No. 844,752. PATENTED FEB. 19, 1907.

J. SALOMON.

CHAIR.

APPLICATION FILED AUG. 14, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

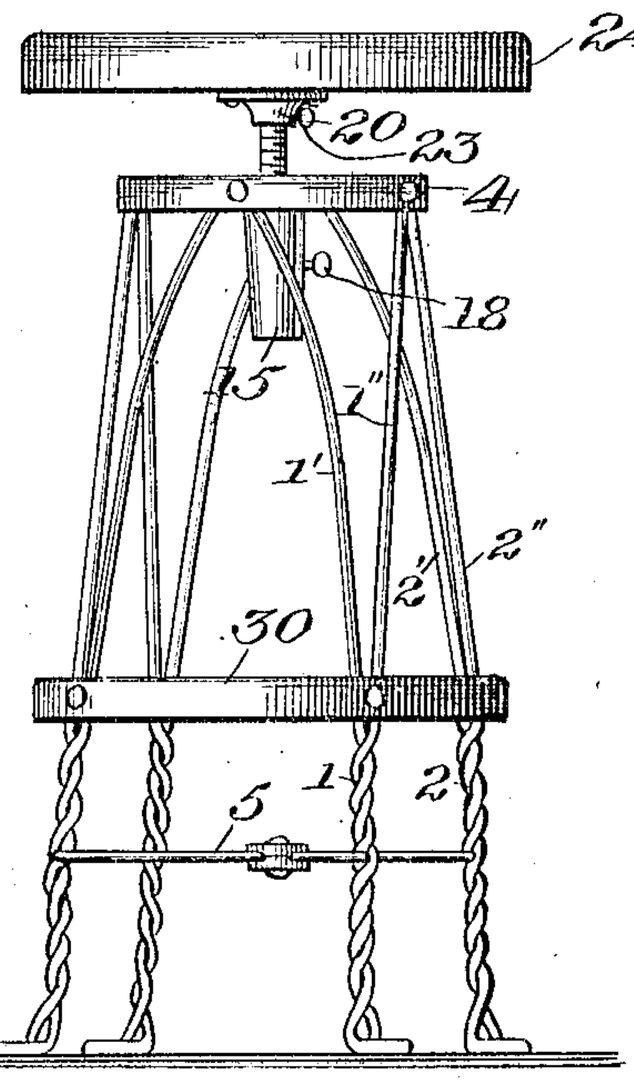


Fig. 3.

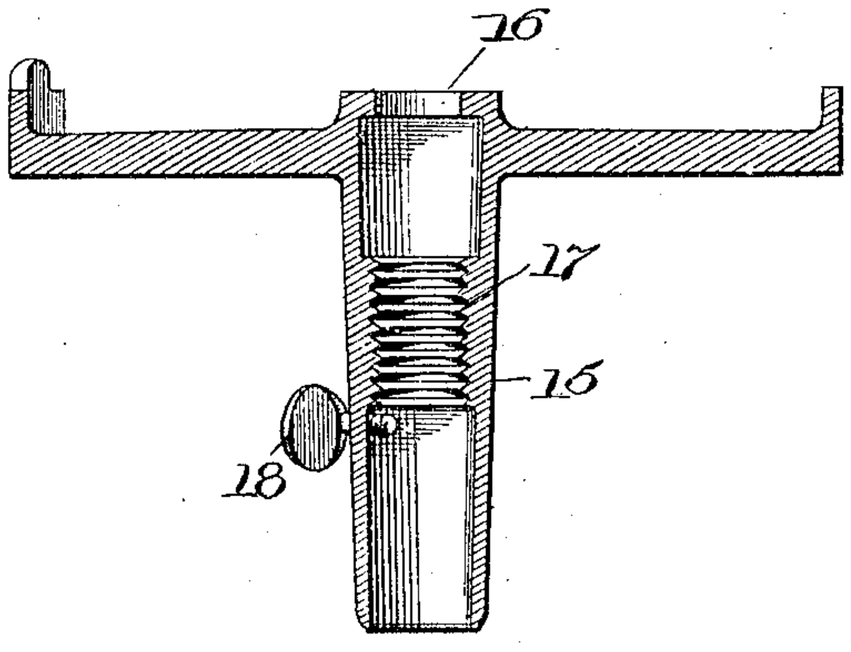
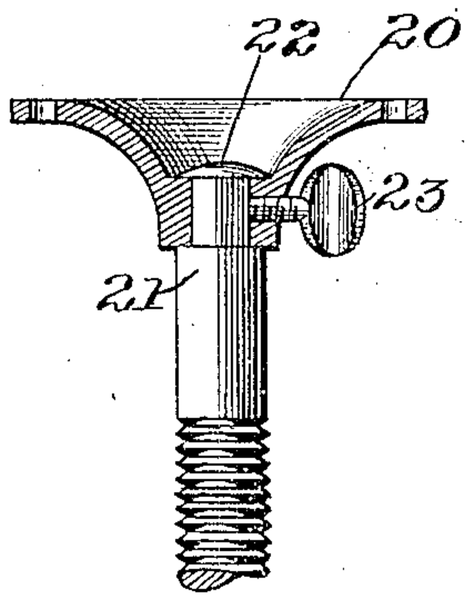


