April 7, 1936. C. FISHER 2,036,687

MOISTUREPROOF BAG

Filed Oct. 8, 1935

Fig. 1.

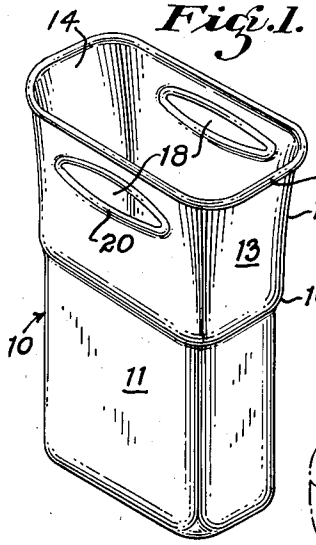


Fig. 2.

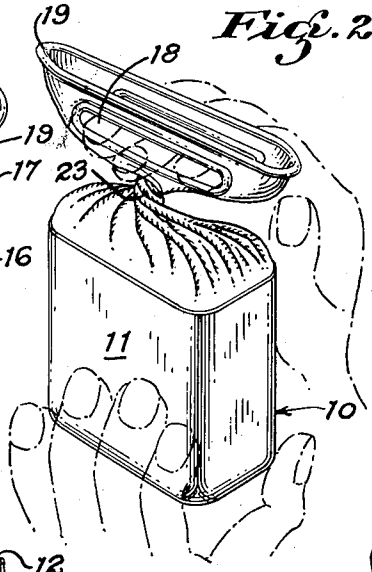
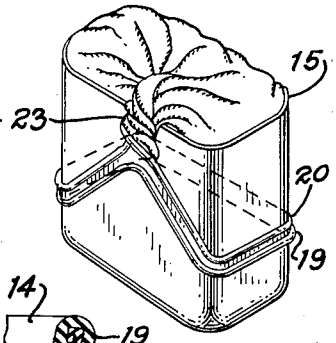


Fig. 4.



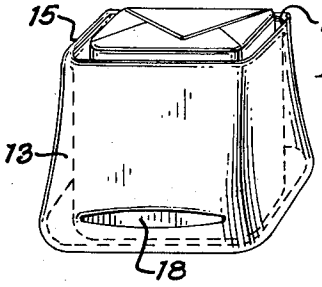


Fig. 3.

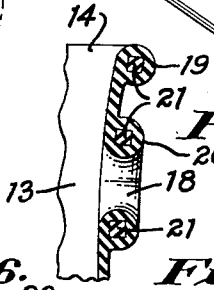


Fig. 8.

Fig. 5.

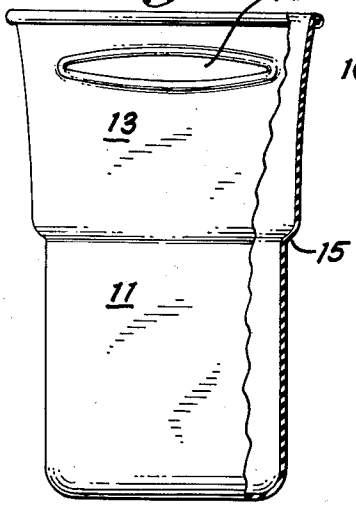


Fig. 6.

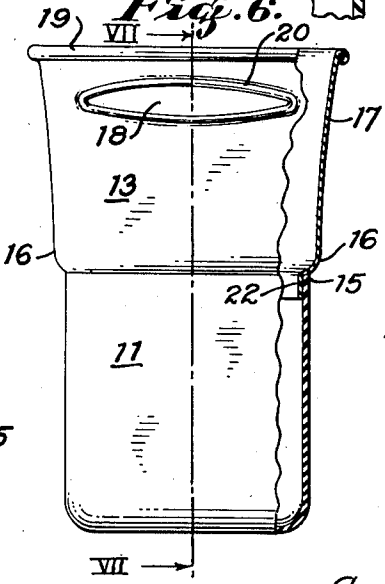
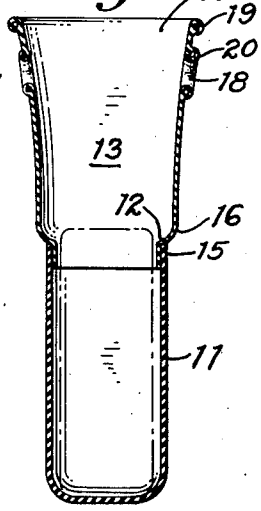


Fig. 7.



