

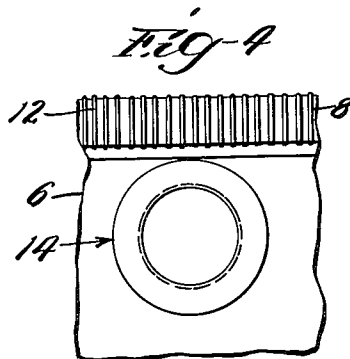
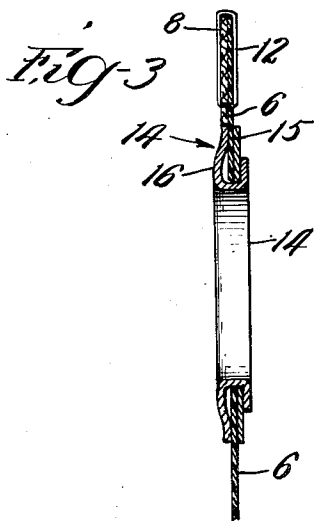
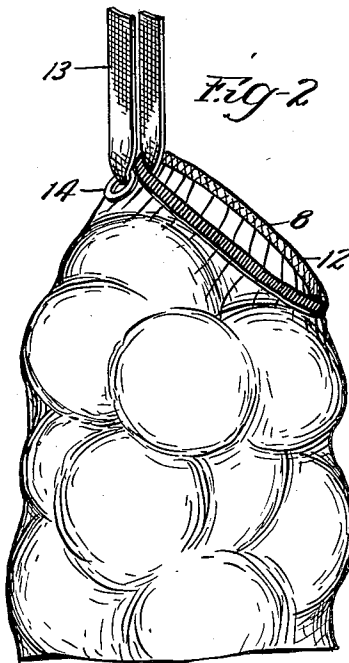
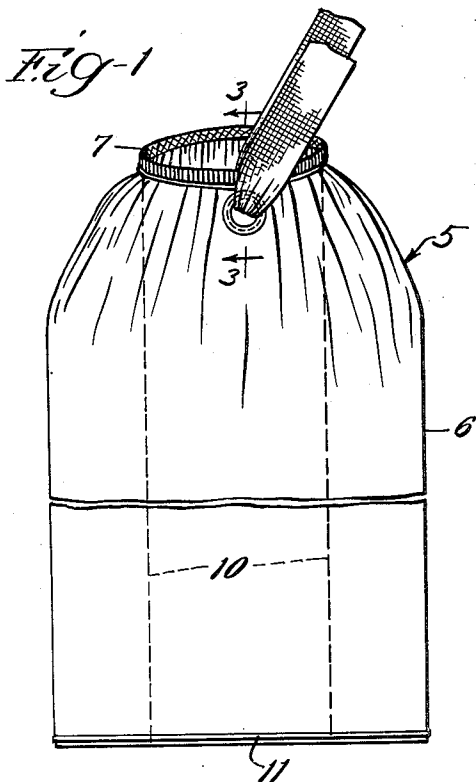
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R. L. LEE

2,631,629

BAG CONTAINER

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INVENTOR.

Robert L. Lee.

BY

Cromwell, Greist & Warden

Attys.

UNITED STATES PATENT OFFICE

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BAG CONTAINER

Robert L. Lee, Mount Vernon, Ohio, assignor, by
mesne assignments, to S. and F. Company,
Hartford, Conn., a partnership

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1 Claim. (Cl. 150—1)

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This invention relates, generally, to new and useful improvements and innovations in bag-type containers having an elastic opening in the top thereof, and it has particular relation to such containers adapted to be suspended from adjacent the top opening with provision being made for distributing the weight of the container and its contents through an elastic loop member and thence through a multiplicity of ruffles or gatherings of the bag material spreading out from the loop member to the ungathered or unruffled portion of the container.

The object of this invention is a bag-type container having a restricted elastic opening in the top thereof formed by an elastic loop member to which the relatively light, thin sheet material forming the bag is gathered in ruffles adjacent the periphery, and a grommet is located on opposite sides of the bag material adjacent the loop member so that when the bag, with contents therein, is supported from the grommet, the weight is distributed through the loop member and in turn through the ruffles so that localization of stress on the bag material is avoided.

