Feb. 9, 1943. H. S. CRABTREE 2,310,840

LIFE SAVING CUSHION

Filed Feb. 20, 1940

Fig. 1.

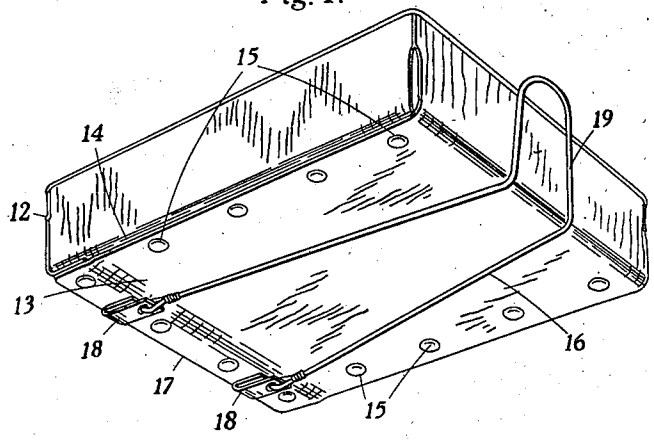


Fig. 2.

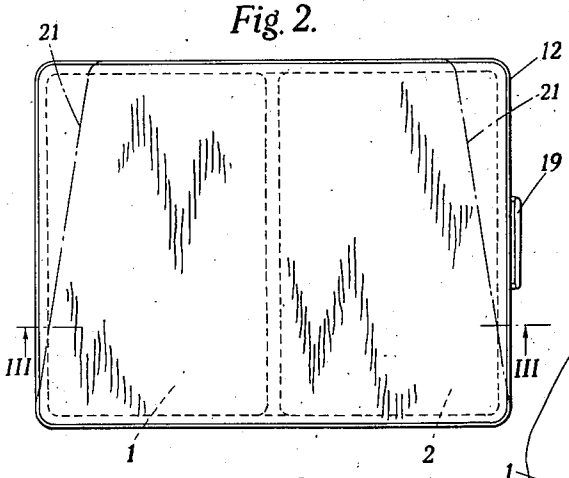


Fig. 3.

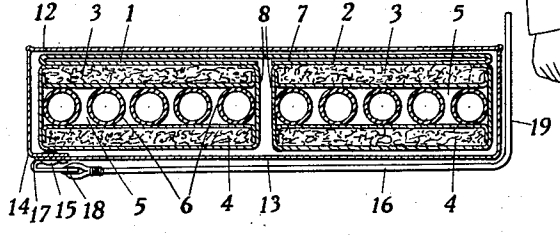
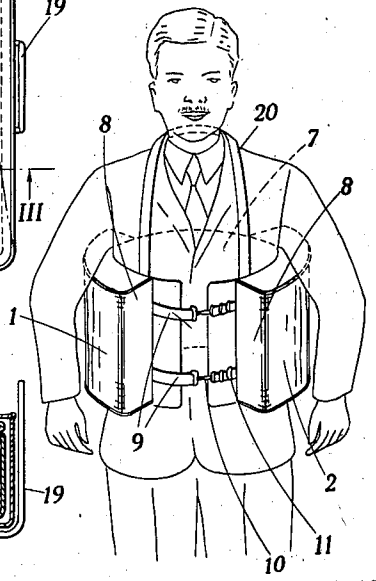


Fig. 4.



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LIFESAVING CUSHION

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4 Claims. (Cl. 9—17)

This invention relates to a combined cushion and life-belt particularly designed but not necessarily limited for use on the seats of aircraft used by the pilot or other members of the crew of aircraft both civil and military, and it has for its object the provision of a cushion adapted to rest in a recessed shaped seat (as is usually employed for pilots' seats) said cushion being so formed that the inner part constitutes a life-belt capable of being readily released in case of necessity.

In the accompanying drawing, which illustrates how the present invention may be carried into effect,

Figure 1 is a perspective view of the cushion;

Figure 2 is a plan;

Figure 3 is a section on line III—III of Figure 2, and,

Figure 4 is a view illustrating the method of fitting the life-belt to the pilot.

