June 22, 1937. G. H. GRAHAM 2,084,906

LINER

Filed June 15, 1935

Fig. 1.

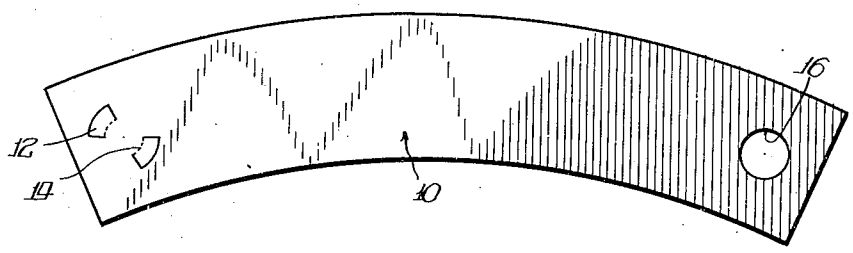


Fig. 2.

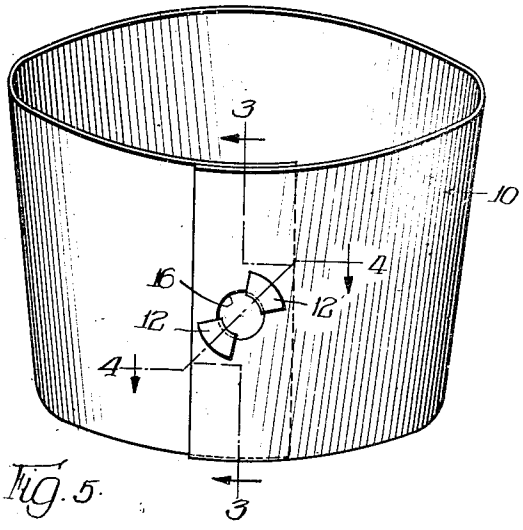
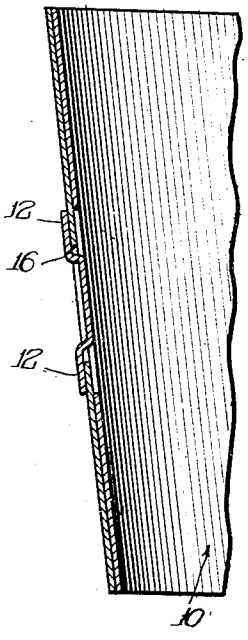


Fig. 5.

Fig. 3.



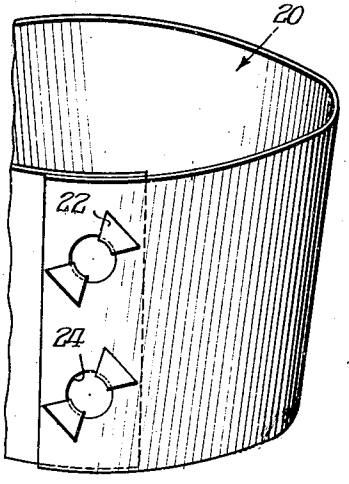
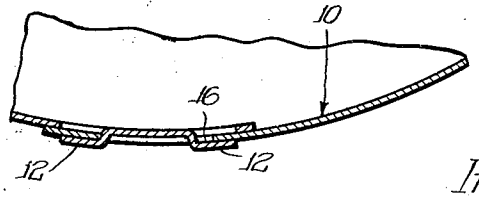


Fig. 4.



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UNITED STATES PATENT OFFICE

2,084,906

LINER

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Application June 15, 1935, Serial No. 26,719

3 Claims. (Cl. 217—3)

The invention relates to basket liners and has been illustrated as embodied in one suitable for use in packing fruit or vegetables for the purpose of protecting the contents of the basket.

The present liner is also effective in the packing of fruit wherein a facing form is used which supports the liner with the small end up. When the liner in this position has been filled and covered by an inverted basket the entire assembly is turned over so that the fruit that was arranged on the facing form appears at the top of the basket. Usually a reinforcing shell is placed around the liner while the fruit is being packed into the same but this shell is removed before the basket is placed over the liner. Therefore, it is necessary that the liner be sufficiently strong to retain the fruit after the reinforcing shell is removed. It is further desirable that the liner yield sufficiently to conform to the contour of the basket.

Accordingly, an object of the invention is to provide a liner that will accomplish all the functions mentioned and which can be cheaply manufactured.

A more specific object is to provide a liner for the purposes described having novel means for attaching the ends of the liner together, that will not include extraneous parts and which will permit limited relative movement of the ends of adjusting the liner to the contour of the basket.

With these and other objects in view the invention may consist of certain novel features of construction and operation, as will be more fully described and particularly pointed out in the specification, drawing and claims appended hereto.

In the drawing which illustrates an embodiment of the invention and wherein like reference characters are used to designate like parts—

Figure 1 is a plan view of the present liner in flat or strip form;

Figure 2 is a perspective view of the liner shown in Figure 1 in assembled form;

Figure 3 is a fragmentary sectional view taken substantially along line 3—3 of Figure 2;

Figure 4 is a fragmentary horizontal sectional view taken substantially along line 4—4 of Figure 2; and

Figure 5 is a perspective view of a modified liner in assembled form.

