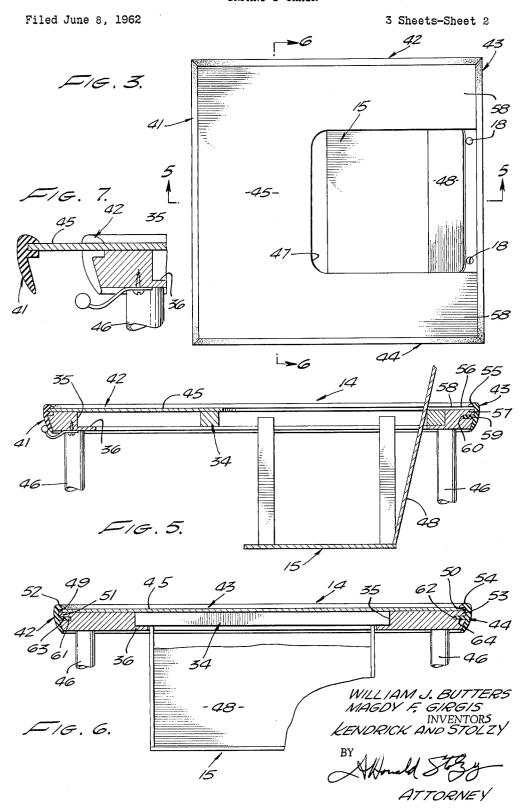
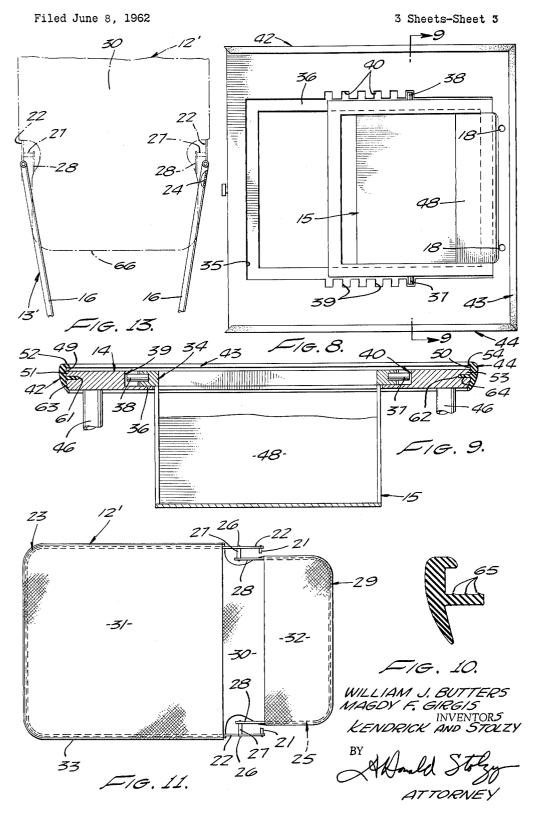
INFANT'S CHAIR

Filed June 8, 1962 3 Sheets-Sheet 1 F16.1. *3*3 *3*3. 26 28 29 - 46 46 F16.12. 16 -1G.Z. WILLIAM J. BUTTERS MAGDY F. GIRGIS INVENTORS KENDRICK AND STOLZY F1G. 4. ATTORNEY

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3,224,806 INFANT'S CHAIR

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This invention relates to both interior and exterior furnishings, and more particularly to strong, economical articles of furniture having adjustable features for maximum utility.

Although the device of the present invention will have applications other than those set forth herein and should therefore not be limited thereto for that reason, the invention has been found especially useful when employed in the construction of a combined table and chair for infants for use indoors or outside of the home.

In the past, the use of many complicated component parts of a combined table and chair assembly has made the manufacture and part assembly thereof difficult and time consuming. Further, it is desirable that several adjustments be provided on such an assembly. The adjustments provided on such assemblies in the prior art have been unreliable and unstable. In addition, the types of adjustments of such assemblies have been such as to restrict the maximum usefulness thereof.

