Feb. 27, 1934. C. H. LAUN 1,948,724

FURNITURE CONSTRUCTION

Filed June 6, 1932 2 Sheets-Sheet 1

Fig. 1.

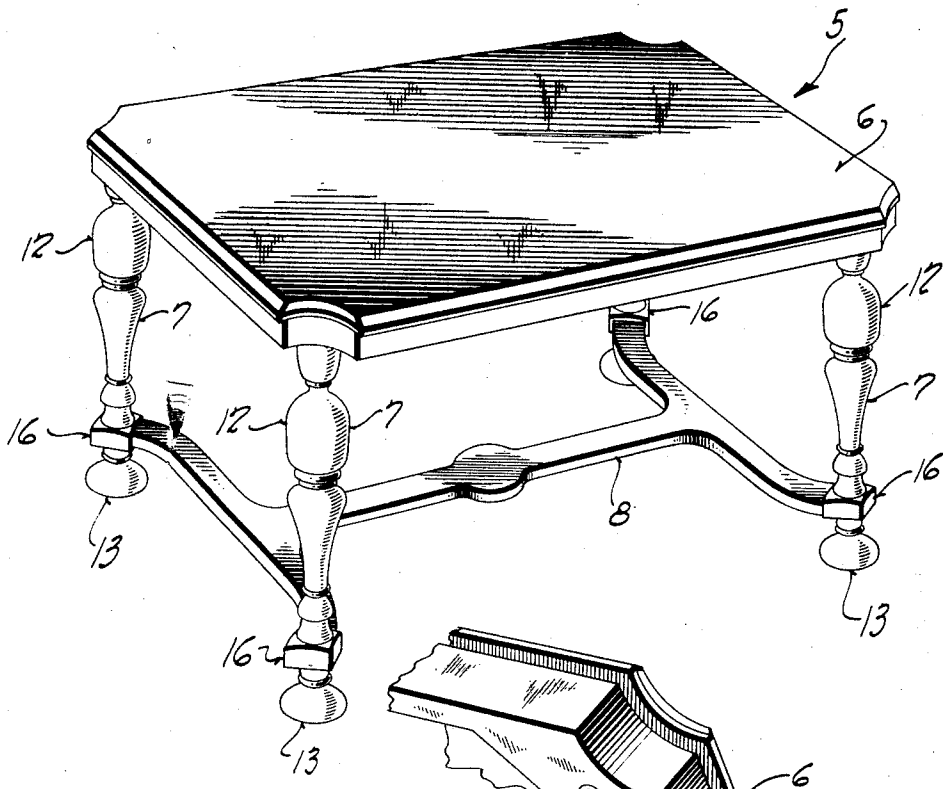
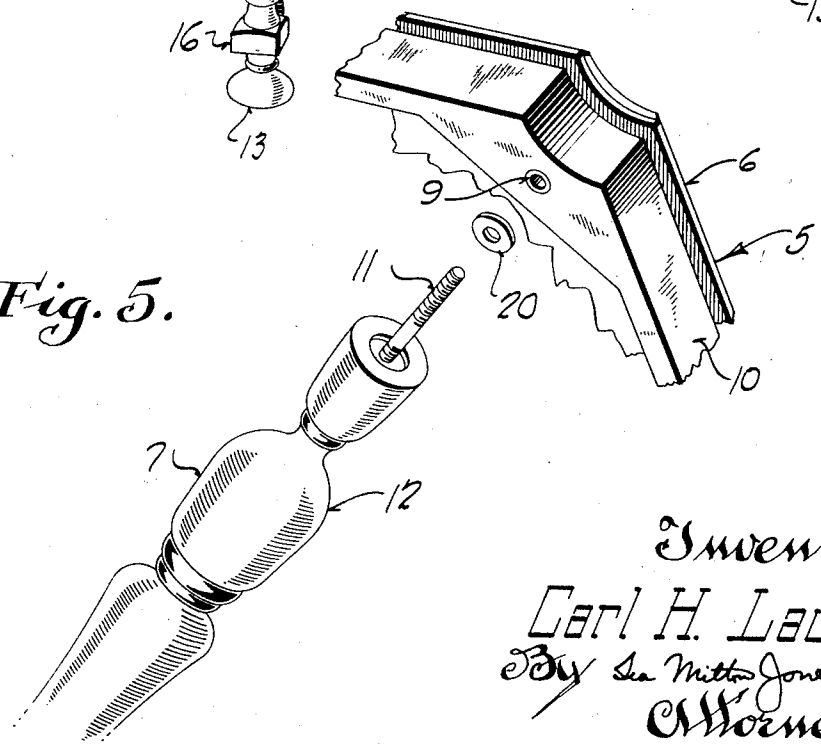


Fig. 5.



Inventor
Carl H. Laun
By Sea Mitton Jones.
Attorney

Feb. 27, 1934. C. H. LAUN 1,948,724

FURNITURE CONSTRUCTION

Filed June 6, 1932 2 Sheets-Sheet 2

Fig. 2.

