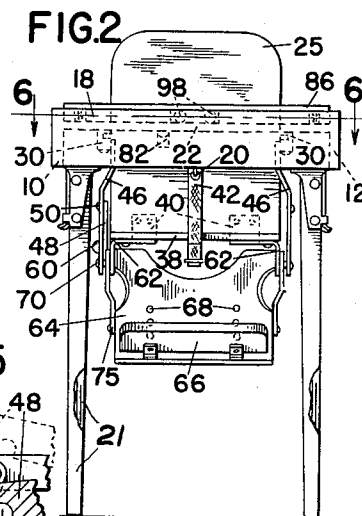
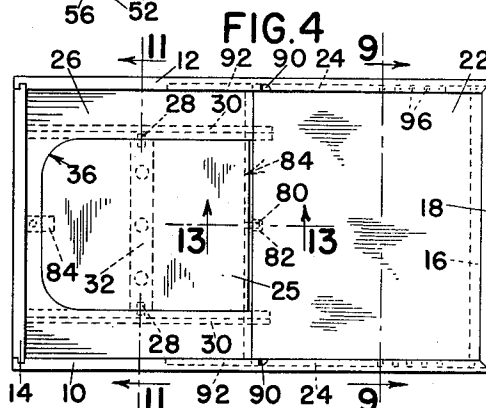
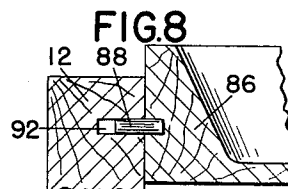
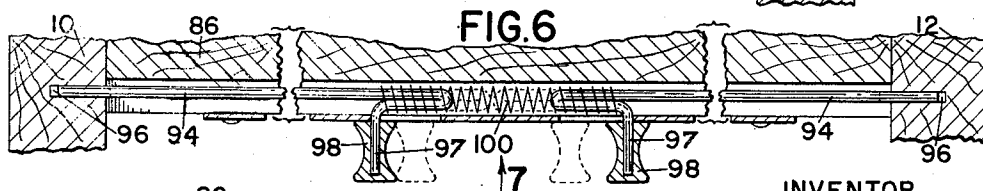
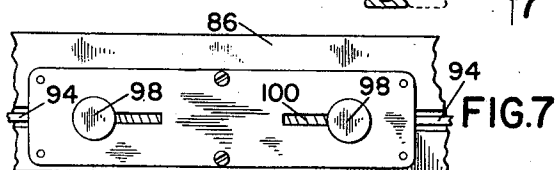


