May 25, 1965 E. D. BRYAN 3,185,198

FIRE FIGHTING DEVICES

Filed Sept. 23, 1963

FIG. 1

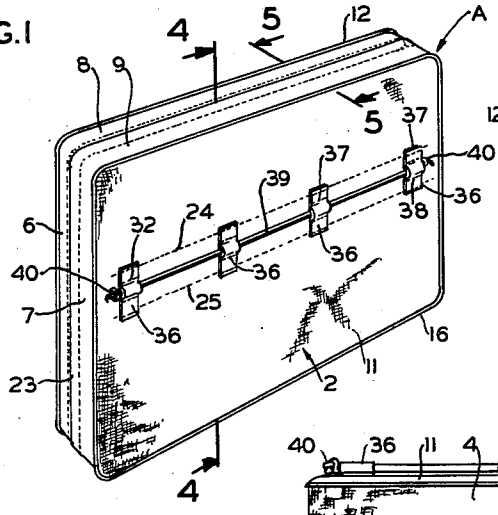
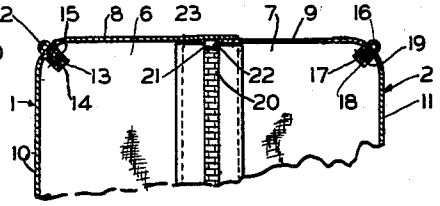


FIG. 5



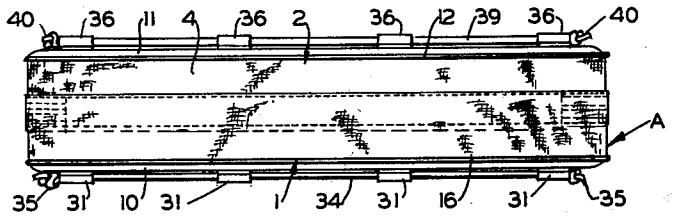


FIG. 2

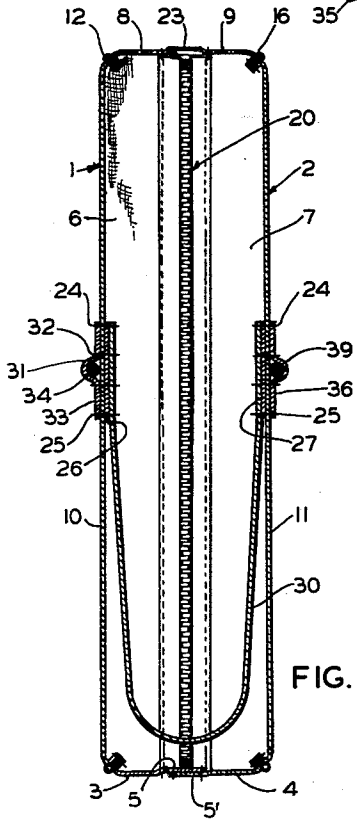


FIG. 4

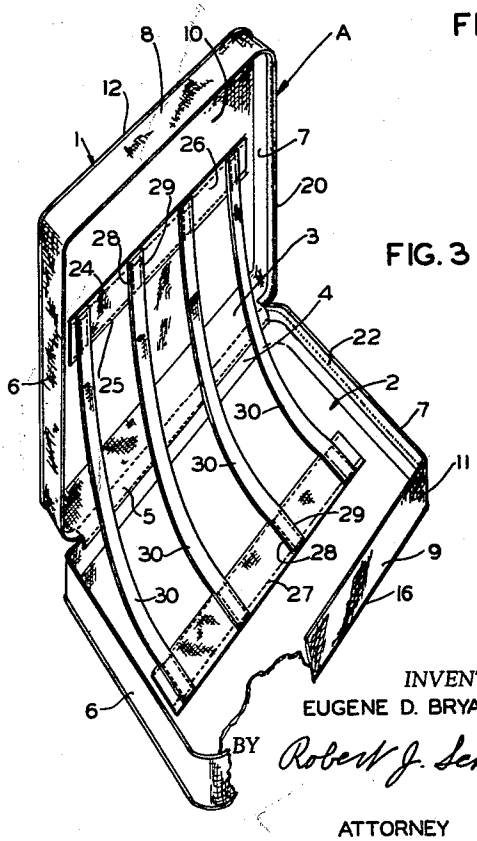


FIG. 3

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FIRE FIGHTING DEVICES

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This invention relates in general to certain new and useful improvements in fire fighting devices, and more particularly to a container which is adapted to retain a burning article.

