

Dec. 18, 1956

R. H. WIKLE

2,774,402

VENTILATED PLASTIC BAG

Filed Dec. 1, 1951

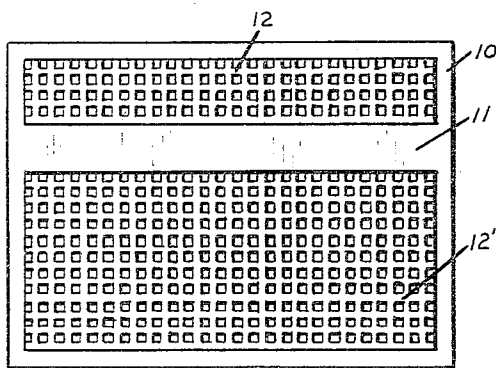


Fig 1

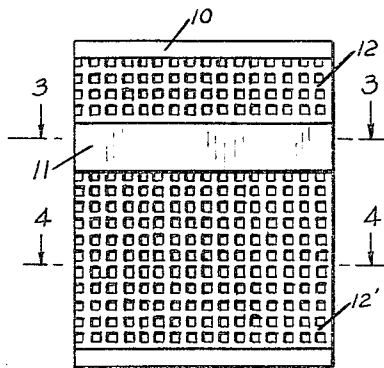


Fig 2

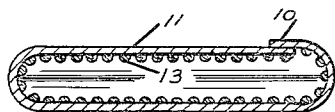


Fig 3

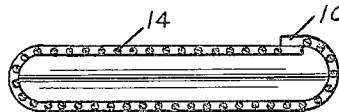


Fig 4

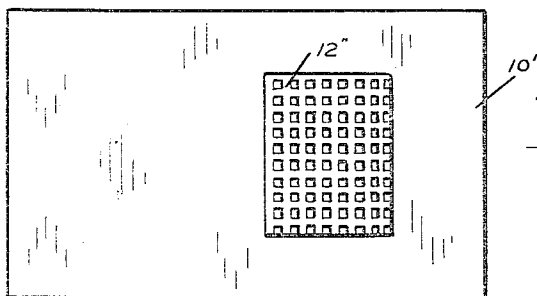


Fig 5

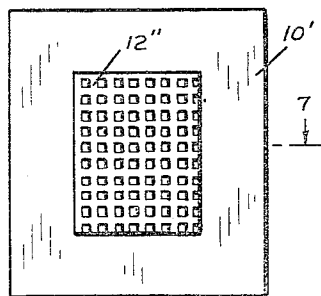


Fig 6

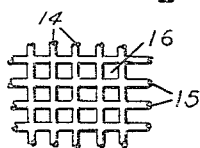


Fig 8

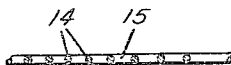


Fig 9

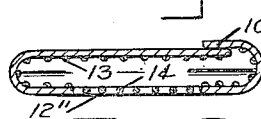


Fig 7

INVENTOR.
RICHARD H. WIKLE
BY

Edw. P. Newton

ATTORNEY

1

2,774,402

VENTILATED PLASTIC BAG

Richard H. Wikle, Atlanta, Ga.

Application December 1, 1951, Serial No. 259,347

3 Claims. (Cl. 150—1)

This invention relates to ventilated plastic bags and more particularly to ventilated bags made entirely of thin plastic or synthetic rubber sheet material.

Ventilated bags for fruits, vegetables and the like have heretofore been made of paper, fabric or combinations of paper and fabric; but such prior art structures were not satisfactory. Paper bags were subject to tearing, the threads of fabric bags were not securely held in place, and bags made of combinations of these prior art materials were additionally subject to the disadvantage of being complicated and expensive to manufacture.

It is an object of my invention to provide a ventilated bag made entirely of thin plastic or synthetic rubber sheet material comprising a plurality of integrally connected filaments and having smooth marginal portions for joining together.

Another object of my invention is to provide a bag having extreme lightness and provision for ventilation in the finished article without detrimental sacrifice of strength.

Another object of my invention is to provide a ventilated bag made entirely of thin plastic or synthetic rubber sheet material having an imperforate portion reinforced by outstanding ribs, and a perforate portion formed of a plurality of integrally connected filaments.

Another object of my invention is to provide a ventilated bag of thin plastic or synthetic rubber sheet material which is economical to manufacture and durable in construction.

Other and further objects and advantages of my invention will be apparent from the following description taken in connection with the accompanying drawing in which like characters of reference designate corresponding parts throughout the several views, and wherein:

Fig. 1 is a plan view of a blank from which a bag is made according to my invention.

Fig. 2 is a front elevation of a bag made from the blank shown in Fig. 1.

Fig. 3 is a cross-sectional view taken along the line 3—3 in Fig. 2.

Fig. 4 is a cross-sectional view taken along the line 4—4 in Fig. 2.