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MOISTUREPROOF BAG

Charles Fisher, Berkeley, Calif.

Application October 8, 1935, Serial No. 44,049

10 Claims. (Cl. 150—3)

This invention relates to a moisture-proof bag and particularly to a moisture-proof bag of flexible material which includes in its structure a means whereby an open end of the bag may be closed imperviously to the passage of liquid or moisture through the bag opening, and which includes means for releasably maintaining the closure in such moisture-proof position.

Such water-tight bags are advantageous for all uses where it is desired to protect articles from becoming wet or affected by moisture while the articles are being carried upon the person, for example, the enclosure of money, watches, jewelry, matches, or cigarettes by swimmers, fishermen, hunters, and campers, or enclosure of delicate sensitive instruments in countries of extremely high range of humidity. Also, by making the body of the bag of insulating material such as rubber, the bag may also be advantageously employed as an insulating pocket by persons handling media which is affected by the proximity of exposed metals, for instance, electricians working with sensitive magnetic forces. The bag may also be made in different shapes, weights, and sizes for use as a fluid container for such products as crushed ice or may be employed as a hot water bag or the like and for such other purposes to which its simplicity and economy may commend it.

Among the objects of the invention are to provide a moisture-proof bag which includes a body of flexible moisture-proof material; to provide such a bag which includes means for maintaining said bag securely and releasably closed imperviously to entry of moisture; to provide such a bag in which the means to maintain the bag releasably closed is inherent in the structure of the bag; to provide a moisture-proof bag in which the receiving pouch is of less flexible material than a neck portion; to provide a moisture-proof bag having an extended neck portion which may readily and easily be folded down around a pouch portion to encircle the pouch portion and thereby make the opening in the pouch readily accessible for reception or removal of articles which require protection from moisture; to provide a moisture-proof closable bag which is efficient, practical, and economical to manufacture, and generally to improve upon moisture-proof bags.

With the foregoing and other objects in view, all of which will be more apparent as this description proceeds, the invention is exemplified in one form in the novel construction and combination of parts hereinafter described and illustrated in the accompanying drawing, it being understood that various changes in the form, proportion, size and details of construction of the device may be resorted to within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

To more clearly comprehend the invention, reference is directed to the accompanying drawing wherein:—

Fig. 1 is a perspective view of the device of the invention.

Fig. 2 is a perspective view illustrating a method of manually twisting a neck portion to make a moisture-proof closure.

Fig. 3 is a perspective view illustrating the manner of draping or folding the neck portion to encircle a pouch portion for insertion of articles in the pouch or removal therefrom.

Fig. 4 is a perspective illustrating the bag in releasably closed position.

Fig. 5 is a front elevational view partly broken away to illustrate in section a modified form of integral construction.

Fig. 6 is a front elevational view partly broken away to illustrate in section the preferred form of construction and joining of neck and pouch.

Fig. 7 is a lateral transverse vertical section on line VII—VII of Fig. 6.

Fig. 8 is a fragmentary enlarged detail of a slit portion of side wall of neck member.

Referring to the drawing, in which like characters of reference designate corresponding parts, 10 represents generally a bag of suitable moisture-proof flexible material, preferably elastic, such as rubber, the bag comprising a flexible pouch portion 11 which may be of any suitable shape, but which is preferably generally rectangular and of greater transverse width than of lateral thickness. The pouch portion 11 is open at one end as at 12, said open end having a flexible neck member 13 extending therefrom and provided with an open free end 14. Although the wall of the bag may be integrally formed from top to bottom as indicated in Fig. 5, it is preferred that the neck and pouch be formed as separate sections and joined together as in Fig. 6, the advantages of which will be hereafter described. The neck member at its juncture 15 with the open end 12 of pouch portion 11 bulges outwardly as at 16 and preferably flares outwardly and upwardly as at 17 so that the circumference of the free open end 14 is substantially greater than the circumference of the open end 12 of the pouch portion. Thus, the neck portion may be retroverted upon itself and folded down so as to drape around the exterior of the pouch portion 11, and

thus expose the open end 12 of the pouch portion to the ready and convenient reception of articles to be enclosed, or removal of articles therefrom after the bag has been in use. This feature of folding the neck portion into encircling relation with the pouch portion also insures against dripping of liquid into the pouch or onto the contents thereof when the pouch is opened after it has been subjected to immersion in water, such as would be the case when carrying same in the pocket of a swimming suit of a fisherman's wading trousers.

