H. W. BOLENS.

CHAIR BASE HUB.

APPLICATION FILED MAY 13, 1915.

1,182,889. Patented May 16, 1916.

Fig. 1.

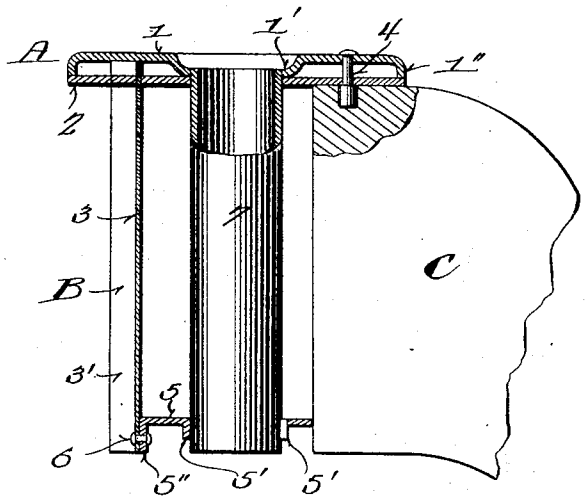
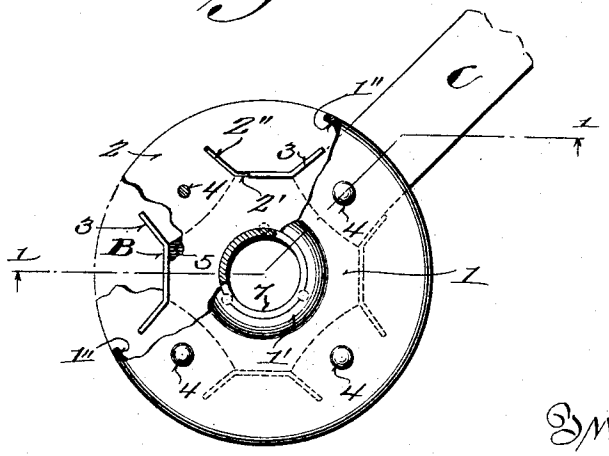


Fig. 2.



Witness:
Samuel Young

Inventor:
Harry W. Bolens
by Whitehead & Young
Attorneys.

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

UNITED STATES PATENT OFFICE.

HARRY W. BOLENS, OF PORT WASHINGTON, WISCONSIN, ASSIGNOR TO GILSON MANUFACTURING COMPANY, OF PORT WASHINGTON, WISCONSIN.

CHAIR-BASE HUB.

1,182,889. Specification of Letters Patent. Patented May 16, 1916.

Application filed May 13, 1915. Serial No. 27,832.

To all whom it may concern:

Be it known that I, HARRY W. BOLENS, a citizen of the United States, and resident of Port Washington, in the county of Ozaukee and State of Wisconsin, have invented certain new and useful Improvements in Chair-Base Hubs; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention refers to swivel seat chair supports and has for its primary object to provide a simple, durable and light weight pressed steel hub for the supporting base mechanism, the said hubs constituting the journal for the usual seat-supporting spindle.

Specific objects are to provide a hollow two part top plate for the hub, the lower section of which is slotted for the reception of channel-iron strips; to provide rivets for securing the members of the top-plate together, the heads of which constitute anchor-pins for the chair-legs. Thus said rivets perform two distinct functions; to provide channel strips that may be formed from a length of material rolled into a proper shape and cut into short sections ready for use, and to provide a lower hub-plate to be secured to the lower ends of the channel strips, whereby said strips and the entire assemblage is rigidly secured.

With the above and other minor objects in view the invention consists in what is herein shown, described and claimed.

In the drawings Figure 1 represents a partly sectional elevation of a pressed steel hub embodying the features of my invention, there being shown in connection therewith, one leg member and the section is indicated by line 1—1 of Fig. 2, and Fig. 2, a top plan view of the same with parts broken away and in section to show the various elements in detail.

Referring by characters to the drawings, A represents a two part top-plate, the upper section 1 of which in this exemplification of my invention, is provided with a depressed ball-race 1′, which is centrally apertured for the reception of the flush end of a hub-barrel 7, the same being secured to the walls about the ball-race aperture by spot-welding or other suitable means. The outer edge of the plate section 1 is formed with a downturned flange 1″ for abutting engagement with the circular edge of the lower plate section 2, which plate section is also provided with a central aperture through which the barrel is extended and at the junction between the barrel and the two parts of the plate the lower plate abuts the offset ball-race, whereby said ball-race forms a spacing thimble between the plate sections and the flange 1″ forms an outer spacing member with relation to said sections.

The lower plate section 2, as best shown in Fig. 2, is also formed with a series of strip-receiving apertures 2′, which have flared end portions 2″, that, together with the main portion of the slot, are shaped to conform to the cross-sectional contour of channel-strips B. As shown, each of the channel-strips B have a flat backbone section 3 and flared wing sections 3′, the walls of which when the hub is assembled, form the opposite faces of leg sockets.

