ADJUSTABLE CHILD'S SHAMPOO CHAIR

Filed Nov. 28, 1966

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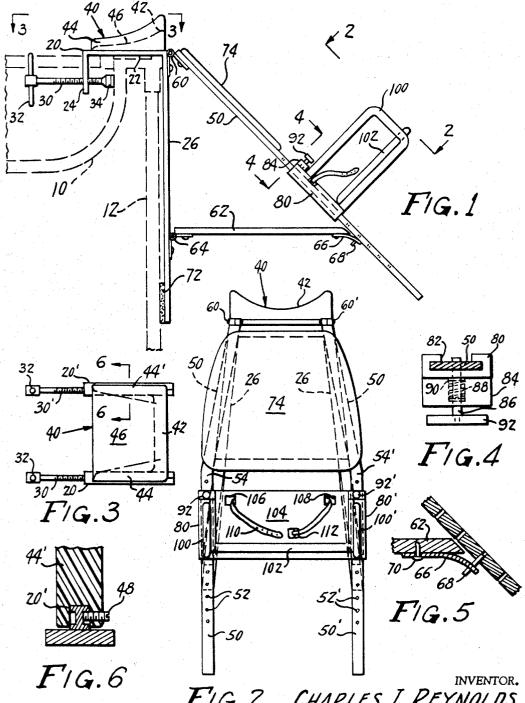


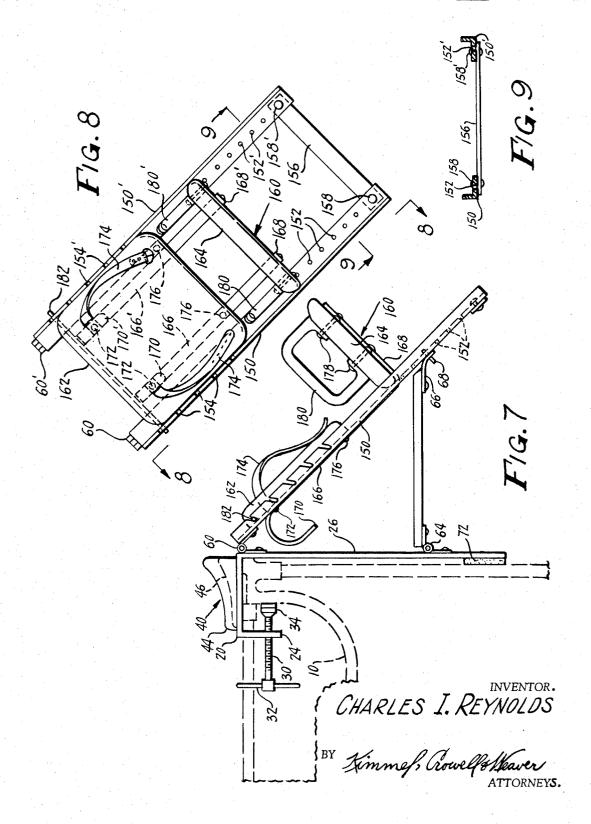
FIG.Z CHARLES I. REYNOLDS

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Filed Nov. 28, 1966

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# United States Patent Office

3,428,361 Patented Feb. 18, 1969

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3,428,361 ADJUSTABLE CHILD'S SHAMPOO CHAIR Charles I. Reynolds, 2183 McAfee Road, Decatur, Ga. 30032

Continuation-in-part of application Ser. No. 567,624, July 25, 1966. This application Nov. 28, 1966, Ser. No. 597,428
U.S. Cl. 297—182

9 Clain

Int. Cl. A47d 1/10, 15/00; A47c 1/08

9 Claims

#### ABSTRACT OF THE DISCLOSURE

This patent discloses an adjustable height and repose angle shampoo chair for supporting a child adjacent a sink for shampooing the child's hair in the sink. Briefly, 15 the patent discloses a shampoo chair which has a specially designed C-clamp member for securing the chair adjacent a sink, a seat for supporting the child and a seat support unit which permits adjustment of the height of the seat relative to the sink. Two specific constructions are disclosed for adjusting the height of the seat.

