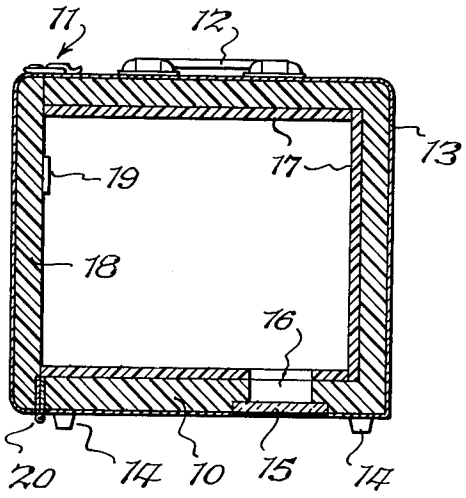
April 11, 1961 H. E. LOTZ 2,979,170

COMBINED TRAVELLING CASE AND HEAD PROTECTOR

Filed July 20, 1959

Fig. 1.



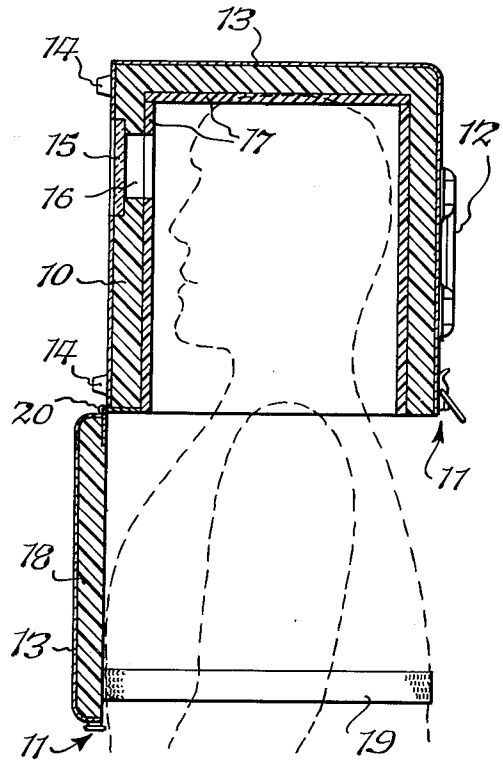
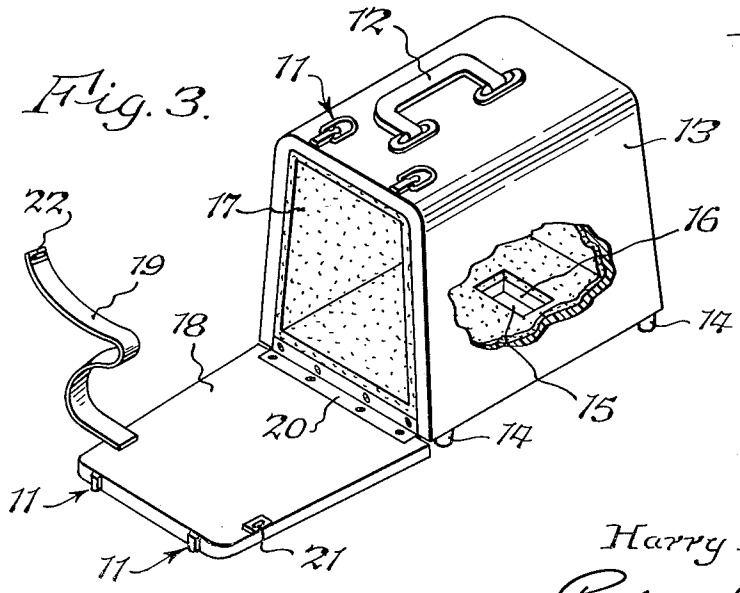


Fig. 2.

Fig. 3.



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COMBINED TRAVELLING CASE AND HEAD PROTECTOR

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4 Claims. (Cl. 190—42)

This invention relates to travelling cases capable of containing personal articles such as ordinarily used in travelling and which case also may be used as a protector for the head and neck of a person.

It has been found that in connection with airplane accidents that the most serious accidents are as a result of injuries to the heads of persons. Head protectors and helmets of course are commonly used by persons as protection against head injuries. However, passengers on airplanes would not be likely to carry helmets or other types of head protectors with them because of the inconvenience and the remote possibility of needing them.

In accordance with my invention the head protector is in the form of a travelling case which can be used to contain such articles as are ordinarily packed in a travelling bag, the case however being made of materials which are strong and light and which offer considerable protection to a wearer against head and neck injuries.

In the accompanying drawing:

Fig. 1 is a central, sectional view of a travelling case embodying my invention when closed for use in containing personal articles.

Fig. 2 is a sectional view showing the travelling case open and emptied and used as a head protector.

Fig. 3 is a perspective view of a travelling case of slightly modified construction.

