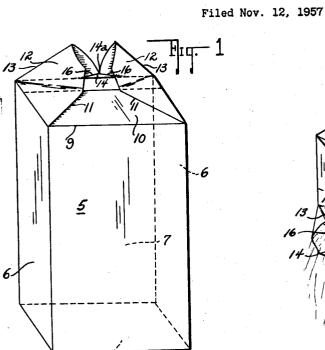
E. G. THIELE BAG FOR FLOUR AND THE LIKE

Aug. 9, 1960

1



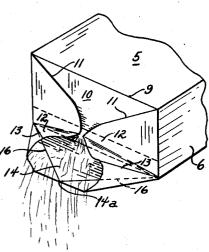
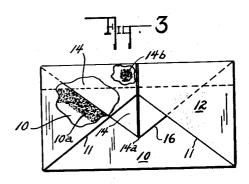
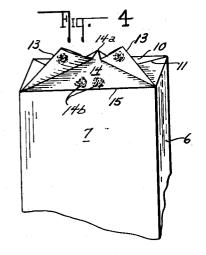


Fig- 2

2,948**,457**



8



INVENTOR. EDWARD G. THIELE Williamson, Schooder, adams Meyers

ATTOR NEYS

United States Patent Office

2,948,457 Patented Aug. 9, 1960

1

2,948,457

BAG FOR FLOUR AND THE LIKE

Edward G. Thiele, 4217 Lynn Ave., Minneapolis, Minn.

Filed Nov. 12, 1957, Ser. No. 695,610

4 Claims. (Cl. 229---62)

This invention relates to bags for pulverulent mate- 15 rial.

The present bags for materials such as flour and the like, are relatively difficult to open, impossible to reclose with any degree of sealing, and are incapable of effectively pouring material therefrom.

It is an object of my present invention to provide a bag particularly designed for use for packaging flour and other pulverulent material, which can be quickly and easily opened, from which the material can be efficiently poured, and which can be subsequently reclosed **25** with substantial efficiency.

More specifically, it is an object to provide a bag having a pair of opposed closure flaps with overlying side retaining flaps releasably holding said flaps in closed position but permitting the same to be easily opened to **30** form a pouring spout from which the material can be easily poured.

These and other objects and advantages of my invention will more fully appear from the following description made in connection with the accompanying drawings, wherein like reference characters refer to similar parts throughout the several views and in which:

Fig. 1 is a perspective view of my new bag for pulverulent material, showing the top in partially-opened position.

Fig. 2 is a perspective view of the bag shown in Fig. 1, with the top open in pouring position.

Fig. 3 is a top plan view of the bag in closed position.

Fig. 4 is a perspective view from the back, showing 45 the top in partially-open position.

As illustrated in the accompanying drawing, I provide a bag particularly constructed for packaging pulverulent materials, such as flour and sugar, for home consumption. This bag is formed from any suitable flexible sheet material, such as paper, or the like, which is constructed to provide peripherally continuous walls which form a front panel 5, side panels 6, a rear panel 7, and a closed bottom 8.

An easy-opening re-closable top is formed from flaps 55 provided by folding the upper marginal portions of the continuous walls disposed above the level of the material to be confined within the bag. The upper marginal portion of the front panel 5 is folded inwardly along 60 an exposed fold line 9 disposed adjacent the level of the material confined within the bag when filled. This forms a front closure flap 10 which has sufficient width to extend a substantial distance across the top of the bag, and also provides a pair of diagonally-disposed outer fold lines 11 which form beveled edges of a pair of overlying side-retaining flaps 12, which are folded inwardly in overlying relation to the end portions of the front closure flap 10, as illustrated in the drawings. The rear edges of said side-retaining flaps 12 are defined by 70 exposed fold lines 13. A generally triangular rear closure flap 14 is formed from the upper marginal portion

2

of the rear panel 7 by folding the same inwardly along the rear fold line 15, disposed at the filling level of the bag, and is inserted between the overlying side-retaining flaps 12 and the underlying front closure flap 10, as best shown in Fig. 2. The inner edges of the flap 14 are defined by the fold lines 16 extending diagonally inwardly from the rear corners of the bag, as best shown in Fig. 2.

