

Aug. 9, 1960

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2,947,998

APPARATUS FOR SUPPORTING INFANTS

Filed March 14, 1955

4 Sheets-Sheet 1

Fig. 1.

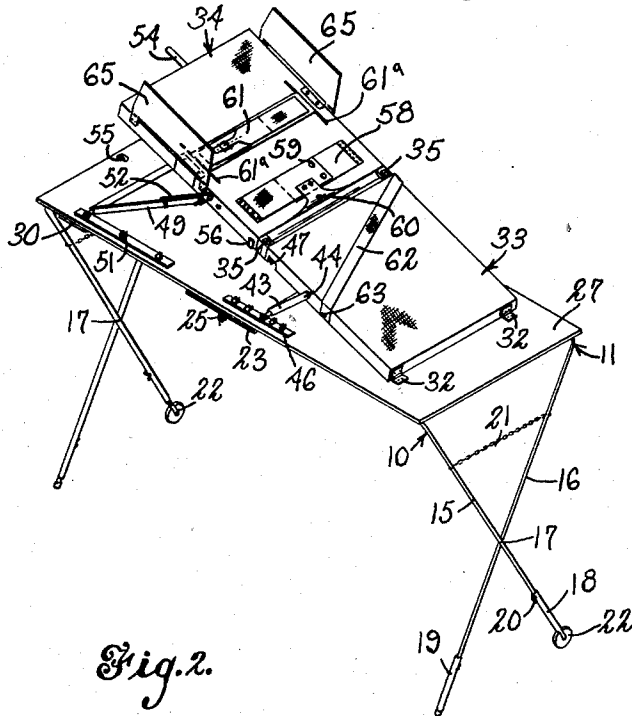
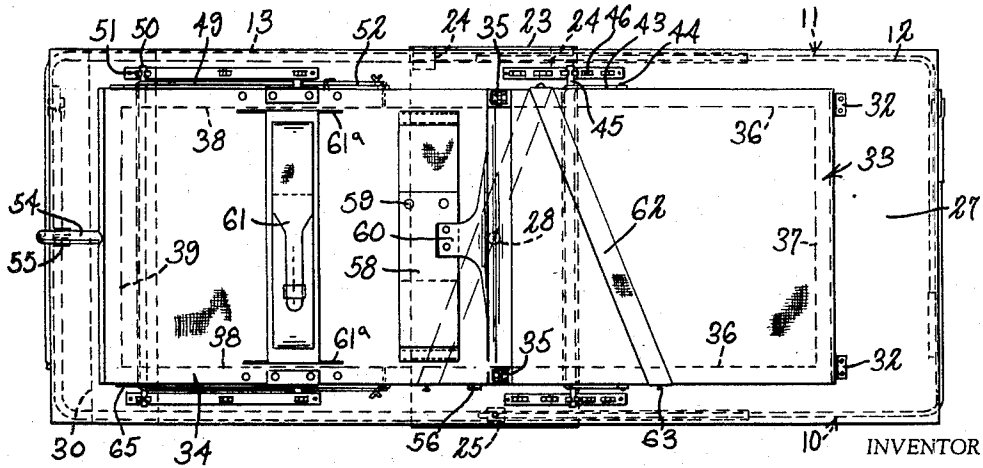


Fig. 2.



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Filed March 14, 1955

4 Sheets-Sheet 2

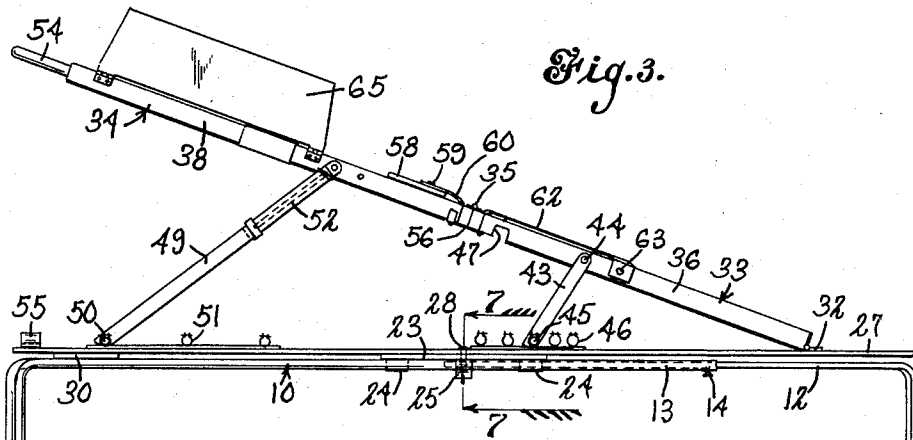


Fig. 3.