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Sept. 10, 1957

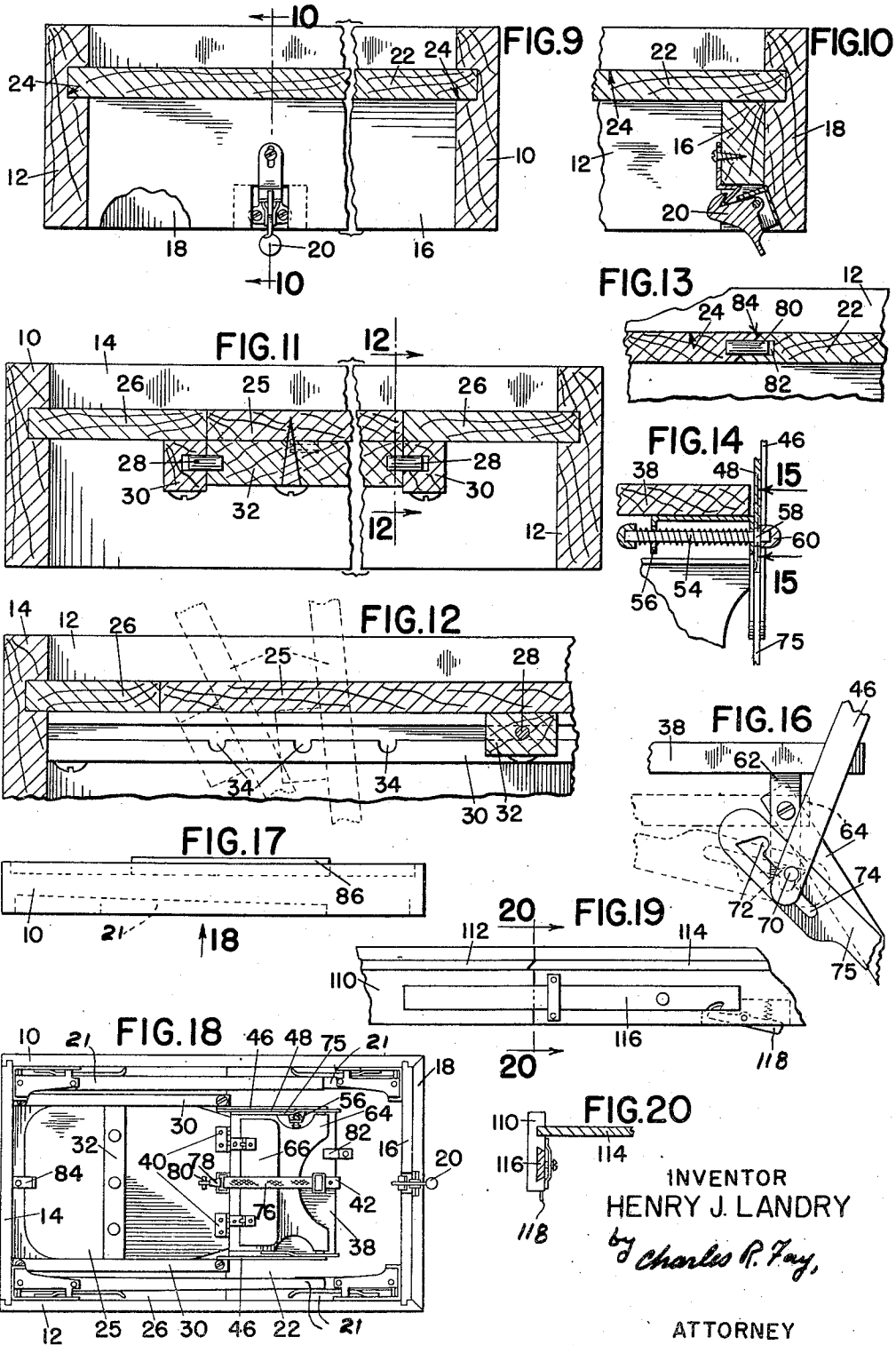
H. J. LANDRY

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COMBINED TABLE AND FOLDING CHAIR

Filed Feb. 1, 1954

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COMBINED TABLE AND FOLDING CHAIR

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14 Claims. (Cl. 155—123)

This invention relates to a new and improved combined and convertible safety table and chair combinations particularly adapted for infants and used when the infant can sit up, and also when the child has grown older and is capable of using the device as a table with separate chairs.

The principal objects of the invention include the provision of a device as described wherein there is provided a multi-part co-planar table top, a part of which forms a back rest for a chair for the infant, and including means for supporting the chair in depending adjustable operative position, the back rest being movable to provide an entrance aperture for the infant, and the chair being foldable into position for making the device into a single table, the back rest completely filling the entrance aperture, so that the table has a completely continuous surface when the chair is folded.

Other objects of the invention include the provision of a device as described including a removable tray which is adjustable to and from the infant sitting in the chair when extended, said tray being quickly and easily removable and being adjustable so as to hold the infant within the aperture safely and without any danger of the child climbing out.

Further objects of the invention include the provision of a folding chair forming a part of a table wherein the chair is adjustable as to the back rest thereof in at least six different positions including three or more positions in a forward and rearward direction to accommodate different sizes of infants, said back rest also being pivotable at different angles according to the adjustment of a supporting member bracket located on a swinging lever depending from the table and supporting the seat; and the provision of a device as above described including an adjustable leg rest having an adjustable foot rest thereon and a multi-purpose strap used as a safety strap for the infant and as a safety strap for the entire chair and also to hold the parts together in folded condition under the table.

Other objects of the invention include details of construction, latches, means for releasing a part of the chair for easy and quick adjustability and folding or extension thereof, etc.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which:

Fig. 1 is a view in side elevation of a device according to the invention, showing the same in extended condition ready for use;

Fig. 2 is a view in front elevation thereof;

Fig. 3 is a top plan view thereof, looking in the direction of arrow 3 in Fig. 1;

Fig. 4 is a top plan view illustrating the table and chair folded;

Fig. 5 is a sectional view on an enlarged scale, looking in the direction of arrows 5—5 in Fig. 3;

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Fig. 6 is a sectional view on enlarged scale, looking in the direction of arrows 6—6 in Fig. 2, certain of the parts being omitted;

Fig. 7 is a view in front elevation of a part of the mechanism of and looking in the direction of arrow 7 in Fig. 6;

