J. A. SHERRY.

CHAIR.

APPLICATION FILED JAN. 16, 1914.

1,149,545.

Patented Aug. 10, 1915.

2 SHEETS—SHEET 1.

Fig. 1.

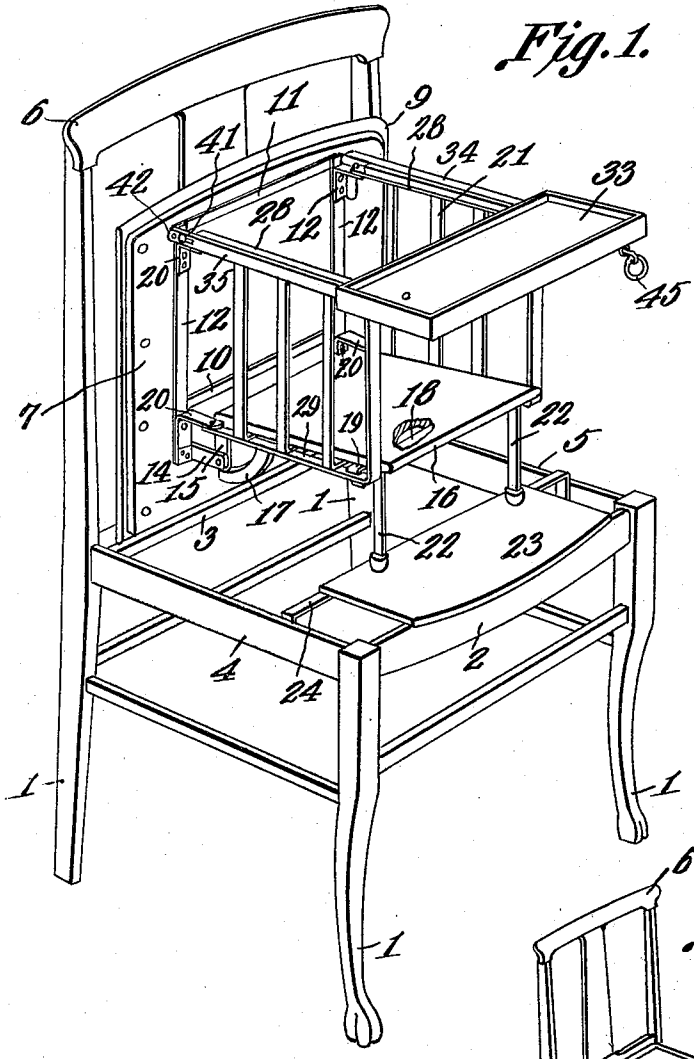
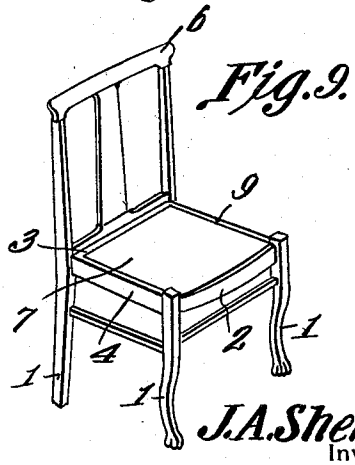


Fig. 2.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

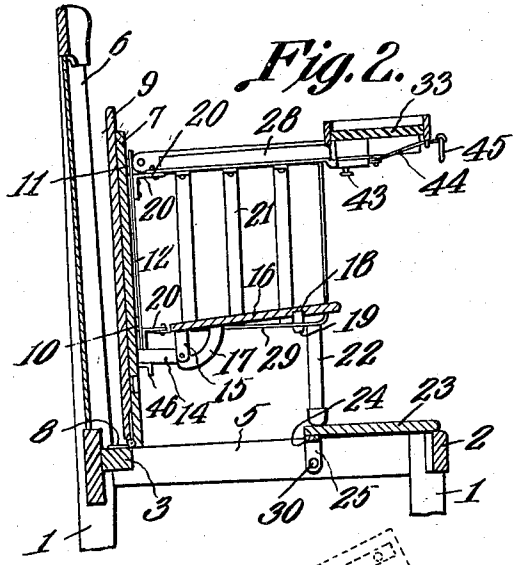


Fig. 5.

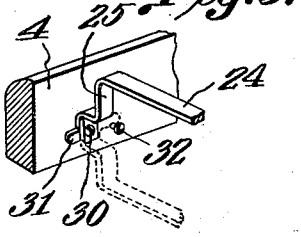


Fig. 6.

