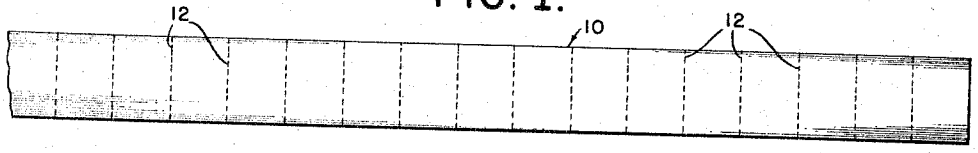
May 30, 1967 R. L. BUSH 3,322,325

BAG SEAL UTILIZING PRESSURE SENSITIVE TAPE HAVING WEAKENED TRANSVERSE ZONES

Filed Jan. 30, 1962

FIG. 1.



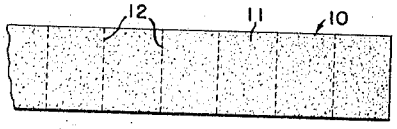


FIG. 2.

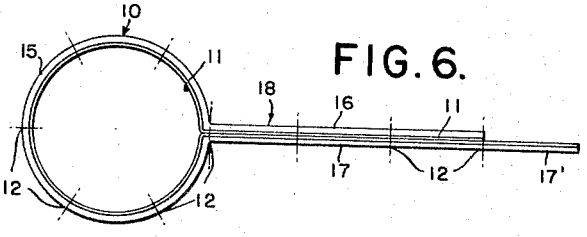


FIG. 6.

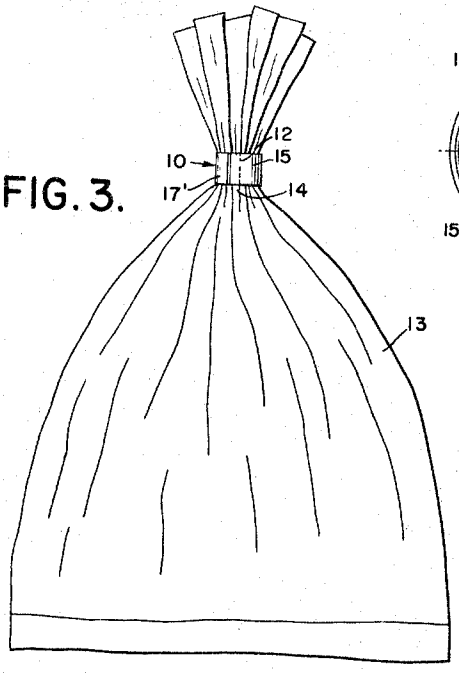


FIG. 3.

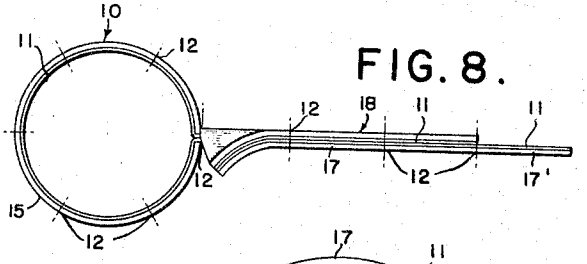


FIG. 8.

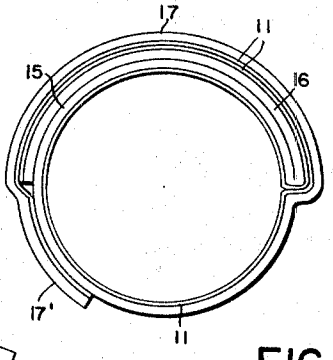


FIG. 7.

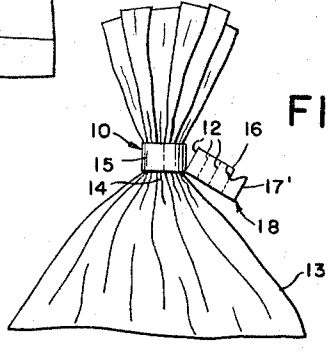


FIG. 5.

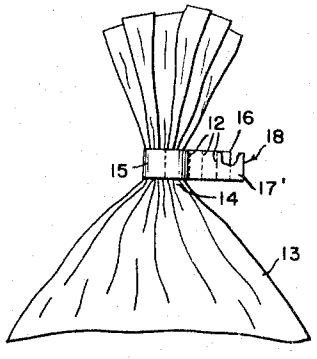


FIG. 4.

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BAG SEAL UTILIZING PRESSURE SENSITIVE TAPE HAVING WEAKENED TRANSVERSE ZONES

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3 Claims. (Cl. 229—62)

This invention relates to a pressure sensitive tape particularly adapted for sealing bags or the like, and to a method for applying the same to said bags.

Many commodities are presently vended in polyethylene bags or the like, the upper end of which is gathered to form a neck around which is placed a pressure sensitive tape. This tape is generally made of a treated paper base material for strength, to prevent accidental or premature severance of the tape, one side of the tape having a pressure sensitive adhesive applied thereto. While this tape provides an efficient sealing means, it has been found that, when the contents of the bag are to be removed, it is virtually impossible to pull the tape off, or tear it in two, without ripping the bag, thereby destroying its storage usefulness.

It is an object of this invention to provide a pressure sensitive tape for placement around the gathered neck of a bag or the like, to seal the latter, the seal being readily broken to permit facile opening of the bag and removal of the contents without tearing the bag.

Another object is to provide a pressure sensitive tape of the character described having transverse weakened zones at spaced intervals to permit the tape to be torn apart at the locus of the neck of the bag, for opening the latter.

