Oct. 23, 1951 J. J. SCANLON 2,572,282

COLLAPSIBLE FEEDING TRAY ATTACHMENT FOR CHAIRS

Filed Jan. 8, 1949

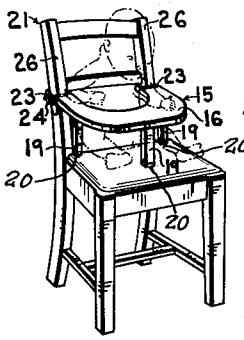


FIG. 1.

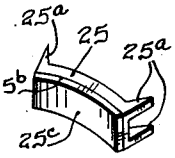


FIG. 10.

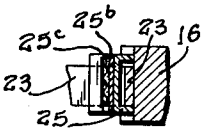


FIG. 9.

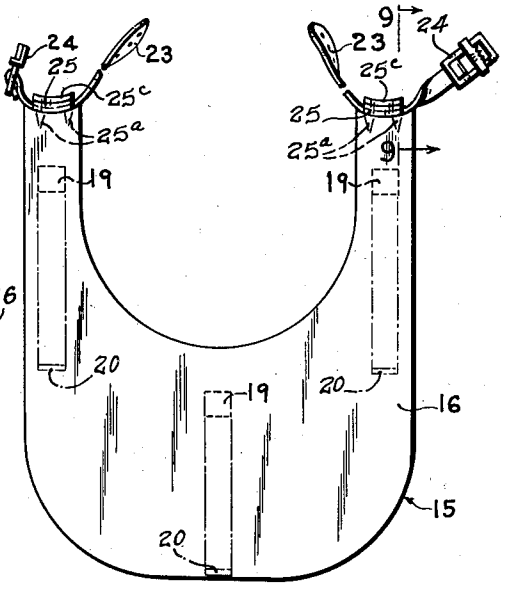


FIG. 3.

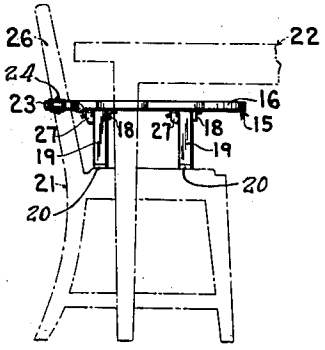


FIG. 2.

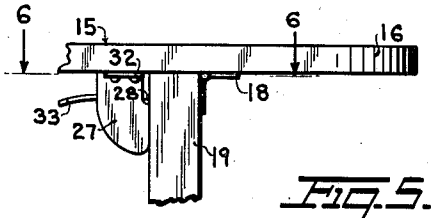


FIG. 5.

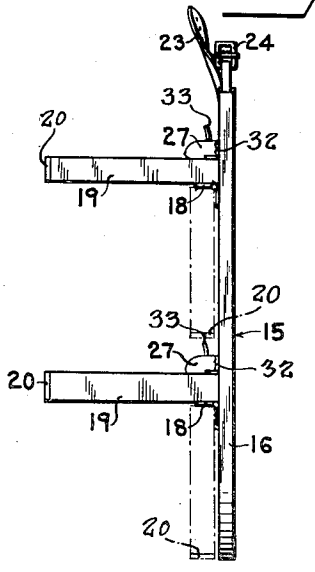


FIG. 4.

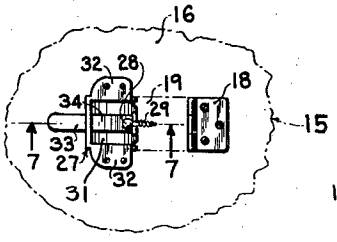


FIG. 6.

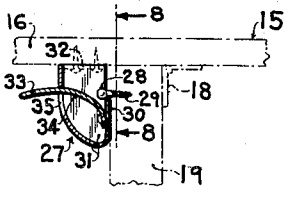


FIG. 7.

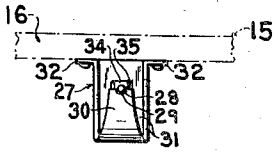


FIG. 8.

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COLLAPSIBLE FEEDING TRAY ATTACHMENT FOR CHAIRS

John J. Scanlon, Bronx, N. Y.

Application January 8, 1949, Serial No. 69,857

4 Claims. (Cl. 155—188)

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This invention relates to new and useful improvements in furniture articles for babies, and, more particularly, the aim is to provide a novel and valuable collapsible appliance for erection and attachment to an adult's chair and then for providing a seat and enclosure for the infant or very young child such that the latter is dependably protectively positioned and facing a frontally surrounding miniature table on which may be arranged one or more suitable toys and by the aid of which the baby may be conveniently fed.

The new furniture article has very few parts, is relatively inexpensive to manufacture, and has the further advantages that it may be readily collapsed into a compact and comparatively small unit, as for carrying the same in collapsed condition even in a moderate size suitcase or the like. As thus collapsible, and in its now preferred form, the new appliance comprises merely a substantially U-shaped table, and three legs hingedly connected at their tops to the underside of said table, whereby for erecting the appliance said legs may be swung to dispositions perpendicular to the plane of the table and for collapsing the appliance the legs may be swung to extension against and parallel with the bottom of the table and in the latter case with both opposite ends of all the legs within the area of the table.