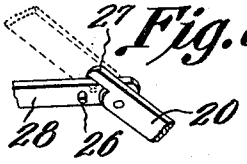
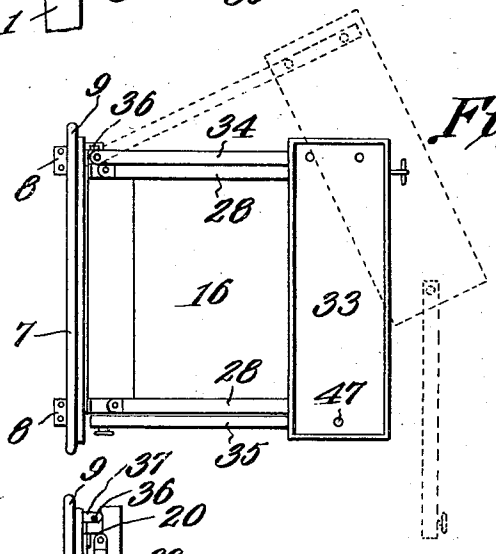
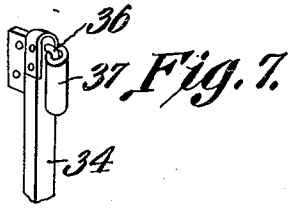


Fig. 3.





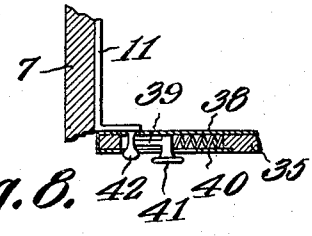


Fig. 8.

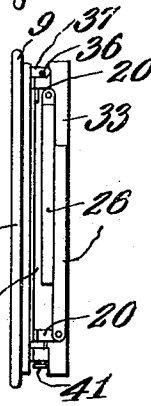


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

JAMES A. SHERRY, OF FALL RIVER, MASSACHUSETTS.

CHAIR.

1,149,545. Specification of Letters Patent. Patented Aug. 10, 1915.

Application filed January 16, 1914. Serial No. 812,468.

To all whom it may concern:

Be it known that I, JAMES A. SHERRY, a subject of the King of England, residing at Fall River, in the county of Bristol and State of Massachusetts, United States of America, have invented a new and useful Chair, of which the following is a specification.

The device forming the subject matter of this application is a collapsible high chair and one object of the invention is to provide a device of this type which, when folded up and not in use, will present the appearance of an ordinary dining chair and neither detract from the general appearance of the apartment in which the structure is located, nor take up unnecessary room.

Another object of the invention is to provide a device of this type in which the auxiliary seat of the high chair is hinged directly to the main seat of the chair proper so as to fold beneath the main seat when the latter is closed down upon the seat frame of the chair proper.

The invention aims to provide novel means for supporting the seat of the high chair in a horizontal position.

It is within the scope of the invention to provide novel means for assembling the laterally swinging arms of the high chair with the main seat of the chair proper and to secure accurate coöperation between the arms, the tray of the high chair, the seat of the high chair and other elements of the structure.

It is within the scope of the invention to improve generally and to enhance the utility of, devices of that type to which the present invention appertains.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:—Figure 1 is a perspective view showing the chair set up in a position for use; Fig. 2 is a vertical longitudinal section of the structure shown in Fig. 1, parts being broken away; Fig. 3 is a top plan showing the seat of the main chair and attendant parts as the same will appear when the high chair is set up for use; Fig. 4 is a top plan showing the seat of the high chair, the seat of the main chair and attendant parts in folded positions; Fig. 5 is a fragmental perspective showing the means whereby the foot rest is prevented from dropping downwardly when not in use; Fig. 6 is a perspective view illustrating the mechanism whereby the lateral movement of the arms of the high chair is limited; Fig. 7 is a perspective view showing the means whereby the tray of the high chair is mounted to swing either vertically or horizontally; Fig. 8 is a sectional detail showing the means whereby one arm of the tray of the high chair is detachably assembled with the main seat of the chair proper; Fig. 9 is a perspective view illustrating the complete structure as the same will appear when folded up and not in use.

The chair proper with which the high chair structure is collapsibly assembled comprises the legs 1 and a seat frame including a front bar 2, a rear bar 3 and side bars 4 and 5. The back of the chair proper is indicated at 6. The seat of the chair proper, hereinafter referred to as the main seat is denoted by the numeral 7 and is united by means of hinges 8 with the rear bar 3 of the seat frame, the main seat 7 having an outstanding flange 9 which, cooperating with the seat frame of the main chair prevents the seat 7 from swinging downwardly beyond a horizontal position.

Cross strips 10 and 11 are secured to the under face of the main seat 7 and are united by longitudinal strips 12. Projecting from the strips 12 are supports 14 pivoted to brackets 15 attached to an auxiliary seat 16 which constitutes the seat of the high chair, the brackets 15 having curved arms 17, the functions of which will be made manifest hereinafter. Secured to the under face of the auxiliary seat 16 is a bar 18 having depending fingers 19 at its ends.