# Cross reference to related application

This is a continuation-in-part application of application Ser. No. 567,624, filed July 25, 1966, now Patent No. 3,337,263,

#### BACKGROUND OF THE INVENTION

#### Field of the invention

This invention relates to chairs and seats. In particular, this invention relates to a seat which is adjustable in its entirety vertically and pivotally from the horizontal. The 35 seat unit includes a headrest which is fixed, a safety belt, and handles.

# Description of the prior art

Adjustable chairs are known in the prior art. A chair 40 which is intended for a different purpose and which is structurally different but is related to the present invention is disclosed in Patent No. 2,509,040, issued to Kibbe on May 23, 1950. A similar chair is also disclosed in Patent No. 2,697,480 issued to Dubois on Dec. 21, 1954.

Such chairs as are known in the prior art have had features to permit adjustment on the chair to accommodate the size of the occupant's body; however, such chairs as have been known in the prior art suffer from adjustable but the adjustment is so difficult and complicated as to make them of limited value in professional use and of virtually no value in home use where the user has neither the time nor the patience to operate the adexpensive because of the complicated constructional and adjustment features. Another problem relates to chairs of simpler construction. While some such chairs are known which may be simply adjusted, they do not provide adequate certainty of adjustment and are not structurally 60 safe because of the adjustment features.

#### Summary

This invention is directed specifically to a child shampoo chair which is secured directly to a sink for positioning the child's head above the sink and for adjustment to accommodate the size of the child's body by vertical adjustment and by angular adjustment relative to the support surface to position the child comfortably proximate the sink. Specifically, this invention is directed to a 70 shampoo chair for children which has a C-clamp type securement to the sink, a hingeably connected seat sup2

porting unit, and a seat secured to the supporting unit which is adjustable on the supporting unit to accommodate for differences in the size of children. The seat supporting unit is angularly adjustable with respect to the C-clamp member and, consequently, with respect to the supporting surface. The chair also includes a safety strap to prevent the child from falling out of the chair, Two specific embodiments of the height adjustment mechanism for the chair are provided in this invention. The first embodiment includes a spring biased pin which may selectively be positioned in apertures at different heights. The second embodiment includes a horizontal pin which may selectively be positioned in slots at different heights in the seat supporting unit.

The object of the invention is the provision of an overall combinational construction for a child's shampoo chair which is adjustable in height and in angle by means of simple, easily accessible and easily operable adjustment mechanisms. The essential elements of the inventhe seat relative to the sink and the angle of repose of 20 tion reside in the overall combinational cooperation of the chair elements rather than in the construction or position of any single element.

#### Brief description of the drawing

FIGURE 1 is a side view of the overall invention showing its position with respect to a standard sink.

FIGURE 2 is a front view of the shampoo chair of this invention taken substantially along lines 2-2 in the direction of the arrows.

FIGURE 3 is a detail top view of the headrest of this invention taken substantially along lines 3-3 in the direction of the arrows as shown in FIGURE 1.

FIGURE 4 is a detail of the means for adjusting the support seat for the child taken substantially along lines -4 in the direction of the arrows as shown in FIGURE

FIGURE 5 is a detail of the selectively adjustable engaging means for supporting the child's body in a desired reclining position shown in the side view and partial sec-

FIGURE 6 is a detail of the interconnection between the headrest and the supporting hook of this invention taken substantially along lines 6-6 of FIGURE 3.

FIGURE 7 is a side elevational view of a second pre- $_{45}$  ferred embodiment of the present invention.

FIGURE 8 is a front elevational view of the second preferred embodiment of the invention.

FIGURE 9 is a cross-sectional view of the bottom bracing construction of the second preferred emboditwo disadvantages. Some of the chairs of this type are 50 ment of the invention taken along lines 9-9 in the direction of the arrows as shown in FIGURE 8.

# Description of the preferred embodiments

With reference now to FIGURE 1, the child's shamjusting mechanisms. Frequently such chairs are unduly 55 poo chair of this invention may be used with any conventional sink shown generally at 10 which is supported in a sink cabinet shown generally at 12. The shampoo chair is supported by a hook 20 which includes a horizontal portion 22 and downward extensions 24, which extends downwardly into a sink for engagement therewith, and 26 which extends downwardly adjacent the front of the sink cabinet for resting engagement therewith. The hook may be securely engaged inside the sink 10 by a thumbscrew arrangement 30 including handle 32 and engaging foot 34. Bolt 30 is threadably received in an aperture formed in the first downward extension 24 of hook 20 and may be adjusted to provide a desired forcible engagement with the sink to prevent slippage.

