C. J. TRAVERS.

REVOLVING CHAIR.

APPLICATION FILED DEC. 30, 1914.

1,173,328.

Patented Feb. 29, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

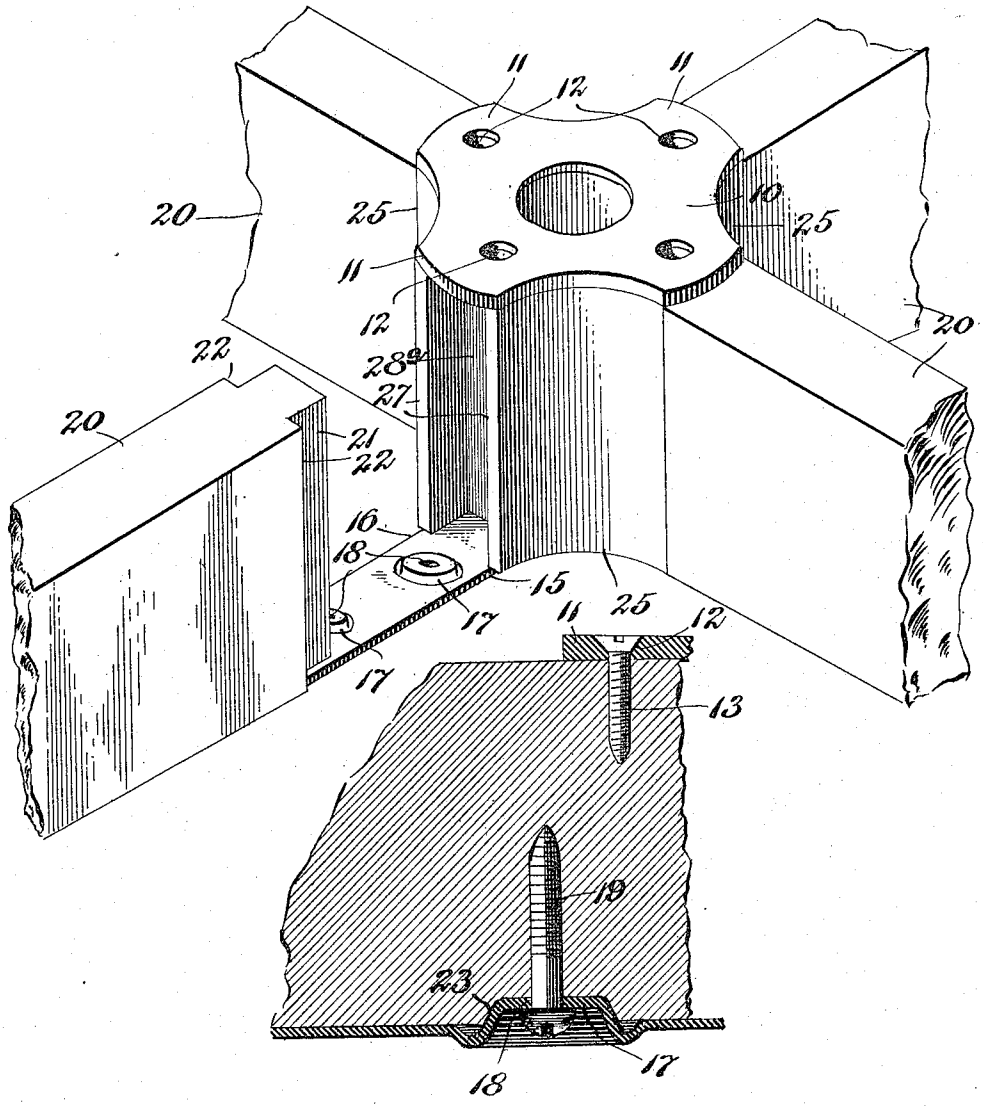


Fig. 2.

WITNESSES:

W. S. Duvall.

E. R. Slater

INVENTOR:

Charles J. Travers,

by W. S. Duvall, Attorney.

THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

C. J. TRAVERS.

REVOLVING CHAIR.

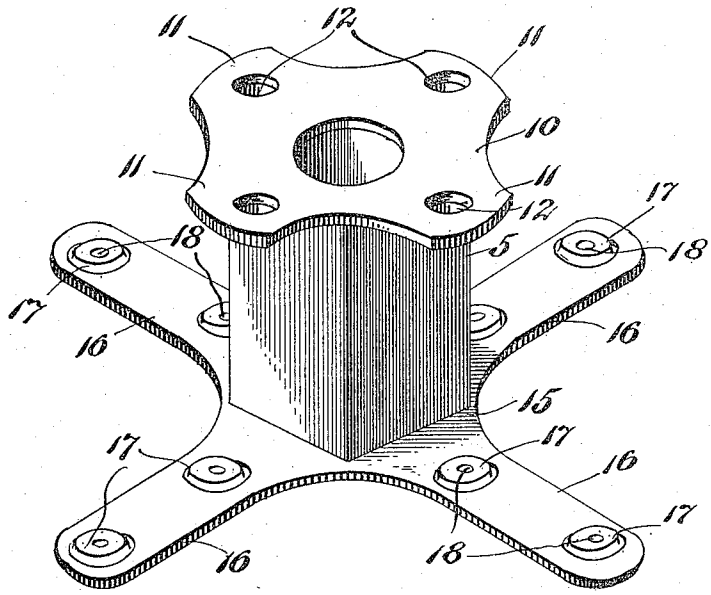
APPLICATION FILED DEC. 30, 1914.

1,173,328.

Patented Feb. 29, 1916.

2 SHEETS—SHEET 2.

Fig. 3.



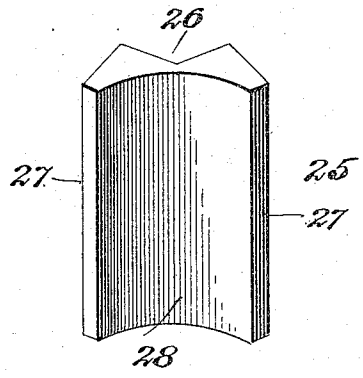


Fig. 4

WITNESSES:

W. T. S. Duvall.

E. R. Slater

INVENTOR:

Charles J. Travers,

by W. D. Duvall, Attorney.

THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES J. TRAVERS, OF OAK PARK, ILLINOIS.

REVOLVING CHAIR.

1,173,328. Specification of Letters Patent. Patented Feb. 29, 1916.

Application filed December 30, 1914. Serial No. 879,668.

To all whom it may concern:

Be it known that I, CHARLES J. TRAVERS, a citizen of the United States, residing at Oak Park, in the county of Cook and State of Illinois, have invented a new and useful Revolving Chair, of which the following is a specification.

My invention relates to improvements in revolving-chairs, and more particularly to the base or support therefor.

The prime objects in view are to produce a base or support for the purpose specified and wherein may be employed a sheet-steel hub and a new and improved means for securing the legs and filler-blocks thereto, whereby the entire base is stable and rigid and of exceptional strength.

With these principal objects in view, the invention may be said to consist in the features of construction hereinafter referred to and more particularly pointed out in the appended claims.

Referring to the drawings: Figure 1 is a perspective view of a revolving-chair base or support embodying my invention, the legs being shown as broken away at their outer ends and one leg partially withdrawn from the hub. Fig. 2 is an enlarged fragmentary longitudinal sectional view of one of the legs illustrating the manner of securing the lower plate of the hub to the underside of the leg. Fig. 3 is a perspective view of the hub in detail. Fig. 4 is a detail in perspective of one of the filler-blocks.

Similar numerals of reference indicate similar parts in all the figures of the drawing.