It will be noted that the neck portion may be twisted upon itself as shown in Fig. 2 so as to close its tubular form against penetration by moisture. The twisted neck member is then preferably bent down over the side of the pouch portion and releasably secured in that position. Means are provided for releasably securing the neck portion in releasably closed relation to the pouch portion, said means being herein exemplified and illustrated as slits 18 disposed in opposite portions of the wall of the neck adjacent the free open end thereof. For purposes of reinforcement, it is preferred that the edges of the free open end 14 of the neck be rolled upon itself as at 19, and, likewise, the edges of the slit 18 may be similarly rolled as at 20 for the same purpose. Further reinforcement may be provided for the free open end 14 of the neck or also around the edges or slit 18 by enclosing in the rolls 19, 20, an elastic band 21.

It is preferred that the bag be made in two sections which are designated as the pouch 11 and the neck 13 and that the edges of the open end 12 of the pouch overlap the edges of the lower end 22 of the neck at which point of juncture they are vulcanized or suitably cemented one to the other to form a joint or seam impervious to liquid or moisture. By such a structure the pouch 11 which is not subjected to twisting and is not necessarily elastic may be made of a material of greater thickness and less flexibility and elasticity than the neck 13 which is subject to the twisting action indicated in Figs. 2 and 4, and which is both flexible and elastic to provide for manual manipulation so that the slit may be passed around the outer periphery of the pouch portion and resiliently engage the pouch after the neck has been closed by twisting thereof upon itself and then folded over the side of the pouch, as shown in Fig. 4.

While it is not intended to limit the invention to any specific dimension of length of neck relative to the length of the pouch, if it is desired to form the neck portion 13 of substantially the same axial length as the body of the pouch portion 11, the neck, when it is folded down around the pouch, will stand out away from the body of the pouch portion and serve to brace the pouch portion in a vertical position when it is stood upon its bottom or closed end, thus providing a self-supporting upright container for an open package of cigarettes.

The method of closing the bag is clearly indicated by Fig. 2. The pouch portion of the bag being held in the fingers of one hand, the fingers of the other hand are inserted through the flexible slit 18, and thereupon the pouch portion and the slit portion of the neck are twisted relative to each other, thereby forming the sealing closure 23. By then bending the twisted and slit portion of the neck over the side of the pouch, the fingers engaged in the slit may be spread apart due to the elasticity of the neck at the slit and the slit may then be passed around the pouch in the resiliently held engagement indicated in Fig. 4.

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

1. A moisture-proof bag comprising a pouch portion of moisture-proof material having an open end for receiving and enclosing articles to be protected from moisture, a tubular neck of flexible moisture-proof material extending from the open end of the pouch portion, said flexible neck having a free open end and having a slit in opposing portions of its wall, the portion of the neck adjacent the slits being of elastic material whereby said slits may be manually manipulated elastically to convert the slits into larger openings for reception of the pouch portion in closure operation of the bag.

2. A flexible moisture-proof bag comprising a completely flexible structure including a pouch portion of moisture-proof material having an open end for receiving and enclosing articles to be protected from moisture, a twistable tubular neck of flexible moisture-proof material extending from the open end of the pouch portion, said flexible neck having a free open end and having a slit in opposing portions of its wall, the portion of the neck adjacent the slits being of elastic material whereby said slits may be manually manipulated elastically to convert the slits into larger openings for reception of the pouch portion in closure operation of the bag.

3. A moisture-proof bag comprising a pouch portion of moisture-proof material having an open end for receiving and enclosing articles to be protected from moisture, a twistable neck of flexible moisture-proof material imperviously connected to and extending from the open end of the pouch portion, said flexible neck having a free open end and having a slit in opposing portions of its wall, the portion of the neck adjacent the slits being of elastic material whereby said slits may be manually manipulated elastically to convert the slits into larger openings for reception of the pouch portion in closure operation of the bag.

