Nov. 17, 1942. M. GREITZER 2,302,439

TABLE CORNER CONSTRUCTION

Filed Dec. 7, 1940

Fig. 1.

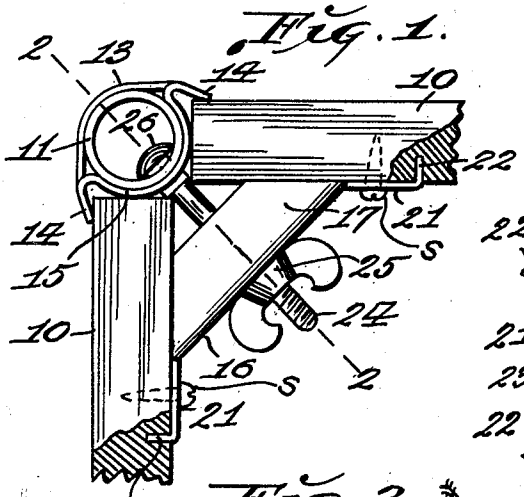


Fig. 4.

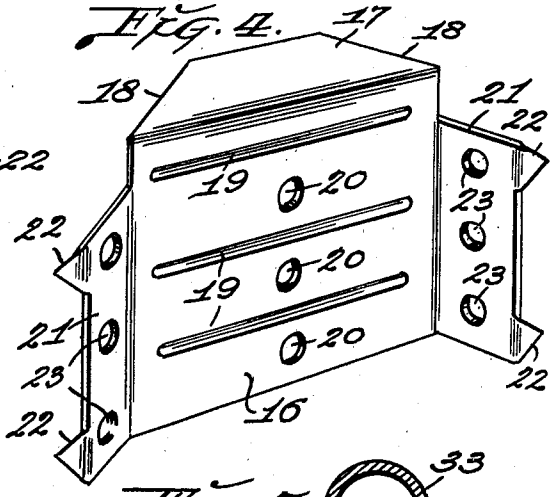


Fig. 2.

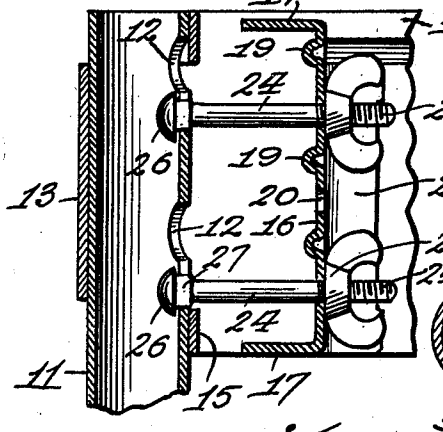


Fig. 5.

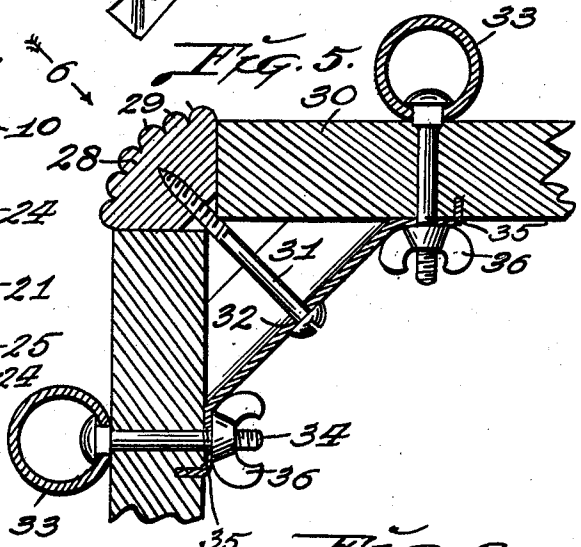


Fig. 3.

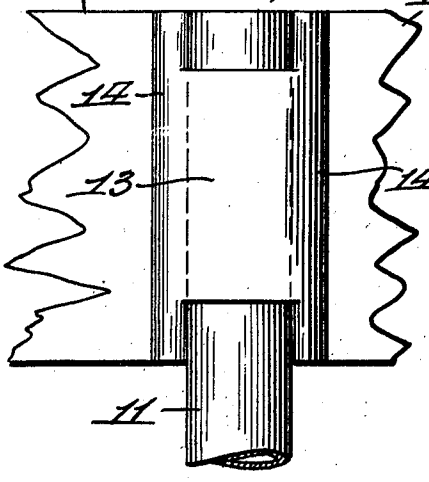
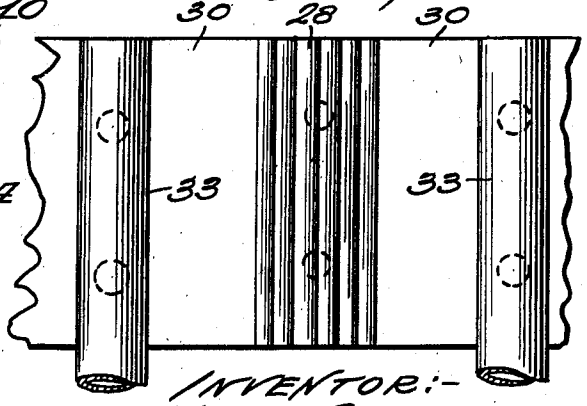


Fig. 6.



