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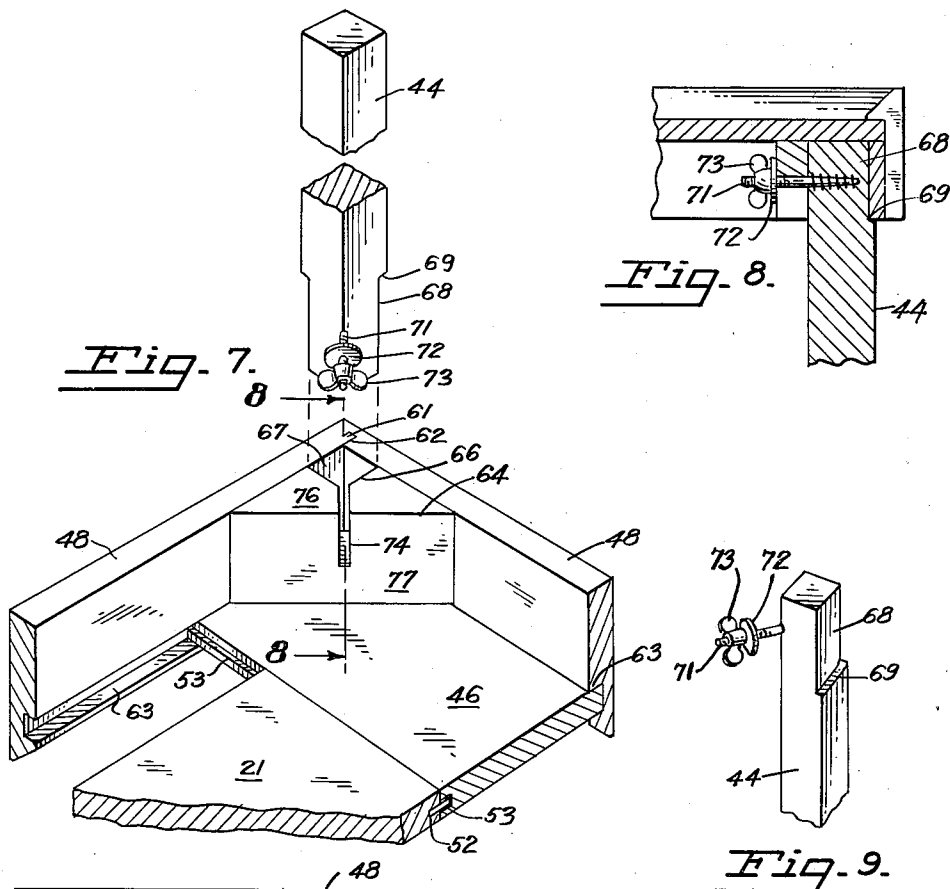
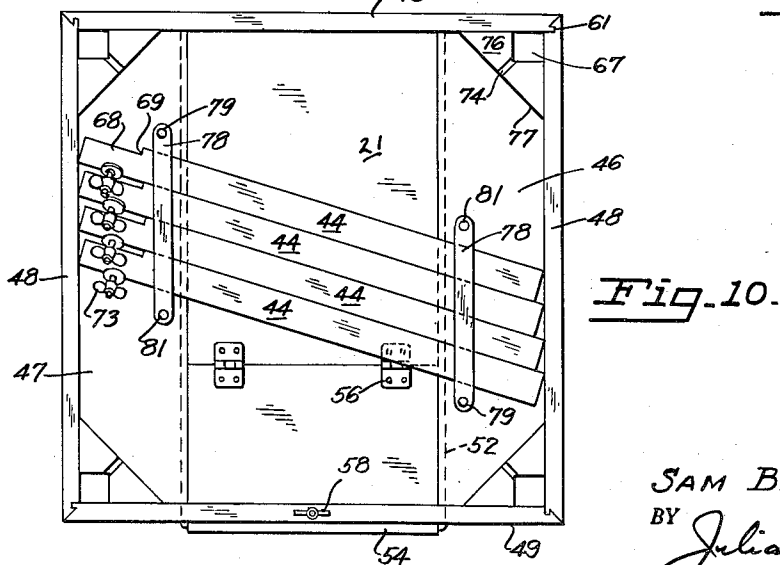
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INFANT'S FEEDING TABLE

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2 SHEETS—SHEET 2



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INFANT'S FEEDING TABLE

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This invention relates to new and useful improvements in infants' feeding tables.

A principal object of this invention is the provision of a chair and table so constructed and proportioned that the chair may be placed and supported within a well or hole in the top of the table and used as a feeding chair for an infant, the top of the table functioning as an apron on which dishes and toys may be placed and which collects food particles which fall during the infant's feeding.