Fig. 8 is an enlarged section on line 8—8 of Fig. 3;

Fig. 9 is an enlarged section on line 9—9 of Fig. 4, parts being broken away;

Fig. 10 is a section on line 10—10 of Fig. 9;

Fig. 11 is an enlarged section on line 11—11 of Fig. 4;

Fig. 12 is a section on line 12—12 of Fig. 11;

Fig. 13 is an enlarged sectional view on line 13—13 of Fig. 4;

Fig. 14 is an enlarged sectional view on line 14—14 of Fig. 1;

Fig. 15 is a section on line 15—15 of Fig. 14;

Fig. 16 is an enlarged view in elevation of the adjustable supporting bracket for the leg rest;

Fig. 17 is a view in front elevation of the device when closed;

Fig. 18 is a bottom plan view of the device when closed, looking in the direction of arrow 18 in Fig. 17;

Fig. 19 is a view in elevation of a modified form of side rail for the invention; and

Fig. 20 is a section on line 20—20 of Fig. 19.

In carrying out the present invention, it should be understood that the present device comprises a table generally referred to as a child's safety table and this table has in combination therewith a permanently attached folding and adjustable infant's chair located in the table top. The device may be used as an infant's safety table and it may also be used merely as a table with separate chairs, particularly when the child grows older. The present device is rectangular in nature rather than square as are most safety tables of the prior art, and this is accomplished through novel constructions to be described below.

The table of the present invention comprises a pair of longitudinal side rails 10 and 12. These side rails are interconnected by a rear rail 14 which is preferably fixed thereto and forms an end member of the table. At the forward end of the table, the side rails 10 and 12 are connected by a forward cross rail 16 which is lower in height than the other rails and is perhaps best seen in Fig. 10. Just outside of rail 16, there is a second forward rail 18 which is comparable to the rear rail 14 in width and height. Rail 18 is not connected to rail 16 and it must be understood that rail 16 is connected to the side rails 10 and 12, whereas rail 18 is separate therefrom and slidable with respect thereto. These two forward rails are latched by a spring-pressed pivoted latch 20 so as to releasably secure the rails 16 and 18 together, or selectively to allow separation thereof by pressing latch 20 in a counter-clockwise direction in Fig. 10. Folding legs 21 extend or are folded in parallelism in pairs.

The rail 18 has a table surface part 22 secured thereto. Table surface 22 slides in a pair of grooves 24, these grooves facing each other and being in-set in the side rails 10 and 12 (see Fig. 9).

The seat construction includes a back rest element 25 which may be cut out of another table surface element 26 which may be more or less the same in size and shape as the table element 22. This back rest is seen in folded condition in Fig. 4 and in extended condition in Fig. 3 wherein the back rest 25 is swung on an axis defined by a pair of pins 28, so that a part of the back rest extends above the table top and a part depends below the table top (see Fig. 1).

The pins 28 slide in appropriate grooves in a pair of spaced fixed cleats 30 to move the back rest forwardly and backwardly (see Fig. 11), and the pins 28 are lo-

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cated in a cleat 32 fixed to the under side of the back rest 25 so as to provide for alignment of the top surface of the back rest with the top surface of table part 26 and also table part 22. The grooves receiving pins 28 are provided with a series of spaced notches 34 which receive the pins 28 in different adjusted positions of the back rest 26 (see Fig. 12). This adjustment is to provide for different sizes of infants, and also for angularity of the back rest for sleeping, etc. This space or opening 38 remains when the back rest 25 is cut out from part 26.

The back rest 25 has hinged thereto at its lower end as seen in Fig. 1, a seat member 38. This seat member is connected at its rear edge by offset hinges 40 to the back rest member and extends forwardly, being provided at its under side with a strap 42 which is secured as at 44 to the under side of the movable table surface portion 22. The forward portion of the seat 38 is held in its position as shown in Fig. 1 by means of a pair of spaced links 46 which are pivoted to the cleats 30, depending downwardly.

One of the links 46 is provided with an angular link 48 pivoted thereto at 50. The link 48 has an arm provided with a series of apertures 52, each of which has a restricted opening as clearly shown in Fig. 15. These restricted opening apertures are provided for receiving a narrow rod or the like 54 longitudinally movable in a U-shaped bracket 56 depending from the under side of the seat 38. The rod 54 has an enlarged portion 58 that fits the contour of the holes 52 and it is also provided with a head 60 preventing the bracket 48 from slipping off sideways. When the rod 54 is moved to the right in Fig. 14, the bracket 48 is released and the device may be folded but when bracket 48 is secured to the seat by the latch just described, the seat is adjustably held in the position shown in Fig. 1.