Fig. 5 is a modified form of blank from which a bag is made according to my invention.

Fig. 6 is a front elevation of a bag made from the blank shown in Fig. 5.

Fig. 7 is a cross-sectional view taken along the line 7—7 in Fig. 6.

Fig. 8 is an enlarged fragmentary view of a detail.

Fig. 9 is a fragmentary top view of the detail shown in Fig. 8.

In the embodiment of my invention chosen for purpose of illustration, Fig. 1 shows a blank of thin sheet material which may be made of plastic or synthetic rubber materials, cellophane, re-generated cellulose, cellulose acetate, cellulose acetate butyrate, cellulose nitrate, ethyl cellulose, or any such cellulose derivatives, as well as products obtained by the polymerization of vinyl compounds and

2

other plastic materials used in the plastic and synthetic rubber industry to make thin plastic films. As shown in Fig. 1, this blank has a smooth border portion 10 around the outside, and an imperforate intermediate portion 11 separating two perforate portions 12, 12' which lie within the border 10. The imperforate intermediate portion 11 is reinforced by integral ribs 13, as shown in Fig. 3. The perforate portions 12, 12', as best seen in Figs. 8 and 9, comprise a plurality of substantially parallel filaments 14 which are crossed at right angles by a plurality of similar filaments 15 which are integrally connected thereto in a manner to form interstices or ventilating openings 16 between the filaments. The blank of thin plastic sheet material from which my bag is made may be formed by casting, extruding, calendering on engraved surfaces, or by other methods known in the plastic and synthetic rubber industry for making thin films or sheet material and the like.

As shown in Fig. 2, the blank of Fig. 1 is folded upon itself in a manner customary in the bag-making art, and the smooth edges, or border portions of the bag, are fastened together by gluing, heat sealing, or other processes common in the bag-making art, the bottom portion of the bag being adapted to be sealed against itself, as shown in Figs. 3 and 4.

Fig. 3 is a cross-sectional view showing the completed envelope of the bag with the smooth border portions 10 of the blank overlapping and fastened together. From this view it will be noted that the imperforate intermediate portion 11 presents a smooth outer surface which readily lends itself to printing thereon information regarding the contents of the bag, or other ornamentation, while the reinforcing ribs 13 project on the interior of the bag.

A modified form of ventilated plastic bag is shown in Figs. 5, 6 and 7, and in this modification, the imperforate border strip 10' is made larger, and only a single perforate portion 12'' is provided in a manner to appear on the front of the bag when the blank is folded upon itself, as shown in Fig. 6, the imperforate but reinforced marginal portion then extending completely over the back of the bag.

It will be obvious that my invention provides a needed article of great convenience and usefulness, and that various modifications may be made without departing from the scope of my invention as defined in the following claims.

I claim:

1. A ventilated bag made of plastic sheet material, said sheet material having an imperforate border portion, perforate portions lying within said border portion and integrally formed therewith, and an imperforate intermediate portion lying within said border portion between said perforate portions, said perforate portions each comprising a plurality of filaments which are integrally connected in a manner to form ventilating openings therebetween, said sheet being joined together at opposite portions and sealed against itself along at least one other portion.

2. In a ventilated bag made of plastic sheet material, said sheet material having an imperforate border portion, a plurality of perforate portions lying within said border, an imperforate intermediate portion separating said perforate portions, and a plurality of reinforcing ribs formed integrally with said imperforate intermediate portion, said perforate portions comprising a plurality of filaments which are crossed by a plurality of similar filaments which are integrally connected thereto in a manner to form ventilating openings.

3. In a ventilated bag made of plastic sheet material, said sheet material having an imperforate border portion, a plurality of perforate portions lying within said border, an imperforate intermediate portion separating said per-

3

forate portions, and a plurality of reinforcing ribs formed integrally with said imperforate intermediate portion, said perforate portions comprising a plurality of substantially parallel filaments which are crossed by a plurality of similar filaments which are integrally connected thereto in a manner to form ventilating openings.

References Cited in the file of this patent

UNITED STATES PATENTS

1,534,654	Netz et al. -----	Apr. 21, 1925	10
1,539,756	McNeill -----	May 26, 1925	
1,663,298	Geer et al. -----	Mar. 20, 1928	
1,833,631	Wilsey -----	Nov. 24, 1931	

1,918,793
2,085,365
2,225,089
2,428,266
2,439,757
2,523,682
2,588,695
2,677,585

4

Baker -----	July 18, 1933
Israel -----	June 29, 1937
Vadnais -----	Dec. 17, 1940
Daniels -----	Sept. 30, 1947
Sidnell -----	Apr. 13, 1948
Corwin -----	Sept. 26, 1950
Brady et al. -----	Mar. 11, 1952
La Voy -----	May 4, 1954

FOREIGN PATENTS

Great Britain -----	Feb. 21, 1929
Great Britain -----	July 6, 1933

306,330
394,790