Dec. 19, 1933. J. CARPOS 1,940,117

COLLAPSIBLE TABLE

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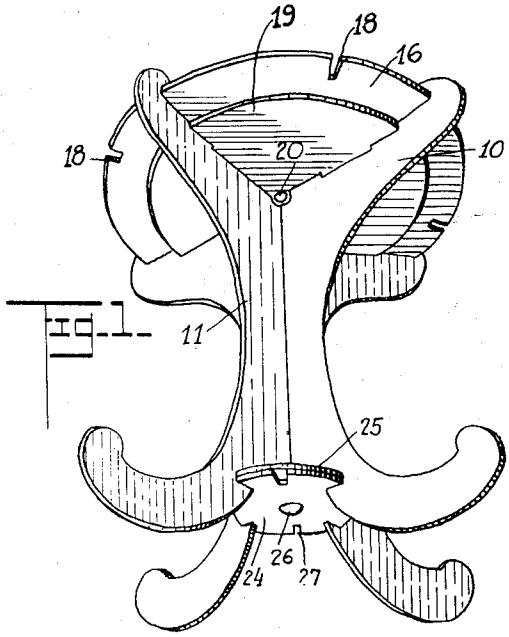

Fig. 1.

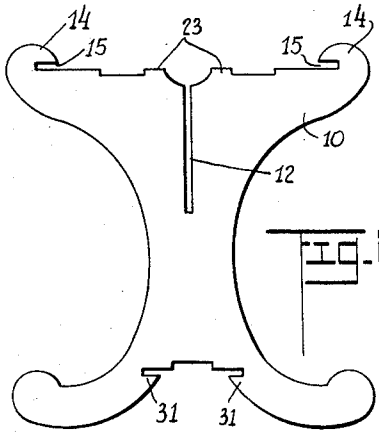

Fig. 2.

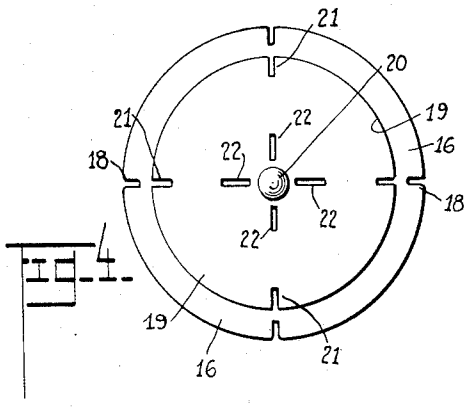

Fig. 4.

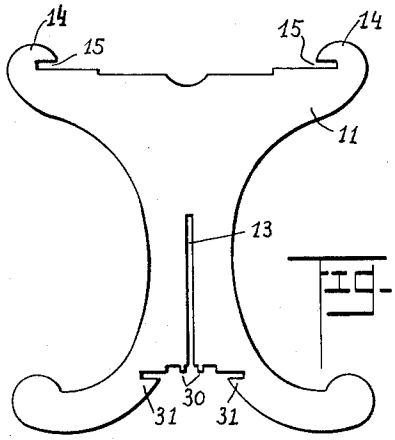

Fig. 3.

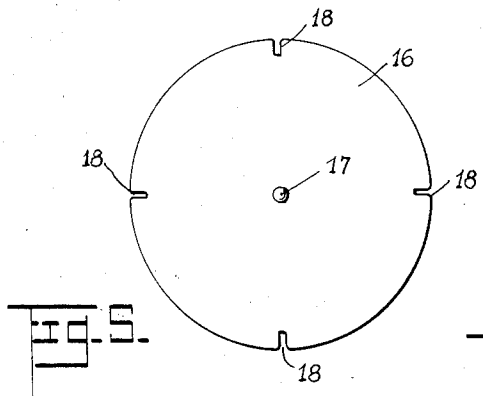

Fig. 5.

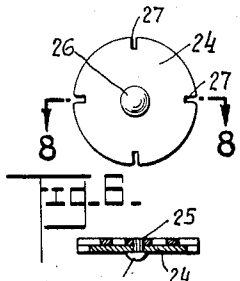

Fig. 6.

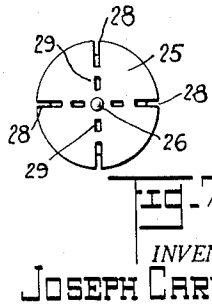

Fig. 7.