The hub (see Fig. 3) is preferably made of sheet-steel, although it may be cast, if desired, and the same comprises a central connecting-portion 5, an upper-plate 10, and a lower-plate or spider 15. The central or connecting-portion 5 is formed with a central longitudinal bore, of the usual formation for the purpose of receiving the screw-standard for supporting the chair-seat, the said standard and seat being omitted in the drawings for the reason that the same form no part of my present invention. In the present instance, the central or connecting-portion is preferably rectangular in cross-section, although it may be given any other external shape desired. The upper-plate is of the usual conventional design, being provided with short radial projections 11, for the purpose of overlapping the upper sides of the chair-legs, and perforated, as at 12, to receive ordinary wood-screws for entering the upper sides of said legs. The lower-plate or spider 15, is provided with radiating extensions 16, corresponding with the number of legs for supporting the base, the said extensions being located coincident with the projections or extensions 11 of the upper-plate though considerably longer than the same, whereby the legs of the chair are supported much farther on their undersides than in the ordinary chair-base of this character. Each of the said radiating extensions 16 of the lower-plate 15, is provided with some suitable form of upwardly disposed shallow projection for engaging with the underside of the superimposed leg 20. In the present instance, and preferably at intervals, the metal composing the extensions 16 is punched from the underside upwardly to form shallow bosses 17, the latter taking into and snugly fitting corresponding cavities 23, formed in the undersides of the legs. Of course, in lieu of the bosses shown, other forms of engaging-devices may be used, the invention not being limited in this respect. Screws 19, may be inserted from the undersides of the extensions 16 into the legs, and such screws may be located at any suitable points, but preferably through the bosses 17, for which purpose they are provided with screw-receiving holes 18. In addition, screws 13 are located in the screw-holes 12 of the extensions 11 of the upper-plate, whereby, as will be obvious, each leg is clamped between the upper and lower-plates. The bosses, or their equivalents, it will be observed, supplement the screws in resisting any longitudinal withdrawal of the leg from between the plates as well as vertical and lateral vibrations, so that the legs are capable of withstanding undue strains in all directions and cannot possibly work loose under even extraordinarily hard usage.

The legs may be inclined downwardly at their inner ends when in the act of inserting the same between the plates of the hub, and after entering the upper inner corners of the legs under the upper plate, said legs may be lowered at their outer ends and upon being brought to more nearly approaching a rightangled position with relation to the hub, pushed inward so that their square abutting-faces will rest and abut against the corresponding faces of the hub, at which moment the legs may be completely lowered

so as to be at a complete rightangle with the hub. When this is done, the shallow bosses 17, heretofore referred to, enter the corresponding cavities 23 in the undersides of the legs, and as will be apparent, such bosses will offer an obstruction to a lateral or direct withdrawal of the legs from the hub. At their inner ends each leg is provided with a reduced vertically disposed tenon 21 and at opposite sides thereof with corresponding vertical shoulders 22, the end of the tenon abutting against the intermediate connecting-portion of the hub 5. Between the legs are located filler-blocks 25, the outer sides of which may be curved, as at 28, or given any other external configuration, and the inner sides of which are in the present instance, in order to conform to the angular formation of the intermediate connecting-portion 5 of the hub, formed with angular recesses 26. These blocks when in position completely fill the spaces between the legs and combine to form vertical recesses 28ª, into which the reduced or tenoned ends 21 of the legs snugly fit. At each of its vertical outer edges, each filler-block is provided with a shoulder 27, corresponding to and abutting against the shoulders 22 of the legs, so that when the legs are in position they will serve to retain and lock the filler-blocks against displacement, and the filler-blocks will aid in preventing lateral movements of the legs. It will be observed that when the legs and filler-blocks are in position, on account of their proportions with relation to the intermediate connecting-portion of the hub, the latter will be completely inclosed, so that although composed of metal and consequently of very great strength, yet it has the finished appearance as if formed of wood.