The device of the present invention overcomes the above-described and other disadvantages of the prior art by providing an article of furniture including a seat supporting structure, a molding fixed to opposite sides of the structure, each of the moldings having an upper edge overhanging corresponding portions of the upper surface of the structure, and a table top having side edges slidable on said structure in the space between the upper surface thereof and the overhanging upper molding edges. By using this construction, it is possible to rapidly and simply construct the device of the present invention in a very economical manner. In particular, each of the moldings may be easily and quickly fixed to the seat supporting structure by inserting an integral tongue thereon into a corresponding slot in the seat supporting structure.

In accordance with another feature of the invention, the chair, which may be employed in the seat supporting structure, may be removed by removing the table top. 45 In this case, the table top acts to lock the chair in position when the chair is placed in the seat supporting structure. The device of the present invention, for this reason, is reliably stable and strong.

In accordance with still another feature of the present invention, a canopy may be detachably connected to the seat supporting structure. This is an unusually useful feature of the present invention in that the seat supporting structure may be used without the canopy indoors, the use of which, in such a case, may be substantially more convenient. Still further, the canopy of the present invention is adjustable in several ways for convenience. For example, the canopy may be rotated from an approximately horizontal position over the chair in the seat supporting structure to a substantially vertical position whereby an infant occupying the chair may be removed therefrom easily and quickly.

The above-described and other advantages of the present invention will be better understood from the following description when considered in connection with the accompanying drawings.

In the drawings which are to be regarded as merely illustrative:

FIG. 1 is a side elevational view of the combined table and chair of the present invention with the canopy thereof attached thereto;

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FIG. 2 is a sectional view of the table and canopy supporting means taken on the line 2—2 shown in FIG. 1;

FIG. 3 is a top plan view of the combined table and chair of the present invention with the canopy and its supporting means detached therefrom;

FIG. 4 is a perspective view of the chair by itself;

FIG. 5 is a longitudinal sectional view of the combined table and chair assembly taken on the line 5—5 shown in FIG. 3.

FIG. 6 is a transverse sectional view of the assembly taken on the line 6—6 shown in FIG. 3;

FIG. 7 is a broken away sectional view of the left end of the table shown in FIG. 5 with the top thereof shown partially removed;

FIG. 8 is a top plan view of the seat supporting structure and chair shown in FIG. 3 with the table top completely removed:

FIG. 9 is a transverse sectional view of the seat supporting structure and the chair taken on the line 9—9 shown in FIG. 8;

FIG. 10 is an enlarged transverse sectional view of the moldings employed with the seat supporting structure shown in FIG. 8;

FIG. 11 is a bottom plan view of the canopy;

FIG. 12 is a side elevational view of the canopy in its inoperative position shown with a portion of the support means therefor; and

FIG. 13 is a front elevational view of a portion of the canopy support means in which only the outline of the canopy is shown, the same being shown in dotted lines.

In FIG. 1, the device of the present invention is indicated generally at 10 including a combined table and chair assembly 11 having a canopy 12' supported thereon by support means 13. Assembly 11 includes a seat supporting structure 14 and a chair 15.

As shown in all of the FIGS. 1, 2, 12 and 13, canopy support means 13' includes a pair of posts 16. Each post has a lower end as indicated at 17 in FIG. 2 which extends into a corresponding hole 18 through seat supporting structure 14 as shown in FIGS. 3 and 8. Each post 16 is provided with a shoulder 19 which bears against the upper surface indicated at 20 in FIG. 2 of the seat supporting structure 14.

Canopy 12' is pivoted to posts 16 at projections 21 on legs 22 of a front U-shaped frame 23 of canopy 12', as shown in FIG. 11. Projections 21 are carried in holes 24 through posts 16, as shown in FIG. 13.

Canopy 12' also includes a rear U-shaped frame 25 which is pivoted to U-shaped frame 22 by pivot shafts 26 which extend through cylindrical spacers 27 surrounding the same. Rivets 26 connect ends of legs 28 of U-shaped frame 25 to the ends of legs 22 of U-shaped frame 23.

A fabric having effectively a pocket to slip over both of the frames 23 and 25 is provided as indicated at 29 in FIG. 11. Fabric 29 includes a panel 30 extending over the top of frames 23 and 25. Fabric 29 also includes a panel 31 which extends over the bottom of frame 23 and a panel 32 which extends over the bottom of frame 25. Panels 31 and 32 are sewed to panel 30 at their side and end edges. A panel 33 which may be provided with a flange is sewed to panels 30 and 31 at their seam.