Projecting from the longitudinal strips 12 which are secured to the main seat 7 are brackets 20 which constitute supports for the side arms 21 of the high chair, the construction being such that the side arms 21 may be folded toward each other and toward the seat 7. The upper rails of the side arms 21 of the high chair are indicated at 28 and the lower rails are indicated at 29, the brackets 20 being pivoted directly to the rails 28 and 29. Referring to Fig. 1, the side

arms 21 of the high chair are equipped adjacent their forward ends with depending legs 22.

The invention includes a foot rest 23, across the rear edge of which extends a bar 24 having depending ends 25 supported upon pivot elements 30 which are mounted upon the inner faces of the side bars 4 and 5 of the seat frame of the chair proper. One of the ends 25 of the bar 24 is provided with a finger 31 adapted to coact with a pin 32 inserted into the inner face of the bar 4, as shown in Fig. 5. The coöperation between the finger 31 and the pin 32 is such that when the foot rest 23 is swung rearwardly from the position shown in Fig. 1, the foot rest will assume a horizontal position and will be housed between the side bars 4 and 5 of the seat frame of the chair proper. A means is also provided for limiting the outward lateral swinging movement of the side arms 21 of the high chair and with this end in view, the upper rails 28 of the side arms are provided with pins 26 adapted to coact with fingers 27 formed on the ends of the brackets 20. (Fig. 6.)

The invention includes a tray 33 including arms 34 and 35. An angle rod 36 is provided, as shown in Fig. 7. One end of this angle rod is journaled in the side face of the arm 34 and the other portion of the angle rod 36 is journaled in a bearing 37 mounted on the main seat 7. Secured to the arm 35 of the tray, as shown in Fig. 8, is a casing 38 in which is mounted to slide a latch 39 constrained by a spring 40 to engage with a lug 42 constituting a part of the cross strip 11 and extended removably through the casing 38, the latch 39 being manipulated by means of a finger piece 41 thereon.

A latch 43 is secured to the under face of the tray 33 and is controlled by a cord, rod or the like shown at 44, the same being provided upon its exposed end with a ring 45. The latch 43 is adapted to engage beneath the end of one of the upper rails 28 of the side arms 21 when the high chair is set up as shown in Fig. 2, and the latch is adapted to engage with a keeper 46 formed upon the end of one of the longitudinal strips 12, when the high chair is in folded condition.

When the high chair is set up for use as shown in Fig. 1, the relations existing between the different parts are as follows:—The foot rest 23 is swung forwardly upon its pivot supports 30 until the forward edge of the foot rest sets on the front bar 2 of the main seat frame, as shown in Fig. 1. The main seat 7 is swung upwardly upon its hinges 8 until the main seat stands approximately parallel to the back 6 of the main chair. The ring 45 is drawn upon, thus disengaging the latch 43 from the keeper 46 and then the tray 33 is swung upwardly, the arms 34 and 35 of the tray pivoting upon the members 36 and 42. When the tray 33 is thus swung upwardly, the body portion of the tray moves out of engagement with the legs 22 on the side arms 21. The side arms 21 are swung laterally in opposite directions until they are in approximate parallelism, and then the seat 7 is swung forwardly, slightly, until the legs 22 rest on the foot support 23. The auxiliary seat 16 is swung downwardly and the fingers 19 enter openings in the lower rails of the side arms 21, thus locking the side arms against swinging toward each other and, at the same time, supporting the auxiliary seat 16. Then the tray 33 is swung downwardly and forwardly until the latch 43 engages with the forward end of one of the upper rails 28 of the side arms 21 as shown in Fig. 2. The parts thus are disposed as shown in Figs. 1 and 2 and the high chair is set up for use. When the seat 16 is swung downwardly into the position shown in Fig. 1, the portions 17 of the brackets 15 engage the inner edges of the lower rails 29 of the side arms 21 and thus guide the auxiliary seat 16 in its downward movement, so that the fingers 19 will enter the openings prepared for their reception in the rails 29. As has been set forth hereinbefore, the coöperation between the pins 26 (see Fig. 6) and the fingers 27 serve to limit the lateral swinging movement of the side arms 21 when the same are swung outwardly.