Fig. 8.

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COLLAPSIBLE TABLE

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3 Claims. (Cl. 45—117)

This invention relates to collapsible articles and more especially to a collapsible or knock-down table or stand.

An object of the invention is to provide a simple, sturdy and rigid form of table or stand adapted to be assembled and disassembled without recourse to any fastenings whatsoever.

Another object is to provide a table or stand which may be transported in knock-down arrangement in comparatively small space and assembled as needed without fastenings or tools.

A further object is to provide a construction for tables, stands, pedestals and the like, which may be formed entirely from flat material, such as veneered wood sheets or sheet metal, and by simply sawing out the parts around an outline, if of wood, or pressing them from metal sheets.

All these and other objects, as hereinafter suggested, are attained by the method and means now to be described, and illustrated in the accompany drawing, in which—

Figure 1 is a perspective view from below of the completely assembled invention—in this instance a table—comprising the essential features of this improvement.

Fig. 2 is a plan view of one of the supports or leg members of the article of Fig. 1.

Fig. 3 is a similar view of the other leg member thereof.

Fig. 4 is a bottom plan view of the table top member.

Fig. 5 is a top plan view of the member of Fig. 4.

Fig. 6 is a bottom plan view of the lower shelf member of Fig. 1.

Fig. 7 is a top plan view of the member of Fig. 6.

And Fig. 8 is a cross sectional view through the line 8—8 of Fig. 6.

Like numerals refer to like parts throughout the several views.

While collapsible tables are in themselves old, it has always been a problem to devise a form of such knock-down articles of furniture, which will be both easy to assemble and disassemble but also very rigid and solid when fully assembled.

A construction of this character is useful not only to reduce transportation expense by permitting the table to be shipped in knock-down arrangement from the factory to the user, but also it permits the user to disassemble the article and put it away in a corner of a closet when not in use. Thus, such a construction is useful in city apartments where space is at a premium and there is a need occasionally for an additional table.

The construction now to be described meets these needs admirably since it is made entirely from sheet material such as stamped-out metal plates or wood veneer in sheet form.

The article consists essentially of two double leg portions Figs. 2 and 3, shaped as shown. A vertical slot 12, Fig. 2, is cut downwardly from the top of member 10 to a point half way to the bottom and this slot has a width substantially equal to the thickness of the material from which members 10 and 11 are formed. A corresponding slot 13 is cut from the bottom of member 11 to a position half way to the top, and in such manner that the two leg members 10 and 11 may be assembled together by merely fitting member 11 at right angles down over the top of member 10, to the position shown in Fig. 1.

The upper portions of members 10 and 11 terminate in hook-shaped projections 14 extending above slots 15 over a horizontal edge as shown; and these slots have a width equal to the thickness of the material from which the top of the article is formed, which may preferably be the same thickness as that of the leg material. Suitable recesses are cut in the central portion of the upper edge of member 10, in which are to rest downwardly projecting tongues from the top of the article when in assembled relation, and into the central recess of which is to project the head of a centering pin. Member 11 is likewise formed along its upper edge with several recesses as clearly shown in Fig. 3, and for a like purpose.

The table top comprises a member 16, Fig. 5, circular in outline and having a central hole 17 and radially positioned slots 18, extending inwardly from the periphery of the table top 16 at four positions equi-distant from each other and substantially as shown in Fig. 5.

A second circular top member 19, Fig. 4, having a diameter substantially less than the diameter of that portion of members 16 within the inner ends of its slots 18 is concentrically positioned beneath table top 16 by means of a pin-like member 20 projecting through a central hole in both members 16 and 19, and having an enlargement or head beneath the lower surface of member 19, but its opposite end being flush with the upper surface of member 16 when in position. This pin may be held in place merely by friction since when the parts are as-

sembled together, it is prevented by their relation from getting out of place.

Member 19 has a similarly-positioned plurality of slots 21 to that of slots 18 of member 16, and these are adapted to fit over the projecting portions of members 10 and 11 immediately inside of the slots 15 when in assembled relation. Four slots 22, Fig. 4, are also cut through member 19 and either oppositely-disposed pair of them is adapted to engage upstanding lips 23, Fig. 2, to prevent member 19 from turning, and also aid in making the device rigid when fully assembled. The extra oppositely-disposed pair is supplied as an aid in assemblage since it is only necessary to bring member 19 to any position of register of its slots 21 with projections 14 of members 10 and 11 in order to have the parts fit into proper position.

