May 6, 1924. 1,492,960

J. S. CHAMBERS

SACK VALVE AND TIE

Filed Dec. 12, 1922

Fig. 1.

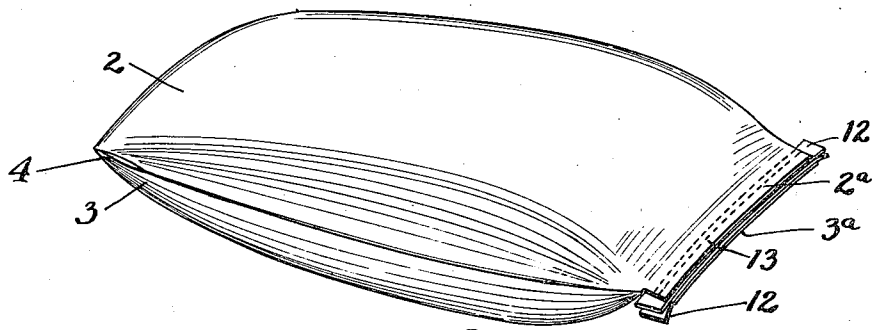
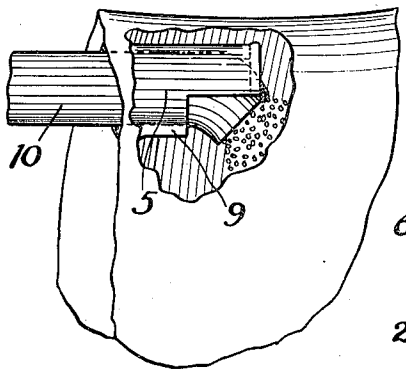


Fig. 2.



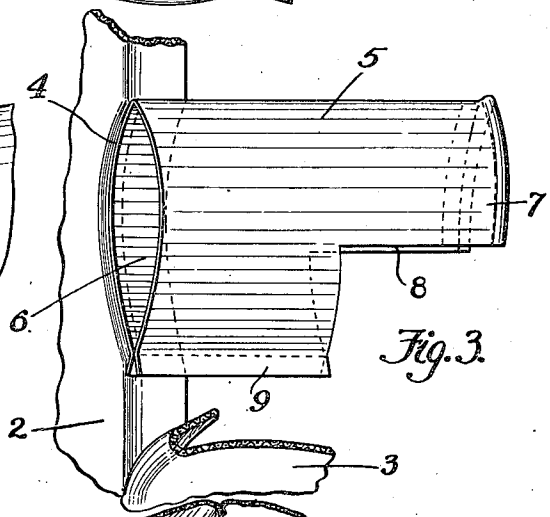


Fig. 3.

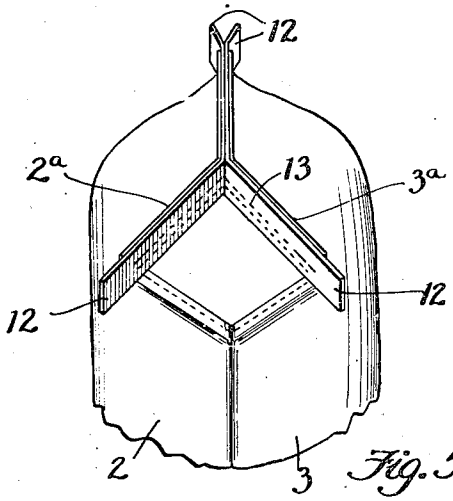


Fig. 5.

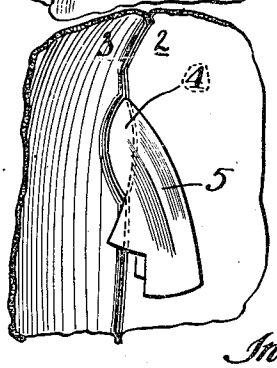


Fig. 4.

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UNITED STATES PATENT OFFICE.

JAMES S. CHAMBERS, OF LOS ANGELES, CALIFORNIA.

SACK VALVE AND TIE.

Application filed December 12, 1922. Serial No. 606,504.

To all whom it may concern:

Be it known that I, JAMES S. CHAMBERS, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Sack Valves and Ties, of which the following is a specification.

This invention relates to flexible receptacles and more particularly to fabric sacks and bags.

It is an object of the present invention to provide a filling and collapsible valve for sacks and bags.

A further object is to provide a means for facilitating the opening of sacks and bags, especially of the type having stitch closed ends.

Other objects and advantages will be made manifest in the following specification of an embodiment of the invention illustrated in the accompanying drawings, wherein:

Figure 1 is a perspective of a bag incorporating the present improvements.

Fig. 2 is a perspective of a fragment of a corner of a bag with the improved filling valve in which is inserted a filling nozzle.

Fig. 3 is a perspective of a fragment of a partially opened bag showing the valve.

Fig. 4 is a perspective of the interior of a corner of a bag showing the collapsed closed valve.

Fig. 5 is a perspective showing the method of opening and stitched end of a bag.

The present invention includes a form of flexible or pliant and collapsible filling valve which, in the present case, is shown as stitched between layers or walls 2 and 3 of a bag, the valve being arranged so as to provide an inlet 4 as at one corner of the bag. The valve consists of a piece of flexible tubing 5 having an inlet 6 at one end coordinate to the inlet aperture 4 of the bag. The tubular valve 5 is of suitable length and projects inwardly and has an open discharge end 7 which may be cut away on a right angular outline as at 8 at the inner and lower corner of the tubular valve; the bottom edge of the valve being closed longitudinally as at 9.

This form of valve, as clearly shown in Figs. 2 and 3, permits the ready insertion of a filling spout 10 which may turn down through the cut away inner corner 8 of the pliant valve.

After the bag has been filled to the desired degree, the pressure of the contents thereof will compress or collapse the pliant walls of the tubular valve 5 and this will, therefore, be substantially shut or closed as its walls are brought into contact and will, therefore, prevent the escape or loss or passage of the contents out through the collapsed valve.

A further feature of the invention consists of means for facilitating a ripping open of a stitched bag end without destroying or cutting the warp and weft of the bag material. As here shown, a pair of transverse substantial straps 12 are arranged between outer end flaps 2^a and 3^a of the bag material and stitched as by transverse lines of stitching 13. The extremities of the transverse straps 12 project sufficiently beyond the corners of the bag to provide for the ready grasping of the strap ends so that these can be ripped apart, as is clearly shown in Fig. 5, across the top of the bag to open the same.

Further embodiments, modifications and variations may be resorted to within the spirit of the invention as here claimed.

What is claimed is:

1. In combination with a bag, two ripping straps superposed upon each other and stitched to contiguous end portions of the bag walls to close the same.

2. In combination with a bag, two ripping straps superposed upon each other and stitched to contiguous end portions of the bag walls to close the same, said ripping straps having extended end portions to provide grips to enable the straps to be ripped apart in opening the bag.

In testimony whereof I have signed my name to this specification.

JAMES S. CHAMBERS.