Nov. 8, 1932. P. A. COPENHAVER 1,887,234

HIGH CHAIR

Filed Oct. 18, 1928

Fig. 1

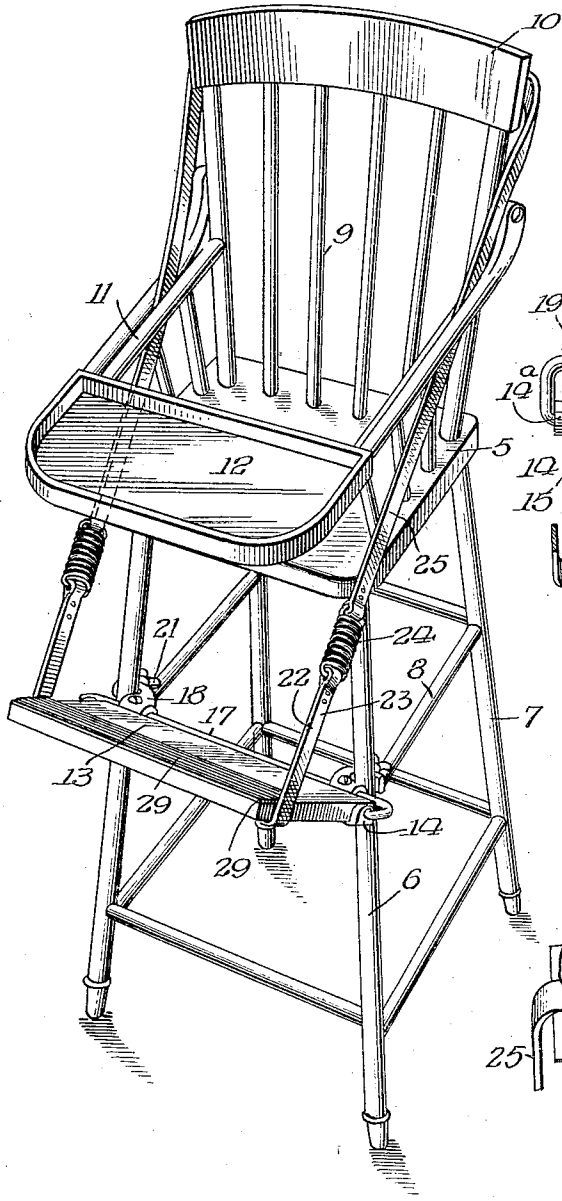


Fig. 2

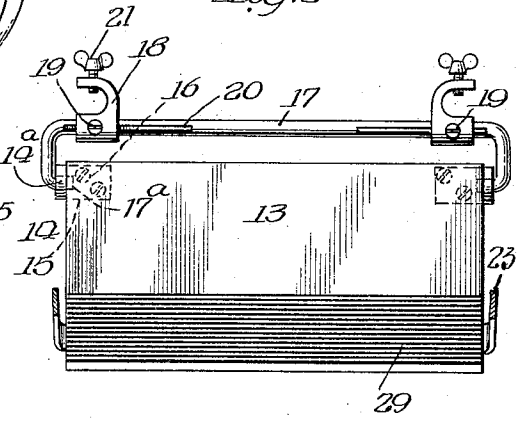
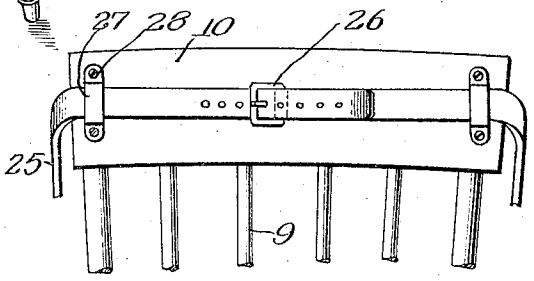


Fig. 3



Inventor
Philip A. Copenhaver
By Fred Gerlach
his Atty.

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UNITED STATES PATENT OFFICE

PHILIP A. COPENHAVER, OF CHICAGO, ILLINOIS

HIGH CHAIR

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The invention relates to high chairs for infants.

Infants, during use of their high chairs, often stamp and exert considerable pressure on the foot rests. When the foot rest is suspended by springs, I find that the infant will use the rest as an exerciser to strengthen his or her ankles and legs. The primary object of the invention is to provide a high chair for an infant in which the foot rest is suspended by springs.

Another object of the invention is to provide a high chair of the aforementioned type in which the foot rest is pivotally connected to the legs of the chair and provision is made for angularly adjusting the foot rest so that the force required to expand the springs may be varied.

A further object of the invention is to form the foot rest as an attachment which may be applied to chairs of different constructions and sizes, and is adjustable vertically relatively to the seat so that the foot rest may be adjusted in a manner that is best suited to the requirements of the infant.

Other objects of the invention will be apparent from a consideration of the following detailed description.

The invention consists in the several novel features hereinafter set forth and more particularly defined by the claims at the conclusion hereof.

In the drawing: Fig. 1 is a perspective of a high chair embodying the invention. Fig. 2 is a plan view of the foot rest. Fig. 3 is a rear elevation of the back of the chair.