An important object of the invention is a bag-type container formed of relatively thin plastic film or sheet material having an elastic opening provided therein by an elastic loop member to which the bag material is gathered and attached so that when the bag member is suspended by a grommet located adjacent the loop member and fitting on opposite sides of the sheet material, the weight of the bag and its contents will be distributed throughout the bag material rather than localized around the grommet.

Certain other objects of the invention will, in part, be obvious and will in part appear hereinafter.

For a more complete understanding of the nature and scope of the invention, reference may now be had to the detailed description thereof taken in connection with the accompanying drawings, wherein:

Fig. 1 is an elevational view of a bag-type container in empty condition and forming one embodiment of the present invention;

Fig. 2 is a view illustrating the manner in which the bag in Fig. 1 is suspended when filled;

Fig. 3 is an enlarged detailed sectional view taken on line 3—3 of Fig. 1; and

Fig. 4 is a fragmentary detail view on enlarged scale showing the relationship of the suspending grommet to the elastic loop member.

In the drawings, the reference numeral 5 designates, generally, a bag-type container compris-

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ing a bag member 6 having an elastic opening 7 formed in the top thereof of restricted circumference relative to the circumference of the opening in the top end of the bag member 6 before it is attached to the elastic loop member 8.

The bag member 6 may be formed of any suitable bag material, but plastic sheet films are particularly suitable when an impervious bag-type container is desired. A number of plastic sheet materials are commercially available which are satisfactory including such materials as Pliofilm, cellophane, saran, vinylidene chloride polymer, vinyl chloride acetate copolymer, paper, etc.

In the drawings, the bag 6 is shown being formed of a tube of plastic film material which is provided with bellows side folds indicated by the dotted lines 18—19, the bottom end being heat-sealed along a band area indicated at 11. It will, of course, be appreciated that other types of bag construction may be used.

The restricted elastic opening 7 includes a loop member 8 which may suitably be in the form of an elastic ribbon such as a cotton covered elastic of the type which is available commercially in a range of sizes, widths, weights, strengths, etc. The loop 8 is formed by overlapping and stitching together the ends of a piece of the elastic ribbon sheet and the material forming bag 6 is secured to the loop 8 in known manner by stitching 12 in a gathered or ruffled condition.

It will be noted that the ruffles are densest and most highly concentrated immediately adjacent the loop member 8 and they spread or fan out downwardly therefrom until they join the unruffled or ungathered portion of the bag 6.

In order that the container 5 may be suspended as by a loop of tape or cord 13, with an even distribution of the load so that localized stress is avoided, a grommet or eyelet 14 of known type is applied to the bag 6 immediately adjacent the loop member 8 as shown in Figs. 1 and 4. The grommet or eyelet 14 is of the conventional two-piece type with one piece 15 fitting on the inside of the bag material and the other piece 16 fitting on the other side, with the film material being firmly crimped or pressed therebetween as shown in Fig. 3. The grommet 14 may be applied so that the parts 15 and 16 will cover a plurality of the ruffles thereby causing several thicknesses of the bag film material to be gripped therebetween.

When the container 5 is loaded or filled and then suspended by a loop or cord 13 from a nail

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or hook, the weight of the contents will be transmitted from the lower portion of the bag 6 upwardly through the several ruffles to the elastic loop member 8 which is elongated and drawn down on an angle, as shown in Fig. 2. The stress distributed around the elastic loop 8 is in turn supported by the grommet 14 in cooperation with the loop 8.

The arrangement or location of the grommet 14 with respect to the loop 8 makes possible the uniform distribution of stress rather than a localization or concentration of stress at one or two points in the film material forming the bag 6.

Having described a preferred embodiment of 15 the invention what is claimed as new is:

A bag type container with an elastic opening in the top thereof particularly adapted to be suspended from adjacent the top opening and comprising, a bag member having a top opening 20 therein, an elastic loop member secured to the material forming said bag member around the top opening therein, said loop member having a contracted length substantially less than the full peripheral length of said top bag opening 25

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thereby producing ruffles in said bag member which spread out from said loop member down to the unruffled portion of said bag member, and a grommet juxtaposed beneath said loop member and secured to a plurality of said ruffles so that several thicknesses of the material are caught by the opposite sides thereof, whereby when said container is suspended by said grommet the load is distributed to said elastic loop member and to said ruffles.

ROBERT L. LEE.

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