Dec. 4, 1923. 1,476,560

F. WITMER

VALVE BAG CLOSURE

Filed May 22, 1922

FIG. 1.

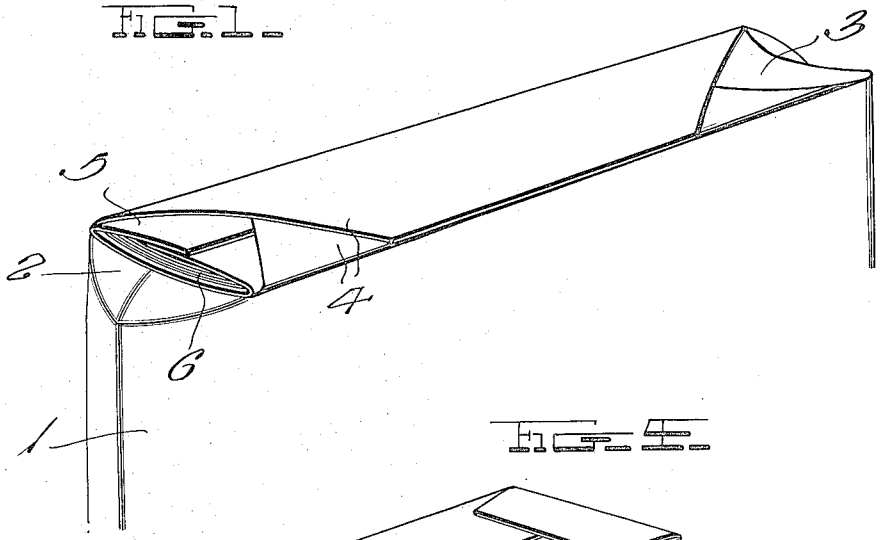


FIG. 5.

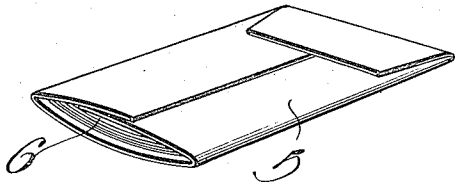


FIG. 2.

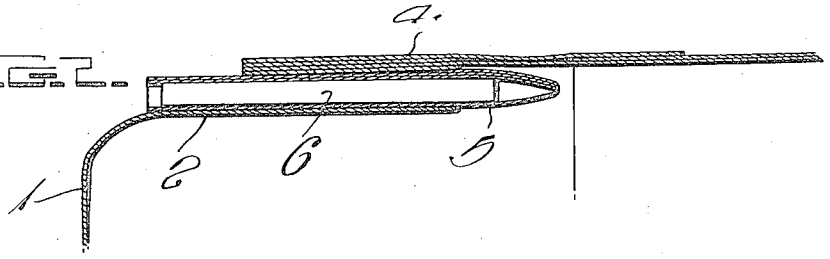
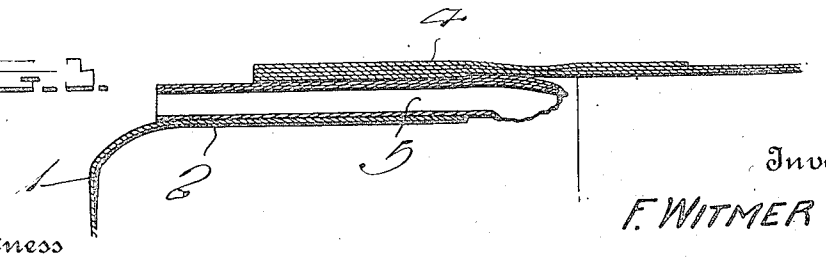


FIG. 3.



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UNITED STATES PATENT OFFICE.

FRED WITMER, OF WOODVILLE, OHIO.

VALVE-BAG CLOSURE.

Application filed May 22, 1922. Serial No. 562,755.