According to the embodiment of the invention illustrated, the cushion comprises two oblong pockets 1 and 2 formed of waterproof material, each of which is divided by horizontally disposed partitions into three or more compartments 3, 4 and 5, the outer compartments 3 and 4 being stuffed with kapok or other suitable material while the inner compartment 5 is furnished with an air cushion 6 preferably but not necessarily composed of a single length of india-rubber tubing provided with means for inflating same.

The oblong pockets 1 and 2 are adapted to be closed by suitable lacing means in any known manner, the two pockets 1 and 2 are connected together by a band 7 of waterproof material of the same width as the maximum width of the pockets, the length of said band being approximately equal to the width of the two pockets combined so that when it is desired to use the device as a cushion, the two pockets may be placed side by side so that one face of each pocket is resting against one face of the connecting band as shown in Figure 3. The band 7 preferably extends from the free edge 8 of one pocket to the corresponding edge of the other pocket or slightly beyond these edges as shown in Figure 4 and thereby forms one wall of the pocket 3. The means for securing the device to the body for use as a life-belt consists of a pair of straps 9 which may extend throughout the full length of the belt and are secured to the pockets and band, each of said straps being provided at one end with a swivel 10 adapted to coact with rings or the like 11 on the other ends of the straps.

The life-belt thus formed is adapted to be contained within a casing 12, the bottom 13 of which is secured to the side edges 14 by spring buttons 15 or other easily releasable means.

The means for removing the cushion from the seat in the case of emergency comprises a leather thong or other cord 16, the ends of which are secured to the free edge 17 of the bottom 13 of the casing 12 at the points 18, the loop 19 being arranged to pass beneath the cushion and to project upwardly beyond one side edge thereof as shown in Figures 1 and 3.

When circumstances are such as to render it necessary for the pilot to make use of his life-belt, he rises from the seat and pulls the loop 19 after him. The cushion is thus removed from the seat and if pulled with sufficient force will also rip open the bottom 13 of the casing 12 and the life-belt will be free to fall therefrom, but the cord 16 is also attached to the life-belt by means of a wire, means such as a snap-hook being provided for detaching the cord and thereby the casing from the belt. The belt is secured to the body in the manner above described and is maintained in position and prevented from sliding down the body by means of a shoulder strap 20 or by means of two separate straps attached to the front and rear ends of the pockets 1 and 2, said straps being crossed in known manner.

According to a modification the side walls of the pockets 1 and 2 and the casing 12 may be shaped as indicated by broken lines 21 in Figure 2 to enable same to fit in pilots' seats having that particular shape.

What I claim is:

1. A life saving cushion comprising a life belt and casing therefor, the life belt including two buoyant generally rectangular elements and a web of flexible material, an edge of each of said elements being attached to an end of said web respectively, securing means along the opposite edge of each of said elements for securing them to the body of a wearer, the length of the web being substantially equal to the combined width of said elements thereby providing a common surface against which the elements may be folded in side by side relation with the web forming a covering on one side thereof, said casing being constructed of fabric and substantially the size of the folded life belt, means for closing the casing thereby constraining the belt and forming a cushion, and means for opening the casing.

2. A cushion as claimed in claim 1 wherein each of said elements includes a cover, partition

means in the cover extending from the first mentioned edge of the element to the second mentioned edge thereof thereby dividing the cover into a plurality of generally parallel chambers, and buoyant material in each chamber.

3. A cushion as claimed in claim 1 wherein each of said elements includes a cover, a pair of general parallel partitions in the cover extending from the first mentioned edge of the element to the second mentioned edge thereof thereby providing three compartments, an inflatable member in the centre compartment and buoyant material in the compartments at each side.

4. A cushion as claimed in claim 1 wherein the means for closing the casing comprises press button fasteners interposed between a side and the remaining portion of the casing, a member secured to said side and projecting beyond an edge of the casing thereby affording a means for ripping the fasteners apart.

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