As shown in FIG. 4, seat 15 includes a frame 34 which fits inside a rectangular hole 35 in seat supporting structure 14 as shown in FIG. 8. As shown in both FIGS, 5 and 8, hole 35 is provided with a flange or projection means 36 which fits under frame 35 to support chair 15 in structure 14. The fit of the rectangular character of frame 34 in the rectangular hole 35 prevents transverse and rotational movement of seat 15 in hole 35. Chair 15 is provided with a projection 37 on one side and 38 on the other to fit in a corresponding one of a plu-

rality of notches 39 in one side of hole 35 and a corresponding plurality of notches 40 in the other side there-The longitudinal position of the chair 15 may thus be adjusted by lifting the chair so that the projections 37 and 38 come out of the corresponding one of notches 39 and 40 and lowering the chair 15 back into the hole 35 onto the flange 36 with the projections 37 and 38 into a different corresponding selected pair of notches 39 and 40.

In FIG. 3, seat supporting structure 14 is shown with 10 moldings at 41, 42, 43 and 44 disposed thereabout and a table top 45 thereon. Seat supporting structure 14 is provided with four legs fixed therewith as indicated at 46 in both FIGS. 5 and 6. Note will be taken in FIG. 5 that moldings 41 and 43 may be made of a molded plastic 15 yet economical manner. material as may be moldings 42 and 44, shown in FIG. 6. Molding 41 may be cemented to the left edge of table top 45, table top 45 being provided with a rectangular opening or slot 47 therein upwardly through which a back 48 of chair 15 projects. Note will betaken that table top 45 overlies frame 34 and blocks chair 15 in a fixed vertical position between its lower surface and the upper surface of flange 36. Table top 45 is slidable in recesses indicated at 49 and 50. Recess 49 is provided by a portion at 51 of the upper surface of structure 14 and an 25 having a front portion adapted to overhang said chair upper overhanging edge 52 of molding 42. Similarly, recess 50 is provided by a portion 53 of the upper surface of structure 14 and an upper overhanging edge 54 of molding 44.

In FIG. 5, it will be noted that similarly, molding 43 30 is provided with an upper overhanging edge 55 which forms a recess 56 with a portion 57 of the upper surface of structure 14 into which ends 58 of table top 45 extend. In FIG. 5, note will be taken that molding 43 is held on the right of rear edge of structure 14 in that a tongue 35 thereof at 59 extends into a groove 60 in structure 14.

Similarly, structure 14 is provided with grooves at 61 and 62 into which tongues 63 and 64 extend, tongue 63 being integral with molding 42 and tongue 64 being integral with molding 44.

All of the moldings 42, 43 and 44 may have an identical construction as indicated in FIG. 10 with barbs at 65. Thus, moldings 42, 43 and 44 with tongues 59, 61, and 64, respectively, may be snapped into place with or without the benefit of cement into corresponding grooves 60, 63 and 62 of structure 14 easily and quickly. Barb 65 prevents tongues 59, 63 and 64 from coming out of their corresponding grooves in structure 14.

Note will be taken from FIG. 12 that canopy 12' may be rotated to a substantially vertical position so that 50 an infant in seat 15 may be removed easily and quickly therefrom. Note will also be taken from FIG. 1 that the pivot portion of frame 25 about rivets 26 may be utilized to lower frame 26 to a position such that fabric 29 will better shade the chair 15 from the rear of the 55

In addition to the foregoing, from FIG. 13 it will be noted that a rear portion 66 of canopy 12' has a width such that it rests against posts 16. That is, posts 16 are closer together than the widths of portion 66 where it 60 rests against posts 16. Thus, canopy 12' may rest in the convenient position shown in FIG. 12 and tilted, if desired, to lower the same to the position shown in FIG. 1.