Supposing that the structure is arranged as shown in Fig. 1, the operation of collapsing the high chair is as follows:—By drawing upon the ring 45, the latch 43 is disengaged from the forward end of one of the upper rails 28 of the side arms 21 and then the tray 33 is swung upwardly. The auxiliary seat 16 is folded up against the seat 7. The side arms 21 are folded into parallelism with each other and with the seats 16 and 7. The tray 33 is swung downwardly until it engages the legs 22 on the side arms 21 and, at the same time, the latch 43 engages with the keeper 46 on the main seat 7, so as to hold the main seat 7, the auxiliary seat 16, the side arms 21 and the tray 33 in approximate parallelism. The foot rest 23 is swung upwardly and backwardly until the finger 31 (see Fig. 5) engages the pin 32 on the side bar 4 of the main seat frame, thus holding the foot rest 23 in a horizontal position and housed between the bars 4 and 5. Then the main seat 7 is swung downwardly and forwardly until the flange 9 thereof engages the seat frame 2—4—3—5, whereupon the structure will appear as shown in Fig. 9.

One of the principal advantages of the invention, generally considered, is that practically all of the high chair structure is carried by the main seat 7, the construction

being such that the high chair may be mounted upon a dining room chair of standard construction without making material alterations therein, other than hingedly mounting the seat 7. It is possible, therefore, to adapt the structure to any standard make of dining room chair and a person already provided with a set of dining room chairs may readily attach the high chair structure herein disclosed thereto, or the manufacturer may buy in the open market, any standard and accepted form of dining room chair and, with slight alterations, assemble the folding high chair structure therewith.

It is to be observed that the auxiliary seat 16 is directly connected to and supported by the main seat 7 and, since the legs 22 engage the foot rest 23, a collapse of the structure is impossible.

It will be understood readily that when the parts are arranged as shown in Fig. 1, the main seat 7 constitutes a back which cooperates with the auxiliary seat 16.

Referring particularly to Figs. 8, 7 and 3 it will be understood that in order to swing the tray 33 upwardly and rearwardly, the arm 35 of the tray pivots on the stud 42, one arm of the angle member 36 rotating in the arm 34. However, by disengaging the latch 41 from the stud 42, the arm 35 is set free. Then, the tray may be swung laterally, as shown in Fig. 3, one arm of the angle member 36 rotating in the bearing 37. As indicated at 47, the arm 35 is pivoted to the body portion of the tray 33 and thus the arm 35 may be swung outwardly, as shown in dotted line in Fig. 3, the operation being such that a child may be readily placed in the chair, without lifting the child into the contour of the tray and its arms. In order to restore the parts from the dotted line position of Fig. 3 to the solid line positions thereof, the arm 35 is merely swung around until the latch 39 engages with the stud or boss 42, one arm of the angle member 36 rotating in the bearing 37.

Having thus described the invention, what is claimed is:—

1. A combined dining room chair and high chair comprising a frame including a fixed back; a main seat hinged to the frame; an auxiliary seat hinged to the main seat, both seats being mounted to swing each independently of the other in the same direction toward and away from the fixed back, thereby to dispose the main seat in approximate parallelism to the fixed back and to dispose the auxiliary seat substantially at right angles to the main seat; and means for upholding the auxiliary seat when the same is disposed approximately at right angles to the main seat.

2. A chair comprising a frame; a main seat hinged thereto; side arms hinged to the main seat; means for supporting the side arms at their outer ends; an auxiliary seat hinged directly to the main seat; and interengaging elements on the side arms and the auxiliary seat for holding the auxiliary seat in an approximately horizontal position.

3. A chair comprising a frame; a foot rest hinged thereto and supported by the frame; a main seat hinged to the frame; an auxiliary seat hinged directly to the main seat; side arms hinged to the main seat and coacting with the foot rest; and interengaging elements on the auxiliary seat and the side arms for holding the auxiliary seat in an approximately horizontal position.

4. A chair comprising a frame; a main seat hinged thereto; side arms hinged to the main seat; means for supporting the outer ends of the side arms; an auxiliary seat hinged to the main seat; interengaging elements on the auxiliary seat and the side arms for supporting the outer end of the auxiliary seat; a pivoted tray supported adjacent the side arms; a latch on the tray adapted to engage one side arm; and a keeper supported by the main seat and coacting with the latch to hold the tray, the auxiliary seat and the side arms in approximate parallelism with the main seat when the parts are in folded position.

5. A chair comprising a frame; a main seat hinged thereto; an auxiliary seat hinged to the main seat; side arms hinged to the main seat and including legs; means upon the frame for engaging the legs to uphold both seats; interengaging elements on the side arms and the auxiliary seat; a pivotally supported tray resting on the side arms, the side arms and the auxiliary seat being foldable into approximate parallelism with the main seat, and the tray coacting with the legs to hold the side arms and the auxiliary seat in approximate parallelism with the main seat; and a releasable connection between the tray and the main seat.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES A. SHERRY.

Witnesses:
SELINA WILLSON,
I. E. SIMPSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."