It will be noted that there are two notches 52 shown and of course more could be used. By selecting the notch, the forward and rearward position of the seat 38 is determined and this in turn determines the angle of inclination of the back rest member 25 as shown in dotted lines in Fig. 12. This back rest member is therefore seen to have a number of positions corresponding to the number of notches 34 multiplied by the number of notches 52 and the adjustments are not only forward and backward, but also the angle of inclination is adjustable as described above.

Referring now to Fig. 16, the seat 38 is seen to be provided with brackets 62 at the under side thereof, these brackets pivotally supporting a leg rest 64 having hingedly mounted thereon a foot rest 66, which may be adjusted by means of removing and re-applying the same in a series of holes 68, to provide for infants of different length, etc.

The angular position of the leg rest 64 is adjustable between the solid line position and the dotted line position in Fig. 1, the dotted line position showing that preferred to be used for smaller children or for sleeping with legs extending forwardly and the solid line position being that preferred when it is desired that the child sit up, more nearly erect. This adjustment is accomplished by means of the linkage shown in Fig. 16 wherein lever 46 is provided with a pin 70 taking into a series of notches 72 and joined by a slot 74 in lever 75. Depending upon which notch 72 receives pin 70 determines the angularity of position of the leg rest. Lever 75 is pivoted at its lower end to the leg rest.

Furthermore, the leg rest 64 may be completely reversed to lie parallel and under seat 38 as indicated in Fig. 16 and this position is used when the device is folded as in Fig. 18. Also, of course, the foot rest 66 folds into the dotted line position shown in Fig. 1 and also shown in full lines in Fig. 18.

The strap 42 is provided with an extension 76 which underlies the seat and terminates in a snap swivel 78 which is selectively hooked onto a ring 80 at the rear side of the back rest 25. This strap acts as a safety factor to-

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gether with the safety strap 42 so as to support the seat and the infant in the event of failure of the cleats or any of the adjusting linkages 46, 48 and 75. Also, this strap serves to hold the device in folded condition as indicated in Fig. 18.

With the device extended as shown in Fig. 1, it is necessary merely to swing the foot rest 66 to dotted line position parallel with leg rest 64, move leg rest 64 into parallel position relative to and beneath the seat 38, draw out end member 18 and surface member 22 to the dotted line position, and then swing the back rest 25 into co-planar parallelism with table top surface member 26, so that the back rest fits the cut out portion 36. In this position, the seat will be parallel with table member 22 and under the same, and the back rest will completely fill the opening as above described.

Hinges 40 are offset to provide for this condition and there is a pin at 80 on the forward edge of the back rest, see particularly Fig. 13, this pin extending into a hole provided for it at 82 in the edge of the table member 22, so that in order to extend or forward the chair, it is necessary to move the table member 22 outwardly to release or accept the pin, and this helps to hold the assembled relation of the parts in folded condition. The corresponding edges of the back rest 25 and table member 26, and those of table member 22, are made on an angle with respect to each other and interfit as shown at 84 (Fig. 13) whereby the member 22 helps to support the forward portion of the back rest 25 and also the forward edges of the U-shaped member 26.

When the seat member 38 is thus moved forwardly to its folded condition as in Fig. 18, a bracket 82 under table part 22 receives the edge thereof and holds the same in combination with pin 80; and also a bracket 84 at the opposite end of the folding construction may be utilized to aid in holding the back rest member 25 from moving downwardly in folded condition thereof.

The strap 42 holds the parts folded under the table surface, and the device with its legs folded may be carried or stored or used in any way desired for a plain table top.

The device is seen to have a rim all about the edges thereof, and this rim is useful not only for containing objects on the table; it may also be a support for an adjustable and separable tray 86. This tray may be of any form or shape desired but it is preferred that it be as wide as the table top. At its forward end, it is provided with a pair of outwardly projecting pins 88 which may be set into the open tops at 90 of grooves 92, and slid forwardly to come to rest at the end of the slots, or in any intermediate position, as determined by locking rods 94 which take into any of the holes 96 inside rails 10 and 12 for adjustment with respect thereto.