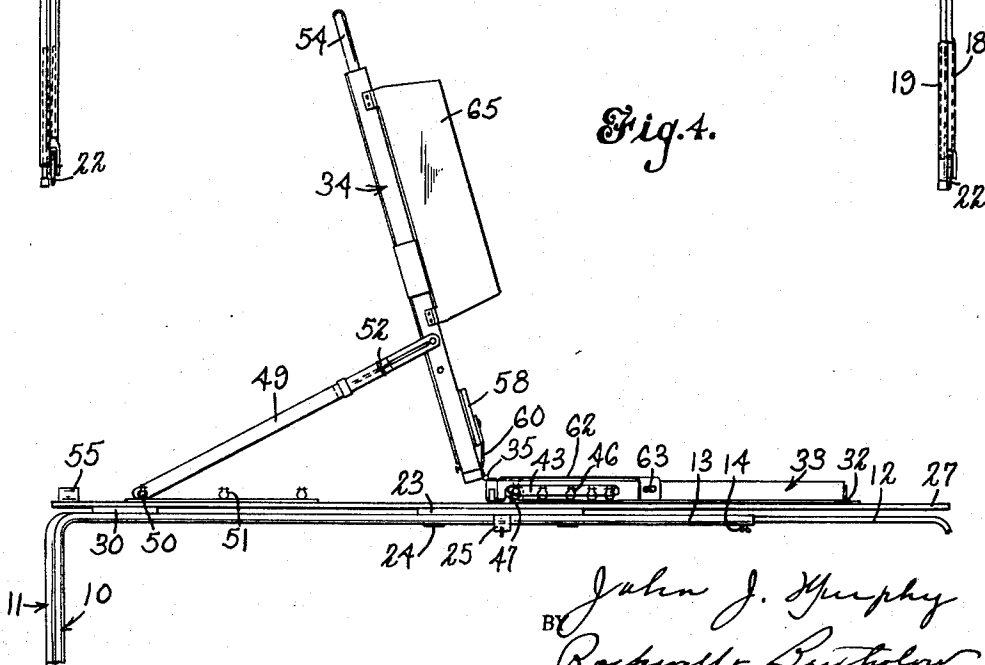


Fig. 4.

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4 Sheets-Sheet 3

Fig. 5.

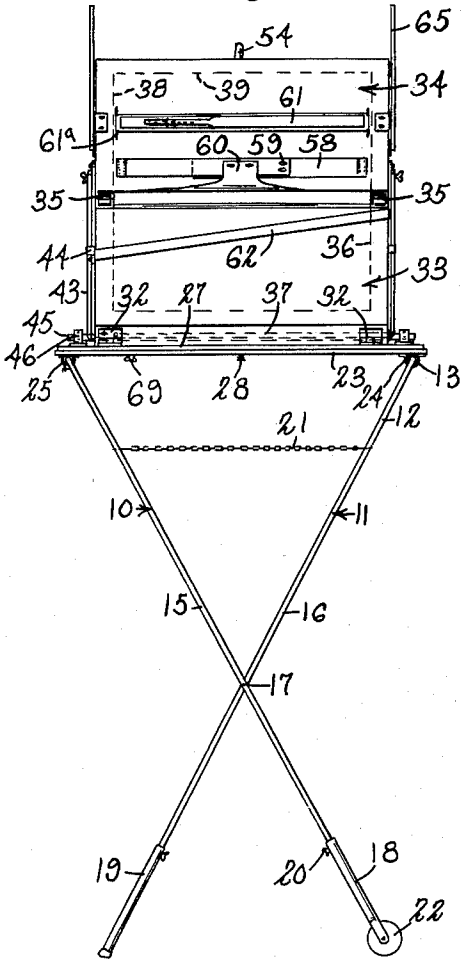


Fig. 6.