Another principal object of the invention is the provision of a specially designed table having a sliding or otherwise extensible panel which may be extended to leave a hole or well in the table top and which may be retracted to restore the table top to usage in the manner of ordinary tables, with a lock to secure the panel in various positions of adjustment.

A further object of the invention is the provision of a child's chair having projecting portions on two or more sides thereof extending beyond the dimensions of the hereinbefore mentioned well in the table top, which projecting portions serve to suspend the chair within the well.

Another object of the invention is the provision of separating blocks on the underside of the extending chair portions to prevent accidentally pinching the infant's fingers between the arms and the table top.

Still another object of the invention is the use of a footrest in conjunction with the chair consisting of a cross piece attached to a pair of long levers which are pivoted adjacent the lower rear corners of the sides of the chair so as to afford considerable adjustability of the footrest, with the further provision of means for holding the footrest in a plurality of different positions of adjustment.

Another object of the invention is the location of a hinge in the sliding top panel so that the portion extending outside the edges of the table top may fold downwardly and thus not project and constitute a hazard to those passing by.

A further object of the invention is the provision of detachable legs of unique construction and means for securing such legs when detached to the underside of the table for convenient transportation and storage.

Still another object of the invention is the provision of novel means for attaching the side rails of the table together, and the attachment of the detachable legs to the table.

With the above and other objects and advantages in view, the invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims, reference

being had to the accompanying drawings, in which:

Fig. 1 is an isometric view showing a chair installed in the table so as to constitute a feeding chair;

Fig. 2 is a vertical section;

Fig. 3 is an isometric of a chair with the footrest in position for use;

Fig. 4 is an isometric of a chair with the footrest folded back;

Fig. 5 is an isometric of the table;

Fig. 6 is a section along the line 6—6 of Fig. 5;

Fig. 7 is an isometric of a corner of the table as viewed from the underside thereof and showing a table leg withdrawn from its socket;

Fig. 8 is a section along the line 8—8 of Fig. 7 with the table leg in place in its socket;

Fig. 9 is an isometric of a portion of a table leg; and

Fig. 10 is a plan of a table as viewed from the underside thereof with the legs detached and secured for transportation or storage.

The present invention contemplates the use of a specially constructed table 20 having a sliding top panel 21, which, when extended, creates a well in the top of the table into which a chair 22 may be inserted and which when retracted allows for normal use as a table. The seat when removed from the table is, of itself, a useful child's chair. The chair and table assembled together function as a feeding table, the child being seated in the chair and surrounded by the table top so that dishes, toys and other articles may be placed on the table conveniently at hand. For convenience of description, the chair, table and chair and table assembled will be separately described.

The chair

The chair herein described is simply and inexpensively constructed, is comfortable and is ideally suited for the needs of small children. However, it should be understood that the details of construction of the chair described herein may be modified without departing from the spirit of the invention insofar as other types of chairs and seat arrangements might be installed in the well of the table. The primary features of the chair are that it be of such size and shape as to fit within the well left in the top of the table upon extension of the sliding panel 21, that a portion of the chair extend outwardly so as to rest upon the table top and thereby suspend the chair within the well in proper position and that the chair be useable when disassociated from the table. In the chair illustrated herein, portions of each of the arms 23 of the chair project laterally outward so as to overhang the sides 24 with the result that when the chair is lowered into the table well,

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the lower surfaces of the arms 23 rest upon the table top and the chair is properly supported within the well and prevented from passing on through.

The chair consists essentially of a pair of substantially vertically disposed sides 24, a seat 26 and a back 27. Each of the sides has two integral legs 28 and 29 at the front and back, respectively, upon which the chair may rest upon the floor when not installed in the table. The seat 26 is disposed inclined slightly downwardly from the horizontal and its forward edge 31 is curved so that a child's legs may dangle without discomfort. The back rest 27 is disposed at an obtuse angle with respect to the seat 26, the angular relationship shown in the drawings having been found to be the most comfortable, namely the back inclined rearwardly at an angle of approximately 80° to the horizontal. The seat 26 and back 27 are attached to the sides 24 by insertion of the edges thereof into properly positioned grooves cut in the adjoining surfaces of the sides 24 and held therein by glue, nails, screws or similar means. At the top of each side portion is a substantially horizontal arm rest 23, a portion of which projects laterally outwardly so as to overhang the sides 24 for the purpose of supporting the chair in the table well. In order to overcome the danger of an infant's fingers being pinched between the lower surface of the arm rest and the top of the table, small blocks 32 may be attached to the underside of the arm rests 23 so as to elevate the arms above the table surface a distance slightly greater than the thickness of an infant's fingers.

