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P. E. MORRILL ET AL

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FASTENER

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Fig. 2.

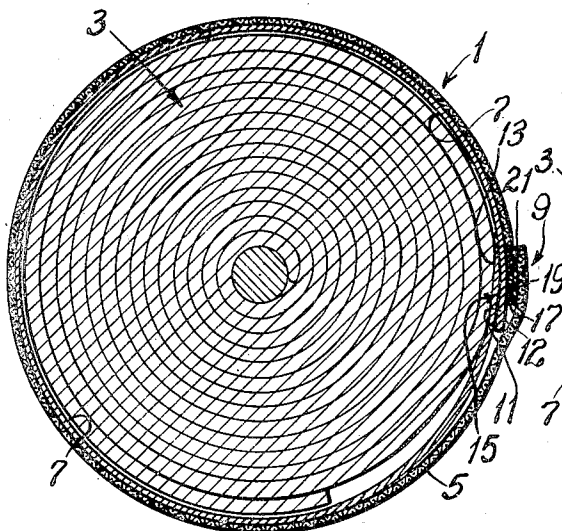


Fig. 1.

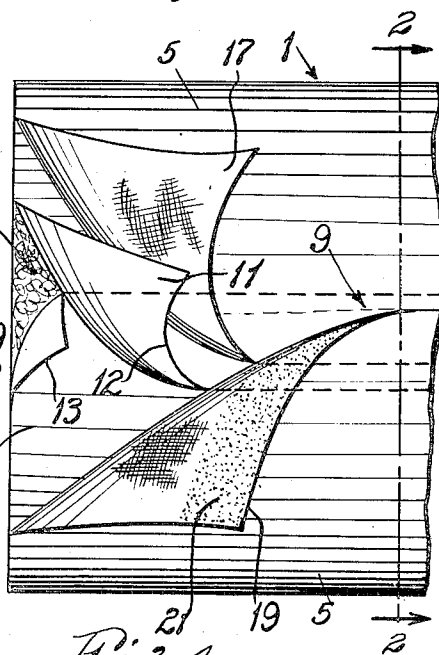


Fig. 3.

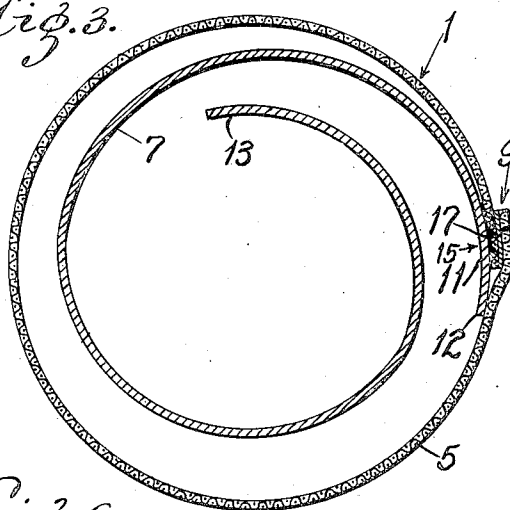


Fig. 4.

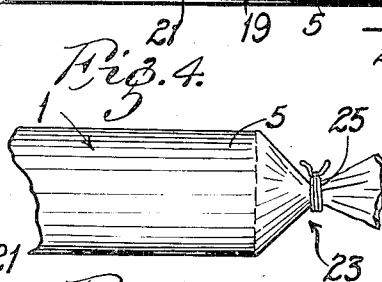


Fig. 5.

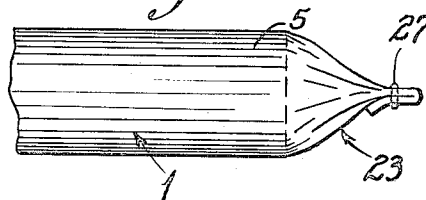
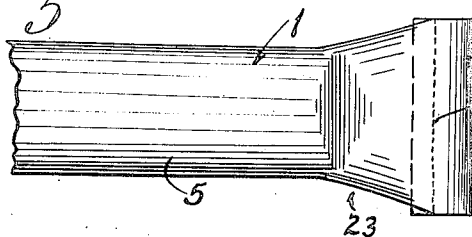


Fig. 6.