My improved travelling case may be of any desired shape and of a size sufficient, when opened, to fit over the head of a person. The travelling case shown in Figs. 1 and 2 is substantially rectangular in both vertical and horizontal planes. The body portion of the case has an opening at one end thereof which may be closed by means of a cover or lid **18** which, in the particular construction shown, is hinged to the bottom wall or panel of the case by suitable means, such as a hinge **20**, and the cover or lid may be held in closed or locked position by means of any usual or suitable fastenings or locking devices **11**. **12** represents a handle by means of which the case may be carried. As clearly shown in Fig. 2, when it is desired to use the case for protecting the head and neck of the user, the case is emptied and the head of a person is inserted through the open side of the case in such a manner that the cover or lid extends downwardly in front of his chest and may be held in that position by means of a flexible strap **19** of any suitable material, the end of the strap having a fastening member **22** formed to interlock with a fastening member **21** secured on the cover or lid **18** so that the case will be held against dislodgment from a person. The part of the case which normally constitutes the bottom **10** thereof is provided with an opening **16** which is on the level of the eyes of a person when the case is positioned on his head, as described. This opening is closed by any suitable transparent material, such as a plate of Plexiglas or the like, through which the person can look while using the device to protect his head. By locating the opening **16** on the same wall on which the cover **18** is hinged, a person will place the cover in position to cover his chest, and this will automatically locate the opening in front of his eyes. This is important when the case must be applied to the head in the dark or in a great hurry.

The bottom **10** of the case may be provided with the usual feet **14** so that when the device is in use as a travelling case, the feet will protect the transparent member **15** from becoming scratched or otherwise injured by contact with a floor.

It is desirable to make the case as light as possible and at the same time provide adequate protection for the user of the same when placed over his head. I consequently prefer to make the body portion of the case of a rigid foam plastic material, such for example as polystyrene which, when in rigid foam form, is quite strong and not readily broken. When struck, this material may become dented but will provide adequate protection for the head of a person wearing the device against severe blows or impacts. In addition, I provide a covering **13** of fiberglass which extends around the exterior of all sides of the case and its lid. This fiberglass can be made of sufficient thickness so that it provides further protection against damage to the rigid foam body portion of the case.

For the purpose of further cushioning the head of the wearer against any blows which might be received by the device, and since the rigid foam is uncomfortable when next to a person's skin, I preferably line the interior of the device with a layer of flexible, spongy material **17**, such as polyurethane sponge. A lining of other material however may be used if desired.

The length of the case from the opening therein to the opposite wall is such that when the case is worn on the head of a person, the lower edges surrounding the open end of the case can rest on the shoulders, as clearly shown in Fig. 2. Consequently, any blows received on the top of the case and the shock resulting therefrom, will be taken mainly by the wearer's shoulders, thus providing additional protection for his head and neck.

The material from which the case is made is light and buoyant so that the case will support a person in water to a sufficient extent to keep his head above water.

The construction shown in Fig. 3 differs mainly from that shown in Figs. 1 and 2, in that the side walls of the case converge toward each other so that the bottom of the case is somewhat larger than the opposite wall thereof.

It will be understood that various changes in the details, materials and arrangements of parts which have been herein described and illustrated in order to explain the nature of the invention may be made by those skilled in the art within the principle and scope of the invention as expressed in the appended claims.

I claim:

1. A device useable as a travelling case and head protector, said device having a body portion formed of a rigid plastic foam covered with an outer skin of a tough material adhering thereto, said body portion being of a size capable of fitting over the head of a person, a shock-absorbing sponge-like resilient lining in said body portion, a side of said body portion having an opening covered with a transparent plate, a lid for said body portion hinged on the side thereof having said opening and forming a chest protector for the wearer, said lid being hinged to said body portion to close the same when used as a case, said opening being spaced from the side thereof closed by said lid at such distance as to be in front of the eyes of the wearer when the wall of said device opposite to the side closed by said lid rests on his head.

2. A device useable as a travelling case and head protector and having a body portion formed of rigid plastic foam and of a size which enables the wearer's head to be inserted into the same from one side thereof, an outer skin of a tough material adhering to said body portion,

said body portion having a base provided with an opening positioned to be in front of the eyes of a wearer of the device when on his head, a transparent plate covering said opening, a lid for said body portion hinged to the outer end of said bottom and which when in open position forms an extension of said bottom and when said device is placed on the head of the wearer forms a chest protector, and a flexible strap on said lid for securing said device to a body of a person.

3. A device useable as a travelling case and head protector and having a body portion formed of a rigid polystyrene foam, said body portion being of a size capable of fitting over the head of a person, a lining of urethane foam within said body portion, said body portion having an opening in one of the walls thereof, a transparent covering for said opening through which a person wearing the device can see, and a lid for said body portion for closing the same when used as a travelling case and which extends in front of the wearer when the device is placed on his head and extends downwardly to form a chest protector, said lid being hinged to the same wall in which said opening is located, whereby the location of said lid enables the wearer to find the wall in which said opening is located.

4. A device useable as a travelling case and head protector, said device having a body portion formed of a rigid plastic foam covered with an outer skin of a tough material adhering thereto, said body portion being of a size capable of fitting over the head of a person and having an open side through which a person's head may be inserted into said case, a shock-absorbing sponge-like resilient lining in said body portion, a side of said body portion having an opening covered with a transparent plate, the depth of the case from said open side thereof to the wall opposite thereto being such that said case when placed over the head of the wearer will rest on his shoulders.

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