July 16, 1946. F. I. STEELE 2,404,109

COMBINED HEADREST AND EMERGENCY KIT

Filed Jan. 29, 1943

Fig. 5

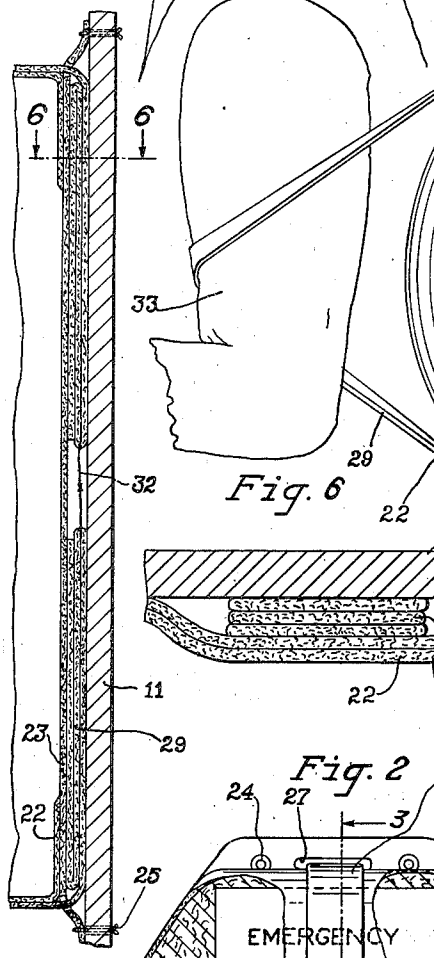


Fig. 4

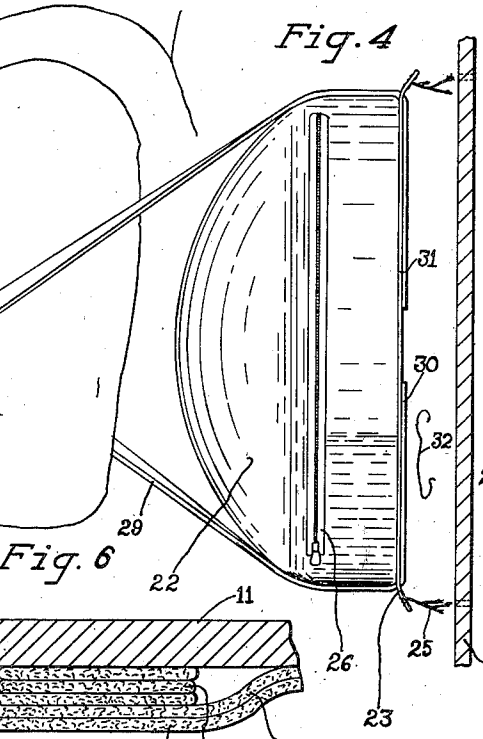


Fig. 3

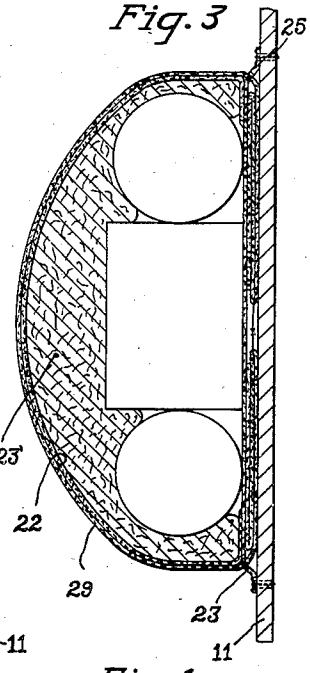


Fig. 6

Fig. 1

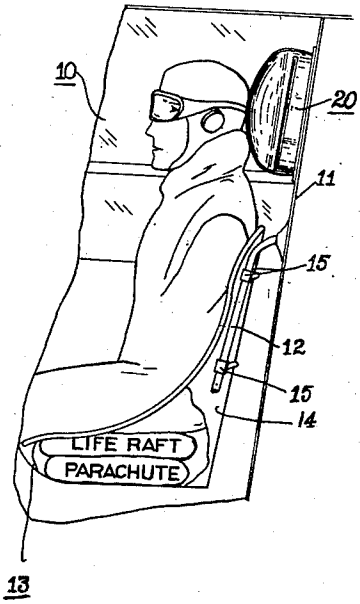
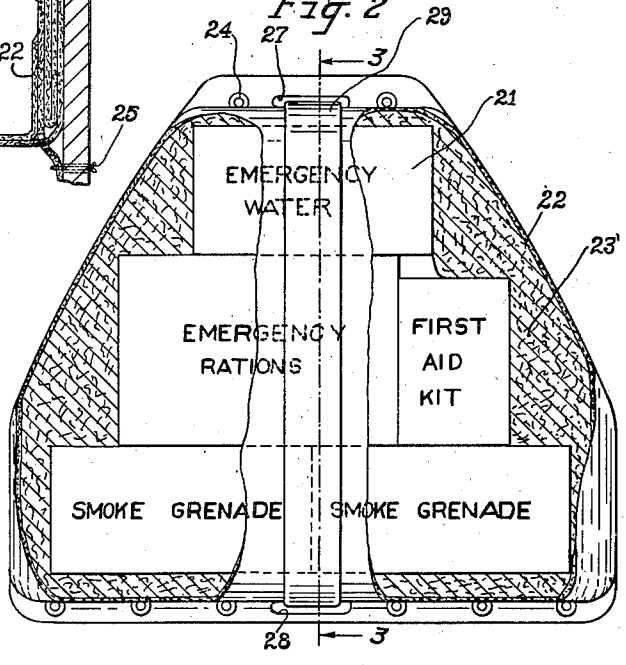