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UNITED STATES PATENT OFFICE

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FASTENER

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Application February 9, 1931. Serial No. 514,374

3 Claims. (Cl. 150—1)

This invention relates to containers formed from woven fabric and the like, and with regard to certain more specific features, to means for fastening and lining fabric, and adapted to be used more particularly in the manufacture of containers.

Among the several objects of the invention may be noted the provision of a seam for fastening lined fabric in containers, said seam also being adapted to secure said lining to said fabric; the provision of a container having a seam of the class described said lining having an edge area secured to said fabric at said seam, and as part of said seam, the remaining area of said lining being unattached; and the provision of a fabric container having improved dust-proofing characteristics. Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly comprises the elements and combinations of elements, features of construction, and arrangements of parts which will be exemplified in the structure hereinafter described, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawing, in which is illustrated one of various possible embodiments of the invention,

Fig. 1 is a fragmentary side elevation of a lined container showing the application of the invention thereto, with certain parts laid open for purposes of description;

Fig. 2 is a vertical section taken on line 2—2 of Fig. 1, showing a rolled rug or the like located within said container;

Fig. 3 is a vertical section taken on line 2—2 of Fig. 1 showing the container empty;

Fig. 4 is a side elevation of the container shown in Fig. 1 showing one method of closing the ends thereof;

Fig. 5 is a side elevation of the bag or cover of Fig. 1 showing another method of closing the ends thereof; and,

Fig. 6 is a plan view of Fig. 5.

Similar reference characters indicate corresponding parts throughout the several views of the drawing.

A conventional mode of fastening or seaming edges of lined woven fabrics comprises overlaying two or more layers of fabric and lining and sewing therethrough a strand such as a thread, cord, twine or the like. This method of fastening or seaming has certain disadvantages arising from several causes. For example, stresses applied to the sewed seam are concentrated at points through which the thread passes. Thus the

strain is greater in the regions around the threads and separation is likely to occur in such regions. Moreover, even though it has been found advantageous to fasten juxtaposed edges of the fabric of the bag to an edge area of the lining, it is difficult to do so when the seam is formed in the conventional sewed manner. Furthermore, when the bag or cover or container is paper lined, and the lining is not fastened to the outer fabric by an adhesive binder the perforations formed by the sewing operation weaken the paper lining.

It will be seen hereinafter that the present invention provides a seam for lined fabrics, the lining of said fabrics not being bound throughout to the fabric, and that said seam is adapted to secure one edge area of the lining thereto, and yet in no way weaken the lining by perforations or the like. The invention therefore provides a seam adapted to secure the lining to the bag and at the same time allow the lining to conform to the shape of the product contained within the bag without receiving any strains due to the product contained in the bag or container.

Referring now more particularly to Figs. 1, 2 and 3 there is illustrated at numeral 1 a lined cylindrical bag or cover or container adapted to receive a roll of material 3 such as of cloth or a rug or the like. The bag 1 comprises an outer woven fabric 5 such as burlap or the like, which is returned upon itself to form a cylinder, said cylinder being completed at a seam 9. The outer layer of material 5 has fastened thereto, at seam 9, an inner layer 7 comprising paper, for instance, for dust and moth protecting purposes, which paper will yield when the bag is folded or otherwise strained. It is to be understood that the inner layer 7 is held to the outer layer 5 only at the seam 9.

The seam 9 comprises lateral edge areas 17 and 19 of the material 5 overlapping one another, the edge area 19 being juxtaposed on the edge area 17. Moreover, only the one edge area 11, of the lining 7, is joined to the under side of the edge area 17, as indicated at numeral 15. The edge area 11, however extends substantially beyond the end of the edged area 17, as noted at numeral 12. The position of the remaining edge area 13 is determined by the material located within the bag, and may vary since it is in no way fastened at the seam 9.

As the edge areas 17 and 19 are brought together to form the seam 9, a layer of adhesive material or cement 21 is positioned between the areas 17 and 19 in a layer extending substantially

along the areas. At the same time the edge areas 11 and 13 are positioned beneath the area 17, the area 11 coming directly in contact therewith as is shown more clearly in Fig. 2. The edge of the lining 7 extends substantially beyond that of the material 5 as shown at numeral 12. The cement or adhesive material comprises preferably latex, processed rubber, gum, asphalt or any adhesive capable of forming a seam of sufficient strength. The layer on one side faces the woven material of the edge area 19, and on the other the edge area 17.