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2,302,439

TABLE CORNER CONSTRUCTION

Meyer Greitzer, Los Angeles, Calif.

Application December 7, 1940, Serial No. 369,021

2 Claims. (Cl. 311—113)

My invention relates generally to tables and more particularly to the corner construction of the frame that is supported by legs and which frame in turn provides a support for the table top, and my present invention is an improvement on a somewhat similar invention forming the subject matter of my copending application for U. S. Letters Patent filed February 21, 1940, Serial No. 320,023.

The principal objects of my present invention are, to generally improve upon and simplify the table corner construction set forth in my aforesaid copending application for patent, further, to provide a corner construction that is inexpensive of manufacture, capable of being readily assembled or taken apart and which combines strength, rigidity and stability when the parts entering into the construction are properly assembled.

A further object of my invention is, to provide a table corner construction employing a brace disposed on the inner faces of the rails or aprons of the frame adjacent the ends thereof and which brace cooperates with a socket or sleeve that is positioned on the upper end portion of a tubular leg to provide a strong, rigid and substantial connection between the table leg and the rails or aprons of the frame.

A further object of my invention is to provide, in a table corner construction a brace that is disposed between the end portions of the rails or aprons of the frame and which brace provides anchorage for bolts or like fastening device that rigidly connect the upper portions of double legs to the corners of the frame.

A further object of my invention is, to construct the brace utilized between the end portions of the rails or aprons of the frame so that it does not overlie and consequently shorten the grooves that are formed in the upper portions of the aprons and which grooves accommodate tongues or flanges that are formed on the sides of sliding members that form a part of the table top.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts that will be hereinafter more fully described and claimed and illustrated in the accompanying drawing in which:

Fig. 1 is a top plan view of a table corner construction embodying the principles of my invention.

Fig. 2 is a vertical cross section taken on the line 2—2 of Fig. 1.

Fig. 3 is an elevational view looking against the outer face of the corner of a frame wherein the rails or panels are connected in accordance with my invention.

Fig. 4 is a perspective view of the brace utilized between the end portions of the frame forming rails or panels.

Fig. 5 is a horizontal section taken through the corner of a table frame and showing the brace utilized as anchorage for the upper end portions of a pair of corner legs.

Fig. 6 is an elevational view looking against the outer face of the form of corner construction illustrated in Fig. 5, said view being taken looking in the direction indicated by the arrow 6 in Fig. 5.

Referring by numerals to the accompanying drawing which illustrate a preferred embodiment of my invention, 10, 10 designate the aprons or rails of the table frame and arranged in the corner between the ends of these aprons is the upper portion of the table legs, one of which appears in Figs. 1, 2, and 3 and designated by the numeral 11. These legs are preferably constructed from metal tubing and formed in the upper portion of each leg are two or more keyhole-shaped openings 12 for the reception of the heads of bolts that are utilized in connecting the parts of the corner construction.

Removably positioned on the upper portion of each leg 11 and fitting snugly thereupon is a member 13, preferably pressed from sheet metal and the main body portion of which is channel shape in cross section so as to conform to the curvature of the leg 11.

Those portions of the metal along the vertical edges of member 13 are bent slightly inward to form lips 14 which, when the parts of the corner construction are assembled, engage directly against the outer faces of the aprons 10 adjacent their ends, thus giving the corner of the frame when the parts thereof are properly assembled, a finished appearance as illustrated in Fig. 3.

Portions at the upper and lower ends of member 13 are cut from the main body portion of the plate and pressed inwardly to form substantially semi-circular bands 15 that pass around the inner face of the tubular leg and thus said bands combined with the main body portion of member 13 between said bands encircle that portion of the leg that is disposed between the ends of the rails 10 and reinforce the upper portion of the tubular leg or that particular portion that is subjected to strains and stresses of the attaching means.

Positioned in the corner between the ends of the aprons 10 and disposed at forty-five degrees with respect thereto is a combined brace and bracket, preferably formed from a single piece of suitable sheet metal and which includes a central plate 16 substantially rectangular in shape and projecting at right angles from the upper and lower edges of this plate are integral flanges 17, the ends thereof being beveled as designated by 18 so as to fit directly against the inner faces of the aprons 10.

Pressed in plate 16 is a plurality of horizontally disposed spaced ribs 19 which give added strength and rigidity to the combined brace and bracket

and formed through said plate midway between its ends is a vertically disposed row of apertures 20 for the reception of fastening devices such as bolts, screws, or the like. Formed integral with the ends of the plate 16 and disposed forty-five degrees with respect thereto are vertically disposed flanges 21 which when the brace and bracket is properly applied to the table frame, bear directly against the inner faces of the aprons 10.