Fig. 2



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COMBINED HEADREST AND EMERGENCY KIT

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3 Claims. (Cl. 155—173)

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This invention relates to emergency kits and more particularly to the construction of the same and to the manner of releasably securing the same on a supporting structure.

In airplanes, emergency kits including emergency supplies which will lend comfort and relief to aviators who have had to bail out of their airplanes, need to be handy and within easy grasp of the aviator. It is also necessary to conserve the space within airplanes and to assemble such auxiliary equipment within the airplane in such location as not to interfere with the movement of the men through the airplane, and at the same time be easily accessible to them.

Hence, it is the principal object of the present invention to provide an emergency kit with means wherein the same can be readily released from its supporting structure and, at the same time, be readily available to the aviator.

It is another object to provide an emergency kit with buoyant material which will sustain the kit afloat on the water, and with such material as is soft enough to serve as a rest against which the aviator's head can rest while operating the airplane.

It is still another object of the invention to provide a combined emergency kit and head rest for airplanes.

According to the present invention the emergency kit is constructed of a casing partially filled with emergency supplies and finally filled with a soft and buoyant material. This head rest has means for releasably attaching the same to the body of the airplane. The entire kit is of such construction and dimension as to be easily located in vertical alignment with the aviator's seat so that it may be used as a head rest and at the same time, is within easy reach of the aviator and out of the way so as not to interfere with movement of the aviator within the airplane.

In order to facilitate the release of the emergency kit from the structure of the airplane, and at the same time provide a handling means for the kit such as to allow the aviator on leaving the airplane to locate the kit over his shoulder, there is provided a strap normally retained flat over the kit and having its portions folded into a location between the kit and the supporting structure. As the strap is pulled, it is unfolded and as the slack in the folds is taken up, sufficient shock will be given to the releasing means such that its release from its supporting structure is facilitated.

For other objects and for a better understanding of the invention, reference may be had to the

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following detailed description taken in connection with the accompanying drawing, in which

Fig. 1 is a pictorial view of an aviator in his seat and with the emergency kit located on the aircraft and adjacent to the aviator's head.

Fig. 2 is a plan view of the emergency kit with portions of its casing removed to show the location of the emergency supplies within the same.

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2, and in the direction of the arrows thereof, of the emergency kit and of the supporting structure illustrating its connection with the latter.

Fig. 4 is an illustrative view showing the aviator's arm as it is being inserted through the strap and with the kit just after it has been released from the supporting structure.

Fig. 5 is an enlarged fragmentary detail view of the base portion of the kit and illustrating the manner in which the straps are folded adjacent to the same and how the folds themselves are temporarily secured to each other.

Fig. 6 is an enlarged fragmentary view taken along the line 6—6 and looking in the direction of the arrows thereof of Fig. 5.

Referring now particularly to Fig 1, there is shown a supporting structure 10 of an airplane, which may be the fuselage of the same, which has a transversely extended bulk head 11 from which there extends downwardly supporting brace 12 for the aviator's seat 13. This aviator's seat 13 is of the bucket type in the bottom of which may be located the aviator's parachute and life raft, upon which the aviator sits. Extending vertically from the seat portion is a back portion 14 which is connected to the support 12 by vertically spaced sleeve connection 15. On the bulk head 11 above the seat, is an emergency kit 20 having the features of the present invention and arranged to be in alignment with the aviator's head so as to provide a head rest, and at the same time be located in a position wherein it is readily accessible to him, should he have to leave the airplane on a moment's notice. The kit thus serves a dual purpose and space within the airplane is thereby conserved.

Referring now particularly to Figs. 2 and 3, there is shown the emergency kit per se. This kit includes a number of supply containers 21, all of which are to be opened for the specific purpose indicated by the names on the same. The contents thereof are packed in a most conservative manner, and likewise the containers themselves are packed in a most conservative manner within a casing 22 having a base portion 23.

