.

20 Another object is to provide a device of this character which, though the primary object is to construct it in and operate it upon the leg of a chair, may be attached to and operated on an ordinary chair.

25 A further object is to provide a device that may be attached to or constructed on the leg of a chair and adapted to swing to a forwardly-extended position and be retained therein or to a position beneath the seat of the chair removed from obstruction and be retained therein.

30 Other objects and advantages of the invention will appear in the course of the subjoined description.

35 The invention consists of an improvement in foot-rests, embodying certain novel features and details of construction and arrangements of parts, as hereinafter particularly set forth, illustrated in the drawings, and incorporated in the claims hereto appended.

40 In the accompanying drawings the vertical shaft upon which the movable parts of my device are mounted is shown attached to the leg of an ordinary chair; but the primary object of my invention is to incorporate said vertical shaft into the leg of said chair during the time of its construction. As the device is alike constructively and operatively in both cases, except the addition of means for securing said shaft to the leg of an ordinary chair,

the following description is equally applicable in both cases.

Figure 1 is a side elevation of an ordinary chair, back broken away, showing the vertical shaft attached to the front leg, a vertical and rotatable movable horizontal rod mounted on said shaft, and a horizontally-movable foot-plate mounted on said rod. Fig. 2 is a front view of the leg of the chair shown in Fig. 1, having the horizontal projecting rod broken away, disclosing the means of attachment. Fig. 3 is a side view of the front leg of a chair, showing the vertical shaft incorporated into the structure of the leg with movable connection mounted thereon, having the foot-plate and part of its horizontal extension broken away. Fig. 4 is a vertical bisecting cut from front to rear of the leg shown in Fig. 3, disclosing more clearly the mode of construction. Fig. 5 is a view of the lower side of the horizontal projecting rod disconnected. Fig. 6 is a plan view on the line *x x* in Fig. 3, showing the horizontally-extending rod in its inward position with foot-plate mounted thereon and dispensing with the lower front round connecting the front legs of the chair. Fig. 7 is a view of the foot-plate from its lower side to show its mode of operation on the rod, Fig. 6. Fig. 8 is a vertical view of said foot-plate. Fig. 9 is a view of the lower support connecting the shaft to the chair. Fig. 10 is a view of the upper support connecting the upper end of the vertical shaft. Fig. 11 is a view of the vertical shaft upon which the horizontal rod is operated.

Similar letters designate corresponding parts in the various views of the drawings.

The improved foot-rest is constructed entirely of metal, and in its mechanical construction such principles are employed as will contribute to its stability, simplicity of operation, and adaptability of application to any kind of a chair. Its mechanical movements consist of vertical, horizontal, and rotary motions, by means of which the foot-plate may be raised or lowered, extended or contracted horizontally, and rotated in or out of position for use and retained in said positions.

The devices shown in Figs. 9 and 10 shall, for convenience, be designated as "supports."

They are attached to the leg of a chair at a location suitable to retain the vertical shaft B in a position that will permit the horizontal rod C², Fig. 5, to swing forward and back from a forwardly-extended position to a position beneath the seat of the chair, as shown in Fig. 1 of the drawings, or said supports D may be attached in a position suitable to swing the rod C², Fig. 5, from a forwardly-extended position to a position beneath the seat and between the two front legs of the chair. To attach the supports to the leg of the chair, a hole is bored in the leg of the same diameter as the flange D² and of a depth equaling the thickness of said flange. The supports are screwed into the leg A and retained therein by the tapering screws D³, forming the ends of the supports. In the lower support a channel D' is cut vertically and outwardly in the direction of the shank D' for the purpose of permitting the pins B'', projecting from one side of the vertical shaft B, Fig. 11, to pass into the cylindrical perforation D⁵ in the supports, Figs. 9 and 10. When the shaft, Fig. 11, is inserted through the perforations D⁵ in the lower support, the T-fitting C is mounted thereon and the upper end of the shaft is inserted into the cylindrical perforation D⁵ in the upper support and revolved to the required position and fastened therein by means of pins or screws D⁴, passing diametrically through the shaft and the cylindrical perforation in the upper and lower supports.

The above description, it is believed, clearly describes the application of my invention to a previously-constructed chair; but the primary object intended is to incorporate the vertical shaft, Fig. 11, into the leg A of the chair with the T-fitting C mounted thereon during the process of its manufacture, the said shaft constituting a component part thereof. The vertical shaft B² is preferably made of tubing, into the upper and lower ends of which are inserted horizontally-divided portions of the leg A, a vertical bisecting view of which is shown in Fig. 4 and side elevation in Fig. 3. For the purpose of removing obstruction and giving greater range to the vertical movement of the T-fitting C, I prefer to dispense with the lower front round joining the two front legs A of the chair and substitute the one marked A² as a means of attachment, (shown in Fig. 6,) joining the two lower side rounds.

As has hereinbefore been stated, the vertical shaft, Fig. 11, is preferably made of metal tubing and is perforated diametrically and in line at equal and determined distances along its length. Into these perforations suitable pins B' are firmly inserted, their ends projecting beyond its surface to a determined distance on one side, their opposite ends terminating even with said surface. On the lower end of the shaft a narrow flange B' is turned outwardly at right angles around its edge, forming a bearing for the T-fitting C,

Fig. 5, when it is in its lower position. The T-fitting C is constructed to move loosely on the shaft B, and from its inside surface, contacting with the said shaft B, a vertical channel C' is cut outwardly in the direction of the shank C' of said T-fitting, of sufficient dimensions to pass freely over the pins B' when it is moved vertically. Diametrically opposite to the said channel C' on the lower edge of said T-fitting an incision C⁹ is cut out and adapted to fall astride one of the pins B'' when it is revolved to a forwardly-extended position and maintained therein. The pins B'' are located at suitable distances to permit the vertical part of said T-fitting contacting with the shaft B and B² to swing between the pins B''.