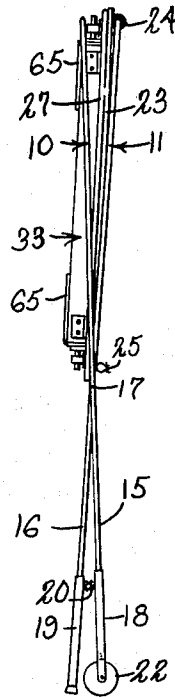
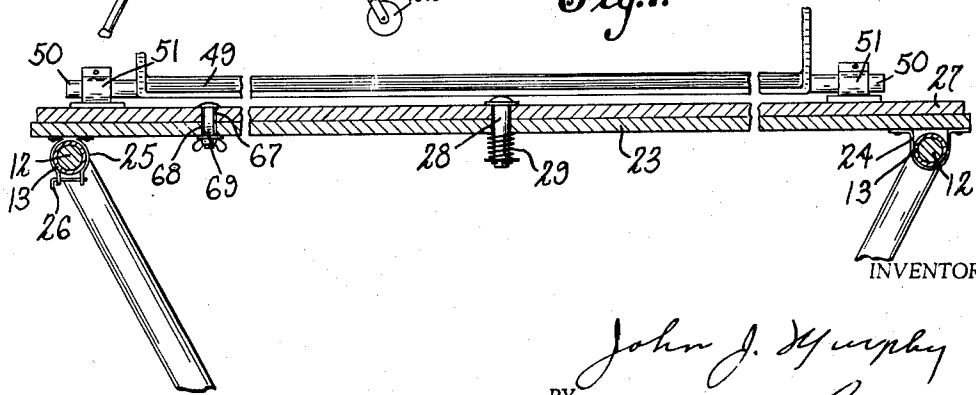


Fig. 7.



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Filed March 14, 1955

4 Sheets-Sheet 4

Fig. 8.

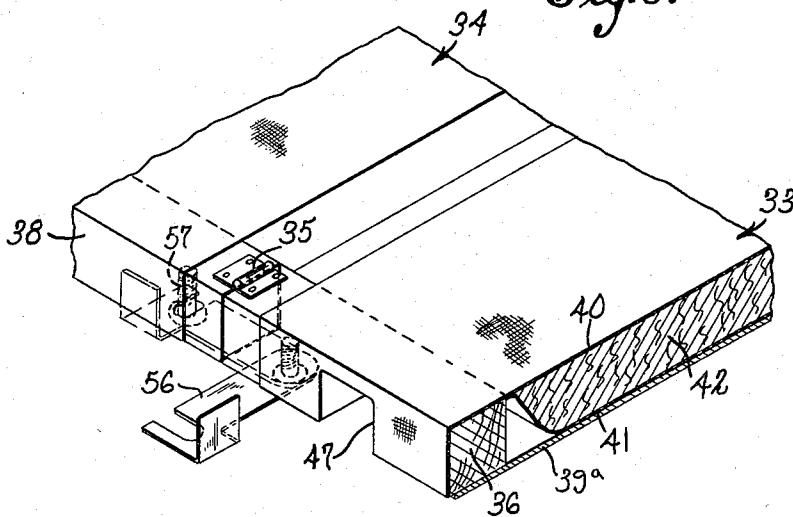
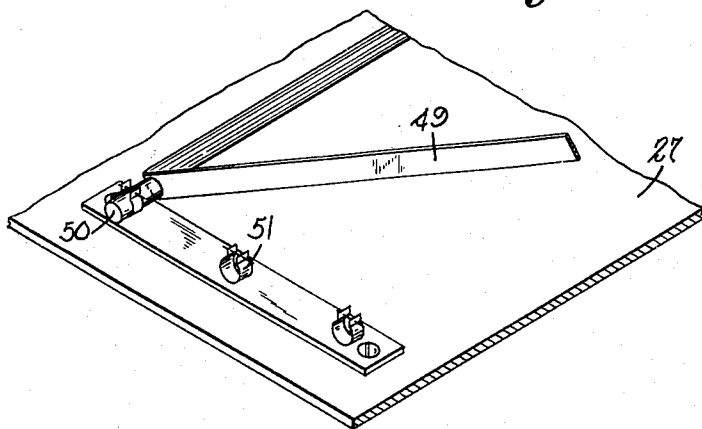


Fig. 9.



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1

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APPARATUS FOR SUPPORTING INFANTS

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Filed Mar. 14, 1955, Ser. No. 493,983

2 Claims. (Cl. 5-77)

This invention relates to an apparatus for supporting infants, and more particularly to a device comprising a collapsible table having movably connected thereto a sectional or jointed support upon which the infant rests.