Fig. 4.



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2 SHEETS—SHEET 2.

Fig. 2.

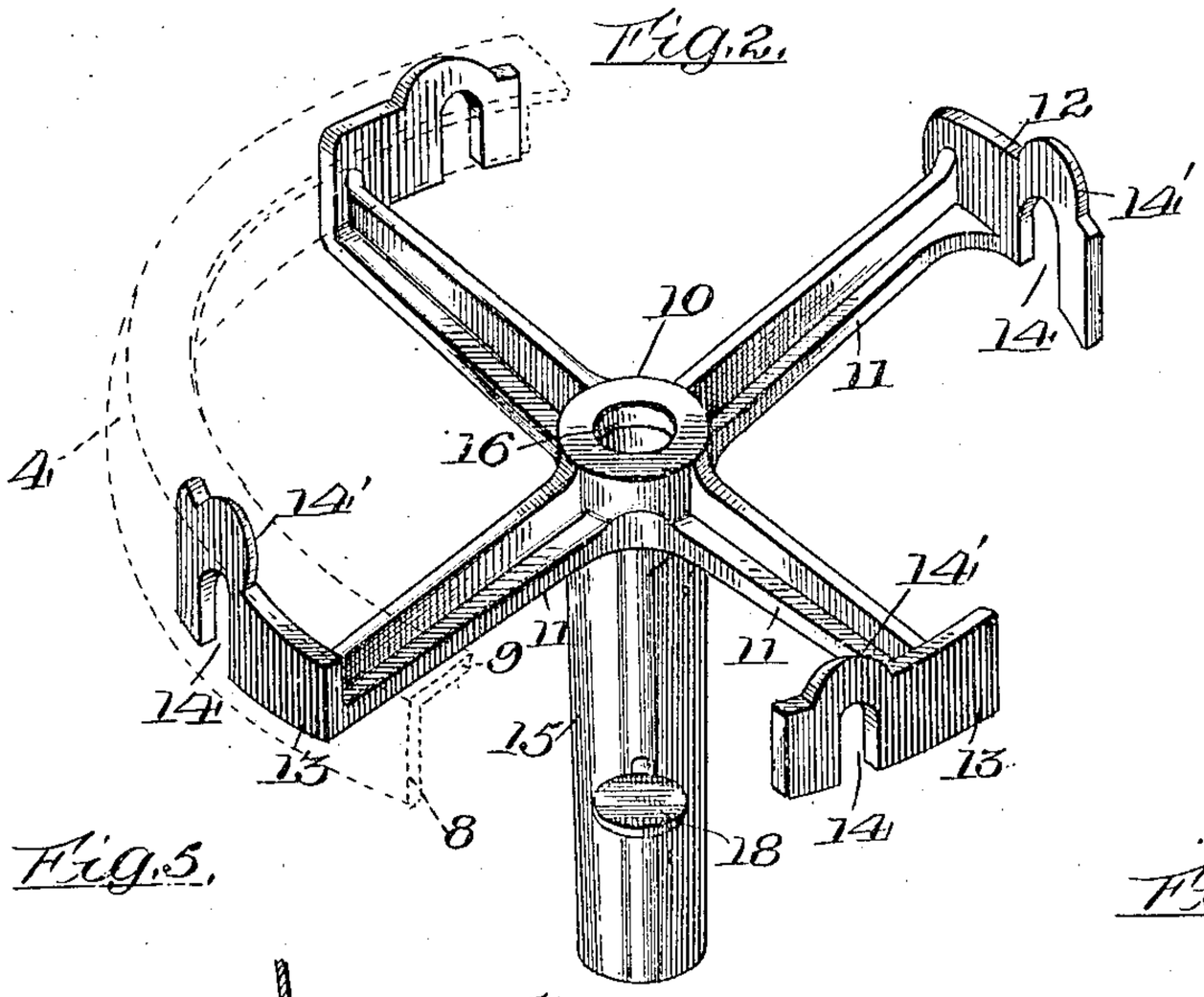