4. A flexible moisture-proof bag comprising a completely flexible structure including a pouch portion of moisture-proof material having an open end for receiving and enclosing articles to be protected from moisture, a neck of flexible moisture-proof material imperviously connected to and extending from the open end of the pouch portion, said flexible neck being of more flexible material than the pouch portion and having a free open end and having a slit in opposing portions of its wall, the portion of the neck adjacent the slits being of elastic material whereby said slits may be manually manipulated elastically to convert the slits into larger openings for reception of the pouch portion in closure operation of the bag.

5. A flexible moisture-proof bag comprising a pouch portion of moisture-proof material having an open end for receiving and enclosing articles to be protected from moisture, a tubular neck of flexible moisture-proof material extending from the open end of the pouch portion, said flexible neck having a free open end and having a slit in opposing portions of its wall, the portion of the neck adjacent the slits being elastic, said flexible neck being of substantially larger circumference at its free open end than at its juncture with the pouch portion whereby said neck portion may be retroverted upon itself and folded into encircling

relation with the exterior of the pouch portion to expose the open end of the pouch portion for the selective reception or removal of articles.

6. A flexible moisture-proof bag comprising a flexible pouch portion of moisture-proof material having an open end for receiving and enclosing articles to be protected from moisture, a tubular neck of flexible moisture-proof material extending from the open end of the pouch portion, said flexible neck having a free open end and having a slit in opposing portions of its wall, the portion of the neck adjacent the slits being of elastic material, said flexible neck being of substantially larger circumference at its free open end than at its juncture with the pouch portion whereby said neck portion may be retroverted upon itself and folded into encircling relation with the exterior of the pouch portion to expose the open end of the pouch portion for the selective reception or removal of articles.

7. A flexible moisture-proof bag comprising a completely flexible structure including a pouch portion of moisture-proof material having an open end for receiving and enclosing articles to be protected from moisture, a neck of flexible moisture-proof material imperviously connected to and extending from the open end of the pouch portion, said flexible neck being of more flexible material than the pouch portion having a free open end and having a slit in opposing portions of its wall, the portion of the neck adjacent the slits being of elastic material, said flexible neck being of substantially larger circumference at its free open end than at its juncture with the pouch portion whereby said neck portion may be retroverted upon itself and folded into encircling relation with the exterior of the pouch portion to expose the open end of the pouch portion for the selective reception or removal of articles.

8. A flexible moisture-proof bag comprising a pouch portion of moisture-proof material having an open end for receiving and enclosing articles to be protected from moisture, a tubular neck of flexible moisture-proof material extending from the open end of the pouch portion, said neck being of greater flexibility than the pouch portion, and adapted for closure by manual twisting manipulation and for bending in its twisted condition to lie against the exterior of the pouch portion, said flexible neck having a free open end and having a slit in opposing portions of its wall, the portion of the neck adjacent the slits being elastic.

9. A flexible moisture-proof bag comprising a pouch portion of moisture-proof material having an open end for receiving and enclosing articles to be protected from moisture, a tubular neck of flexible moisture-proof material extending from the open end of the pouch portion, said neck being of greater flexibility than the pouch portion, and adapted for closure by manual twisting manipulation and for bending in its twisted condition to lie against the exterior of the pouch portion, said bag including elastic means for binding the twisted neck securely and releasably to the pouch portion.

10. A flexible moisture-proof bag comprising a pouch portion of moisture-proof material having an open end for receiving and enclosing articles to be protected from moisture, a tubular neck of flexible moisture-proof material extending from the open end of the pouch portion, said neck being of greater flexibility than the pouch portion and adapted for closure by manual twisting manipulation and for bending in its twisted condition to lie against the exterior of the pouch portion, said flexible neck having a free open end and having a slit in opposing portions of its wall, the portion of the neck adjacent the slits being elastic, said flexible neck being of substantially larger circumference at its free open end than at its juncture with the pouch portion whereby said neck portion may be retroverted upon itself and folded into encircling relation with the exterior of the pouch portion to expose the open end of the pouch portion for the selective reception or removal of articles.

CHARLES FISHER.