As illustrated, this sectional or jointed support may be moved to various positions to place the infant in various postures, as desired. That is, the infant may be supported in a sitting position or in a reclining position either flat upon the table or horizontal, or in a position inclined with respect to the horizontal.

The apparatus is suitable for supporting an infant when the latter is being given its bottle or when it is resting or playing, or at any other time when it is not in its crib or carriage. Thus the mother is relieved of the inconvenience of having to hold the baby upon her lap, and provision is made for securing the infant to the support so that the mother may have both hands free to attend to any duties required.

Preferably, as illustrated, the table is collapsible in that it is so made that the legs may be folded together and the table top folded downwardly against the legs with the support thereon so that the device may be stored in an out-of-the-way position when not needed. Also, it is desirable to pivot the table top to the supporting leg structure so that the table top with the infant support thereon may be swung to various positions with respect to the legs or base as desired by the mother or attendant, and the device is so constructed that it may be made relatively economically so that it may be sold at a reasonable price.

One object of the present invention is to provide an apparatus for supporting infants when they are being cared for in various ways, and which may also be used as a bed or chair.

A further object of the invention is the provision of an apparatus for supporting infants, which apparatus comprises a table structure to which is hinged a jointed or sectional supporting structure whereby the latter may be moved to various inclined positions with respect to the table, and whereby the sections of the support may be moved to various angular positions with respect to each other.

A further object of the invention is to provide an apparatus for supporting infants of the type described wherein the table top is pivoted to the supporting leg structure about the vertical so that it may be swung to various positions in a horizontal plane.

Still another object of the invention is to provide an apparatus for supporting infants of the character described which will be collapsed so that it may be folded into a relatively compact form when its use is not required.

Still another object of the invention is the provision of an apparatus for supporting infants of the character described wherein the table support is adjustable in length so that the legs of the support may be moved outwardly in order that the device may be used with chairs or seats of various width, and wherein the legs of the table are

2

also adjustable in length so as to vary the height of the table from the floor.

To these and other ends the invention consists in the novel features and combinations of parts to be hereinafter described and claimed.

In the accompanying drawings:

Fig. 1 is a perspective view of an apparatus embodying my invention;

Fig. 2 is a top plan view thereof;

Fig. 3 is a side elevational view of the device;

Fig. 4 is a view similar to Fig. 3 showing the sectional support in an adjusted position;

Fig. 5 is an end elevational view of the support as shown in Fig. 3;

Fig. 6 is an end elevational view showing the apparatus in collapsed position;

Fig. 7 is a sectional view on line 7-7 of Fig. 3;

Fig. 8 is a detail perspective view of the joint between the sections of the support; and

Fig. 9 is a detail view of the method of maintaining the support in inclined position.

To illustrate a preferred embodiment of my invention I have shown in the drawings a table, the supporting structure of which is comprised of U-shaped members 10 and 11, each of these members comprising a horizontal portion and depending ends or leg portions. As shown in Fig. 4, the horizontal portions of each of these members consist of a rod-like member 12 and a tubular member 13 in which the rod 12 is slidably received and secured in adjusted position by the set screw 14 so that the length of the structure may be varied.

The depending end portions or legs 15 and 16 are crossed as shown in Figs. 1 and 5 and are pivoted together at 17. Adjustably supported on the members 15 and 16 are tubular end portions 18 and 19 respectively, these end portions being slidably received on the rod members 15 and 16 so that they may be adjusted to vary the height of the table from the floor and they will be held in adjusted position by set screws or the like 20.

A chain or similar member 21 may connect the legs 15 and 16 above the pivot 17 to limit the separation thereof. Secured to the tubular members 18 are rollers 22 so that the device may be rolled upon the floor when moved from place to place and, if desired, similar rollers may be placed upon the members 19 although it may be preferable to omit the rollers from these members in order that the device be less likely to move inadvertently. It will be seen that with the above construction the two U-shaped members 10 and 11 are pivotally secured together to form a supporting structure for a table top which will be described below. These members are, of course, foldable about the pivots 17 when it is desired to collapse or store the device.

