May 19, 1931. C. E. TYLER 1,806,103

VACUUM HEADREST FOR BATHTUBS

Filed Feb. 26, 1930

Fig. 1

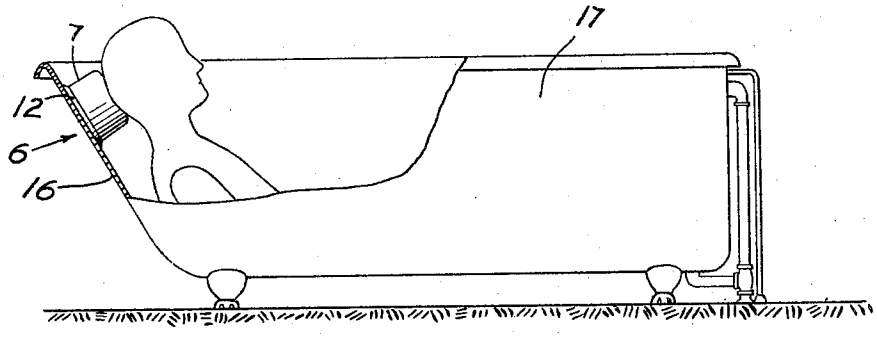


Fig. 2

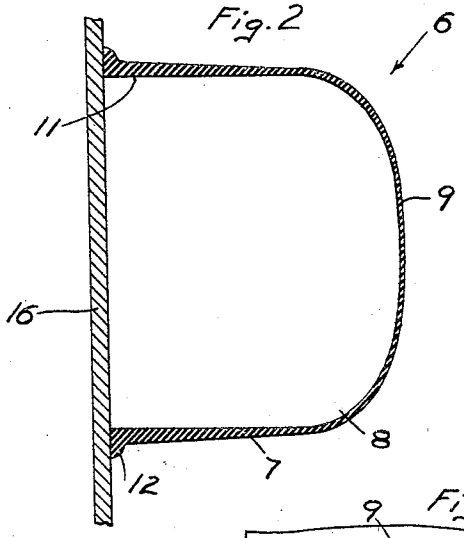


Fig. 3

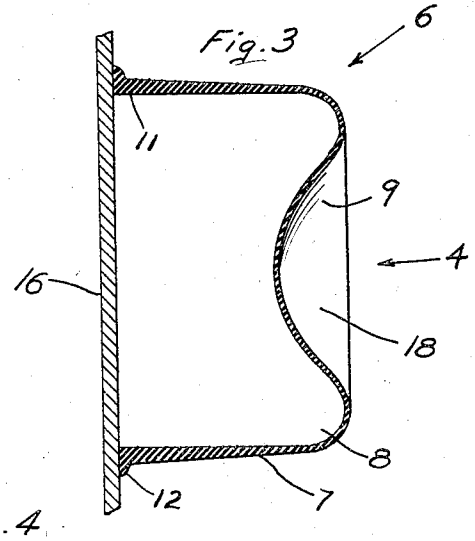
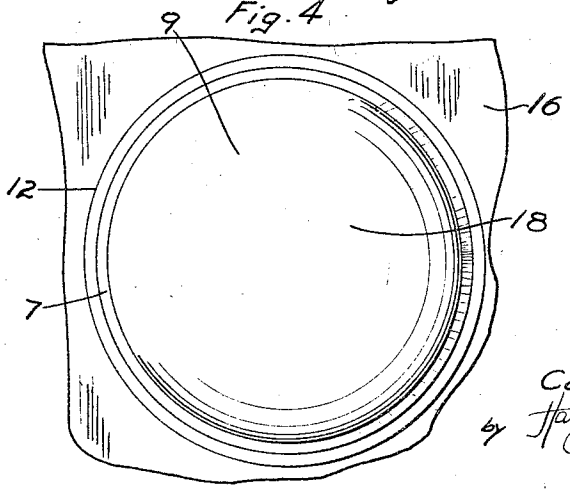


Fig. 4



Inventor
Carl E. Tyler
by Hazard and Miller
Attorneys

Patented May 19, 1931

1,806,103

UNITED STATES PATENT OFFICE

CARL E. TYLER, OF LOS ANGELES, CALIFORNIA

VACUUM HEADREST FOR BATHTUBS

Application filed February 26, 1930. Serial No. 431,396.

This invention relates to bathtubs, and more especially to a device adapted to be mounted within a bathtub, in such a manner as to offer convenience to a person during bathing.

An object of the invention is to provide a cushion device adapted to be so mounted in a bathtub, that a bather may rest his head thereagainst, and thus be enabled to assume a restful, reclining postion while bathing.

A more detailed object is the provision of a cushioning device as described, which is in the form of a vacuum cup adapted to be held in operative position against a wall of the bathtub, by the pressure of the atmosphere against the outside of the cup, the air having been exhausted from the interior of the cup.

A further object is to provide a bathtub appliance of the general character described, which is of very simple construction, and hence which is relatively inexpensive to manufacture, and yet which is capable of being mounted in operative position with the greatest degree of facility, and which is capable of offering the greatest amount of comfort to the bather.

The invention possesses other objects and advantageous features, some of which, with those enumerated, will be set forth in the following description of the invention's particular embodiment which is illustrated in the drawings accompanying and forming a part of the specification.

Referring to the drawings:

Figure 1 is a side elevation of a conventional bathtub partially broken away to disclose the device of the present invention in operative position.