One of the most difficult to handle and hard to extinguish fires for the modern day fire fighter is a mattress fire. The case of mattress fires caused by burning cigarettes, is quite typical of a fire which causes great difficulty to fire fighters. When the fireman arrives at the scene of the fire he usually enters the dwelling with a high pressure water hose or device for discharging fire retardant foam, if the fire occurs in the interior of the dwelling. Those articles which have ignited are then saturated with water or a fire retardant foam.

When a burning mattress has been ignited by a cigarette, the flames are usually emitted from a hole where the cigarette contacted the surface of the mattress. This external flame is easily extinguished by the fireman. However, there is often a smoldering fire which takes place internally of the mattress. The fireman is therefore faced with the necessity of tearing up the mattress and spraying all portions thereof to insure complete smothering of the fire. This is a rather difficult chore to perform in a room which may still contain considerable quantities of smoke. Consequently, the fireman is faced with the necessity of transporting the mattress from the interior of the dwelling in which the fire occurred.

Due to the size, weight and bulkiness of mattresses, they are difficult items to transport. This difficulty is increased if the mattress has absorbed a good deal of water during the original attempt to smother the fire in the dwelling, or if smoke is still emitted from the internal portions thereof. In order to obviate this transportation problem, the fireman often throws the mattresses from a window of the dwelling. There are, however, other dangers connected with disposing of a mattress in this fashion. The mattress may strike and sever telephone or electric power cables. The mattress may also damage any property upon which it lands, or possibly injure a bystander. Moreover, the onrush of air may revive a fire which may be smoldering internally in the mattress.

It is therefore the primary object of the present invention to provide a container for transporting burning and smoldering articles.

It is another object of the present invention to provide a container of the type stated which includes an air-tight pocket and thereby aids in smothering the fire of an article contained therein.

It is an additional object of the present invention to provide a container of the type stated, which is fireproof and is sturdy in its construction.

It is a further object of the present invention to provide a container of the type stated which can be folded into a neat, compact package, when not in use.

It is also an object of the present invention to provide a container of the type stated which is relatively inexpensive to manufacture.

With the above and other objects in view, my invention resides in the novel features of form, construction, arrangement and combination of parts presently described and pointed out in the claims.

In the accompanying drawings (one sheet):

FIGURE 1 is a perspective view of a fire fighting device constructed in accordance with and embodying the present invention;

FIGURE 2 is a bottom plan view of the fire fighting device of FIGURE 1;

FIGURE 3 is a perspective view of the device of FIGURE 1 illustrated in the open position;

FIGURE 4 is a vertcial sectional view taken along line 4—4 of FIGURE 1; and

FIGURE 5 is a fragmentary sectional view taken along line 5—5 of FIGURE 1.

Generally speaking, the device of the present invention is a container which is sized to contain ignitable articles such as mattresses and the like. The device is readily and easily opened for inserting an article thereinto. When closed, the air supply to the article is removed, thereby smothering any internal fire. Moreover, the device provides an easy and convenient means for transporting smoldering and smoking articles.

Referring now and in more detail by reference characters to the drawings, A designates a container for mattresses, cushions and the like, preferably constructed of a fire resistant material such as a heavy asbestos or any suitable textile which has been impregnated with a fire resistant or fire retardant material can be employed. For example, cellulosic fabrics which have been impregnated with any conventional fire retardant material such as ammonium bromide, phosphoric acid, sodium stannate, potassium hydroxide and potassium thiocyanate have been found to be suitable for use in the present invention.

The container A is divided into left and right sections 1, 2, each having mottom walls 3, 4, respectively connected by relatively thick but flexible overlapping hinge panels 5, 5', which are integrally formed with the bottom walls 3, 4, and which extend for the greater portion of the length of the bottom walls 3, 4, respectively. Each of the sections 1, 2, have pairs of abutting end walls 6, 7, abutting top walls 8, 9, and spaced opposed side walls 10, 11, respectively.