As shown in Figs. 2 and 7, a flat member such as a board 23 is detachably secured to the tubular members 13 of the leg section of the table. For this purpose the member 23 may be provided with strap loops 24 through which the member 13 passes and at the other edge the board may be provided with a clamp member 25 of resilient material open at its lower end and adapted to snap over the tubular member 13 and the open end of the clamp may be closed by a removable pin 26. It will be seen that this board, when secured in place, will rigidly connect the horizontal portions of the U-shaped members so as to form a rigid frame. With removal of the pin 26, however, the board 23 may be swung upwardly about its pivotal connection at the other edge and the U-shaped members collapsed, as shown in Fig. 6.

Mounted upon the board 23 is the flat table top 27, the width of which is substantially equal to the length of the board 23, and the length of the table top will be substantially that desired for the average separation of the

3

legs at each end of the device. This table top is pivoted to the board 23 by the pivot pin 28. A spring 29 surrounds this pivot pin to urge these two members together but which will permit pivotal movement of the member 27 about the member 23 so as to swing the table top to various horizontal positions with respect to the board 23 and the supporting legs. It will be apparent that the board 23 will space the table top 27 from the upper surfaces of the horizontal portions of the leg structure, and in order to prevent play between these parts, a spaced member in the form of a slat 30 may be secured to the underside of the table top 27, which slat rests upon the members 13. It may also be noted that the board 23 is secured to the members 13 so that when the rods 12 are moved to extend or reduce the length of the table, the connection between the leg structure and the table top is not effected. It may also be noted that the table top 27 is of relatively rigid material such as plywood or wallboard or the like.

Hinged to the table top by hinges 32 (Fig. 1) is a supporting member consisting of a lower section 33 and an upper section or back rest 34, these two sections in turn being hinged together by hinges 35 (Figs. 3 and 8).

Each of these sections comprises a rigid open frame which may be of wood or suitable material, the lower section comprising side frame members 36 and a bottom frame member 37, while the upper section 34 comprises side frame members 38 and an upper frame member 39. Secured to the bottom faces of these frame members of both sections are relatively stiff sheets of heavy cardboard or plywood 39^a (Fig. 8). Between the side frame members is supported a mattress or the like, as shown more particularly in Fig. 8, this mattress comprising upper and lower fabric plies 40 and 41 and padding 42 between the plies. The edges of the mattress may be secured to the frame members of the supporting sections in any desired manner.

A U-shaped bracket or brace member 43 (Figs. 1 and 3) is hinged at 44 to the side members 36 of the lower section 33, and studs 45 project outwardly from either side of this member at its lower end to be received in retaining clips 46 secured to the table top 27. By placing the members 45 in various pairs of the clips 46, the lower section can be held in any desired inclined position with respect to the table top or may be allowed to lie flatly against the table top, as shown in Fig. 4. This latter position is made possible by the fact that the lower portion of the U-shaped member 43 can be folded into the recesses 47 (Fig. 4) in the frame members 36.

A similar U-shaped member 49 is secured to the side members 38 of the upper section 34, and likewise this member is provided with laterally projecting studs 50 adapted to be received in clips 51 secured in spaced relation to the upper surface of the table 27 so that the upper section may likewise be held in any desired position with respect to the top of the table. The legs of the U-shaped members 49 are extensible, as shown at 52, so that in addition to placing the lugs 50 in various pairs of the retaining clips 51, the legs of the U-shaped member 49 may be extended in order to bring the upper section to more nearly an upright position, as shown in Fig. 4. It can be placed in any adjusted position between the position shown in Fig. 4 and that shown in Fig. 5 where it is aligned with the section 33, and, of course, both sections can be dropped flat upon the table top, if desired. In the latter position a pin 54 is provided at the upper edge of the upper section which is received in a spring clamp 55 secured upon the table top to hold the section in place. This pin also serves as a handle in raising the supporting member.

When the sections 33 and 34 are aligned, as shown in Figs. 1 and 3, or are in the same plane, they may be locked together by means of the latch member 56 pivoted to the lower side of the member 36 and adapted to engage a headed pin 57 secured in the side member 38 of

4

the upper section 34. It will be understood that this latch will hold the members rigidly together due to the abutting of the adjacent end faces of the members 36 and 37 so that the support may be raised or lowered as a unit about the pivots of the hinges 32.

In order to hold the infant upon the support, an abdominal strap 58 is provided on the section 34, this strap being provided with snaps or the like 59 by which it may be opened in order to be secured about the abdomen of the infant after he is placed upon the support. Also a crotch strap may be provided, as shown at 60, this strap being arranged by using the upper edge of the cover 40 of the mattress on the lower section of the support. This strap may be secured to the abdominal strap 58 by snaps or the like, it being understood that the legs of the infant will extend one upon each side of the strap 60.