The top forward edges of the sides are curved rearwardly in the regions indicated by reference numeral 33 and the forward edge 34 of the arm rests overhangs the sides. When the chair is positioned inside the table and the sliding panel 21 is pushed inwardly to the position shown in Fig. 5, the chair is prevented from rocking or other movement because the sliding panel 21 is clamped between the arms 23 and the curved edges 33.

The chair may also be provided with an adjustable footrest 36 which may be positioned to support the infant's feet and subsequently adjusted as the infant grows. As shown in the drawings, the footrest consists of a cross-piece 37 the upper surface of which is tilted outwardly upward so as to support the soles of the infant's shoes or feet at the most comfortable angle. A pair of levers 38 are affixed to the underside of the cross-piece 37 adjacent opposite ends thereof, said levers being pivotally connected by screws 39 to the sides at about the location of the rear legs 29. The long leverage between pivots 39 and cross-piece 37 permits of maximum adjustability of the height of the footrest. A strap 41 is affixed to the bottom of the seat 26 near the center of the forward edge thereof. The strap is provided with a plurality of spaced holes 42 into which a stud 43 affixed to the underside of cross-piece 37 may be inserted. Thus the position of the cross-piece may be adjusted by selection of the holes 42 into which stud 43 may be inserted.

The footrest 36 may, if desired, be swung out of the way. The pivots 39 for the levers 38 are located sufficiently rearwardly so that the footrest may be swung down and around to lie against the rear of the back rest 27 as shown in Fig. 4. In such position it is out of the way, yet it may be conveniently restored to normal position with a minimum of time and effort.

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The table

The table 20 herein described is of such height and shape as to be conveniently accessible to an adult feeding the infant, occupy a minimum amount of floor space, and be useful in and of itself as an occasional table. For such purpose it has been found that the table top should be approximately 25½ inches from the floor, as this height permits feeding of the child without having to bend or stoop. It has also been found that a table having a width and length of 24 inches is of the most convenient size. It will be observed that if these dimensions are used, the legs of the table will not fold in the manner of a conventional folding table unless telescopic legs are used. In the embodiment illustrated in the drawings, detachable legs 44 are used so as to permit convenient transportation of the table with a minimum of space occupied and at the same time preserving the optimum dimensions. In the event that it is desired to use conventional folding table legs, either the height of the table may be reduced or the dimensions of the top surface increased.

One of the salient features of the table is the central sliding top panel 21 disposed to slide between the fixed top panels 46 and 47 at either side thereof. The panels 46 and 47 are rigidly mounted in side rails 48 which constitute a rectangular frame for the table. One of the side rails 49 is provided with a horizontal slot 51 through which projects one end of the central sliding panel 21. The panel has tongues 52 along two edges which fit within grooves or guideways 53 in the adjoining edges of panels 46 and 47 (see Fig. 6) and thus the central panel 21 may project and retract freely. It will be observed that, as shown in Fig. 5, when the panel is in extreme inward position, the leading edge 56 of the central panel extends outwardly slightly beyond the side rail 49 and the projecting portion constitutes a convenient handle which may be grasped to pull out the panel. So that the projecting panel when extended does not constitute an obstacle in that persons moving in the vicinity of the table bump against it and so that the table does not occupy too much space, the sliding panel is hinged approximately one-third of the distance inward from the leading edge 54 by hinges 56 and thus when it is withdrawn one-third of its length or more the forwardmost portion of the panel hangs downwardly and is not in the way, all as is illustrated in Figs. 1 and 2.

To clamp the sliding panel in any desired position, there is provided a screw 57 threaded into the side rail 49 with its inner end bearing against the underside of the panel 21. The opposite end of the screw is provided with a winged head 58 so that by twisting the head the screw may be tightened against and clamp the panel in the selected position. It will be understood, that other means may be employed to hold the panel in place so that it cannot accidentally be moved or so that the infant occupying the chair cannot push the panel away and injure himself by crawling out of the chair.

The side rails 46 project above the plane of the table top so as to prevent articles from rolling off the table. In order to prevent food from lodging in the angle between the side rail 48 and table top, the rails are beveled as indicated at 59 in Figs. 2 and 6. One method of joining the side rails 48 together at the corners is shown

in Figs. 7 and 10. The adjoining edges meet in a mitre joint, but to assist in securing a firm juncture, a projecting tenon 61 extending parallel to the side rail is formed in one side rail as a projection of the inner edge thereof and a corresponding mortise 62 is formed in the adjacent side rail. The tenon 61 projecting within the mortise 62 insures a secure joint and it is generally unnecessary to use nails to hold the side rails in proper 90° angular relationship to each other.