Fig. 2 is an enlarged, longitudinal, medial sectional view through the headrest device of the present invention, and a portion of the wall of the bathtub to which it is to be attached.

Fig. 3 is a view similar to Fig. 2, but showing the device as having been securely but removably attached to the wall of the bathtub.

Fig. 4 is a front elevation, the direction of view being indicated by the arrow 4 of Fig. 3.

In terms of broad inclusion, the device of the present invention is a cushion device adapted to be firmly but removably attached in operative position, to a bathtub. It frequently occurs that beauty treatments or medicaments are administered to the patient by immersing him within a quantity of water or other liquid properly treated, so as to administer to the patient, the desired treatment. The most common method of so treating a patent, is to require him to recline within a bathtub within which the treated liquid is held, and it frequently occurs that the patient must remain within the treated liquid for an extended length of time. It is not at all uncommon for such treatment to occasion considerable discomfort to the patient, inasmuch as it is inconvenient for him to assume a comfortable reclining position within the conventional bathtub. It is to eliminate this undesirable condition and to make it possible for the patient to be more comfortable in a bathtub, that the device of the present invention has been produced. The device also makes it possible for a bather to read comfortably while bathing, and even to fall asleep while lying in the bathtub covered with suitably warmed water.

Specifically describing the invention in its preferred embodiment, I have provided a vacuum cup indicated in its entirety at 6, this cup differing however, from those now conventionally employed, in that it is relatively larger and particularly adapted as a result of its peculiar configuration and size, for the uses above outlined. With the mentioned and other objects in view, the device is constructed with relatively stiff side walls 7 preferably continuous, to form a substantially cylindrical body. One end 8 of the body is closed by a relatively flexible end 9, whereas the other end 11 is open.

The device is made of any suitable resilient material, rubber being the most suitable under most circumstances. The most convenient method of making the end wall 9 more flexible than the side walls 7, is to make the side walls 7 thicker, with the result that the additional material considerably increases the stiffness thereof. Whereas the device may be constructed of any suitable

size, I prefer to so proportion it that the open end 11 is six or seven inches in diameter, and the entire device is two to four inches in height.

A bead 12 encirles the open end 11, thus adding still greater thickness to the material of the device at the periphery of the open end. The purpose of stiffening the open end by the bead 12, is to hold the body of the headrest to substantially circular cross-sectional configuration.

When unattached to a supporting structure, the end 9 of the body is domed outwards as indicated upon Fig. 2. This effect is gained through the inherent resiliency of the material of which the device is constructed, the headrest being molded or otherwise fashioned so as to develop a tendency for the end 9 to spring outwards in respect to the rest of the body. However, the headrest may be securely but removably attached to any suitable supporting structure by placing the open end 11 against that structure and pressing the end 9 inwards, so that in effect, the end 9 is collapsed into the interior of the body. This collapse of the end 9 will expel a certain amount of the air from the interior thereof, with the result that when the inherent resiliency of the material of which the headrest is constructed, forces the end 9 outwards to initial position, it will be necessary for air or other fluid to enter the interior of the body before the end 9 can return. However, if the end 11 is pressed against a surface sufficiently smooth and of such configuration that the end 11 can conform itself thereto, entrance of air to the interior of the body will be prevented, with the result that the pressure within the body is materially reduced as a result of the outward springing tendency of the end 9. Consequently, the pressure of atmospheric air against the exterior of the headrest, will cause it to be pressed firmly against the surface to which it has been attached, thus holding it rigidly in position. Collapse of the open end 11 is prevented by the stiffening thereof, effected by the provision of the bead 12.

Whereas the device of the present invention is capable of offering convenience under various circumstances of use, it has been particularly designed so as to be attachable to the inner face of the sloping end 16 of a bathtub 17. When so positioned, the device is capable of permitting a bather to assume a comfortable, reclining position within the bathtub 7, with his head resting against the collapsed end 9 of the headrest. In view of the fact that when the device is secured in operative position, the end 9 is collapsed into the interior thereof, the outer face of the end 9 is concave, presenting a recess 18 adapted to receive a portion of the head of the bather. As a result, tendency is developed to retain the bather's head securely against the headrest without the necessity of exerting any muscular effort on the part of the bather. This detail makes it possible for a bather to actually fall asleep while reclining within the bathtub, with little danger of his head being displaced from the headrest.

Thus it may be seen that I have provided a device making it possible for a bather to assume a comfortable, reclining position within the bathtub for an extended length of time, without becoming unduly fatigued. As will readily be understood, the provision of the device of the present invention will materially facilitate the administering of treatments to a person, when those treatments involve immersion of the patient for any considerable length of time.

It should also be mentioned that another possible use for the device is as a support or seat for a relatively young child while being bathed. The concavity of the end 9 facilitates holding the child erect within the tub containing the bathing water; and the size of the device is such that the child is held elevated from the bottom of the tub with its feet and legs disposed in a comfortable position.

It is to be understood that the details of the invention as herein disclosed, are subject to alteration within the spirit or scope of the appended claim.

I claim:

A vacuum cup headrest for a bather, comprising a hollow body of impervious material open at one end, said open end being conformable to a portion of the interior surface of a bathtub, to make intimate contact therewith throughout the periphery of said open end, and a resiliently flexible outer end on said body collapsible thereinto to define a cavity in its outer face adapted to receive and support a portion of a bather's head, said flexible end continuously pressing outwards when collapsed, to create a partial vacuum inside said body when said open end is engaged by said surface.

In testimony whereof I have signed my name to this specification.

CARL E. TYLER.