Also a chest strap 61 is provided upon the upper section 34, this strap being adapted to be secured about the chest of the infant in order to secure the infant safely upon the support. The ends of this strap pass through elongated slits 61^a in the mattress cover so that the strap may be adjusted lengthwise of the support.

It is necessary when raising the support, and particularly the lower section thereof, to various positions, to provide some means to which a lifting force may be applied. I, therefore, provide a strap 62, one end of which is detachably secured to the lower section, as shown at 63, so that it may be attached at various places along the length of the support. The other end will be permanently secured to the supporting member. The user when manipulating the support may thrust his arm below the strap 62 from the lower edge thereof and, by exerting an upward force upon the strap, move the supporting member 33 upwardly while at the same time holding the infant in position with his hand. The reverse procedure may be employed when it is desired to lower the section 33 from an inclined position to a position flat upon the table.

Hinged to each side of the upper section 34 of the table is a visor or shield 65 which may be swung inwardly to lie flat against the table or which may be moved outwardly to the position shown in Fig. 1 in order that the infant will feel secure, and these members will act as side members for the support.

If it is desired to collapse the apparatus when it is not necessary to use it, the upper support comprising the sections 33 and 34 are dropped flatly upon the table 27. The pin 26 (Fig. 7) is removed and the member 23 is swung upwardly until the spring clamp 25 is disengaged from the horizontal tubular support 13. The two U-shaped supporting members 10 and 11 can then be folded together, as shown in Fig. 6, with the superstructure comprising the member 23, the table 27 and the sectional supporting members 33 and 34 dropping downwardly between them about the loop 24 as a hinge.

Registering openings 67 and 68 may be provided in the table 27 and board 23 through which a bolt or pin 69 may be passed to prevent the table swinging about the pin 28 when the device is collapsed.

While I have shown and described a preferred embodiment of my invention, it will be understood that it is not to be limited to all of the details shown, but is capable of modification and variation within the spirit of the invention and within the scope of the claims.

What I claim is:

1. An apparatus for supporting infants comprising a table including a relatively flat, elongated table top member and a supporting leg structure to support the top member from the floor, and a supporting frame hinged adjacent one end to the table top member to swing to various adjusted positions with respect thereto, means to hold said frame in said adjusted positions, said leg structure comprising a pair of U-shaped members having horizontal bight portions disposed in substantially parallel relation, lengthwise of the top member, and depending

5

leg portions, and the latter being crossed and pivoted together intermediate their lengths whereby the leg structure may be collapsed, a rigid plate member pivotally attached to the horizontal portion of one of said U-shaped members and detachably connected to the horizontal portion of the other member, and said table top being pivoted to said plate member to swing in a horizontal plane.

2. An apparatus for supporting infants comprising a table including a relatively flat table top member and a supporting leg structure to support the top member from the floor, and a supporting frame hinged adjacent one end to the table top member to swing to various adjusted positions with respect thereto, means to hold said frame in said adjusted positions, said leg structure comprising a pair of U-shaped members having horizontal bight portions disposed in substantially parallel relation, longitudinally of the table top member, and depending leg portions, the latter being crossed and pivoted together whereby the leg structure may be collapsed, a rigid plate member to which the table top member is attached, said plate member being pivotally attached to the horizontal

6

portion of one of said U-shaped members and detachably connected to the horizontal portion of the other member, whereby the plate and top may be folded between said leg members, and said table top member being pivotally attached to the plate member to swing about a vertical axis when the top member is in a horizontal position.

References Cited in the file of this patent

UNITED STATES PATENTS

487,625	Kales	Dec. 6, 1892
1,018,865	Benedetti	Feb. 27, 1912
1,244,373	Rice	Oct. 23, 1917
1,270,737	Hyatt	June 25, 1918
2,133,223	Brightman	Oct. 11, 1938
2,314,778	Froelich	Mar. 23, 1943
2,324,421	Ouellette	July 13, 1943
2,508,905	Cohen	May 23, 1950
2,514,735	Wilson	July 11, 1950
2,546,676	North	Mar. 27, 1951
2,656,232	Raphael	Oct. 20, 1953
2,680,660	Stephens	June 8, 1954