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2,589,155

INFLATABLE HEAD STAY

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Fig. 1.

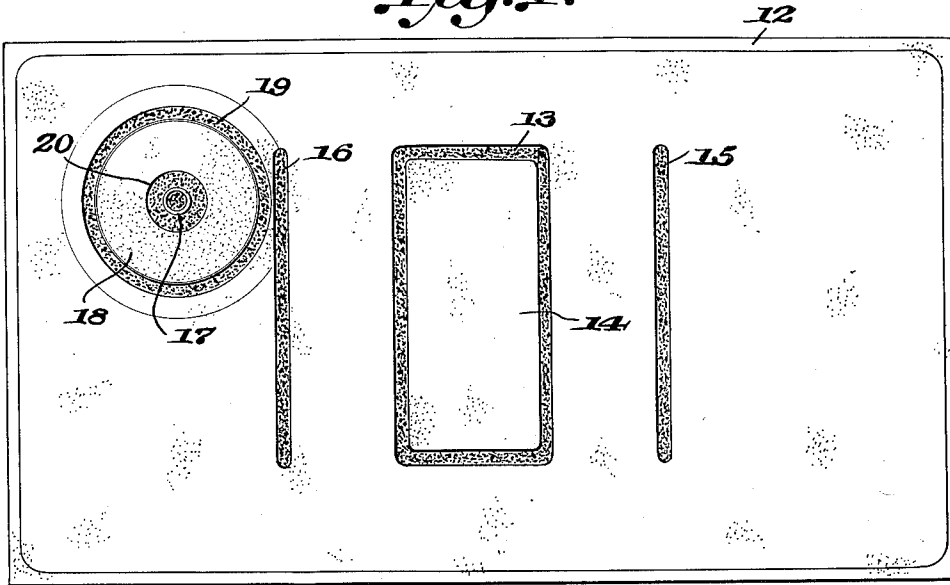


Fig. 2.

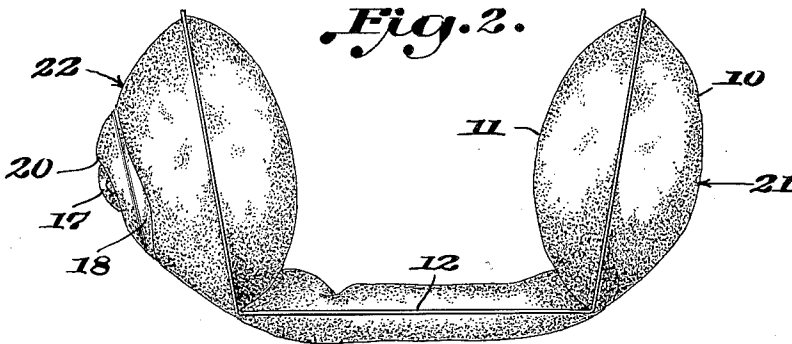
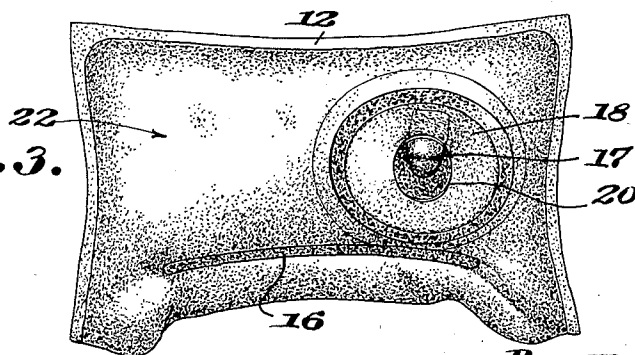


Fig. 3.



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INFLATABLE HEAD STAY

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5 Claims. (Cl. 155-174)

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This invention relates to a device designed for the comfort of sleeping passengers and the like in vehicles. The device is intended to maintain the head of the passenger from movement caused by movement of the vehicle.

An object of this invention is to provide a head stay which is inflatable when desired and which when deflated can easily be folded and compacted for storage by the user.

A further object of this invention is to provide a simple, inexpensive, efficient device capable of providing lateral support of the head of a user and to prevent rolling or sliding of the head to the side when the neck muscles of a user are relaxed as in sleep.