These locking rods extend laterally from the tray and may themselves be located in a forward slot. Each rod has a free end extending into the selected hole 96 in the respective edge rails 10 and 12. Each rod extends inwardly and is reversely bent outwardly at 97 to provide for a handle 98. Between the reversely bent portions 97, there is provided a coil spring 100 which serves to push these rods apart and into the holes 96. When it is desired to adjust the tray or to remove the tray, the handles 98 are drawn together as shown in dotted lines in Fig. 6, releasing the ends of the rods 94 from the respective holes 96, whereupon the entire tray can be moved to the right in Fig. 3 and is easily removed completely from the table, or it may be adjustably positioned, depending upon the size of the child sitting in the chair as for instance indicated in Fig. 3.

In Figs. 19 and 20 there is shown a modification particularly of the side rail construction wherein a side rail 110 is separated near the center and each table top surface member 112 and 114 is fixed thereto and moves therewith. Also each such separable part carries a pair

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of supporting legs not shown and the parts are guided by a dovetail guide 116 fixed to part 112 and slidably arranged in an undercut slot in part 114. A latch 118 is used to hold the parts together, and otherwise the construction is the same as above described.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A combination table and chair comprising a rectangular frame, folding legs on the frame, a pair of coplanar table top members, one of said members being slidable relative to the second table top member, a chair back rest element forming a part of the second table top member and being swingable from a folded coplanar position therewith to a substantially upright position, leaving an opening in the said second table top member, a seat pivoted to the back rest, a link pivoted to the second table top member and to the seat and supporting the latter in extending condition for use, interengaging means between the back rest and the slidable table top member to hold the back rest in said folded coplanar position, and a releasable latch to hold the two table top members in abutting relation.

2. A combination table and chair comprising an elongated rectangular frame, folding legs on the frame, said legs being parallel to the long dimension of the table when folded, a pair of side rails, inter-connecting end rails for the side rails, a pair of coplanar table top members, one of said members being slidable relative to the second table top member, the latter being fixed to the rails and one end rail, a chair back rest element forming a part of the second table top member and being swingable from a folded coplanar position therewith to a substantially upright position, leaving an opening in the said second table top member, a seat pivoted to the back rest, a link pivoted to the second table top member and to the seat and supporting the latter in extended condition for use and selectively adapted to swing to allow a folded position of the seat in articulated extension of the back rest but under the slidable table top member, means to hold the back rest in said folded table top coplanar position, and a releasable latch to hold the two table top members in abutting relation.

3. A combined convertible table and chair seat comprising a pair of side rails, end rails connecting the side rails to form a fixed frame, a table top member fixed to the side rails and to one end rail, a co-planar slidable table top member on and between said side rails and cooperating with the fixed table top member to form a full table top generally coextensive with the side rails, a chair back rest forming a part of one of the table top members and adapted to swing from a table forming position co-planar and within the limits of the table top to a position substantially normal thereto for use as a chair, and a folding seat secured to the chair back rest.

4. The table and chair of claim 3 wherein the side rails extend above the table top surface and have grooves therein receiving the edge portions of and guiding the slidable table top member, the other end rail being of less height than the side rails and being located below the slidable table top member.

5. The table and chair of claim 3 including offset hinges pivoting the seat to the back rest, said seat having a folded position parallel to the table top and under the same in extended but offset relation to the back rest in folded condition co-planar with the table top.

6. The table and chair of claim 3 including offset hinges pivoting the seat to the back rest, said seat having a folded position parallel to the table top and under the same in extended but offset relation to the back rest in folded condition co-planar with the table top, and means to hold the back rest and seat in folded condition, said last-named means comprising a bracket on

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the under side of one of the table top members for holding engagement with the seat and interengaging means between the back rest and one table top member for holding engagement of the back rest, the bracket and said interengaging means being effective to hold the seat and back rest respectively upon full closure between the slidable table top member and the fixed table top member.

7. A combined convertible table and chair seat comprising a pair of side rails, end rails connecting the side rails to form a fixed frame, a table top member fixed to the side rails and to one end rail, a co-planar slidable table top member on and between said side rails and cooperating with the fixed table top member to form a full table top generally coextensive with the side rails, a chair back rest forming a part of the fixed one of the table top members and adapted to swing from a table forming position co-planar and within the limits of the table top to a position substantially normal thereto for use as a chair and forming an opening in the table top for entrance to the chair, and a folding seat secured to the chair back rest, a swinging link secured to the fixed table top member and to the seat, a latch on the link and engageable with the seat in adjusted relation thereto to hold the back rest in different forward and rear positions.