Fig. 5.

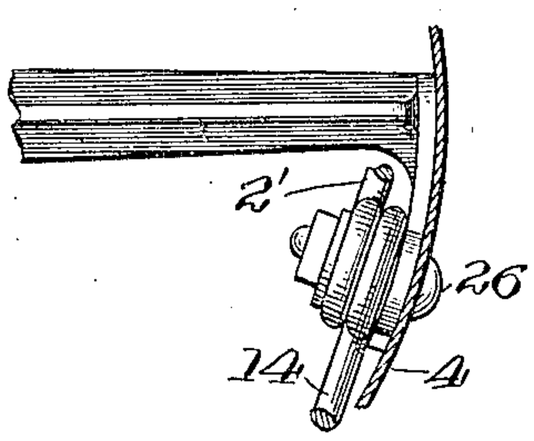


Fig. 7.

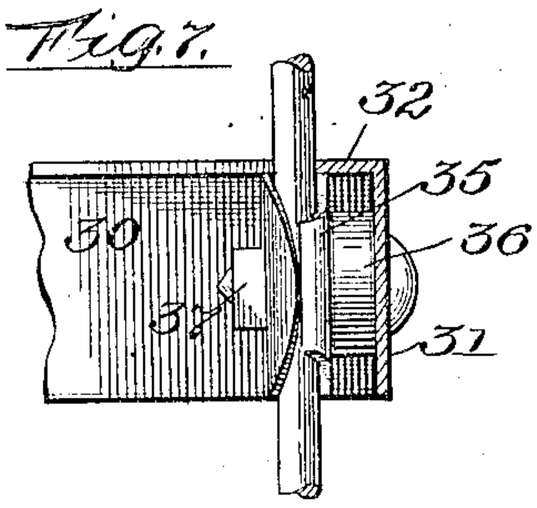


Fig. 6.