The edges of panels 46 and 47 fit into grooves 63 cut into the side rails so that they are held securely in place.

As has been stated, detachable legs 44 are shown in the preferred embodiment illustrated in the drawings. In order to hold such legs in position and also to assist in securing the side rails 48 and 49 and top panels 46 and 47 in proper position, corner braces 64 are placed in each corner where the side rails join and such braces are glued both to the side rails and to the top panels. The shape of the cross-section of the braces is approximately that of an equilateral right triangle and the corner at the right angle is cut out at 66 to receive the ends of the legs in the sockets 67 formed between the notched out portion 66 of the brace and the inside edges of the side rails. By fitting the legs within the sockets, the side rails need not be cut away at the corners where table legs are ordinarily located and thus the strength of the table is increased. At the same time the exterior surfaces of the side rails are smooth and continuous, a feature of importance both from the standpoint of appearance and in preventing food being lodged in the crevices at the joints. The ends of the legs may be reduced in thickness as at 68 in Figs. 7 and 9 so as to provide a shoulder 69 which abuts against the brace 64 and assists in holding the legs perpendicular to the table. To secure the legs in place a threaded screw is fixed in one of the corners of each leg a short distance from the end thereof, which screw extends diagonally and perpendicular to the length of the leg. Each screw is provided with a washer 72 and a wing nut 73. A slot 74 is cut part way into the brace 64 to receive the screw, said slot extending from the interior corner of the cut out portion 67 outward toward the hypotenuse 77. The slot extends only part way into the brace so that when the screw reaches the bottom of the slot the shoulder 69 abuts the surface 76 of the brace 64 and the end of the leg abuts the underside of the table top. By tightening the wing nut 73, the washer 72 bears against surface 77 of brace 64 and the leg 44 is pulled against the brace and held firmly in position. It will be observed that tightening of nut 73 has no tendency to force the side rails 48 apart as is common in other table constructions.

When it is desired to collapse the table for transportation or storage, the wing nuts 73 are loosened and the legs 44 withdrawn from their sockets 67. During transportation or storage the legs may be held flat against the underside of the table so that they extend confined within the side rails 48 and at an angle with respect thereto. They may be held in place by elastic bands 78 fixed to the table top at one end by a permanent fastening 79 and held to the table top at the other end by means of a hook and eye connection, snap fasteners, etc., 81, all as illustrated in Fig. 10.

Chair and table assembled

As has already been pointed out, both the chair 22 and table 20 separately are useful articles of furniture. One of the most important features of the present invention is the fact that the chair and table may be assembled together to make a feeding chair for an infant with a wide apron on which to place plates, toys and other objects and to catch food dropped during the infant's feeding.

In order to accomplish such assembly, after the legs have been attached to the table as has been described, the lock screw 57 is loosened, permitting the sliding panel 21 to be withdrawn to the position shown in dotted lines in Fig. 2. Such withdrawal of the sliding panel 21 leaves a hole or well in the table top of sufficient size to permit the chair 22 to be lowered therein. Since the arms 23 project laterally beyond the planes of the sides and since the width of the sliding panel is approximately the distance between the outer surfaces of the sides, the lower surface of the arms 23 rest upon the table top. As has been indicated, the blocks 32 elevate the arms slightly above the table top so as to prevent pinching the infant's fingers. This feature is of particular importance if the infant has been placed in the chair before the chair has been lowered into the table well. Either before or after the chair is in place, the infant may be seated therein, and the sliding panel 21 pushed back until it contacts either the infant's body or the forward edges 33 of the sides, as indicated in Fig. 2. The lock 57 is then tightened to prevent movement of the panel 21. With the panel locked in position, the chair cannot be moved with respect to the table and it is firmly secured in place. Likewise the infant is prevented from getting out of the chair because here is insufficient distance between the edge of the panel 21 and the back rest 27 to permit the infant to raise himself out of the chair or to slide downwardly and under the table. Thus it is unnecessary to use straps or harnesses commonly used in connection with high-chairs to secure the infant inasmuch as once the infant has been seated and the sliding panel locked in inward position there is no danger of the infant falling out of the chair.

The height of the table is such that the infant may be spoon fed conveniently by an adult and if the adult is seated in an ordinary chair it is unnecessary to bend or stoop in order to feed the infant. At the same time, the center of gravity is low enough so that there is no danger of the infant tipping the chair and table over by boisterous movement.