Referring to the drawing which shows a preferred form of the invention, the liner identified in its entirety by numeral 10 may consist of sheet material such as cardboard or the like of moderate strength and stiffness, which, however, will readily yield as to conform to the fruit and to the basket walls and also support the column of fruit when on the facing form without the aid of a reinforcing shell. The liner in blank or strip form is arcuate in shape as shown in Figure 1, the curvature of which is determined by the size of the basket to which the liner is to be applied. Adjacent one end of the liner tabs 12 are formed, preferably two in number, and disposed diametrically opposite each other. In forming the tabs the material of the liner is severed on arcs and then along radii for a portion of their extent. The extremities of the tabs therefore have an arcuate contour, while the tabs themselves are fan-shaped and in forcing the tabs outwardly from the liner the invention contemplates that they be bent on the dotted lines 14 which are also arcuate, having the same center as the severed portions forming the extremity of the tabs. The other end of the liner is provided with a circular opening 16 of a diameter less than the distance between the extremities of the tabs 12 but which is greater than the distance between the dotted lines 14 on which the tabs are bent. The tabs and circular opening are located a distance in from their respective ends of the liner and substantially centrally of the width of the liner so that they coincide when the ends are overlapped, forming the assembled liner shown in Figure 2. In this form the liner appears as a truncated cone and approximate the internal contour of the side walls of the basket to which the liner is to be applied.

In assembling the liner the tabs 12 are forced outwardly where they can be grasped by the fingers and thumb of one hand and bent to a position substantially upright, or, in other words, at right angles to the wall of the liner. The liner is then caused to assume the circular form shown in Figure 2 and the end having the opening 16 is placed over the tabs, telescoping them, whereupon they are released and flattened again to form a lock retaining the ends of the liner in connected relation. The size of the opening 16 permits a limited shifting movement of the ends of the liner and it is further possible for one end to have considerable rotating movement relative to the other end of the liner. The permissible shifting and rotating movement described are sufficient to permit the present liner to readily adjust itself to the walls of the basket. Also the liner can be cheaply manufactured and is well suited to the packing of fruit by reason of the convenience and facility with which it can be assembled.

The tabs 12 may vary in length for different liners, the only limit on their size being the circular opening 16 which tends to weaken its end

of the liner if made very large. The tabs are formed from the material of the liner and thus extraneous parts for fastening the ends are omitted. The extremities of the tabs are shown as rounded but it is of course within the invention to provide tabs with straight extremities and to curve the sides of the tabs as their particular shape is not essentially important although it is preferred that the tabs at least approximate the shape of a fan.

In Figure 5 the liner 20 is shown as having a pair of tabs 22 and openings 24 formed in the respective ends of the liner blank. The tabs 22 are fan-shaped having a flat top and are struck from the material of the blank as is described with respect to Figure 1. The openings 24 are circular although it is within the invention to change the contour of said openings to square or rectangular as it is only necessary that the end of the liner be provided with some opening of proper size through which the tabs can be inserted. This construction of liner follows that of the preferred form as the tabs and openings are located a distance in from their respective end of the liner and are spaced so as to align when the liner is assembled with its ends in overlapping relation.

The invention is not to be limited to or by details of construction of the particular embodiment thereof illustrated by the drawing, as various other forms of the device will of course be apparent to those skilled in the art without departing from the spirit of the invention or the scope of the claims.

What is claimed is:

1. A blank for a basket liner having at one end a pair of tabs struck from the material of the blank, said tabs joining with the blank at their base and being directed outwardly in substantially opposite directions, the other end of the liner having at least one opening therein through which said tabs are adapted to extend so as to overlie the said end of the liner having the opening therein, whereby the ends of the liner are joined, said pair of tabs and openings being located a short distance in from their respective end of the liner, and said opening coinciding with the space between said tabs when the liner is assembled with its ends overlapping.

2. A blank for a basket liner, having at one end a pair of tabs struck from the material of the blank, said tabs joining with the blank at their base and being directed outwardly in substantially opposite directions, the other end of the liner having at least one substantially circular opening therein through which said tabs are adapted to extend so as to overlie said end of the liner having the opening therein, whereby the ends of said liner are joined, the distance between the base of said tabs being less than the diameter of said circular opening and said opening coinciding with and exposing the space between said tabs when the liner is assembled with its ends overlapping.

3. A blank for a basket liner having at one end tabs arranged in pairs and which are spaced transversely of the liner, the tabs of each pair joining with the blank at their base and extending radially outward in substantially opposite directions, the other end of the liner having openings also spaced transversely for receiving the tabs which extend through an opening and overlie the said end of the liner having the opening therein, each pair of tabs and each opening being located a short distance in from their respective ends of the liner and each opening substantially coinciding with the space between the tabs of a pair when the liner is assembled with its ends overlapping.

GEORGE H. GRAHAM.