In assembling the parts, the upper ends of the channel-strips are fitted through the plate-slots 2′, whereby their upper ends shoulder or abut the lower face of the upper plate section 1 and hence their upper ends are thus firmly held in position with relation to the various parts comprising the hub. It is understood that, before the channel strips are assembled, the top-plate member A as a whole is affixed to the barrel 7 and that the upper and lower sections 1 and 2 of said top-plate are secured together by rivets 4, the shouldered heads of which project below the plane of the lower plate section 2 to form anchor-pins for chair-legs A, one of the same being shown in position. Thus the ordinary screws which pass through the top-plate of a hub for securing the legs may be dispensed with. The barrel member 7 has also fitted to its lower end a bottom plate 5, which bottom-plate is provided with a central aperture for the reception of the lower end of the barrel. In order to effect a simple connection between the bottom plate aperture and exterior walls of the barrel, the said aperture is cut back at intervals to form tabs 5′, which are bent downwardly and adapted to engage the barrel and be secured thereto in any suitable manner. At intervals about the outer edge of the bottom plate, the same is formed with downwardly bent ears 5″ which are adapted to abut the backbone portion 3 of the channel strips and be secured thereto by rivets 6.

Hence it will be seen that a hub of the

character described is formed by pressed steel elements entirely and that in assemblage, after the channel-strips B have been inserted in place with relation to the top-plate A, their lower ends only are riveted, as described in connection with the bottom-plate 5, whereby the entire device is completed and rendered rigid, durable and light at a comparatively low cost of manufacture. It is obvious that the slots 2′ in the lower plate section 2 which conform to the shape of the channel irons, will thus brace said channel-irons in opposition to strain upon the wing sections 3′ thereof due to the insertion of the legs C. It is also manifest, however, that, in some instances, I may cut the slots in the lower plate 2 to conform only to the backbone portion of the channel strips, which backbone portion in such instances would be extended above the wing portions and the said wing portions would abut the lower face of the plate section 2.

I claim:

1. A hub of the character described comprising a barrel, a top-plate secured thereto having a lower slotted section spaced from the top portion thereof, a bottom-plate secured to the lower end of the barrel, channel-strips fitted into the slots of the lower section of the top-plate, and means for securing the lower ends of the strips to the bottom plate.

2. A hub of the character described comprising a barrel, a top-plate secured thereto having a lower section spaced therefrom and provided with slots having obliquely disposed wings, winged channel strips having their upper ends fitted into the said slots, a bottom-plate secured to the barrel, and means for securing the channel-strips to the bottom plate.

3. A hub of the character described comprising a barrel, a top-plate secured thereto having a lower section spaced therefrom and provided with slots having obliquely disposed wings, winged channel strips having their upper ends fitted into the said slots and in abutting engagement with the upper plate section, a bottom plate secured to the barrel, and means for securing the channel-strips to the bottom plate.

4. A hub of the character described comprising a two part top plate secured to the barrel, the lower section of which is provided with slots spaced about said barrel, means interposed between the top-plate sections for spacing the same apart, means for securing said top-plate sections together, channel-strips having their upper ends fitted into the slots of the top-plate in abutting engagement with the upper section of said two part plate, a bottom plate secured to the hub barrel, and means for securing the bottom plate to the lower ends of the channel strips.

5. A hub of the character described comprising a two part top-plate, one section of which is flanged to abut the opposite plate section whereby they are spaced apart, the lower plate section being provided with slots, means for securing the plate sections together, channel-irons fitted into the slots of the plate section having wings adapted to form the side walls of leg sockets, a bottom plate, a barrel secured to the bottom plate and two part top-plate, and a rivet connection between the bottom plate and each of said channel strips.

6. A hub of the character described comprising a two part top-plate the upper section of which is apertured and depressed centrally, the lower section being slotted and in abutting engagement with the depressed portions of the upper section, a spacing-flange between the plate sections, means extending through said plate sections for securing the same together, a lower plate section, a barrel connecting the top-plate section and lower plate section, channel strips having ends extending through the slots of the top-plate, ears extending from the lower plate, and means for securing the ears and lower ends of the channel strips together.

7. A chair hub of the character described comprising a barrel, a top-plate comprising an upper section and a lower section fitted to the barrel, means for spacing the plates apart, the lower plate being provided with channel-iron receiving slots, rivets for securing the plate sections together including portions constituting leg anchors, a bottom plate secured to the lower end of the barrel, channel-strips fitted into the slots of the top-plate section and adapted to abut the lower plate, and means for permanently securing the lower ends of the channel-strips to the bottom plate.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin.

HARRY W. BOLENS.

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