

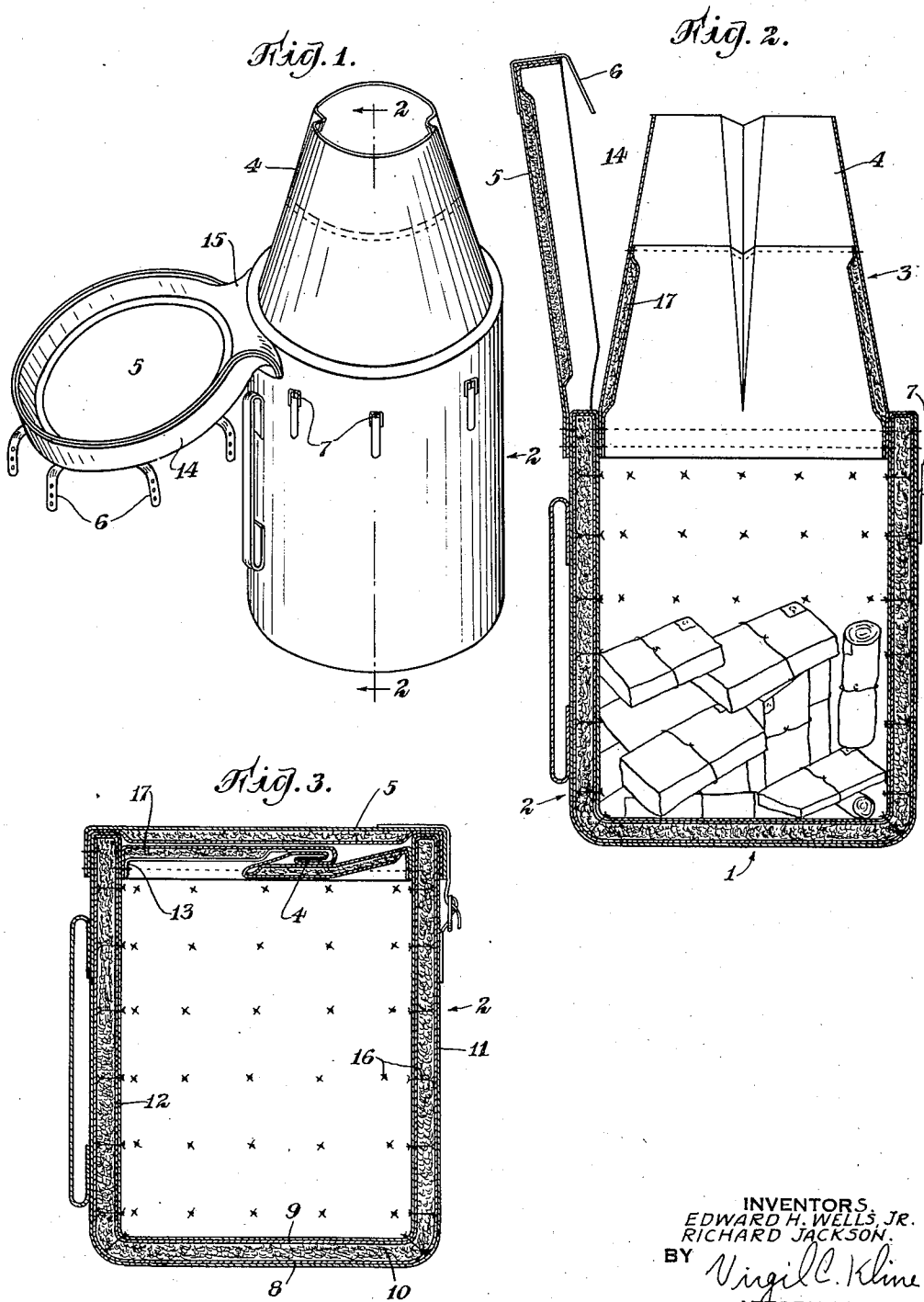
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HEATPROOF CONTAINER

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HEATPROOF CONTAINER

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2 Claims. (Cl. 150—13)

This invention relates to a heat-proof container for mail, express, or other heat-destructible parcels and particularly to the improved means of closing the top or opening in such a container.

Because of the need of such a container for parcels or letters transported by airplanes, the invention will be illustrated especially in connection with an airplane mail bag.

It is an object of the invention to provide a container having non-rigid walls and closing means which will retain approximately the preestablished closing position, whether or not the container is largely filled with parcels. Another object of the invention is to provide a container that, while not susceptible to breakage, will maintain approximately an established shape and will have a large capacity relative to the overall dimensions of the container. Other objects and advantages will appear from the detailed description that follows.

An embodiment of the invention that is at this time preferred is illustrated in the drawing and will be described in connection therewith.

Fig. 1 shows a perspective view of the improved container, in open condition.

Fig. 2 shows a vertical sectional view on line 2—2 of Fig. 1.

Fig. 3 shows a vertical sectional view of the container when closed.

The container has heat-proof bottom and side walls 1 and 2, respectively, and, preferably, double closure effected by the inner closing member 3 with a flexible extension 4 thereon and the outer cover 5 with conventional fastening means such, for example, as the straps 6 and buckles 7.