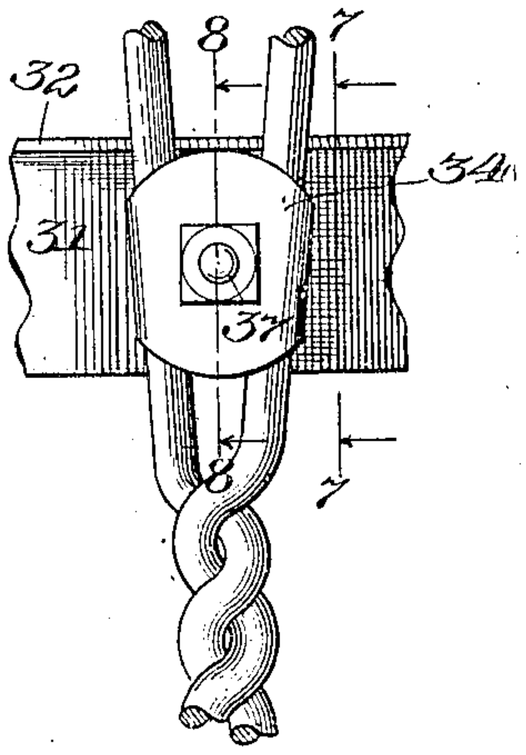
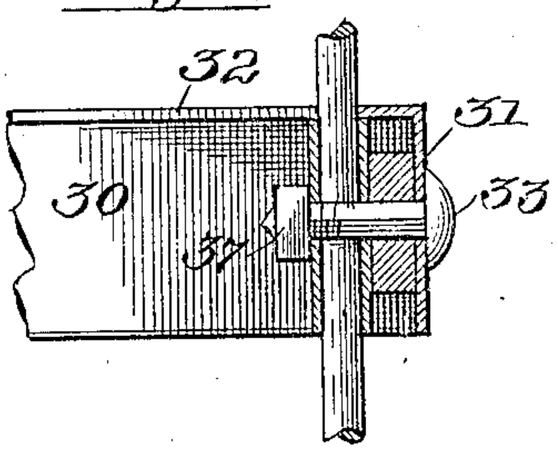


Fig. 8.



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UNITED STATES PATENT OFFICE.

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CHAIR.

No. 844,752. Specification of Letters Patent. Patented Feb. 19, 1907.

Application filed August 14, 1905. Serial No. 274,029.

To all whom it may concern:

Be it known that I, JOSEPH SALOMON, a citizen of the United States of America, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Chairs, of which the following is a specification.

My invention relates to furniture which is made wholly or in large part of metal and the framework of which mainly consists of small rods or wires twisted or otherwise secured together.

The present invention is especially adapted in its application to high chairs used for office and commercial purposes by bookkeepers, type-writers, telegraph and telephone operators, and the like. It provides a strong foot-rest of neat and attractive appearance and of such shape or section as to give a broad and agreeable bearing for the foot of the user. It also greatly strengthens and stiffens the legs of the chair, which when higher than usual may bring an undue strain on the ordinary fastening or bracing. In connection therewith I provide a pivoted seat, which may be readily raised or lowered to bring it into proper and convenient relation to the foot-rest, and means by which when adjusted to the proper height it will remain pivotally attached at that point without disturbing the vertical adjustment. I also introduce certain other novel features and arrangements of parts which are particularly described, and pointed out in the claims.

The principles of my invention are illustrated in the drawings, in which—

Figure 1 shows a side view of a bookkeeper's chair with my said improvements applied thereto. Fig. 2 is a perspective view of a casting forming a part of the seat support and adjustments, together with a portion of the flanged ring to which it is attached. Fig. 3 is a vertical section of said casting. Fig. 4 is a sectional detail of the seat attachment. Fig. 5 illustrates the attachment of legs to the casting shown in Fig. 2 and the attachment thereof to the bearing-ring. Fig. 6 is an enlarged inside view of a portion of the foot-rest of a chair-leg to which it is attached. Fig. 7 is a section of Fig. 6 on the line 7 7. Fig. 8 is a section of Fig. 6 on the line 8 8.

