ADJUSTABLE WARP-RESISTING LEG HOLDER PLATE

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FIG. 4

FIG. 5

FIG. 6

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ADJUSTABLE WARP-RESESTING LEG HOLDER PLATE


Continuation of applications Serial No. 172,452, Feb. 12, 1962, and Serial No. 185,500, filed April 4, 1962, now abandoned.

This invention relates to a new and improved adjustable warp-resisting leg-holding plate for attachment to the underside of a table, chair or the like article of furniture for the quick and easy attachment of the furniture legs thereto. Such legs are usually provided with projecting threaded screws and it is conventional in the art to provide pressed metal plates having inclined portions thereon with a tapped hole therein for reception of these screws so that the legs of the furniture extend outwardly at a slight angle relative to the vertical.

The principal object of the present invention resides in the provision of an adjustable plate construction which extends across the article of furniture and provides two separate leg-receiving means, together with means for securing the relatively adjustable parts together and also securing them to the underside of the table top, chair base, etc., for the purpose of providing a device not only holding the legs in the normal manner but also providing against any tendency of the material of the article of furniture to warp; the provision of an adjustable warp-resisting leg-holding plate as above recited including a channel member and two end leg-holding members, each leg-holding member being provided with an inclined portion having a tapped hole in the center thereof for receiving the leg, together with an extending tail-like member, the latter being arranged to extend toward each other and to be capped, i.e., they are overflain by the channel member, and the channel member is provided with at least one fastening extending through an elongated slot in the tail member of a leg-holding plate and on into the chair seat, table, etc., securing the parts together in desired assembled relation ready for the reception of the legs for the article of furniture.

The invention further relates to modifications, arrangements and combinations of parts which will be herein described and more particularly set forth in the appended claims.

Reference is to be had to the accompanying drawings, in which:

FIG. 1 is a bottom plan view of a table top or leg piece of furniture illustrating the invention in position;

FIG. 2 is an edge view, looking in the direction of arrow 2 in FIG. 1, the legs being applied;

FIG. 3 is a section on line 3—3 of FIG. 2;

FIG. 4 is a view similar to FIG. 1 showing a modification;

FIG. 5 is an edge view, looking in the direction of arrow 5 in FIG. 4, and

FIG. 6 is a section on line 6—6 of FIG. 4.

Referring to the drawings, the reference numeral 10 indicates a table top, this may be any other article of furniture to which it is desired to attach legs 12. The legs themselves are conventional and are well understood in the art. The present invention comprises three main parts, one of which is a plain channel member indicated at 14. This channel member has side flanges 16, these being relatively short (see FIG. 3). The channel is provided with two fastenings 20 which extend through apertures therein near the ends thereof but of course these fasteners 20 may be positioned anywhere desired.

The other two members comprise a right and left-hand leg holding plate member, one being indicated at 22 and the other at 24. These leg-holding members are substantially alike except for the fact that the inclined parts at 26 have a slightly different angle so that the legs 12 may extend out at a combined angle adjacent the corners of the furniture 10.

Each plate 22 and 24 however has a laterally extending tail member 28, 28, these being provided with slots 30, 30 for the reception of the fasteners 20 and each plate is also preferably provided with raised ribs 32, 32 providing for strengthening purposes.

When the two right- and left-hand plates 20 and 24 have been placed in the desired position adjacent the corners of the piece of furniture 10, the channel member 14 is merely placed in the position to include the two tail pieces 28, 28 and the fastenings 20 are then extended through slots 30, 30 into the base member 10. The flanges 16 of the channel member 14 have a height substantially the same as the thickness of the plate 22 or 24, plus the height of the pressed out strengthening rib 32, as clearly shown in FIG. 3.

The plates 22 and 24 may also be provided with other fastening means such as the conventional screw arrangements 34 of the like.

It will be seen that by this relatively simple construction a relatively wide range of adjustment is provided without any particular or special construction with respect to the channel member 14, the flanges of which tend to stiffen the whole assembly, these flanges preferably closely engaging the side edges of the tail members 28, 28 as shown in FIG. 3, so that a good rigid warp-resisting leg-holding plate is provided.

In the modification of FIGS. 4, 5 and 6, the reference numeral 36 indicates a table top or any other article of furniture. This modification comprises three principal parts also, one being indicated at 38 and corresponding to that at 22. The reference numeral 40 indicates the other adjustable leg holding plate member corresponding to that at 28, and the reference numeral 42 indicates the transverse channel or cap member.

These leg holding plate member are elongated, terminating at edges 44 which in this case overlap and can be adjusted relative to each other. The plates may be flat as at 46 to provide for fastener openings by which the plate members are secured to the table top or other article of furniture, and they also have inclined portions 48 with screw-threaded holes generally centrally thereof as before for the reception of fasteners on a leg 50.

The plate member 38 extends to the right as shown in FIG. 4 and centrally thereof there is a longitudinal elongated slot 52 located between a pair of outstanding stiffening and strengthening ribs indicated at 54. The slot terminates short of the end of the plate but the ribs 54 extend to this end and intersect it.