It is appreciated however, that the liquid cement tends to readily pass through the reticulated mass of the material 5 (burlap, for instance), and is received by the edge area 11 of the lining 7 which, being paper of the like, is substantially impervious to the passage of the cement 21. Thus the cement 21 does not reach the area 13, of the lining 7, and accordingly the area 13 is left free to slide past the area 11. In this way the perimeter of the cylinder formed by the lining is made variable as is clearly shown in Fig. 3.

The joint formed between the three edge areas 17, 19 and 11 is particularly effective. The cement surrounds and embeds the outstanding fibers of the woven material 5, passes into the interstices thereof. Thus, there is effected a substantially homogeneous material at the juncture between the fabric, the lining and the cement. It will be understood that a compressing operation is used in juxtaposing the edges of the material 5, so that in actuality the seam 9 is only slightly thicker than the material composing it and thus is substantially thinner than is diagrammatically shown in Figs. 1 and 2. The width of the overlapping area between the edge areas 17 and 19 may be varied as is desirable to obtain a proper strength in the seam 9. The joint may be made stronger than the remainder of the bag by using an amply wide area, although this is not necessary and the area may be limited to provide substantially equal strength.

It is thus seen that a bag 1 has been provided which is adapted to receive rolled material 3 comprising cloth, rugs or the like and to provide protection from moisture, dust, moths and the like. In order to cover such a piece of material as a rug, with the bag 1, the latter is opened up to form a cylinder, and the rug 3 telescopically placed therein. In this operation the lining 7 is only opened up far enough to receive the rug 3, the free edge area 13 sliding past the edge area 11, thereby permitting the lining 7 to conform to the shape of the object 3, which is being received into the bag 1. It is thus seen that the lining 7 bears substantially none of the stresses or strains due to the load which the bag or cover 1 carries. As the bag stretches, the periphery of the lining 7 enlarges by the sliding of the edge area 13 past the edge area 11. Such however, would not be the case if the edge area 13 were fastened to the edge area 11.

After the rug or rolled material 3 is located

within the bag 1, ends 23 of the bag 1 are suitably closed as is shown in Figs. 4, and 5 and 6. Fig. 4 shows one method of fastening the ends 23 and involves winding a strand of twine, wire or like substance 25 around that portion of the bag 1 which extends beyond the material bagged. Figs. 5 and 6 show the closing accomplished by flattening the portion of the bag which extends beyond the roll 3, folding it back on itself, and sewing the juxtaposed portions together, near the fold.

An advantage of the invention is the flexibility with which the lining 7 is secured within the woven fabric 5, whereby substantially all of the strains resulting from bagging the material 3 are properly borne by the woven material 5. Another advantage is the ease with which such a bag is manufactured, the durability and protection which it offers. Another advantage presented by the invention is the fact that the paper lining is not weakened by perforations formed by sewing. Further it is not necessary to wrap the ring or other contents in paper before inserting them in the cover.

In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained.

As many changes could be made in carrying out the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

We claim:

1. A container comprising an inner lining having outer and inner lateral edges, said edges being juxtapositioned, an outer reticulated fabric also formed to provide juxtaposed edges, and permeable adhesive material for binding together said fabric juxtaposed edge areas and said outer lining edge.

2. A container having an outer fabric layer formed to provide lapped fabric areas, a lining in said container formed to provide lapped lining areas, said lining areas being positioned opposite said fabric areas, cement positioned between said fabric areas, and between said fabric areas and said lining, said fabric areas being pervious to said cement, and said lining being substantially impervious to said cement, whereby one lapped area of said lining is joined to said fabric and the other edge of said lining is left free to vary in position.

3. A container comprising at least one layer of fabric formed to provide overlapping edge areas, means for fastening said areas, a lining positioned interiorly of the fabric and having one edge fastened at the lapped fabric areas in such manner as to overlap the lapped fabric areas, the remainder of said lining being free from the fabric and the other edge thereof being adjacent said fastened edges.

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