A further object is to provide a method of applying pressure sensitive tape having uniformly spaced, transverse weakened zones to the neck of a bag, comprising placing the central section of a length of the tape around the neck, aligning the weakened zones of the terminal portions of the tape, and securing the terminals of the pressure tape together.

Other objects of the invention will be manifest from the following description of the present preferred form of the invention, taken in connection with the accompanying drawing.

FIG. 1 is a fragmentary front plan view of pressure sensitive tape made in accordance with the present invention;

FIG. 2 is a rear plan view of the same;

FIG. 3 is an elevational view of a bag, illustrating the application of the pressure sensitive tape of the present invention thereto, for sealing the bag;

FIG. 4 is a fragmentary elevational view similar to FIG. 3, showing to advantage the manner of securing the tape to the bag;

FIG. 5 is a view similar to FIG. 4, showing the manner of tearing the tape to open the bag, for removing the contents;

FIG. 6 is a top plan view of the tape per se after it is applied to the bag in a manner shown in FIG. 4;

FIG. 7 is a similar view showing the terminal portion of the tape wrapped around the main body of the bag; and

FIG. 8 is a top plan view of the tape per se in the partially torn condition shown in FIG. 5.

Referring now in greater detail to the drawing, there is shown in FIGS. 1 and 2, a tape **10** of predetermined length which may be in roll form or cut into strips as desired. Tape **10** is preferably made of a paper base material which has been treated for greater strength in order to prevent accidental or premature tearing thereof during, or subsequent to, application to the bag. As shown in FIG. 2, a pressure sensitive adhesive coating **11** is applied to one side of the tape to permit facile application of the tape to a bag. In accordance with the objects of the present invention, tape **10** is provided with a plurality of uniformly spaced transverse perforations or weakened zones **12** which extend entirely across the width of the tape. Perforations **12** serve to make the treated tape more pliable for use in accordance with the present invention and also to permit ready severance thereof both for application to the bag for sealing and for tearing of the tape when it is desired to open the bag.

In FIGS. 3–8 there is illustrated the manner of applying the tape of the present invention to a bag designated **13**, which bag may be made of polyethylene, paper or any other suitable flexible material. In accordance with the objects of the present invention, the bag is gathered near its open end to form a neck **14** around which the central portion **15** of a predetermined length of tape **10** is placed. By virtue of the pressure sensitive adhesive **11** on one side of the tape, central portion **15** readily adheres to the neck of the bag. As shown in FIGS. 4 and 6, the terminal portions of the tape designated **16** and **17** extend outwardly from the neck of the bag and are adhered together in such a manner that transverse perforations **12** are aligned. This forms a tear strip designated **18**.

It is within the contemplation of the present invention to extend the extreme terminal portion **17** beyond that of portion **16** as indicated at **17'**. This permits portions **16**, **17** and **17'** to be wrapped around central portion **15** with the adhesive coated side of terminal portion **17'** adhered to main body portion **15** to hold the tape terminals in wrapped positions. This effects a more aesthetic appearance while at the same time effecting a tighter seal on the bag.

When it is desired to open the bag for removal of the contents, terminal portion **17'** is first lifted out of adhesive engagement with central portion **15** and portions **16** and **17** returned to the position shown in FIG. 6. Tear strip **18** is then severed along aligned perforations **12** at the juncture of main body portion **15**, in the manner illustrated in FIG. 8. In most instances, this action is all that is necessary to complete opening of the bag. However, at times, the remaining terminals of the tape are still lightly sealed, in which event the seal is readily broken by spreading the upper terminals of the bag to pull the terminals apart.

With the process and apparatus of the present invention the sealing of bags is quickly and efficiently effected. Additionally, opening of the bag is greatly facilitated without ripping the latter and thereby destroying its storage usefulness.

It is further within the contemplation of the present invention to secure tape **10** to the gathered neck of the bag by adhesively securing the terminals thereof in such a manner that perforations **12** are not aligned. Also, if desired, the terminals of the tape may be coextensive or the terminals may be haphazardly overlapped and secured together. The terminals need not be wrapped around neck portion **15**, as disclosed in FIG. 7. Whether perforations **12** are aligned or unaligned, the tape may be broken by pulling the bag apart at the locus of the neck portion of the tape. This causes the transverse severance along a perforated line **12**, the particular point of the break being the weakest point of the tape. Therefore, when the bag is opened in this manner, the tape may be torn at the point indicated in FIGS. 5 and 8 or at a point on the periphery of neck portion **15**. Various other changes may be made within the scope of the claims hereto appended.

What is claimed is:

1. In a bag of flexible material open at one end, sealing means therefor adapted for engagement with a neck portion of the bag formed by gathering the latter near the open end thereof, the sealing means including a flexible tape having a pressure sensitive adhesive coating on one side thereof and having spaced transverse weakened zones, the intermediate part of said tape encircling the neck portion of the bag, the terminals of said tape being adhered together, whereupon the exertion of stress along a weakened zone at the locus of the neck portion causes the tape to break and permits opening of the bag.

2. In a bag of flexible material open at one end, sealing means therefor adapted for engagement with a neck portion of the bag formed by gathering the latter near the open end thereof, the sealing means including a flexible pressure sensitive tape having transverse weakened zones comprising equi-spaced perforations coextensive with the width of the tape, the intermediate part of said tape encircling and being secured to the neck portion of the bag, the terminals of said pressure sensitive tape being adhered together with the transverse perforations thereof being aligned in opposed relationship, thereby

forming a tear strip, to facilitate severing of the tape along a weakened zone at the locus of the neck portion of the bag.

3. The sealing means of claim 2 wherein the extreme end of one terminal portion of the pressure sensitive tape extends beyond the other, to permit the joined terminals of the tape to be wrapped around the neck portion of the bag and the extended terminal adhered to another portion of the tape.

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