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HEAD TURNING APPARATUS
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2 Claims

ABSTRACT OF THE DISCLOSURE

A motor driven member actuates a pair of arms to rotate a shaft and headpiece back and forth along a fixed path such that a person's head positioned in the headpiece is similarly rotated as such person's hands and feet are moved to simulate crawling by the person.

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates to the field of devices for helping special persons and more particularly to a new and improved head turning apparatus for teaching retarded, special or brain damaged persons to creep and crawl.

Description of the prior art

Prior apparatus includes a device for rotating a headpiece with a person's head positioned therein by the use of panels positioned on each side of the headpiece. The pedals are secured with the headpiece by cords and pulleys such that two attendants must operate the pedals on each side of the person whose head is being rotated while simultaneously moving the arms and legs of such person.

Other known prior art includes having an attendant grip the person's head for rotation thereof as the arms and legs of the person are moved by other attendants to simulate crawling or creeping.

SUMMARY OF THE INVENTION

Briefly, the head turning apparatus of the present invention includes a means for steadily gripping and rhythmically rotating a user's head, thereby eliminating an attendant for gripping the head and also eliminating multiple functions of other attendants attempting to move the feet and arms of the user while simultaneously attempting to operate pedals and the like for rotating the user's head.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front view of the head turning apparatus of the present invention illustrating the relationship of first and second arms to a large wheel or gear member;

FIG. 2 is a partial side view of the head turning apparatus of the present invention illustrating the relationship of a head member to a rotatable shaft; and

FIG. 3 is a partial top view of the head turning apparatus of the present invention illustrating the relationship of a head member with a support member for a shaft.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Attention is directed to FIG. 1 wherein the head turning apparatus of the present invention is generally designated by the numeral 10. The head turning apparatus 10 of the present invention includes a motor means M which is a suitable alternating current electric motor which alternately reverses direction as is well known in the art. Extending outwardly from the motor means M is a shaft S which receives gear means 15. A suitable pulley belt 16 is secured with gear means 15 and a large gear means, member, or wheel 20. Wheel 20 is secured to a support mem-

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ber 23 by a suitable block member and shaft designated at 24 and 25, respectively.

An arm means designated at 30 includes a first arm 31 and a second arm 32 as illustrated in FIGS. 1, 2, and 3. The first arm means 31 is secured along the outer circumference of the wheel 20 at end 31a by any suitable means such as nuts and bolts 35 and is secured at its other end 31b by any suitable means such as nuts and bolts 36 to an end 32a of the second arm 32. The other end 32b of the second arm 32 receives rotatable shaft 40 at one end 40a thereof.

The other end 40b of the shaft 40 is secured with a head attachment member 46 which is secured to head member 50 as illustrated in FIGS. 1, 2, and 3.

As illustrated in FIGS. 1, 2, and 3, the support member 23 is secured to a table 55 having foam or other suitable padding P alternately positioned thereon as will be explained hereinbelow. The support member 23 is secured by hinges 56 to shaft support member 57 such that support member 57 may be arcuately rotated as desired. A pair of bearing support members 58 is secured by nuts and bolts 59 to the upper surface of the member 57 and receive the shaft 40 therein to enable the shaft 40 to rotate while at the same time providing suitable support with said member 57.

In the operation of the invention, an individual I (FIG. 2) is positioned on the table 55 such that the head H is positioned in the head member 50 and such that the head member 50 rests on suitable hard surface member 60 so that the person's face is thus spaced from the table 55 between each of the pieces of padding P.

With the person in this position, the motor means M is plugged into a suitable electrical outlet (not shown) which imparts rotation to the gear means 15. Rotating of the gear means 15 imparts rotation to the wheel 20 through the pulley belt 16 such that the arm 31 is moved in the direction of the arrow 61 and such that the wheel 20 is rotated in the direction of arrow 62. Movement of the first arm 31 in the direction of the arrow 61 causes movement of the second arm in the direction of the arrow 63 which, of course, imparts rotation of the shaft 40 and head member 50 in the direction of the arrow 64, thereby turning the head H of the person I in that direction.

The alternating current motor means M then switches off and initiates another opposite cycle which causes rotation of the wheel 20 in the direction opposite the arrow 62. Since the arm 31 has been moved downwardly, movement of the wheel 20 in the opposite direction of the arrow 62 causes the arm 31 to move back upwardly to its position illustrated in FIG. 1 which, of course, moves the second arm 32 in the opposite direction of the arrow 63 and which rotates the shaft and head member in the direction of the arrow 65, thereby rotating the head H of the individual I with a constant rhythm and rotation and with constant pressure applied on the head H by the head member 50.

Of course, with the individual I positioned such that the head member 50 is continually adjacent to or contacts the member 60, the user's spine is maintained straight relative to the table 55.

Also, since the head H of the person I is automatically rotated back and forth along a constant path by the wheel 20, first and second arms 31 and 32, shaft 40, and head member 50, another attendant is not needed to rotate the head as the hands and feet of the person I are moved as the head is rotated back and forth along its constant arcuate path.

It should also be noted that as the person's head H is arcuately rotated about a fixed path or trajectory, the arms and legs of the person I are simultaneously moved such that crawling and creeping are simulated.

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Further it is to be understood that the motor means M may be of the type to rotate the gear means 15 and wheel 20 in one direction. This movement still enables the arm 31 to move the head member 50 in the direction of the arrows 64 and 65 as will be readily seen.

The foregoing disclosure and description of the invention are illustrative and explanatory thereof, and various changes in the size, shape, and materials as well as in the details of the illustrated construction may be made within the scope of the appended claims without departing from the spirit of the invention.

I claim:

1. An apparatus for use with attendants on a person being taught how to crawl and creep wherein the attendants alternately move the arms and legs of the person comprising:

- (a) a motor means;
- (b) a gear means arcuately rotated along a path by said motor means;
- (c) first arm means positioned with said gear means on the periphery thereof;
- (d) second arm means secured at one end with said first arm means;
- (e) a shaft secured at one end to the other end of said second arm means wherein rotation of said gear means imparts rotation to said arm means and shaft; and
- (f) a head member secured with the other end of said shaft, said head member adapted for receiving the

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head of the person wherein the head is constantly and rhythmically rotated back and forth along a path and wherein the attendants move the person's arms and legs as the person's head is rotated to simulate crawling.

2. The structure as set forth in claim 1 wherein said gear means, first and second arm means, and shaft includes:

- (a) a large member having a big radius secured with said motor for rotating back and forth along a path;
- (b) a first arm secured to the outer circumference of said member; and
- (c) a second arm movably secured at one end with said first arm and secured with said shaft at the other end wherein rotation of said member imparts movement of said first and second arms along a first path to thereby impart rotation of said shaft.

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