

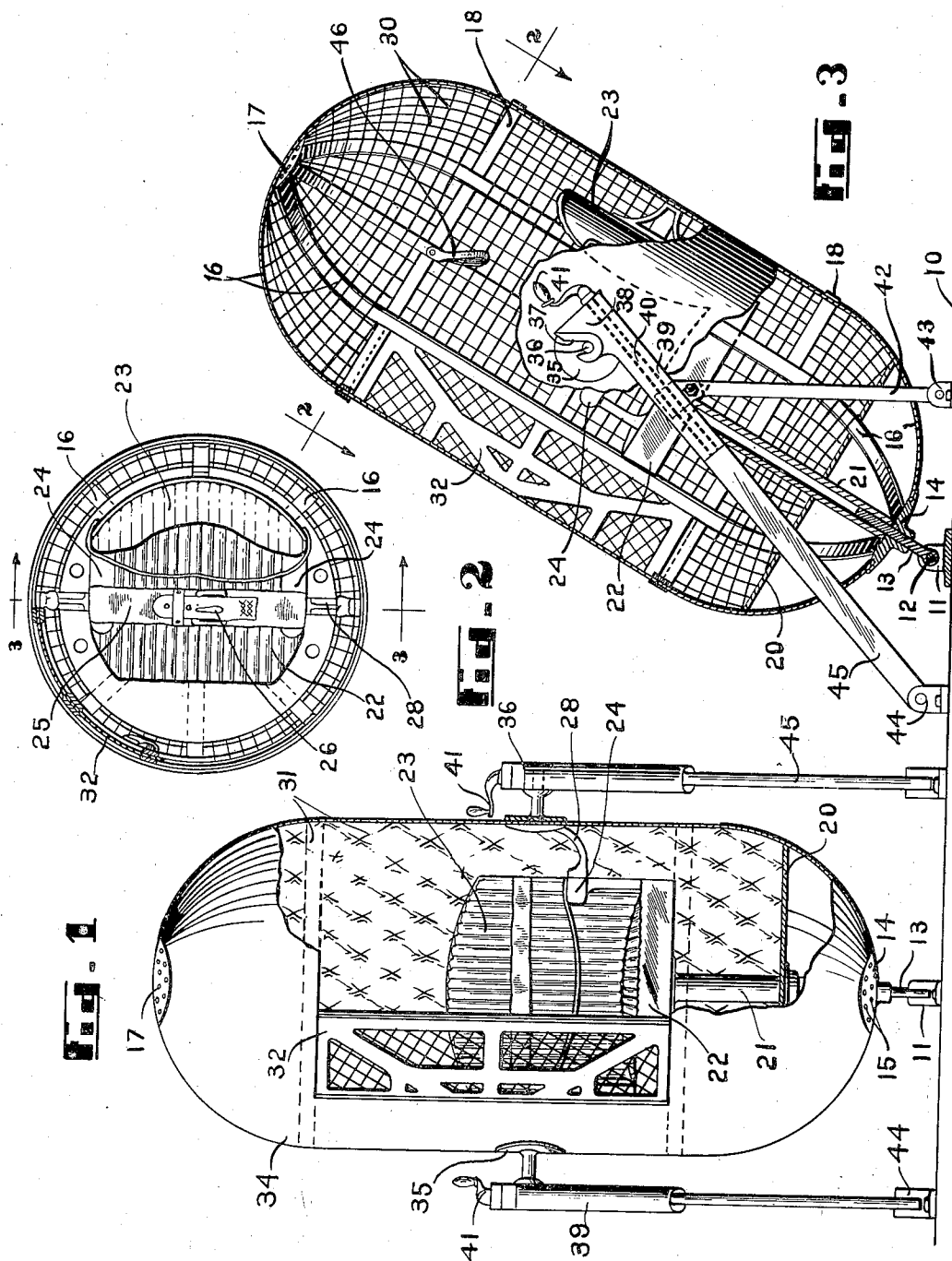
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AIRPLANE PASSENGER CAGE

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## AIRPLANE PASSENGER CAGE

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1 Claim. (Cl. 244—118)

This invention relates to safety appliances for airplane passengers, more particularly to releasable devices for their protection in the event of accident or mishap to the plane.

5 An object of the invention is to provide an individual seat for each passenger, enclosed in a form of cushioned, resilient cage adapted to withstand a very considerable degree of rough usage without injury to the occupant.