Further describing my invention with reference to the drawings, in which like letters and characters of reference denote like parts throughout, 1 2, &c., are legs formed of twisted rods or wires, the upper parts 1′ and 1″, 2′ and 2″, &c., separating at the upper portions whose extremities, formed into the eyes or loops, are attached to the bearing-ring 4. The said legs may be secured together at the lower portions by a wire spider 5 in the manner shown in my patent on wire chairs, No. 751,419, issued February 2, 1904. The inclosing rim or bearing-ring 4 consists of a vertical portion 8 and a horizontal flange 9. The spider 10, which may be of cast metal, has radial arms 11, which are provided at their extremities with the offset flanges or feet 12. The outer surfaces 13 of said flanges should correspond in curvature to the curvature of the ring 4 and be provided with a downwardly-opening slot 14. The length of the arm measured from the outside face of one flange to the outside face of the flange immediately opposite should correspond to the inside diameter of the inclosing or bearing ring. Centrally of the said arms and dependent therefrom is a tubular portion 15, having an upper external opening 16 and a centrally-threaded portion 17.

A thumb-screw 18 passes through the walls of the dependent tubular member 15. A cap 20 is secured to the bottom of the chair-seat and provides a pivotal bearing for the downward projection 21, which may be so headed at 22 as to be secure in place against removal, but to turn freely, as desired. A thumb-screw 23 may be provided to prevent such movement. The member 21 is screw-threaded for a portion of its length and engages the female screw 17 midway of the tubular projection 15. When it is desired to change the height of the seat, this can be done by rotating the screw 21 by means of the chair-seat 24 in the usual manner. During this operation the screw and seat may be secured positively together by the thumb-screw 23, although I find in practice that there is usually binding friction enough to cause the two to rotate together. When the seat is placed at the proper height, the screw 21 is secured against further rotation by the set-screw 18 and the thumb-screw 23 released if used. The seat is thus pivotally mounted, but secure against vertical movement, as the same may be turned by the movement of the user.

In attaching the bearing-ring to the struc-

ture 10 I use bolts 26, which pass through suitable openings in the ring 4, the arched portion 14 of the flanges 12, and through the eyes which form the upper extremities of the legs, as shown in Fig. 4. The said flanges 12 may be arched at 14′. The upper portion of such arch is adapted to bear against the under side of the horizontal flange 9. When the several parts are adjusted in proper relation to each other and the bolt 26 secured in place, a very solid and substantial fastening is the result.

In a high chair of the character described it is necessary to have some support for the feet of the user, and the foot-rest which I provide is so formed and applied to the chair as to have the further property and function of bracing and greatly strengthening the chair-legs. This foot-rest consists of a metallic band 30, having the vertical portion 31 and the horizontal flange 32. It is made from a band of hoop iron or steel of sufficient width, upon which the horizontal flange is turned after the ends are secured or brazed together. The diameter of said hoop or foot-rest inside the horizontal flanges should be such that when applied to the legs of the chair in the proper position the edges of said flanges will rest snugly against the outer portions of the wire leg. The foot-rest may be applied at any point of the legs desired; but I prefer to have the portions of the structure so related as to make the application at the fork of the wires composing each leg just above the twisted portion. The ring is perforated to correspond to the number of legs at the point applied. Inner and outer flange washers 34 and 35 may be placed upon the wires so that the flanges will face each other. A spacing-block 36 of such thickness as will fill the space between the vertical portion of the foot-rest and the outer washer should be interposed between them. A bolt 33 is passed through the aperture in the ring, the spacing-block, and the flanged washers. As it passes between the leg-wires, to which the washers are applied, they are drawn in close engagement with the wires by the nut 37. A secure attachment of the foot-rest to each leg is thus made, and the wires of each leg are firmly and securely bound together. The ring or foot-rest thus applied makes a brace for the legs of the chair additional to the spider 5 and being usually applied at a different height therefrom greatly strengthens and stiffens the entire structure.

I claim and desire to secure by Letters Patent the following:

1. In a chair, the combination of a metallic ring comprising vertical and horizontal flanges, supporting-legs therefor, a spider comprising a central portion and arms radial therefrom, said arms being adapted to bear on the vertical and horizontal flanges of said ring, and a seat having a downward projection adapted to pivot in the central portion of the spider.