This casing of the base portion is preferably made of soft pliable material such as of canvas and the like, and particularly of such material as will not add excessively to the weight of the airplane and which, at the same time will cause the kit to float on the water. The containers 21 are seated flush against the base portion 23 to partially fill the casing 22. Over these containers 21 and to finally fill the casing 22, there is distributed a soft and floatable material 23', such as loose pieces of cork, kapok, or the like, or possibly an air container inflated to set and fit about the containers 21 and to finally fill the casing 22 so that there is a forward protrusion thereof which the aviator may use as a head rest.

Extensions of the upper and lower ends of the base portion of the casing 22 carry series of grommets 24, by means of which the emergency kit is connected by strings 25 to the bulk head structure 11. Any number of these grommets and strings may be used for this purpose. As shown in Fig. 4 an opening is provided in the side of the casing which is closed by a slide fastener 26. Through this opening the emergency kit is loaded and unloaded.

Also through the base portion 23 there extends openings 27 and 28 located respectively at the top and bottom of the kit through which the ends of a strap 29 extend and connect respectively to the base portion 23 as indicated respectively at 30 and 31. The connection of the ends of this strap at the base portion is preferably made by sewing the same to the base portion with heavy thread.

It should be noted particularly as shown in Fig. 3, that the strap lies flat over the expanded casing 22 conforming with the shape thereof and that its loose portions are folded under the base portion and there retained by a breakable string 32.

The number of folds of the strap of each side of the kit is immaterial, but it is preferable that the strap at one end be folded at least twice and in such a manner that its last fold is located toward the center of the kit so that it can be connected by the breakable string 32 to the last fold of the strap at its other end at the opposite side of the kit. This string 32 will temporarily maintain the strap in its folded condition about the kit, whereby the kit can be assembled and the strap preferably retained in place prior to its connection of the kit with the bulk head 11.

When it is necessary for the aviator to remove the kit, his arm is slipped underneath the portion of the strap which extends over the forward portion of the casing in a manner as indicated at 33. As this is done, the string 32 is immediately broken and the folded portions of the strap are released. As he continues to slide the strap over his arm and onto his shoulder, and with his body moving toward the opening in the airplane, the shock incident to the taking up of the slack in the strap is sufficient to readily and easily snap the strings 25 of the kit 20 with the bulk head 11, so that the kit becomes thereby separated from the bulk head 11 and can leave the plane with the aviator. By having such a strap by which the aviator can carry the emergency kit on his back, his hands are left free for the manipulation of parachute ropes on his descent to the earth. Should he land in water he will be given some buoyancy by the emergency kit and should

the emergency kit be separated from him, the same will sustain itself on the water so that he may reach the same when it becomes possible for him to do so.

It should now be apparent that there has been provided a novel emergency kit arrangement which can be readily and easily separated from its supporting structure and which is so constructed that it can serve as a head rest for the aviator.

While various changes may be made in the detailed construction and arrangement of the kit upon the airplane, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

I claim as my invention:

1. In an emergency kit, a casing, emergency supplies packed within the casing, means for releasably securing the casing to a supporting structure, a flexible strap having its two ends respectively connected to the casing at spaced points thereon to allow for the passage of a person's arm under the same, said strap being folded adjacent its opposite end to lie flat over the casing and to take up its slack, means for releasably retaining the strap in its folded condition, whereby when the emergency kit is to be separated from its supporting structure the strap can be extended to allow the kit to be put over the person's arm and to give sufficient shock upon taking up slack as to aid in the release of the kit from its supporting structure.

2. A combination kit and headrest including a casing, emergency supplies in said casing, a filler material covering said supplies and providing a padded area having a predetermined contour, means for releasably securing said kit to a structural support, a strap having terminal portions which are connected to said kit and which are adapted to be folded in the region of said terminal portions, and means for releasably securing the folded portions of said strap against unfolding thereby to cause an intermediate, exposed portion of said strap to fit against, and conformably engage, said padded area, said first and second mentioned means being releasable in an order reversed to that named when the intermediate, exposed portion of said strap is displaced outwardly with respect to said normally engaged padded area.

3. A combination kit and headrest including a casing having a back, means for releasably securing said back to a supporting structure, emergency supplies which fit against the inside of said back, a filler material covering said supplies and providing a padded front area having a predetermined contour, a strap having terminal portions which are connected to said kit and which are adapted to be folded in the region of said terminal portions, and means for releasably securing the folded portions of said strap against unfolding adjacent the outer side of said back, thereby to cause an intermediate, exposed portion of said strap to fit against, and conformably engage, said padded area, said first and second mentioned means being releasable in an order reversed to that named when the intermediate, exposed portion of said strap is displaced outwardly with respect to said normally engaged padded front area.

FREDERICK I. STEELE.