From the foregoing, it will be appreciated by the use of moldings 42, 43 and 44 that the structure 14 may be easily and quickly assembled with appropriate recesses at 49, 50 and 56 to receive table top 45. A useful structure is thus derived with a small number of inexpensive, uncomplicated component parts which require little in manufacture and assembly. Seat 15 likewise, by the 70 same construction, is locked into position by the table top 45 which is slidable in recesses 49 and 50. The construction of the device 10 thus is reliably stable and strong. The fit of frame 34 in hole 35 and the projections 37 and 38 in corresponding notches 40 and 39, re- 75

spectively, also hold chair 15 not only in a substantially fixed longitudinal position on structure 14, but also in a substantially fixed transverse position therein. Thus, these structures with table top 45 hold chair 15 in an immovable position.

The canopy 12' provides maximum utility of the device 10 in that the same is removable, with support means 13' rotatable to the position shown at 12' and may be adjusted as indicated in FIG. 1 with fabric 29 extending downwardly to the rear to better shade chair 15 or the infant occupant thereof.

Still further, the pivoting actions of projections 21 in holes 24 in posts 16 with spacers 27 around rivets 26 support canopy 12' on posts 16 in an unusually effective

Only one specific embodiment of the present invention has been described and illustrated herein. since many changes and modifications thereof will suggest themselves to those skilled in the art, the invention is by no means to be limited to the particular embodiment selected for this disclosure, the true scope being defined only in the appended claims.

What is claimed is:

1. An article of furniture comprising: a chair; a canopy and a rear portion to extend rearwardly from said front portion; and means fixed with said chair to support said canopy, said rear portion of said canopy being rotatable downwardly from an approximately horizontal position about an axis approximately dividing said front portion from said rear portion of said canopy.

2. An article of furniture comprising: a chair; a canopy having a front portion adapted to overhang said chair and a rear portion to extend rearwardly from said front portion, said rear portion being pivoted from said front portion about an axis extending along the rear end of said front portion; and means fixed with said chair to support said front portion of said canopy, said front portion of said canopy being rotatable on said support means from an approximately horizontal position overhanging said chair to an approximately vertical position.

3. An article of furniture comprising: a chair; a canopy having a U-shaped front frame and a U-shaped rear frame, the end of one leg of each frame being positioned adjacent one another, the end of the other leg of each frame also being positioned adjacent one another, said canopy having a pivot shaft fixed with each mutually adjacent pair of leg ends of said frames in a manner such that said frames may be rotated relative to each other; support means fixed with said chair; and means at the ends of the legs of said front frame spaced rearwardly of said pivot shafts to mount said front frame rotatably on said support means.

4. An article of furniture comprising: a chair; support means fixed with said chair; a canopy pivoted at the upper end of said support means from an approximately horizontal position overhanging said chair to an approximately vertical position, said canopy having a portion extending rearwardly of the pivot point thereof, said rearward portion having a construction to engage said support means to act as a stop for said canopy in said approximately vertical position thereof.

5. An article of furniture comprising: a chair; support means fixed with said chair; a canopy pivoted at the upper 65 end of said support means from an approximately horizontal position overhanging said chair to an approximately vertical position, said canopy having a portion extending rearwardly of the pivot point thereof, said support means including two horizontally spaced approximately vertical posts, said rearward portion of said canopy having a width sufficiently great to contact said posts and thereby to act as a stop for said canopy in said approximately vertical position thereof.

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References Cited by the Examiner				2,705,820	4/1955	Torrence 20—74	
UNITED STATES PATENTS				2,725,094	11/1955	Goldblatt et al 297—138	
				2,805,706	9/1957	Landry 297—136 X	
1,199,187		Jiranek 5—362		2,871,920	2/1959	Nichols et al 297—136	
1,297,308		Armfield 5—362	5	2,926,724	3/1960	Rittenberg et al 297—184 X	
1,751,907	3/1930	Cripps 248—424	Ü	2,936,204		Sofi 108—34	
2,161,658	6/1939	Hansburg 297—136 X		EODEICNI DATENITO			
2,291,203	7/1942	Bent 5—319		FOREIGN PATENTS			
2,461,123	2/1949	Miller 297—138		323,470	12/1929	Great Britain.	
2,461,715	2/1949	Biggerstaff 297—136	10	814,655	6/1959	Great Britain.	
2,544,080	3/1951	Gustafson et al 297—138	10				
2,658,225	11/1953	Bascom 297—184 X		FRANK B.	SHERRY	, Primary Examiner.	