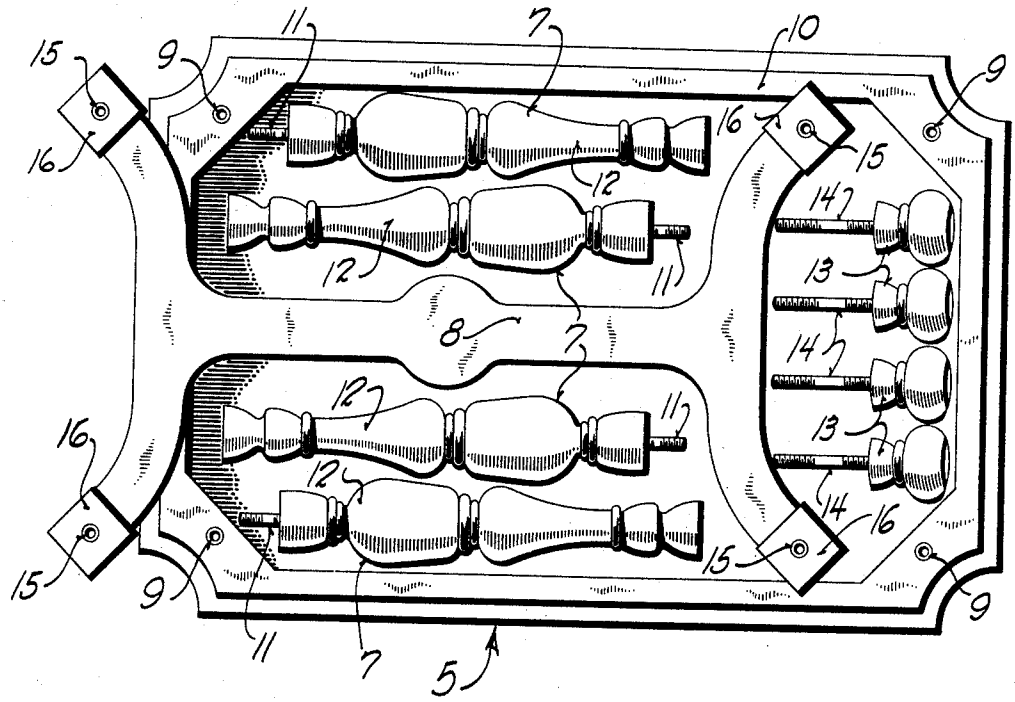


Fig. 3.

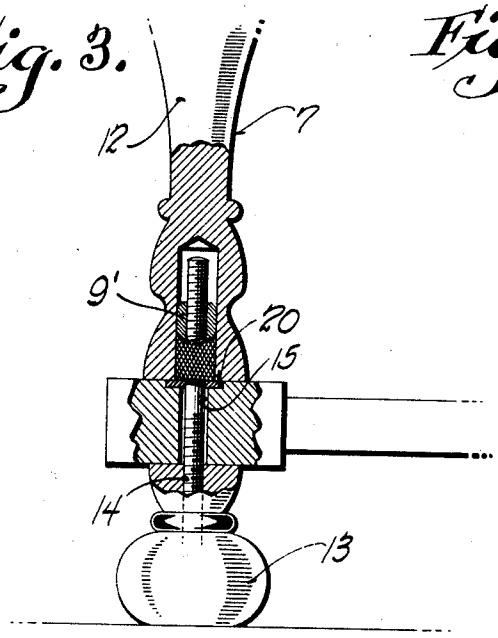
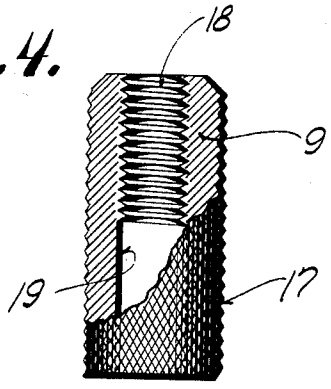


Fig. 4.



Inventor

Carl H. Laun

By Ira Milton Jones.

Attorney

Patented Feb. 27, 1934 1,948,724

UNITED STATES PATENT OFFICE

1,948,724

FURNITURE CONSTRUCTION

Carl H. Laun, Milwaukee, Wis., assignor to Kiel Furniture Co., Milwaukee, Wis., a corporation of Wisconsin

Application June 6, 1932. Serial No. 615,587

2 Claims. (Cl. 45—48)

This invention relates to furniture construction and refers more particularly to improvements in tables and kindred furniture.

Tables and similar furniture are generally shipped in knocked-down or disassembled condition with the legs and braces detached from each other and from the top. Consequently, it is incumbent upon the dealer or retailer who receives the goods, to assemble them. But heretofore the assembly of tables and similar furniture required considerable skill and often necessitated the services of a cabinet maker, especially where the leg braces were of unusual or fancy design.

It is therefore an object of this invention to simplify and improve the means for assembling the various elements of a table so as to permit accurate and quick assembly by even unskilled persons.

It is also an object of this invention to provide means for securely holding the various elements of a table construction assembled, which means is entirely enclosed and consequently concealed from view.

Another object of this invention is to provide a table of such construction that it may be easily and quickly set up without the use of tools.

A further object of this invention is to provide a table construction of the character described which, when set up is rigid and substantial.