The side wall 10, is secured to the top wall 8, the bottom wall 3, and to each of the end walls 6 through a welt 12, and each have inturned flanges 13, 14, which are secured through lines of double stitching 15. Similarly, the side wall 11 is secured to the top wall 9, the bottom wall 4 and each of the end walls 7, through a large welt 16, and each have inturned flanges 17, 18, which are secured through double lines of stitching 19.

The two sections are optionally attached through a zipper 20, composed of zipper tracks 21, 22, each being secured to the opposed margins of the top walls 8, 9, end walls 6, 7, and the portion of the bottom walls 3, 4, not secured by the hinge panels 5, 5'. The zipper 20 is preferably provided with a pair of movable elements so that the container A can be opened simultaneously from each side. The panel 1 is integrally provided with an overhanging flexible flap 23, along the top wall 8, end walls 6, and bottom wall 3, which is disposed over the zipper 20, in the manner as shown in FIGURE 4.

Secured to the interior surfaces of each of the opposed side walls 10, 11, through lines of stitching 24, 25, in approximate horizontal alignment are relatively thick but flexible support strips 26, 27, respectively. The strips 26, 27, are preferably located midway between the upper and lower margins of the side walls 10, 11, and extend for the greater portion of the overall length of the side walls 10, 11.

Secured to the interior surfaces of each of the strips 26, 27, through lines of stitching 28, 29, are four spaced aligned U-shaped mattress support straps 30. The straps 30 are preferably formed of relatively thick canvas so that they are flexible and yet sufficiently strong to support the weight of a water soaked mattress. The straps 30 assume a U-shaped configuration when the container A is in closed position as illustrated in FIGURES 1 and 4.

Four spaced aligned handle-forming straps 31 are se-

cured to the exterior surface of the side wall 10 through upper and lower lines of stitching 32, 33, which pass through the strip 26 and form four loops through which pass a rope-handle 34. The rope-handle 34 is provided with knots 35 at each transverse end for retaining the rope-handle 34 within the handle-forming straps 31. Four spaced aligned straps 36 are similarly secured to the exterior surface of the side wall 11 through upper and lower lines of stitching 37, 38, which pass through the strip 27 and form four loops through which pass a rope-handle 39. The rope-handle 39 is also provided with knots 40 at each transverse end for retaining the rope-handle 39 within the handle-forming straps 36. In this connection, it should be understood that while the container A has been illustrated with rope-handles, that any suitable handle-forming means could be employed.

In use the container A can be conveniently and easily folded up and stored on a fire truck or in fire closets of public accommodation institutions such as hotels, etc. In view of the fact that the container A is formed of a flexible material, it can be folded into a neat compact unit. Furthermore, it can be rapidly unfolded and opened by means of the zipper 20.

When the fire fighter enters the dwelling and discovers a mattress or similar type of cushion on fire, he will spray the same with water or some type of fire extinguishing foam or liquid to eliminate the external fire. He can then load the mattress into the container A and close the two sections 1, 2, through the zipper 20. The container A can then be easily transported from the interior of the dwelling. Inasmuch as the container A is almost completely air tight, any internal fire within the mattress or cushion will be smothered in a few minutes due to the lack of an oxygen media. Moreover, any smoke created by the smothered fire will be contained in the container A.

It should be understood that changes and modifications in the form, construction, arrangement and combination of parts presently described and pointed out in the claims can be made and substituted for those herein shown without departing from the nature and principle of my invention.

Having thus described my invention, what I desire to claim and secure by Letters Patent is:

1. A device for retaining and transporting mattresses and similar large and bulky ignitable elements, said device comprising a foldable container constructed of a flexible material which is capable of being folded a plurality of times into a small compact unit, said container being divided into two sections which are adjoined and pivoted with respect to each other along a common margin, said sections having spaced opposed walls, securement means operatively associated with at least one of said sections along the remaining margins thereof for securing each of said sections, support strips secured to and extending lengthwise along each of said opposed walls, and a plurality of flexible straps operatively secured to the support strips on each of said opposed walls for maintaining said ignitable element in spaced relation to the wall having said common margin.