10 A further feature is in the provision of supporting means which permit tilting the cage angularly from a vertical to an almost horizontal position, and retaining it in such adjustment.

15 Another purpose is in the production of supporting means adapted to automatically release the cage, in case of overturning of the plane, freeing the cage from the plane.

20 These and other objects, tending to the comfort, convenience and safety of an airplane passenger, as will hereafter appear, are accomplished by the novel construction and arrangement of parts hereinafter described and illustrated in the accompanying drawing, forming a component hereof, and in which:—

25 Figure 1 is a front elevational view of an embodiment of the invention, parts being broken away to show the construction.

Figure 2 is a transverse sectional view taken on line 2—2 of Figure 3.

30 Figure 3 is a longitudinal sectional view taken on line 3—3 of Figure 2.

35 As shown in the drawing, the flooring 10 of the airplane has attached rigidly to it a bracket 11 for each of the several cages, and mounted thereon is a short shaft 12 on which is rotatable the eye of a spindle 13.

40 The spindle is slidable through the hub of a base flange 14, provided with perforations 15, and to which is secured the converging ends of a plurality of curved, resilient metal strips 16, arranged like the staves of a cylindrical barrel, in spaced circular relation, the strips again converging at their upper ends and being secured to the edge of a crown flange 17, also perforated 45 for ventilation.

50 At the junction of the straight and curved portions of the strips 16 are hoops 18 and in the lower portion of the structure is a floor 20, through which passes an axial tube 21 in which the spindle 13 is freely slidable.

The upper end of the tube acts as a partial support for a seat 22, having a back rest 23, both being provided with an unusually large number of springs and padded upholstery.

55 Arms 24, at the sides of the seat, have secured

to them the ends of a strap 25 connected by buckles 26 in front of the occupant.

The back 23 is firmly fixed to one of the strips 16 by a bracket 27, other similar brackets 28 connecting the seat side edges with the adjacent 5 strips.

Fixed on the inner surfaces of the several strips 16 is a strong wire netting 30 supporting a thick pad 31 covering the entire interior surface, except at an arcuate sliding door 32 giving 10 access to the cage chamber.

The pads 31 are preferably provided with a rubberized surface, and a rubber covering 34 envelopes the exterior of the cage.

Fixed on opposite sides of the cage midway 15 its length, on each side of the door, are flange brackets 35 having stems 36 normally seated in open, angularly disposed slots 37 in the upper ends or heads 38 of supports 39, movable by screws 40, actuable by handles 41. 20

The screws 40 engage the ends of struts 42, pivoted in brackets 43 fixed on the floor 10, while 25 distanced towards the front are other brackets 44 in which are pivoted front struts 45 connected with the lower ends of supports 39.

From the foregoing it will be seen that the cage and the person using the seat, may be inclined by actuating the crank handle 41, this motion being assisted by use of the loops 46 on the 30 sides.

It will also be apparent that in case of overturning of the plane, the door being closed, the cage will be released by reason of the stems 35 leaving their seats and the structure sliding off the spindle 13. 35

Due to the resilience of the frame structure and the excessive padding with which it is provided, a passenger is assured as far as possible against shock in case an accident should occur.

40 Having thus described the invention, what is claimed as new and sought to secure by Letters Patent, is:

An airplane passenger cage comprising resilient metal strips forming a cylindrical frame with hemispherical ends, wire netting attached to said 45 strips, padding attached to said wire netting inside of said frame, upper and lower circular discs attached to the hemispherical extremities of said cylindrical frame, said discs having apertures therein providing means for ventilating said cage, 50 two brackets attached externally to the sides of said cylindrical frame, said brackets having bearing spindles extending therefrom, support means for said cage including pairs of interconnected adjustable pivoted struts on each side of said 55

cage adapted to be attached to a floor of said aircraft, one of said struts on each side having a bifurcated end within which the spindles fit, said cage having a tubular member attached to  
5 the lower disc, a seat within said cage mounted upon said tubular member, the lower disc also having a bore in prolongation of said tubular

member, a floor bracket adapted to be attached to the floor of the airplane, a rod pivotally attached to said floor bracket and slidably fitting into said bore and tubular member whereby the said cage can be tilted about said rod bracket by  
5 adjustment of said struts.

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