From the foregoing description in connection with the accompanying drawings, it will be observed that I have provided a chair-base of very great durability and strength, the several parts all combining and interlocking so as to give the greatest resistance to weight and strains thrown thereon, no matter in which direction. Heretofore, where the ordinary wood-screws were depended upon to secure the legs to the hub or iron, the constant strain to which the chair-base is subjected soon served to work them loose, with the inevitable consequence of a tendency to spread, the latter tendency increasing in proportion to the looseness mentioned. In my structure, however, the screws serve but little more than a mere aid in preventing longitudinal withdrawal of the legs from their positions, and, as a matter of fact, the screws perform such a slight function that it would be possible, if desired, to omit them entirely and yet produce with the remainder of the structure a very stable base. In practice, however, it is my intention to employ the screws shown, as otherwise, it might require that the bosses 17 or other forms of wood engaging projections would have to be made deeper.

It will be obvious that the invention is applicable to tables or other articles wherein a strong, rigid base is desirable; hence, the invention is not to be understood to be limited to the application herein described.

Having described my invention, what I claim, is:

1. In a base for revolving chairs, the combination with a metal hub having top and bottom plates permanently connected thereto, the latter plate having radiating extensions projecting beyond the upper plate sufficiently to permit of the endwise insertion therebetween of the inner ends of the chair-legs when the same are slightly inclined, and provided with upwardly disposed shallow perforated bosses, of legs arranged between the plates and upon the extensions and capable of being tilted and withdrawn endwise from the same as well as entered therebetween, said legs having shallow recesses on their undersides to receive the said perforated bosses, and screws passed upwardly through the perforations in the bosses and into the undersides of the legs.

2. In a chair-base for revolving-chairs, the combination with a metal hub, provided with top and bottom-plates, of legs reduced to form tenons at their inner ends and abutting against the hub, said reduced ends, at each side of their tenons, forming vertical shoulders, means for securing the legs between the plates, and filler-blocks interposed between the tenons of the legs and having shoulders at their outer vertical side-edges engaged by the shoulders formed by the tenons, whereby said filler-blocks are locked against withdrawal from the hub.

3. In a chair-base for revolving-chairs, the combination with a metal hub having integral top and bottom-plates, of legs having their inner ends reduced to form tenons abutting at their ends against the hub, such reductions also forming opposite shoulders, means for securing the legs between the plates, and intermediate filler-blocks fitted around the hub between the plates and the legs and at their opposite vertical edges interlocked or overlapped by the shoulders of the tenons of the legs.

4. In a chair-base for revolving-chairs, the combination with a metal hub, having top and bottom-plates, said hub being angular in cross-section to form flat abutting-surfaces, and the plates having perforated extensions alining with each other and located between the angles and in line with the abutting-surfaces of the hub, of legs fitting between the plates and their extensions and having their inner ends squared to abut against the abutting-surfaces of the hub and reduced to form

tenons and rear contiguous vertical shoulders, screws passed through the extensions of the plates into the legs, and filler-blocks interposed between the legs and plates and having their inner faces provided with angular recesses to fit the angles of the hub and their outer side vertical edges forming shoulders and engaged by the shoulders of the tenons, whereby the filler-blocks are locked in position.

5. In a chair-base for revolving-chairs, the combination with a metal hub, angular in cross-section and having integral upper and lower-plates provided with perforated extensions, the lower extension having upwardly disposed shallow bosses in which said perforations are formed, of legs located between the extensions and provided on their undersides with shallow annular cavities fitting and receiving the said bosses and locking the legs against lateral withdrawal, the front or inner ends of the legs being reduced to form tenons and opposite vertical contiguous shoulders, screws passed through the perforations into the legs, and filler-blocks recessed on their inner sides to conform to and substantially fit the angles of the hub, said blocks having opposite side-shoulders engaged by the shoulders of the tenons.

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

CHARLES J. TRAVERS.

Witnesses:
J. W. B. VAN HOUTEN,
E. A. KRAUSE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."