An important feature of this invention is the headrest 40 which comprises a pair of upward protuberances 42 sloping downwardly toward the sink to a lower edge 44 including in the center a concave portion 46. The headrest 40 is secured to hook 20 by a set screw 48 as shown in FIGURE 6. It will be apparent that the upward sloping of the headrest away from the sink tends to direct the shampoo solutions and rinses into the sink. Important also is the feature of the headrest which supports the child's head in a backward lying position thereby preventing flow of the shampoo solutions and rinse solutions into the eyes of the child. The advantages of keeping such solutions out of the eyes is apparent. Indeed, the provision of the headrest and its relation to the remainder of the shampoo chair to prevent flow of shampoo solutions into the child's eyes, with the consequent pain and discomfort, is a very important feature of this invention.

The child's body is supported on a pair of support rods 50 including a plurality of apertures 52 therein and preferably including a bend 54 which adapts the support rods for interconnection with the hook members by hinges 60. The support rods 50 serve as guide rods for supporting a seat as will be described hereinafter.

The guide rods or support rods 50 are supported in a sloping relation with respect to the second downward extension 26 of hook 20 by a support bar 62 which is hingeably secured by hinge 64 to a lower portion of downward extension 26 of hook 20. The other end of support bar 62, as best shown in FIGURE 5, includes a steel or other resilient, strike member 66 and a steel or similar dowel member 68 and is secured by a screw or pin 70 to the end of bar 62. Dowel 68 selectively engages a chosen aperture 52 in support rod 50 to provide any desired degree of slope to the body support frame. The weight of the child's body is thus transferred through support bar 62 and pad 72 to the cabinet front 12.

A back rest 74 is provided on the body support frame for supporting the child's back in a comfortable position.

The child's body is further supported through support 35 brackets 80, a detail of which is shown in FIGURE 4. The support bracket 80 includes a key groove 82 and a pin support means 84 including a passage for supporting pin 86 which is biased by spring 88 and keeper 90 toward key groove 82 and support rod 50. An operating button 40 92 may be provided on the end of pin 86. Support brackets 80 carry frame members 100 which in turn support seat member 102 generally at right angles to the support rods 50. It will be seen that the position of the seat member 102 may be adjusted along support rods 50 by selectively inserting pins 86 in the desired aperture 52 of rods 50. 45 It will be apparent that the supporting elements of the shampoo chair may be adjusted to accommodate the size of the child therefore making the invention of great advantage to children of all ages and sizes.

A lower back rest 104 is also provided including aper- 50 tures 106 and 108 through which a belt 110, having a buckle 112 thereon, extends. The belt may be used to secure the child on the supporting frame during the shampooing operation to prevent the child from climbing or falling out with the consequent possibility of injury. 55

In a second preferred embodiment of the present invention, the means for supporting the shampoo chair and for angularly adjusting the chair with respect to the support may be identical with the construction described with reference to the first preferred embodiment. The 60 chair support members may be connected by means of a hinge 60 as previously described.

In the second preferred embodiment, however, the chair support members comprise a pair of elongate angle iron members 150 and 150' which are spaced parallel to each 65 other and are connected by hinges 60 and 60' as previously described. The elongate angle supporting members 150 include a plurality of apertures 152 into which pin 68 may fit for angularly adjusting the chair as previously described. The angle support members 150 include in the 70 outwardly extending leg of the angle iron a plurality of angularly disposed slots 154 and 154'. These slots angle downwardly to the lower end of the angle supports for securing the chair in a desired position as will be described hereinafter.

The two angle supports 150 and 150' are secured in spaced parallel relationship at the bottoms by a cross brace 156 which is secured to the angle supports 150 and 150' by frictional fasteners 158 and 158' which may be bolts or rivets. The chair 160 comprises a back supporting member 162 and a seat member 164 which are secured to a pair of parallel seat brackets 166 which have outwardly extending arms 168 and rearwardly extending hooks 170. A back member 162 is secured by pins 172 to the brackets 166. Pins 172 also secure a safety belt 174 to the back member. Additional frictional fasteners 176 may be provided at the bottom of the back member.

Seat member 164 is secured by frictional fasteners 178 to the outwardly extending arms 168. Pins or bolts 178 also secure handles 180 to the seat.