The plate member 40 is similar but complementary to the plate member 38 and is a little wider. The plate member 40 extends to the left as shown in FIG. 4 and overlaps the plate member 38 and has a central longitudinally extending slot 56 which overlaps slot 52. Plate member 40 has slightly larger stiffening ribs 58 which are received in nesting and sliding relationship to the outstanding ribs 54. Both the plate members are provided with edge flanges 60 which engage and impinge upon the surface of the table top and also help to strengthen the plate members and to form a firm locating means therewith.

The channels or cap member 42 is corrugated or ribbed to accommodate the plate and is provided with a central opening for the reception of a fastener indicated at 62 which ordinarily will be a common wood screw if the table top or other article of furniture to which the plate members are attached is susceptible to taking a wood screw.
3,136,517 s firmly. Any other fastener of course can be used which might be suitable to the circumstances.

It will be seen that the two plate members have a very wide range of adjustment longitudinally with respect to each other as indicated by the lengths of the slots. Not only do the flanges tend to maintain the parts together and to stiffen the same but this function is enhanced by reason of the ribs. Once the plate members are in the position desired, it is a simple matter to attach the same to the table top or other article of furniture and to apply the channel member to hold the parts firmly in position and to apply pressure to both plate members centrally between the raised portions to hold the edges of the flanges firmly to the table top or other article of furniture.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. An adjustable leg-holding plate construction for a piece of furniture comprising a pair of leg-holding plate members, the members, one on each plate member, said tall members extending toward each other, means on each plate member adjacent the outer ends thereof for reception of furniture legs, a longitudinal slot in each tail member, said slots being aligned, and a channel fitting over said tail members, flanges on the channel embracing the side edges of said tail members, and fastening means on the channel, said fastening means extending through said slots and said tail members for securing the assembly of channel and plate members to the piece of furniture.

2. The leg-holding plate construction of claim 1 including longitudinal strengthening ribs on the tail members of said plate members, said ribs extending at least in part under the channel.

3. The adjustable leg-holding plate construction of claim 1 wherein the plate members overlap.

4. The adjustable leg-holding plate construction of claim 1 wherein the channel is elongated and overlaps the ends of the plate members which are separated.

5. An adjustable warp-resisting leg-holding plate for the article of furniture comprising an elongated channel member including relatively short flanges at opposite side edges thereof, said flanges being parallel, and a pair of leg-holding plate members, each having means adjacent an end thereof for reception of a furniture leg, said leg-holding plate members being separate and spaced and each including a laterally extending tail member, said tail members extending toward each other and being parallel and underlying the channel member; the flanges of the channel member embracing and holding the side edges of said tail members, and fastening means arranged in said channel member and adapted to extend through the longitudinal slots in said tail member and into the article of furniture.

6. The leg-holding plate as recited in claim 5 including raised ribs on said tail members, the flanges of said channel member having a height equaling the thickness of the plates plus the height of the rib members, so that the channel member may be secured flatly onto the ribs with the flanges contacting the surface of the article of furniture.

7. An adjustable leg holding plate for furniture comprising a pair of elongated overlapping plate members, each plate member having an elongated generally central slot therethrough, said slots longitudinally overlapping in assembled relation of the plate members, means on each plate member adjacent an end thereof for the reception of a furniture leg, a separate transverse member overlying both of said plate members and a fastener extending through said transverse member and said slots and into the article of furniture, locating and holding said two plate members in adjusted position, and longitudinal strengthening ribs on both of said plate members, said strengthening ribs nesting one within the other.

8. An adjustable leg holding plate for furniture comprising a pair of relatively longitudinally slidable elongated members, one overlapping the other, each member having an elongated generally central slot therethrough, said slots overlapping in assembled relation of the two members, inclined means on each member adjacent an end thereof for the reception of a furniture leg, a transverse member overlying the one member, a fastener extending through said transverse member and both said slots and into the article of furniture, locating and holding said members in adjusted position, and raised stiffening ribs on all three members, the ribs nesting with respect to each other.

9. An adjustable warp resisting leg holder plate for an article of furniture comprising a pair of relatively slidable elongated plate members, one plate member being adapted to overlie the other, cooperating mating strengthening ribs on said plate members, said strengthening ribs extending longitudinally of said plate members, each plate member having a longitudinal central slot therein, said slots coinciding over a portion of the lengths thereof, a fastener extending through both slots into the article of furniture to which the plate is applied, and a transverse cap member extending completely across both plate members, said cap member having an aperture for reception of said fastener, said fastener extending through said cap member and through the slots of both of the plate members.

10. The leg holding plate of claim 9 including flanges on said cap member and both plate members, said flanges engaging the under side of the article of furniture to which the legs are to be attached, said flanges all generally nestling relative to each other and forming strengthening members for said leg holding plate.

11. An adjustable leg holding plate for furniture comprising a pair of elongated overlapping plate members, each plate member having an elongated generally central slot therethrough, said slots longitudinally overlapping in assembled relation of the plate members, means on each plate member adjacent an end thereof for the reception of a furniture leg, a separate transverse member overlying both of said plate members and a fastener extending through said transverse member and said slots and into the article of furniture, locating and holding said two plate members in adjusted position, and side flanges on each of said plate members, the side flanges locating the plate members relative to each other against relative lateral motion while allowing relative longitudinal motion of the plate members.

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