To all whom it may concern:

Be it known that I, FRED WITMER, a citizen of the United States, residing at Woodville, in the county of Sandusky and State of Ohio, have invented certain new and useful Improvements in Valve-Bag Closures; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in bags of the type provided with a valve or flap which closes when the bag is filled so as to prevent its contents from discharging through the filling opening. While bags of this character are very satisfactory for shipping numerous materials, when lime or other finely powdered product is shipped in them, it is apt to sift out between the closing valve and the adjacent portion of the bag. Hence, the object of my invention is to provide an effective form of closure adapted to fit snugly in the filling opening and preferably glued in place, so as to prevent accidental discharge of any contents from the bag.

A further object of the invention is to provide the above mentioned closure in the form of an envelope which is adapted to contain directions for using the contents of the bag.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, the description being supplemented by the accompanying drawing.

Figure 1 is a perspective view of one end of a valve bag showing the application of my invention thereto.

Figure 2 is a sectional view showing the closure in place for sealing the valve of the bag.

Figure 3 is a view similar to Fig. 2 but showing the manner in which the seal may be broken.

Figure 4 is a perspective view of the closure or seal.

In the drawings above briefly described, the numeral 1 designates a valve bag of well known form whose edges are folded inwardly at 2 and 3 respectively and whose sides are folded into overlapping relation to form flaps 4 overlying the flaps formed by the inward folds 2 and 3. The flaps 4 are glued or otherwise secured to each other and are similarly connected with the flap 3, but the flap 2 is left free of connection with the other flaps so that it may be moved downwardly from the end of the bag to provide a filling opening for the latter. When the filling operation is complete however, the flap 2 is adapted to move upwardly toward the end of the bag to form a valve. As before stated, when shipping finely powdered material such as lime, it is apt to sift out between the flap 2 and the end of the bag, but I provide a closure which prevents such an occurrence. In the preferred form of my invention, this closure is in the form of an envelope 5 which is preferably elongated in the manner shown in Fig. 4 and is closed at its inner end, but open at its outer end. This envelope is of a width equal to the width of the filling opening of the bag and it is adapted to be inserted snugly between the flap 2 and the adjacent end of the bag, formed by the flaps 4. The envelope 5 is intended to contain a sheet of paper 6 giving directions for the use of the material contained in the bag 1 and in some instances if this sheet is rather bulky, it will cause the envelope to wedge tightly within the filling opening of the bag. I prefer however to glue or otherwise secure this envelope to the end of the bag and to the flap 2, thereby forming a tight seal for the filling opening and preventing any possibility of losing any of the bag contents.

A bag sealed in the above mentioned manner may of course be opened in any desired way, for instance by inserting a knife, a stick or any other suitable device into the envelope 5 and punching the bottom therefrom as shown in Fig. 3.

From the foregoing, taken in connection with the accompanying drawing, it will be seen that although my invention is extremely simple and inexpensive, it will be highly efficient and desirable. Since excellent results have been obtained from the details disclosed, they are preferably followed, but within the scope of the invention as claimed, numerous minor changes may be made.

I claim:

1. The combination with a bag having a filling passage provided with opposed substantially flat closely related side walls; of a substantially flat closure inserted snugly into said passage after filling the bag, said closure being secured in contact with said opposed passage walls and forming an imperforate seal for the bag from the time of insertion until the bag is opened.

2. A structure as specified in claim 1; said closure being in the form of an envelope to contain information for the user of the bag's contents.

3. The structure set forth in claim 1, wherein said body is in the form of an envelope closed on all sides except its outer exteriorly disposed side, to permit insertion of an information sheet.

4. The combination with a bag closed at its top and provided in said top with a filling opening formed by an internal flap normally movable toward said top but capable of moving away from it when a filling conduit is inserted; of an envelope adapted to be inserted through the filling opening after the bag is filled, said envelope being adapted to be secured to said flap and top to form a seal for the opening, and being closed on all sides with the exception of its outer exteriorly disposed side, whereby to permit an information sheet to be inserted into it.

In testimony whereof I have hereunto set my hand.

FRED WITMER.