The seat 160 may be attached by a transversely extending rod 182 which may removably be inserted in slots 154. Rod 182 may be connected to the back of the seat by means of any frictional fastener such as a plurality of screws or it may be secured thereto in any desired manner.

It will be apparent that the seat 160 may be removed entirely from the shampoo chair. This novel and highly useful feature presents several significant advantages. First, the child may be placed in the chair and the safety strap tightened about the child's chest to prevent his falling out. The child may then be moved from one position to another and may be placed with his head over the sink, as previously described, simply by moving the entire seat. The entire seat may be supported by hooks 170 on the back of a conventional chair. This transportability of the seat unit proper permits easier movement of the child and greater comfort for the child during the movement. It is to be noted that this transportability is an important feature of the invention.

Thus it will be seen that a child's shampoo chair has been provided which may be adjusted to accommodate the size of the child and to position the child in a comfortable reclining position adjacent the edge of a sink with the child's head resting over the edge of the sink in a headrest which directs the shampoo solution into the sink and prevents flow of shampoo and other fluids into the child's eyes. The advantages of the invention will be apparent to those familiar with the problems of shampooing children's hair. The child shampoo chair is light, portable, easily stored, and easily adjustable to provide comfort and convenience for both the child and the parent or the person who is shampooing the child's hair.

It will also be seen that in a second preferred embodiment of the invention there is provided an adjustable child's shampoo chair in which the seat and back members are secured together and may be transported as a unit from one position to another and selectively be supported adjacent a sink by the means previously described.

While this invention has been described and the abstract of the disclosure phrased in specific terms with reference to the specific embodiments herein, it will be realized that this terminology and the reference to the specific embodiments shown in the drawings is used to provide clarity in the specification and to permit those skilled in the art to practice the invention more easily. This description is not intended in a limiting sense but is given as exemplary of the preferred embodiments of the invention. Therefore, it is intended and expected that the invention be limited by the appended claims and that constructions which are equivalent to the specific embodiments disclosed herein will be included within the spirit and scope of the invention.

# I claim:

- 1. A child's shampoo chair comprising:
- a hook member including a first downward extension for engaging the inside of a sink and a second downward extension for resting against the sink cabinet and a generally horizontal portion between the two downward extensions;
- a headrest for supporting the child's head proximate

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the edge of the sink and directing the shampoo solution toward the sink;

means securing the headrest to the horizontal portion of the hook member;

a body support frame;

- means securing the body support frame to the hook member; and a seat unit removably carried on the body support frame for supporting the child on the frame.
- 2. The invention of claim 1 wherein the seat unit com- 10prises:
  - a backrest member;
  - a seat member;
  - a bracket secured to the backrest member and the seat member to position the seat member below and sub- 15 stantially at right angles to the backrest member; and means secured to the seat unit for detachably engaging the body support frame for supporting the seat unit thereon.
  - 3. The invention of claim 2 wherein:

the body support frame comprises,

- a pair of generally parallel angle supports having outwardly extending portions, said outwardly extending portions having a plurality of longitudinally spaced downwardly angled slots there- 25 in for detachably receiving the means on the seat unit for engaging the support frame; and
- the means on the seat for engaging the support frame comprises,
  - a transversely extending rod secured to the seat 30 unit for being received in the slots in the support frame.
- 4. The invention of claim 3 wherein:

the bracket secured to the backrest and seat member further includes a hook extending rearwardly of the 35 297-256; 4-159 seat unit.

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5. The invention of claim 2 wherein:

the bracket secured to the backrest and seat member further includes a hook extending rearwardly of the seat unit.

6. The invention of claim 2 further including means to support the body support frame at an acute angle with respect to the downward extension of the hook member.

7. The invention of claim 2 further including means for adjustably forcibly engaging the inside of the sink.

- 8. The invention of claim 2 wherein the body support frame securing means comprises a hinge joint between the top of the body support frame and the upper end of the second downward extension of the hook member and further including a body support member, means pivotally securing one end of the body support member to the downward hook extension and means for selectively engaging the other end of the body support member on the body support frame to hold the body support frame in a sloping position.
- 9. The invention of claim 2 further including an adjustable engaging member threadably received in the first downward extension of the hook member for forcibly engaging the inside of the sink.

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U.S. Cl. X.R.