It will be understood that this invention has been described with reference to illustrating an example for purposes of clarity of understanding and certain changes in assembly and structure may be practiced within the spirit of the invention and scope of the appended claims.

What is claimed is:

1. An article of furniture for feeding infants comprising in combination, a table, said table having a plurality of panels in its top surface, at least one of said panels being movable relative to another of said panels to provide an aperture in said top surface, said panels when in closed position completely closing the top of said table, and a chair, said chair being dimensioned to fit within the aperture of said table top and having a projecting portion engageable with a portion

of said table to suspend said chair within said aperture.

2. An article of furniture for feeding infants comprising in combination, a table, said table having a plurality of panels in its top surface, a first panel slidable with respect to a second panel to provide an aperture in said top surface, said first panel consisting of two portions hinged together and adapted to permit a portion of said first panel to hang vertically upon projection of said first panel to provide said aperture, said first panel when retracted completely closing the top of said table, and a chair, said chair being dimensioned to fit within the aperture of said table top and having a projecting portion engageable with a portion of said table to suspend said chair within said aperture.

3. An article of furniture for feeding infants comprising in combination, a table, the top surface of said table including a first panel interposed between and slidable with respect to a second and a third panel to provide an aperture in said top surface between said second and third panels, and a chair, said chair having substantially parallel, vertical sides dimensioned to fit within the aperture of said table top and having laterally extending arms above said sides to rest on top of said second and third panels and suspend said chair within said aperture, said chair having supporting means dimensioned so that when resting on the floor said chair is positioned for normal seating of an infant, said supporting means constituting integral, substantially co-planar extensions of said vertical sides.

4. An article of furniture for feeding infants comprising in combination, a table, the top surface of said table including a first panel interposed between and slidable with respect to a second and a third panel to provide an aperture in said top surface between said second and third panels, and a chair, said chair being dimensioned to fit within the aperture of said table top and having laterally extending arms to rest upon said second and third panels and suspend said chair within said aperture, and spacing means to elevate said arms above said second and third panels.

5. An article of furniture for feeding infants comprising in combination, a table, the top surface of said table including a first panel interposed between and slidable with respect to a second panel and a third panel to provide an aperture in said top surface between said second and third panels, and a chair, said chair including a pair of opposed, substantially vertical sides, edges of said sides being curved inwardly, said chair being dimensioned to fit within the aperture of said table top and having laterally extending arms attached to said sides immediately above the inwardly curved portions thereof to rest upon said second and third panels and suspend said chair within said aperture, said first panel being slidable inwardly to extend under said arms and engage the curved portions of said sides to restrain movement of said chair within said aperture.

6. An article of furniture for feeding infants comprising in combination, a table, the top surface of said table including a first panel interposed between and slidable with respect to a second panel and a third panel to provide an aperture in said top surface between said second and third panels, and a chair, said chair including a pair of opposed, substantially vertical sides, edges of said sides being curved inwardly, said

chair being dimensioned to fit within the aperture of said table top and having laterally extending arms attached to said sides immediately above the inwardly curved portions thereof to rest upon said second and third panels and suspend said chair within said aperture, said first panel being slidable inwardly to extend under said arms and engage the curved portions of said sides to restrain movement of said chair within said aperture, means for adjustably restraining said first panel in a plurality of positions, and an adjustable footrest on said chair adjustable in a plurality of positions and cooperable with said first panel to restrain an infant from falling from said chair.

7. An article of furniture for feeding infants comprising in combination, a table, the top surface of said table including a first panel interposed between and slidable with respect to a second panel and a third panel to provide an aperture in said top surface between said second and third panels, a lock to restrain movement of said first panel, said first panel consisting of two portions hinged together and adapted to permit a portion of said first panel to hang vertically upon projection of said first panel to provide said aperture, and a chair, said chair being dimensioned to fit within the aperture of said table and including a pair of opposed, substantially vertical sides, edges of said sides being curved inwardly, said chair having laterally extending arms attached to said sides immediately above said inwardly curved edges to rest upon said second and third panels and suspend said chair within said aperture, said first panel being slidable inwardly to extend under said arms and engage the curved portions of said sides to restrain upward and rocking movement of said chair within said aperture, and spacing means underneath said arms to elevate said arms above said second and third panels.

8. An article of furniture for feeding infants comprising in combination, a table, said table having a plurality of panels in its top surface, including a first panel slidable with respect to a second panel to provide an aperture in said top surface, said panels when in closed position completely closing the top surface of said table, and a chair, said chair being dimensioned to fit within the aperture of said table top and having a projecting portion engageable with a portion of said table to suspend said chair within said aperture, said chair including supporting means arranged to support said chair upright when positioned on the floor.

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