A further feature of the invention is the provision of an efficient and entirely reliable latching means for insuring against accidental collapse of any leg when the appliance is erected; this latching means, in its now preferred form, including elements analogous to those characteristic of a snap fastener, combined with a readily accessible finger-piece manipulable for quick release of such snap fastener means in preparation for collapsing the appliance.

Also, according to the invention, mere frictional engagement or any special engagement of the bottoms of the legs with the seat expanse of the adult's chair, when the new appliance is erected, is not depended on in any way to maintain the erected appliance at its prevised placement on the adult's chair, but, instead, there are provided positively functioning means for absolutely securely temporarily coupling together the adult's chair and the new appliance in erected condition; said positively functioning means being so constituted that the same is substantially instantaneously attachable to and detachable from parts of the back of the adult's chair. At the same time, the parts of the new appliance are so arranged that the appliance in erected condition may be left thus coupled to the adult's chair, even during

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the time when the latter is pushed in under a dining table as is desired between meals in a well-ordered home.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a frontal perspective view, showing a now favored embodiment of the new appliance in erected condition on the seat of an adult's chair and coupled thereto as above, and also showing a baby protectively positioned on the seat of the adult's chair.

Fig. 2, drawn to a somewhat larger scale than Fig. 1, shows said appliance in side elevation, and, in dot and dash lines, said adult's chair and also a dining table, with said chair pushed in under said table.

Fig. 3 is an enlarged plan view, with the positions assumed by the upper ends of the legs when the latter are erected indicated in broken lines, and with the positions assumed by said legs when the appliance is collapsed indicated in dot and dash lines.

Fig. 4 is a side elevational view of the new appliance, with its legs shown in full lines in their erected positions and with said legs shown in dot and dash lines in their collapsed positions.

Fig. 5 is a much enlarged fragmentarily elevational detail view, showing certain of the parts as observed in Fig. 2.

Fig. 6 is a horizontal section, taken on the line 6—6 of Fig. 5.

Fig. 7 is a vertical section, taken on the line 7—7 of Fig. 6.

Fig. 8 is also a vertical section, this taken on the line 8—8 of Fig. 7.

Fig. 9 is an enlarged partial vertical sectional view taken on the line 9—9 of Fig. 3.

Fig. 10 is a perspective view of one of the metallic channel members, per se.

Referring to the drawing more in detail, the new appliance as there illustrated is as a whole designated 15. The same comprises a substantially U-shaped uniplanar table or tray 16. Suitably swingably connected to the underside of the tray 16, as by the hinges 18, and at the locations best indicated by the broken-line squares of Fig. 3 representing the tops of the legs when erected, there are three legs 19. The legs 19 are all preferably of the same length, and small squares 20

of felt or other soft material are preferably secured to the bottom ends of the legs to rest on the seat of the adult's chair, as will become clear as this specification proceeds. The tray 16 is made of wood, but may be made of a plastic material or any other similar material.

In Figs. 1 and 2, the new appliance, erected, is shown as secured by the positive holding means already mentioned to the adult's chair 21, which is illustrated as a standard type of chair forming part of a dining room suite, and in Fig. 2 said chair is shown as pushed in under a table 22 also forming part of said suite.

The positive holding means is illustrated as comprising a pair of straps 23 of cloth webbing material, leather or any other suitable material. Each of the straps 23 is provided at one end with a buckle 24 of the friction grip type with which the free end of each of the straps may be engaged after the straps 23 have been engaged about the vertical side risers 26 of the adult chair 21. Each of the straps 23 has its intermediate portion slidably extended through a metallic channel 25 secured to the back ends of the legs defining a part of the U-shaped tray 16. The four corners of each of the metallic channels 25 are formed with prongs 25^a, see Fig. 10, which are to be driven into the back ends of the legs of the tray 16, as shown in Fig. 3, for connecting the channels 25 to the tray. The exposed face of the channels 25 has secured thereto by layers of mucilage 25^b, pieces of felt 25^c which are arranged to contact the adjacent faces of the vertical risers 26 and prevent the channels 25 from marring these faces of the risers 26.

The friction type buckles 24 permit the free ends of the straps 23 to be engaged therewith regardless of the thickness of the vertical risers and slidably extending the intermediate portions of the straps 23 through the channels 25 permits the position of the straps 23 with relation to the channels to be shifted to align the buckles 24 with a flat portion of the risers regardless of the thickness of the risers 26.

To prevent inadvertent collapse of any leg 19, each such leg is also served by a special latch means marked as a whole 27. The details of a now favored construction of a latch means 27 are best shown in Figs. 5–8. This latch means is in function analogous to the ordinary snap fastener, and includes a post element carrying at its outer end a ball-shaped head 28 and having a screw shank 29; in which latter connection it may be explained that the legs 19 are desirably made of wood, a plastic, metal or the like, so that in the case of a leg 19 which is of wood, said shank may have a thread typical of that of a wood screw, or, in the case of a leg 19 of a plastic or metal, said shank may have a thread typical of that of a machine screw.