2. A device for retaining and transporting mattresses and similar large and bulky ignitable elements, said device comprising a foldable container constructed of a flexible material which is capable of being folded a plurality of times into a small compact unit, said container being divided into two sections which are adjoined and pivoted with respect to each other along a common margin, said sections having spaced opposed walls, securement means operatively associated with at least one of said sections along the remaining margins thereof for securing each of said sections, support strips secured to and extending lengthwise along each of said opposed walls, a plurality of flexible straps operatively secured to the support strips on each of said opposed walls for maintaining said ignitable element in spaced relation to the wall having said common margin, and handle forming means on the exterior surfaces of each of said opposed walls and being secured through said walls to said support strips.

3. A device for retaining and transporting ignitable elements, said device comprising first and second sections, said first section having a side wall, end walls and a bottom wall, said second section having end walls, a bottom wall and a side wall spaced from the side wall of said first section, means for pivotally adjoining the bottom walls of each of said sections along a common margin so that said first and second sections can be pivoted to an open position where the end walls of each section are separated and to a closed position where the end walls of each section are in abutting relationship, said first and second sections forming an internal compartment for enclosing said ignitable elements when in the closed position, support strips secured to and extending lengthwise along each of the opposed side walls, a plurality of flexible straps rigidly attached to said support strips on each of said side walls for holding said ignitable elements in spaced relation to the bottom walls of each section, handle-forming means on the exterior surfaces of each of said side walls and being secured to said support strips, and closure means on said end walls for holding the first and second sections in a closed position.

4. A device for retaining and transporting ignitable elements, said device comprising first and second sections, said first section having a side wall, end walls and a bottom wall, said second section having end walls, a bottom wall and a side wall spaced from the side wall of said first section, means for pivotally adjoining the bottom walls of each of said sections along a common margin so that said first and second sections can be pivoted to an open position where the end walls of each section are separated and to a closed position when the end walls of each section art in abutting relationship, said first and second sections forming an internal compartment for enclosing said ignitable element when in the closed position, support strips secured to the interior surfaces of and extending lengthwise along each of the opposed side walls, a plurality of flexible straps rigidly attached to said support strips on each of said side walls for holding said ignitable element in spaced relation to the bottom walls of each section, handle-forming means on the exterior surfaces of each of said side walls and being secured through said side walls to said support strips, and closure means on said end walls for holding the first and second sections in a closed position.

5. A device for retaining and transporting ignitable elements, said device comprising first and second sections, said first section having a side wall, end walls, a top wall and a bottom wall, said second section having end walls, a bottom wall, a top wall and a side wall spaced from the side wall of said first section, means for pivotally adjoining the bottom walls of each of said sections along a common margin so that said first and second sections can be pivoted to an open position where the end walls and top walls of each section are separated and to a closed position where the end walls and top walls of each section are in abutting relationship, said first and second sections forming an internal compartment for enclosing said ignitable element when in the closed position, support strips secured to and extending lengthwise along each of the opposed side walls, a plurality of flexible straps rigidly attached to said support strips on each of said side walls for holding said ignitable element in spaced relation to the bottom walls of each section, handle-forming means on the exterior surfaces of each of said side walls and being secured to said support strips, and closure means on said end walls and top walls for holding the first and second sections in a closed position.

6. A device for retaining and transporting mattresses and similar large and bulky ignitable elements, said device being constructed of a flexible material and capable of being folded a plurality of times into a small compact

unit, said device comprising first and second sections, said first section having a side wall, end walls and a bottom wall, said second section having end walls, a bottom wall and a side wall spaced from the side wall of said first section, means for pivotally adjoining the bottom walls of each of said sections along a common margin so that said first and second sections can be pivoted to an open position where the end walls of each section are separated and to a closed position where the end walls of each section are in abutting relationship, said first and second sections forming an internal compartment for enclosing said ignitable elements when in the closed position, support strips secured to and extending lengthwise along each of the opposed side walls, a plurality of flexible straps rigidly attached to said support strips on each of said side walls for holding said ignitable elements in spaced relation to the bottom walls of each section, handle-forming means on the exterior surfaces of each of said side walls and being secured to said support

strips, and closure means on said end walls for holding the first and second sections in a closed position.

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