The shaft B and B² when placed in position in either an old or a new construction is located and fastened in a position having its projecting pins B'' pointing in a direction that will permit the T-fitting and its horizontally-extending rod C² to be raised or lowered only when it is moved to its inward position, (shown by dotted outlines in Fig. 1,) as in this position the channel C' will be in line vertically with the pins B'' on the shaft B and B², and the lower pin B', as shown in Figs. 3 and 4, will occupy a position in the channel C' of said T-fitting and maintain it in said inward position when it is lowered into contact with support, Fig. 10, or the flange B'.

The horizontally-projecting rod C², being the same in the two modifications, is preferably made of metal tubing and adapted to fit tightly in a predetermined position into the horizontal shank C' of the T-fitting C and fastened therein by the pin or screw C⁸. It is of a length that will permit its outer end to pass the front leg A or rear leg A³ of the chair when it is swung from an outwardly-extended position (shown in Fig. 1) to a position beneath the seat. (Shown in dotted outlines in the same figure and in plan view in Fig. 6.) Along the length of the rod C², at equal and determined distances, it is diametrically perforated in a vertical direction, and pins C⁴ are firmly inserted therein, projecting beyond its surface to a determined distance on its lower side and terminating even with its surface on its upper side. On this rod C² a movable foot-plate, Figs. 7 and 8, is mounted. It consists of a metal plate turned upward at right angles at one side and its opposite side formed with a cylindrical band C³, of suitable size to move freely on said rod C², and, as has been hereinbefore stated, the pins C⁴ are inserted vertically through the rod C². Now assuming the surface of the foot-plate, Fig. 7, to be level, as it is shown in plan view, Fig. 6, on the rod C² a channel C⁵ is cut longitudinally through the cylindrical band C³, contiguous to the pins C⁴ and on the side farthest from the foot-plate of sufficient size to permit the pins C⁴ to pass freely through the said channel C⁵. In the edge of the said channel C⁵ nearest to the foot-plate a curved

recess C⁷ is cut out at each end, of suitable shape to permit the unmutilated part of the edge to enter loosely between two adjoining pins C⁴ and of a depth to serve as a bearing 5 for maintaining the foot-plate in a level position. By the above-described construction the foot-plate can be reversed, so as to extend from the side of the rod C² most desirable to the user. At the outer end of the rod C² a 10 flanged cap C⁶ is provided and adapted to be screwed into the outer end of the rod C² for the purpose of preventing the removal of the foot-plate, Fig. 7, from the rod when it is moved to the extreme outward position. It is obvious 15 now that when the surface of the foot-plate, Fig. 7, is in its normal position on the rod C² it is sustained therein and prevented from moving longitudinally by the aforesaid pins C⁴, but may be moved longitudinally by raising 20 the foot-plate, Fig. 7, until the unmutilated edge of the channel C⁵ contacts with the pins C⁴ and placed in any desired position longitudinally, and that the said rod C² may be moved vertically on the shaft B and B² and 25 swung to a forwardly-extended position at any desired elevation between the pins B' and maintained in said forwardly-extended position by the incision C⁹ falling astride one of the pins B'' and may be removed therefrom 30 by raising the rod C² until the upper edge of the T-fitting contacts with the adjoining pin above and swung to a position beneath the seat of the chair and be maintained therein by the means hereinbefore described.

35 My invention, it is believed, having been sufficiently described,

What I claim as new, and desire Letters Patent for, is—

40 1. In a foot-rest, a vertical shaft and means for connecting the shaft to a chair, a rod projecting from the shaft and vertically adjustable thereon, a foot-plate on the rod and means for adjusting the plate and for retaining it in its adjusted position.

45 2. In a foot-rest, the combination with a chair of a vertical shaft, pins projecting at right angles from one side, a T-fitting mounted on said shaft having a vertical channel

cut out in its concaved surface adapted to pass over said pins, and be restrained from 50 revolving motion when in its lower and inward position on said shaft and to revolve between the pins at various elevations and one or more incisions cut into the lower edge of said T-fitting adapted to fall astride said 55 pins and arrest revolving motion at determined outward positions, substantially as and for the purpose described.

3. In a foot-rest, a chair, a vertical shaft united to the chair, lateral projecting pins 60 alined on one side, a vertically-movable T-fitting mounted on said shaft, a horizontally-extending rod inserted in the shank of said T-fitting and secured therein, alined pins 65 projecting at determined points along one side of said rod, a reversible foot-plate held by the pins, a flanged cap secured to the end of said rod adapted to retain said movable foot-plate on said rod, substantially as and 70 for the purpose described.

4. In a foot-rest, a chair, a vertical shaft applied to the chair, having lateral projecting pins alined on one side, a vertical and rotary moving T-fitting mounted on said shaft, 75 a horizontal rod extending from the shank of said T-fitting provided with alined lateral projecting pins, and removable flanged cap on its outer end, and a horizontally-movable foot-plate mounted on said horizontal rod, provided with a cylindrical band having a 80 channel cut parallel with the line of said projecting pins on said rod, recesses cut in one side of said channel with the unmutilated part of one edge of said channel fitting between the pins maintaining the said foot-plate 85 in a relatively level position on said shaft and preventing horizontal movement and adapted to move horizontally when said foot-plate is raised alining said channel and lateral projecting pins, substantially as and for the purpose described. 90

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Witnesses:

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