The receptor for the ball-shaped head 28 is shown as provided at the upper edge of a resilient leaf 30 upcurled from the blank of which is formed a box-like metal stamping 31 having at its top and at its two sides oppositely horizontally offset apertured ears 32 for securement, as by the screws indicated, of said stamping suitably adjacent to a leg 19 and against the under side of the tray 16. Thus, when a leg 19 is erected, it is automatically snap-latched in its erected position, by coaction between the elements 28 and 30. A finger-piece 33 forms part of a fairly stiff metal strip 34 projected through a vertically elongated slot 35 in said stamping, and said strip is near its lower end suitably secured to the leaf 30; whereby, on pressing down on the finger-piece 33, the snap-latch between said elements 28 and 30 is released. Then the legs 19 may be collapsed against the under side of the tray 16, to lie as indicated in dot and dash lines in Figs. 3 and 4.

While I have illustrated and described the preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. A furniture appliance for the purpose stated, comprising a tray, a plurality of legs each of substantially rectilinear extension from end to end, and means for hingedly connecting one end of each leg to the under side of the tray for permitting swinging movement of any leg relative to the tray and independent of such a movement of any other leg, said hinging means being so arranged relative to each other and to the said legs and to the tray that said legs when erected similarly angularly project from the under side of the tray and said legs when swung away from such projection may be laid substantially flat against the bottom of the tray, said tray being of substantially U-shaped outline, releasable latching devices for maintaining said legs projected from the tray, each such latching device including snap fastener means incorporating post and receptor elements and partially carried by the adjacent leg and partially carried by the tray, each latching device also including manually operable releasing means incorporating an accessible finger-piece manipulable to disconnect said post and receptor, and a plurality of flexible securing means attached to the tray for engagement about the vertical risers of an adult chair, one of said securing means being thus attached adjacent to the free end of one of the legs of said U and the other of said securing means being thus attached adjacent to the free end of the other of the legs of said U, each of said U-leg ends being concavely curved at the place of attachment thereto of one of said securing means.

2. A furniture appliance for the purpose stated, comprising a tray, a plurality of legs each of substantially rectilinear extension from end to end, and means for hingedly connecting one end of each leg to the under side of the tray for permitting swinging movement of any leg relative to the tray and independent of such a movement of any other leg, said hinging means being so arranged relative to each other and to the said legs and to the tray that said legs when erected similarly angularly project from the under side of the tray and said legs when swung away from such projection may be laid substantially flat against the bottom of the tray, said legs being of such lengths as then to lie wholly within the marginal bounds of the tray, the tray being of substantially U-shaped outline, there being three of such legs, with each of two thereof near the free ends of the legs of such U, and with the third leg forward of said two legs adjacent to a point along a line along the tray and bisecting the bowl of said U, channel shaped members mounted on the

rear ends of the side arms of said U-shaped tray, straps having their intermediate portions slidably engaged through said channels, and means on one end of each of the straps for securing the ends of the straps together after having been engaged about the vertical risers of an adult chair.

3. A furniture appliance for the purpose stated, comprising a tray, a plurality of legs each of substantially rectilinear extension from end to end, and means for hingedly connecting one end of each leg to the under side of the tray for permitting swinging movement of any leg relative to the tray and independent of such a movement of any other leg, said hinging means being so arranged relative to each other and to the said legs and to the tray that said legs when erected similarly angularly project from the under side of the tray and said legs when swung away from such projection may be laid substantially flat against the bottom of the tray, said legs being of such lengths as then to lie wholly within the marginal bounds of the tray, the tray being of substantially U-shaped outline, there being three of such legs, with each of two thereof near the free ends of the legs of such U, and with the third leg forward of said two legs adjacent to a point along a line along the tray and bisecting the bowl of said U, channel shaped members mounted on the rear ends of the side arms of said U-shaped tray, straps having their intermediate portions slidably engaged through said channels, and means on one end of each of the straps for securing the ends of the straps together after having been engaged about the vertical risers of an adult chair, said means on the said one end of each of said straps comprising friction grip buckles.

4. A furniture appliance for the purpose stated, comprising a tray, a plurality of legs each of substantially rectilinear extension from end to end, and means for hingedly connecting one end of each leg to the under side of the tray for permitting swinging movement of any leg

relative to the tray and independent of such a movement of any other leg, said hinging means being so arranged relative to each other and to the said legs and to the tray that said legs when erected similarly angularly project from the under side of the tray and said legs when swung away from such projection may be laid substantially flat against the bottom of the tray, said legs being of such lengths as then to lie wholly within the marginal bounds of the tray, the tray being of substantially U-shaped outline, there being three of such legs, with each of two thereof near the free ends of the legs of such U, and with the third leg forward of said two legs adjacent to a point along a line along the tray and bisecting the bowl of said U, channel shaped members mounted on the rear ends of the side arms of said U-shaped tray, straps having their intermediate portions slidably engaged through said channels, and means on one end of each of the straps for securing the ends of the straps together after having been engaged about the vertical risers of an adult chair, and pieces of felt secured to the exposed faces of said channel shaped members for engaging against the adjacent faces of the vertical risers of the adult chair.

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