Other and further objects and features of the present invention will be apparent from the following detailed description of a preferred embodiment of the invention taken together with the drawings in which

Figure 1 is a top plan view of the device in deflated condition;

Figure 2 is a side elevational view of the device in inflated condition, and

Figure 3 is a view of the device shown in the Figure 2 at right angles thereto.

The head stay comprises two sheets of vinyl plastic or the like designated 10 and 11 which are secured together around the peripheral edge 12 by any known sealing means, such as for example heat. The sheets 10 and 11 are likewise sealed to one another in the central portion as shown at 13, which in the drawing is rectangular but which can possibly assume different configurations. The area 14 is consequently cut off from communication with the remainder of the area between the two sheets.

Spaced from the central sealed area 14, the two sheets 10 and 11 are sealed together as at 15 and 16. A valve stem 17 is affixed to the sheet 10 and surrounding the valve stem, a plastic disc 18 is sealed at 19. The plastic disc 18 has an open central portion 20 through which the valve stem 17 extends and the entire disc aside from the sealed portion 19 is loose.

Due to the sealing together of the edges of the sheets 10 and 11, a closed container is formed capable of being inflated through valve stem 17 and the sealed portions 13, 15 and 16 form restrictions in the container which will inherently shape the head stay when inflated as shown in Figure 2.

When the head stay is inflated, the central portion 14, being out of communication with the rest of the container will remain flat. The two

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end portions 21, 22 will become inflated to a considerable extent and the intermediate portions surrounding the area 14 and between the areas 13 and 15, 16 will be inflated to a lesser extent. Due to the sealed area 15, 16 and the differences in amount of inflation, the ends 21, 22 will tend to turn with respect to the central area as shown in Figure 2.

After the head stay is inflated to a desired degree, the valve stem 17 is folded over substantially in the middle and tucked under the loose plastic disc 18 through the open central portion 20. The pressure in the container in conjunction with the plastic disc 18 will maintain a pressure-tight seal. In order to deflate the head stay the inflating process is reversed, namely the folded valve stem 17 is pulled from under the plastic disc and straightened. When deflated, the head stay can be folded like a handkerchief along the lines 15, 16, for example, and can be conveniently placed in a pocket or handbag. The device is easily inflated as will be apparent from the foregoing description and when inflated serves a unique purpose. Due to the restricted areas of inflation, the device does not serve as a pillow or cushion in the ordinary sense and provides no direct support. It is designed purely as a lateral prop to maintain the head upright and prevent its rolling to the side in sleep. Additionally, the use of vinyl plastic and the like provides friction when under pressure from the head of a user and prevents the device from sliding sideways on the back of the seat. At the same time, the head can be lifted slightly so as to adjust the head stay and the head to a comfortable position.

The present invention provides a new and novel structure of extreme simplicity in construction and use which is inexpensive to manufacture, efficient in use and capable of long use.

Various modifications in the form and construction of this device may obviously be resorted to without departing from the scope of this invention as defined in the appended claims.

I claim:

1. A head stay and the like comprising superimposed resilient sheets sealed at the peripheral edges thereof, said sheets being sealed together along a continuous line forming a closed figure in a central portion thereof and along lines intermediate between the peripheral edges and said sealed central portion and symmetrical to the end edges of said stay, said sealed sheets providing a container and inflating means for said container.

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2. A head stay and the like comprising superimposed plastic sheets sealed together at the peripheral edges thereof, a central portion of said sheets being sealed together and providing an air-tight central portion, said sheets being sealed together along extended lines intermediate said sealed peripheral edges and said sealed central portion, said head stay being adapted for inflation, inflating means for said head stay, said head stay in inflated condition having ends thereof inflated to a considerable extent and the intermediate portions thereof around said sealed center portion and extending to said extended sealing lines being inflated to a lesser degree, the end portions tending to become offset with relation to said central portion.

3. A head stay as claimed in claim 2 and wherein said sealed central portion is uninflated.

4. A head stay as claimed in claim 2, said inflating means comprising a valve stem opening into the space between said sealed sheets, a plastic disc having a central opening therein secured to one said sheet at a distance from said central opening, the remainder of said plastic disc being free from said sheet, said valve stem extending through said central opening and being adapted

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after inflation of said head stay to be folded over and tucked under the free portion of said disc and maintained there under in sealed condition.

5. A head stay as claimed in claim 1, said closed figure comprising a rectangle, the seal lines intermediate between the peripheral edges and said sealed figure being parallel to the lateral edges of the rectangle and to the end edges of said stay.

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