With the above and other objects in view which will appear as the description proceeds, this invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claims.

In the accompanying drawings, one complete example of the physical embodiment of this invention is illustrated constructed according to the best mode so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a perspective view of a table constructed in accordance with this invention and set up ready for use;

Figure 2 is a bottom plan view of the table top together with the legs and cross brace shown disassembled and ready to be packed for shipment;

Figure 3 is an enlarged detail view with parts broken away and in section illustrating the manner of assembling the leg units with the cross brace;

Figure 4 is an enlarged detail view with parts broken away and in section illustrating one of the sockets forming part of the attaching means; and

Figure 5 is a detail perspective view of the upper end of one leg and an adjacent portion of the table top shown separated and illustrating the manner of assembly.

Referring now more particularly to the accompanying drawings, the numeral 5 indicates generally a table of any desired design and comprising a top 6, legs 7, and a cross piece or leg brace 8. In conformance with the requirement for conservation of space during shipment, the legs 7 and the cross brace 8 are readily detachable from the top 6, and when disassembled, all of the parts may be packed within a flat space as illustrated in Figure 2.

The legs are readily detachably assembled with the top by screw and socket connections consisting of a socket 9 embedded in the rail 10 of the table top at each corner, or point at which a leg is to be secured, and a screw 11 projecting axially from the upper end of each leg. The attachment of the legs of the table top thus requires merely the threading of the screws 11 into the sockets 9.

The legs 7 each consist of an upper section 12 and a lower section 13 adapted to be detachably connected by screw and socket connections similar to those securing the legs to the table top. Each upper leg section 12 has a socket 9′ embedded axially in its lower end and each lower leg section 13 has a screw 14 projecting axially from its upper end. The screws 14 are adapted for threaded engagement with the sockets 9′ and are of sufficient length to pass through vertical bores 15 in the attaching portions or extremities 16 of the transverse brace.

The transverse brace in the present instance is of substantially H shape, and its extremities or attaching portions 16 have parallel flat upper and lower surfaces for engagement with the adjacent lower and upper ends of the leg sections 12 and 13, respectively, so that when assembled, the attaching portions of the brace are securely clamped between the leg sections and appear as part of the legs.

The sockets 9 and 9′ are identical in construction and as best illustrated in Figure 4, the outer surface of each is knurled or suitably roughened as at 17 to provide a grip with the walls of the bores or recesses into which they are driven. If

desired, the knurled surface may be coated with glue, shellac or other suitable adhesive substance prior to the insertion of the sockets in their respective bores or recesses.

The screws 11 and 14 are secured in the upper and lower leg sections respectively, in any desired manner.

Proper engagement of the screws with the threads of the sockets is facilitated by counterboring the outer ends of their internally threaded bores 18, as at 19.

Positive prevention against pulling the sockets out of their recesses by forced threading of the screws into the sockets during assembly of the parts is afforded by washers 20 which are recessed in the upper ends of the legs and the upper surfaces of the attaching portions or extremities 16 of the transverse leg brace to engage the exposed ends of the sockets and, by reason of their greater area, prevent the sockets from being drawn down into the wood of the legs or transverse brace extremities.

From the foregoing description taken in connection with the accompanying drawings, it will be readily apparent to those skilled in the art to which an invention of this character appertains, that this invention affords simple and effective means for assembling a table or similar piece of furniture; that the entire connection is concealed from view; that no tools are required for assembling the various elements; that a strong construction is provided; and that inasmuch as the sockets and screws are axial to the legs, a requirement for certain positions of circumferential adjustment of the legs is easily accommodated.

It is also apparent that while the means for mounting the leg section with the brace and the legs with the top has been defined as being readily detachable, it is understood that a construction in which the assembly of the elements is facilitated, but in which the ready disassembly is not particularly contemplated, comes within the scope of this invention.

What I claim as my invention is:

1. In demountable furniture construction, a top or body member to be supported above the floor, a supporting leg for said member, means for readily attachably connecting the supporting member with said member comprising an internally threaded metal socket embedded in said member with its outer end portion exposed, a screw projected axially from the leg for threaded engagement with the socket, and a metal washer on the screw between the leg and the socket, said washer engaging the exposed end of the socket to prevent the drawing of the socket into the leg during forced threading of the screw into the socket.

2. In a demountable table, a flat top to be supported above the floor, a plurality of detachable legs to support the top, each of said legs having an upper and a lower section, a brace to connect the legs, and similar means to attach the upper leg sections to the top and to join the leg sections through the base whereby the leg sections are simultaneously assembled with each other and with the brace comprising externally roughened sockets having internally threaded bores and counterbores leading thereto, said sockets being embedded in the top at the places of attachment for the legs and in the meeting end portions of one set of leg sections, screws projected from the upper ends of the upper leg sections for connection with the sockets in the top and screws projected from the leg sections having no sockets for engagement with the sockets of the other leg sections, said second mentioned screws passing through apertures in the brace, and washers on the screws between the sockets and the adjacent surfaces of the upper leg section and brace to prevent the sockets being drawn into said surfaces upon forced threading of the screws in to the sockets.

CARL H. LAUN.