The heat-proof effectively thermal insulating walls, as well as the closing elements 3 and 5, are non-rigid and contain spaced fabrics 8 and 9. The outer fabric at least should be fire and heat-resistant and is preferably asbestos and the inner fabric should also be resistant to external fire, when protected as illustrated. When the thermal insulating layer 10 is of substantial thickness, say, of the order of one-half inch or more, the inner fabric 9 may be constructed of canvas or other conventional textile material, although we have used to advantage asbestos cloth for both the elements 8 and 9.

Disposed over the heat-proof walls described, there is preferably an impervious flexible casing member 11 adapted to prevent entrance of gasoline or the like into the container at the time of an airplane crash. This casing member should not be quickly permeable to liquid fuels for motors and is suitably constituted of canvas or other

textile fabric provided with a continuous coating of rubber, polymerized chloroprene, or other material not readily soluble in or penetrable by the motor fuel.

To assist in establishing the overall shape of the container and to prevent dusting of fibres from the filling of the heat-proof wall into the space within the container, there is provided an inner lining 12 that is advantageously of a closely woven fabric of the type of canvas or duck.

It will be understood that the walls need not be and cannot be absolutely proof against the passage of heat therethrough. The term "heat-proof" is, therefore, used to indicate sufficient insulation against the passage of heat to prevent burning or charring, at the time of an airplane crash, for instance, of paper or similar material within the container.

The inner closing means include suitably a hinge-wise connection, as by means of a thin portion or flange 13 secured to the inside of the top portion of the side wall of the container, a non-rigid thick portion 17 having spaced cloth members, a thermal insulating filler disposed therebetween, and a flexible extension 4 from the said thick portion adapted to be folded on itself, as illustrated in Fig. 3. This folding of the extension 4 serves to maintain the closing means in approximately the established closing position and the prevention of falling into the free space therebelow, when the container is only partially filled.

The hinge portion 13 and the folding portion or extension of the closing means are preferably constituted of the facing cloths of the closing means, with the thermal insulating filling omitted.

The cover 5 is also heat-proof, non-rigid, and constructed preferably of spaced fabrics with a fibrous or other flexible thermal insulating material disposed therebetween.

The thick, heat-proof, non-rigid portion of the said closing means or member is adapted to extend approximately across the opening in the container. The said cover extends completely over the opening and also over the inner closing means.

The cover is provided preferably with a flange 14 extending approximately at a right angle to the general plane of the cover, secured at one portion in hingewise flexible manner to the top of the outside portion of the side wall, as indicated generally at 15, and provided with suitable conventional fastening elements 6, as described.

When the outer cover is brought into the closing position, it overlies the inner closing

means and serves to lock the fold of the extension element 4 against the inner closing member, in such manner as to prevent the accidental unfolding of the said member 4, by limiting its upward movement.

The result is a container that maintains its shape and has closing means that do not fall out of position, even when not supported by the contents of the bag. Furthermore, the folding of the extension 4 minimizes circulation of air from the inside to the outside of the container. Also, the extension of the flange 14 downwardly and snugly around the outside of the top portion of the said wall of the container practically eliminates the possibility of penetration into the container of liquid accidentally spilled upon the container.

Settling of the thermal insulating filling 10, if of asbestos or other loosely felted fibres, is prevented by quilting 16 that does not extend completely through the wall of the container. Thus, the quilting may extend through the fibres themselves, through the pair of cloths defining therebetween the fibre-filled space, and preferably, also through the inner liner 12, to give increased stiffening effect from the use of such a strong liner as canvas or duck. For best results, the quilting does not extend through the exterior casing 11 such as the rubberized fabric disclosed, this casing remaining imperforate in the finished article.

It will be understood that the details given are for the purpose of illustration, not restriction; and it is intended that variations within the spirit of the invention should be included within the scope of the appended claims.

What we claim is:

1. A container, adapted for use as an airplane mail bag, express bag and the like, comprising heat-proof bottom and side walls, a heat-proof closing member secured hingewise to top portion of the side wall and provided with a non-rigid heat-proof portion adapted to extend across the opening of the container and to be folded on itself, to maintain the member in closing position and minimize circulation of air through the said member, and an outer heat-proof cover secured hingewise to the outer top portion of the side wall and adapted to be brought in position over the said closing member and to prevent the unfolding of the fold in the said flexible extension.

2. A container, adapted for use as an airplane mail bag, express bag and the like, comprising heat-proof bottom and side walls, a heat-proof closing member secured hingewise to the inner top portion of the side wall and provided with a non-rigid heat-proof portion adapted to extend across the opening of the container, a flexible extension from said heat-proof portion adapted to be folded on itself, to maintain the member in closing position and minimize circulation of air through the said member, and an outer heat-proof cover adapted to be brought in position over the said closing member and to prevent unfolding of the fold in the said flexible extension, the said cover being provided with a flange element extending downwardly and snugly around the top portion of the side wall, when the cover is in closing position.

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