8. In a combined table and chair including side rails and a table top associated with the side rails and located in a plane below the top edges of the side rails so that a rim member is provided for the table top, the improvement comprising a slot in each side rail member, said slots being parallel to the table top and terminating in upward end portions intersecting the top edges of the side rails, said table top having an opening, a chair in the opening, the slots being in the region of the opening, a tray, fixed extensions on the tray adjacent one end thereof to enter the end portions of the slots and slide along the latter for adjusted held position on the table top, rendering the opening smaller or larger depending on the position of the tray, and latch means on the tray for selective latching or release of the tray in adjusted fixed positions.

9. In a combined table and tray including side rails and a table top associated with the side rails and located in a plane below the top edges of the side rails so that a rim member is provided for the table top, the improvement comprising a slot in each side rail member, said slots being parallel to the table top and terminating in upward end portions intersecting the top edges of the side rails, a tray, fixed extensions on the tray adjacent one end thereof to enter the end portions of the slots and slide along the latter for adjusted held position on the table top, and latch means on the tray for selective latching or release of the tray in adjusted fixed positions.

10. In a combined table and chair including side rails and a table top associated with the side rails and located in a plane below the top edges of the side rails so that a rim member is provided for the table top, that improvement comprising a slot in each side rail member, said slots being parallel to the table top and terminating in upward end portions intersecting the top edges of the side rails, a tray, fixed extensions on the tray adjacent one end thereof to enter the end portions of the slots and slide along the latter for adjusted held position on the table top, and latch means on the tray for selective latching or release of the tray in adjusted fixed positions, said latching means comprising a pair of oppositely extending rods on the tray, spring means to normally urge the rods outwardly at the side edges of the tray, a series of notches in the rim to selectively receive the extending ends of the tray, and manual means to cause the rods to retract from the notches to release the tray for adjustment or complete removal.

11. A combination table and folding chair comprising a pair of spaced parallel side rails each generally centrally divided into two longitudinally aligned parts,

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means slidably guiding said aligned rail parts to and from each other, latch means to hold the rail parts in abutting relation, a table top member fixed to each corresponding pair of spaced parallel rail parts, and end rails connecting each pair of spaced rail parts, legs on each portion of the table, said table top members being co-planar, one table top member having an opening, a chair back rest pivoted in the opening to the table top member having the opening to selectively fold to fill the same for use as a table or to depend to form a chair part, a seat on the back rest, said seat being pivoted thereto for folding action under the table top, and means to hold the seat and back rest in adjusted positions within the opening.

12. A combined convertible table and chair seat comprising a pair of side rails, end rails connecting the side rails to form a fixed frame, a table top member fixed to the side rails and to one end rail, a co-planar slidable table top member on and between said side rails and cooperating with the fixed table top member to form a full table top generally coextensive with the side rails, a chair back rest forming a part of the fixed one of the table top members, the back rest being pivotally mounted and adapted to swing from a table forming position co-planar and within the limits of the table top to a position substantially normal thereto for use as a chair back rest and forming an opening in the table top for entrance to the chair, a folding seat secured to the chair back rest, and means including a tray selectively positionable on the table top to partially cover the opening in adjusted location for varying the size of said opening.

13. In a combined table and folding chair construction including a table top having an opening and a chair located in the opening and depending below the table top, that improvement comprising a back rest pivoted to the table top, a seat hinged at its rear edge to the back rest, a link pivoted at one end to the table, means adjacent the forward edge of the seat pivotally mounting the link at the other end thereof, a second link on the first link, a series of openings at an edge of the second link, each opening in the second link having a restricted

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entrance of the edge thereof, a plunger on the seat, a reduced portion on the plunger to enter a selected restricted entrance, the plunger being of a diameter to fail to pass through any entrance except at the reduced portion, and a spring to urge the plunger in a direction to maintain the plunger with the reduced portion offset from the second link, said plunger being retractable against the spring to position the reduced portion in alignment with the restricted entrance to release the second link from the seat or to apply it thereto.

14. A combined table and chair comprising a pair of relatively slidable table top parts, a folding chair mounted in one part and having interengaging means with the other part in folded position of the chair to hold the latter in fixed position, said interengaging means being located in part on the edge of the other table part abutting the adjacent edge of the one table part having the chair thereon in closed condition of the table, the said edge of the other table part in part underlying the said adjacent one table part edge to aid in supporting the same and the chair mounted thereon.

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