Formed integral with the vertical edges of these flanges 21 adjacent the upper and lower ends thereof and projecting rearwardly at right angles to said flanges are prongs 22 which, when the brace is applied for use are driven into the aprons 10 as illustrated in Fig. 1, thus firmly anchoring said brace to said aprons. Formed through the flanges 21 and disposed one above the other are apertures 23 for the reception of fastening devices such as bolts or screws.

The combined corner braces and brackets are rigidly connected to the upper portions of the tubular table legs 11 by means of bolts 24, the threaded ends of which pass through the apertures 20 in plate 16 of the brace and bracket and said threaded ends receive winged nuts 25 which when tightened bear against the outer surface of plate 16. The heads 26 of the bolts after being inserted through the large, upper portions of the keyhole-shaped openings 12 are moved downward so as to occupy positions directly behind the narrow, lower portions of said openings and to prevent the bolts from turning when the nuts 25 are tightened, those portions of the shanks of the bolts immediately adjacent the heads 26 are made square or non-circular in cross section as designated by 27 so as to fit snugly within the narrow, lower portions of the openings 12.

Thus by means of the prongs 22, the ends of the combined brace and bracket are firmly anchored to the aprons 10 and by tightening the winged nuts 25 on the threaded ends of the bolts 24, the combined bracket and brace and that portion of the tubular leg between the ends of the aprons 10 and the member 13 mounted on said tubular leg, are drawn toward each other so as to very firmly and rigidly clamp the aprons to the leg and maintain the same in assembled relation.

To disassemble the corner structure, it is only necessary to remove the nuts 25 from the bolts, then draw the leg away from the ends of the aprons and finally disengaging the aprons from the combined brace and bracket.

In Figs. 5 and 6, I have shown a corner construction applicable where two legs are connected to the table frame, with said legs being disposed on the outer faces of the aprons equi-distant from the corner between the adjacent ends thereof.

In this construction a filler block or strip 28, preferably of wood and having a fluted, ribbed, or otherwise ornamented outer face 29, is positioned between the ends of the aprons 30 at the corner of the frame and said filler block or strip is secured in such position by means of screws 31 which pass through apertures 32 similar to the apertures 20 that are formed in the main body of a combined brace and bracket that is identical in construction with the brace and bracket illustrated in Fig. 4.

The upper end portions of the table leg 33, preferably formed of metal tubing, extend vertically across the outer faces of the aprons 30 equidistant from the filler block 28 and said legs are rigidly secured to the aprons by means of bolts 34 practically identical with bolts 24 and which pass through apertures 35 similar to the apertures 23 that are formed in the flanges 21 at the ends of the combined brace and bracket. The threaded ends of the bolts 34 receive winged nuts 36 which when tightened very rigidly and securely clamp the legs 32 to the aprons of the table frame.

In order to increase the strength and rigidity of the table corner construction, wood screws such as S may be driven through the apertures 23 of the flanges 21 into the aprons 10 as illustrated in Fig. 1.

Thus it will be seen that I have provided a corner construction for tables that is relatively simple in construction, inexpensive of manufacture, capable of being easily and quickly assembled or taken apart, provides an exceptionally rigid connection between the frame of the table and the legs and which construction is very effective in performing the functions for which it is intended.

It will be understood that minor changes in the size, form and construction of the various parts of my improved table corner construction, may be made and substituted for those herein shown and described, without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. In a table corner construction, a pair of table frame aprons disposed substantially at right angles to each other, a tubular table leg having its upper portion disposed between the adjacent ends of said aprons, a bracket mounted on that portion of the table leg that is positioned between the ends of said aprons, the upper and lower portions of which bracket overlie portions of the table leg adjacent the ends of said aprons, a portion of said bracket intermediate its ends overlying the outer portion of the table leg, a combined brace and bracket disposed diagonally between the inner faces of the end portions of said aprons and detachable means connecting said combined brace and bracket with that portion of the table leg that is positioned between the ends of said aprons.

2. In a table corner construction, a pair of table frame aprons disposed substantially at right angles to each other, a tubular leg having its upper portion positioned between the adjacent ends of said aprons, a bracket mounted on that portion of the table leg that is positioned between the ends of said aprons, portions of which bracket pass around those portions of the table leg that are immediately adjacent the ends of said aprons, another portion of said bracket passing around the outer portion of the table leg, there being keyhole-shaped openings formed through that portion of the wall of said table leg that is positioned between those portions of the bracket that pass around the inner portion of said leg adjacent the ends of said aprons, a combined brace and bracket angularly disposed between the inner faces of the aprons adjacent their ends, there being apertures formed through the central portion of said combined brace and bracket and adjustable fastening devices passing through the keyhole-shaped apertures in said tubular table leg and the apertures in said brace and bracket.

MEYER GREITZER.