2. In a chair, the combination of a metallic ring comprising vertical and horizontal flanges, supporting-legs therefor, a spider comprising a tubular portion and arms radial therefrom adapted to bear on the vertical and horizontal flanges of said ring, and a seat having a downward projection adapted to pivot in the tubular portions of the spider.

3. In a chair, the combination of a metallic ring, supporting-legs of wire therefor, a spider comprising a central tubular portion, arms radial therefrom, flanges at the ends of said arms adapted to bear on the inside of said ring, means for attaching the flanges to the ring, and a seat having a downward projection adapted to pivot in the tubular portion of the spider.

4. In a chair, the combination of a metallic ring, supporting-legs of wire therefor, a spider comprising a threaded tubular portion, arms radial therefrom, flanges at the ends of said arms adapted to bear on the inside of said ring, means for attaching the flanges to the ring, and a seat having a threaded downward projection adapted to pivot in the tubular portion of the spider.

5. In a chair, the combination of a metallic ring, supporting-legs of wire therefor, a spider comprising a threaded tubular portion, arms radial therefrom, flanges at the ends of said arms adapted to bear on the inside of said ring, means for attaching the flanges to the ring, a seat having a threaded downward projection pivoted thereto and adapted to take the threaded tubular portion of the spider, and means for securing the projection against rotation in the spider.

6. In a chair, the combination of a metallic ring, supporting-legs of wire therefor, a spider comprising a threaded tubular portion, arms radial therefrom, flanges at the ends of said arms adapted to bear on the inside of said ring, means for attaching the flanges to the ring, a seat having a threaded downward projection pivoted thereto adapted to take the threaded tubular projection of the spider, and a thumb-screw in the tubular portion to secure said downward projection against rotation.

7. In combination with a chair, having supporting-legs of wire twisted together; a ring of metal comprising a vertical and a horizontal flange surrounding the legs midway of their length so that the inner edge of said horizontal flange bears on the outer portions of said legs, and means independent of the ring and the legs for securing the same together.

8. In combination with a chair having continuous support-legs of wire; a ring of metal comprising a vertical and a horizontal flange surrounding the legs midway of their length so that the inner edge of said horizontal

flange bears on the outer portions of said legs, and means independent of the ring and the legs for securing the same together.

9. In combination with a chair, having supporting-legs of wire twisted together; a ring of metal with a horizontal flange surrounding the legs midway of their length, clamps to engage the wires of each leg, and bolts to secure the clamp and ring to the said legs.

10. In combination with a chair, having legs of duplex wire; a ring of metal having a horizontal flange to surround the legs, clamps to engage the wires of each leg, and bolts passing between the said wires and engaging the clamps, whereby the ring is secured to the said legs.

11. In combination with a chair, having legs of duplex wire, a horizontally-flanged ring surrounding the legs, clamps embracing the leg-wires, and a bolt to secure the clamping members and the ring to the legs midway of their length.

12. In combination with a chair, having legs of duplex wire, a horizontally-flanged ring surrounding the legs, clamps having downturned edges embracing the leg-wires, and a bolt to secure the clamping members and the ring to the legs midway of their length.

13. In a chair, the combination of wire legs, a flanged foot-rest attached to the legs, a bearing-ring, a spider centrally apertured, a unitary means for securing together the chair-legs the bearing-ring and the arms of the spider, and a seat having a downward projection adapted to pivot in the spider.

14. In combination with a chair having supporting-legs of wire; a ring of metal comprising a vertical and a horizontal flange surrounding the legs midway of their length so that the inner edge of said horizontal flange faces the outer portions of said legs, and means independent of the ring and the legs for securing the same together.

In witness whereof I have hereunto subscribed my name, this 3d day of August, A. D. 1905, in the presence of two subscribing witnesses.

JOSEPH SALOMON.

Witnesses:
C. K. CHAMBERLAIN,
A. S. PHILLIPS.