The lower support or shelf comprises two members 24, Fig. 6, and 25, Fig. 7, the former being on the bottom when assembled as shown in Fig. 8. These are of the same diameter and held together by a pin 26 in the same manner as pin 20 holds the two top portions together. Radial slots 27 at each of four equi-distant points around the periphery of member 24 are formed as shown in Fig. 6 and pin 26 extends through a centrally-disposed hole in both members 24 and 25; and similar radially-disposed slots 28 are formed around the periphery of member 25, Fig. 7; and also, four slots 29 are cut along the same radial lines, and one oppositely-disposed pair of which is adapted to engage with projections 30 in a cut-out portion in the lower part of member 11.

The article is assembled as follows:—

Member 11 is pressed down into position at right angles to member 10 and over said member, so that slot 13 slides along slot 12, and finally down over the portion of member 10 beneath slot 12. The four legs of the table are thus assembled in a position at right angles as shown in Fig. 1. The table top comprising members 16, 19, and 20, is then assembled as shown in Fig. 4 with the head of pin 20 below and holding member 19 beneath table top 16. The slots 18 of member 16 and slots 21 of member 19 are brought into alignment by turning the two disks relative to each other. The completely assembled table top is then positioned over the assembled leg members, and slots 21 rest down into projections along the two upper edges of the leg members, and are rigidly held in place thereby, and also contribute to rigidly hold the structure into one unitary whole. And slots 18 drop over projections 14 of the leg members and into slots 15, in which position member 16 may then be rotated with relation to member 19 and leg members 10 and 11 to a position where its slots 18 will be out of alignment with projections 14, as clearly shown in Fig. 1. This prevents the top from being lifted off and holds the parts in rigid relationship.

In a similar manner, the lower combined shelf and holding member is first assembled by putting pin 26 through member 24 from below and then up through member 25 which is on top, and the peripheral slots aligned as before, and the assembled member then inserted into the bottom edges of the table leg assemblage in a similar manner, which is easily apparent from the drawing, and slots 27 then rotated out of alignment with projections 31 formed in members 10 and 11, to retain the parts in place as before.

While pin 26 is shown as projecting downwardly from the bottom of member 24, it is of course understood that the relationship of these parts may be reversed, such that the pin will extend from the top first through member 25 and then into member 24 to hold it in alignment until assembled, and with such a construction, it is only necessary to provide space by cutting away members 10 and 11 at the bottom of slot 13.

Slots 29 fit into projections 30, and the rotation of member 24 to bring its slots 27 out of alignment with projections 31 completes the assemblage of the table or stand, and provides a very rigid construction.

It is to be understood that the present disclosure is for the purpose of illustration only, and that the invention is not limited thereto. To those skilled in the art, many modifications of the invention will be readily apparent, and it will also be obvious to such skilled persons that part of the method and means may be used without other parts thereof, many such combinations of the parts readily suggesting themselves. Therefore, it should be and is to be distinctly understood that for a definition of the limitations of the invention, reference must be had to the appended claims.

Having now described the invention, what is claimed as new, and for which Letters Patent of the United States is desired, is:

1. The combination in a collapsible table of two leg members adapted to fit into each other at right angles, a table top member adapted to rest into the upper edges of the leg members, and having means to hold them in such right angle position, and an upper table top member positioned over said last-named member and adapted to be rotated to lock both said members in position in the upper ends of the leg members.

2. The combination in a collapsible table, of leg members adapted to be fitted into each other in right-angular relationship, and having upper edges terminating in loop-shaped projections adapted to hold a top-member and to permit its rotation therein, including recesses in the upper edges of the leg members adapted to surround a projecting pin head positioned centrally through the top member, and about which it may be caused to rotate.

3. In combination, a circular table top, legs therefor, hook-shaped upper ends to the legs adapted to fit over the periphery of the table top, and slots in the table top permitting it to be dropped over the hook-shaped ends and thereafter rotated laterally to a position separating the slots from the leg ends.

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