The invention is exemplified in connection with a high chair comprising a seat 5; a pair of front legs 6; a pair of rear legs 7; cross-braces 8 which extend between the legs; a back 9 which has a rest 10; arms 11; and an apron or tray 12 which is pivotally connected to the back of the chair so that it may be swung upwardly to permit placing of the infant on the seat 5, as well understood in the art.

The foot rest which forms the subject matter of the present invention comprises a rectangular member 13 which is provided at the rear thereof with a pair of pivot lugs 14. The latter are disposed adjacent to the sides of member 13 and are provided with right angle flanges 15 which are secured to the bottom face of the member by screws 16. The rear end of member 13 is supported by a rod 17 which extends longitudinally of the member and has its ends bent forwardly and then inwardly to form pivot pins 17^a which project into sockets 14^a in lugs 14. Rod 17 is rigidly connected to the front legs 6 of the chair by a pair of C-clamps 18. The front legs of the latter are slidably mounted on rod 17 so that the clamps may be applied to chair legs which are spaced different distances apart. Clamps 18 are secured in their assigned positions by set screws 19. To prevent relative rotation of clamps 18 and rod 17 the latter is provided with longitudinal grooves 20 into which the set screws extend. The rear legs of the clamps are provided with thumb screws 21 for securing the clamps to the chair legs. A characteristic of utilizing C-clamps for connecting rod 17 to the legs of the chair is that member 13 may be readily positioned vertically so as to fit the legs of the infant.

Member 13 is supported at the front thereof by a pair of connections 22 which extend upwardly between the tray and arms of the chair and are anchored to the rest 10 which forms a part of the chair back 9. Each connection comprises a flexible strip 23 which has its front end secured to the bottom face of member 13 by any suitable means; a coil spring 24 which is connected at one end thereof to the rear end of strip 23; and a flexible strip 25 which is connected at its front end to the other end of spring 24. The rear ends of strips 25 are connected together by any suitable device such, for example, as a buckle 26 which permits the length of the connections 22 to be varied so as to change the angular position of member 13. The rear ends of strips 25 are supported by a pair of straps 27 which are secured to the rest 10 by screws 28 and permit the strips to slide therein. In practice, it has been found that when the infant finds that member 13 is resiliently supported, he or she will operate the member as an exerciser to strengthen his or her ankles or legs.

If desired, a corrugated or ribbed strip 29 of rubber or any other suitable material may be secured to the top face of member 13 to prevent the infant's feet from sliding or falling off.

In use, member 13 is adapted to be applied as an attachment to a high chair of any type or size by sliding the C-clamps 18 around the legs of the chair and securing them in their assigned positions by tightening set screws 19. Member 13 is then adjusted vertically to fit the legs of the infant and secured in its adjusted position by tightening thumb screws 21. Connections 22 are then secured in place by means of straps 27 and their length is adjusted by buckle 26 to bring member 13 into the desired angular position. If it is desired to increase the force necessary to operate member 13, connections 22 may be shortened so as to increase the angle of member 13. This will raise the legs of the infant and make it more difficult for him or her to operate or push downwardly member 13. If it is desired to decrease the operative force, connections 22 may be lengthened.

The attachment herein disclosed may be manufactured at a low cost and when applied or secured in its operative position results in a high chair of new and improved construction.

The invention is not to be understood as restricted to the details set forth, since these may be modified within the scope of the appended claims, without departing from the spirit and scope of the invention.

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

1. A high chair for an infant, comprising a seat, supporting legs for the seat, a rigid, board-like rest for the infant's feet positioned beneath the front part of the seat and having the back portion thereof connected pivotally to the front supporting legs, and means applied to the front portion of the rest for supporting said rest at the proper angle for use by the infant, said means including a spring operative to permit the rest to be depressed by the infant's feet and used as an exerciser.

2. A high chair for an infant, comprising a seat, supporting legs for the seat, a back, a rigid, board-like rest for the infant's feet positioned beneath and in front of the front part of the seat and provided at the rear portion thereof with means whereby it is connected pivotally to the front supporting legs, and a flexible connection for supporting the rest at the proper angle for use by the infant, extending between the front portion of the rest and the back of the chair and including a spring operative to permit the rest to be depressed by the infant's feet and used as an exerciser.

3. A high chair for an infant, comprising a seat, supporting legs for the seat, a back, a rest for the infant's feet positioned beneath the front part of the seat and provided at the rear portion thereof with means whereby it is pivotally connected to the front supporting legs, a pair of flexible connections for supporting the rest at the proper angle for use by the infant, said connections being anchored to the outer portion of the rest and extending upwardly and around the back, and a device for adjustably securing together the distal ends of the connections.

4. An attachment for a chair, comprising a foot rest, a rod having the ends thereof pivotally connected to the rest, a pair of clamps mounted on the rod and adapted to be secured to the front legs of the chair, and a flexible connecting means attached to the rest and adapted to be connected to the chair so as to support the rest at the proper or desired angle.

5. An attachment for a chair, comprising a foot rest, a rod having the ends thereof pivotally connected to the rest, a pair of clamps slidably mounted on the rod and adapted to be secured to the front legs of the chair, and a flexible connecting means attached to the rest and adapted to be connected to the chair so as to support the rest at the proper or desired angle.

Signed at Chicago, Illinois, this 13th day of June, 1927.

PHILIP A. COPENHAVER.