The overlying side-retaining flaps 12 are permanently anchored to the overlapped side portions of the front 10 closure flap 10, as by being permanently glued thereto, as indicated at 10a. However, this surface of said side closure flaps 12, is not glued to the underlying triangular rear closure flap 14, but is merely disposed in free overlying relation to adjacent portions thereof. The portion of the rear closure flap 14 which overlies the front closure flap 10 is removably adhered thereto when the bag is initially sealed after filling, as by any suitable adhesive which will permit said rear flap to be raised without tearing by lifting the apex 14a of said triangular flap. In order to assure positive sealing of the bag, the portion 20 of the side retaining flaps 12, which is adjacent to the lower layer of the flap 14, and is formed from the material of the upward extension of the rear panel 7, may also be removably adhered to the underlying overlapped surface of said triangular flap 14, as indicated at 14b

in Fig. 4. My new bag may be easily opened by pulling up on the apex portion 14a of the rear intermediately-disposed flap 14 to release the same from the underlying portion of front closure flap 10. In the event that the rear edge portions of the overlying side-retaining flaps 12 have been removably glued to the underlying surface of the triangular closure flap 14, these retaining flaps 12 must also be released from the underlying flap 14. This may be done by initially pulling upwardly thereon, as shown in Fig. 4, or by merely pulling the flap 14 rearwardly to remove the same from beneath the side-retaining flaps 12, thus breaking the attachment between the flap 14 and the two overlying retaining flaps 12. In either event, however, the triangular rear closure flap 14 is withdrawn rearwardly from beneath the side-retaining flaps 12 to form a pouring spout, as illustrated in Fig. 2. As illustrated, the rear edge of the front closure flap is spaced inwardly from the fold line 15 to provide a discharge opening therebetween.

To re-close the bag top, the diagonally-disposed fold lines 16 are re-inserted under the side-retaining flaps 12 which are held in retaining position by the positive glued connection 10a between said flaps 12 and the underlying side portions of front closure flap 10, thus substantially re-sealing said top by the retaining action of the over-lying side flaps 12 holding the closure flap 14 in closed position.

It will be seen that I have provided a relatively simple bag construction which may be easily and quickly opened, which forms a convenient pouring spout for guiding the pulverulent material confined therein, and which can be re-closed and held in substantially sealed, closed position between overlying side-retaining flaps 12.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the parts without departing from the scope of my invention, which consists of the matter shown and described herein and set forth in the appended claims.

I claim:

1. A bag containing pulverulent material, comprising continuous side walls with a closed bottom and the upper marginal end portions of said side walls being folded inwardly to provide top closure flaps adapted for easy opening and re-closing of the top, and providing a pouring spout when opened, said top closure flaps including an innermost underlying flap extending a substantial distance across the opening of the bag top, a pair of diagonal-

ly-disposed folds extending diagonally toward the longitudinal center line of said bag from the respective corners of said first-mentioned closure flap, and providing a pair of opposed outermost overlying side flaps formed from the upwardly-extending side portions of the container walls and respectively connected to underlying portions of said first-mentioned closure flap and a pair of diagonal folds extending respectively inwardly in converging relation from the opposite corners of said bag and forming a generally triangular closure flap overlying said first-mentioned closure flap and having only the side portions thereof interposed between said side flaps and said first mentioned closure flap with means for removably adhering the innermost portion thereof to the underlying portion of said first-mentioned closure flap to permit said generally triangular flap to be lifted and pulled out from between the end flaps and said first-mentioned closure flaps to provide with said end flaps a pouring spout for the material confined within the bag, and permitting re-insertion of said generally triangular flap between the end flaps and 20 said first-mentioned flap to reclose the bag.

2. A bag containing pulverulent material and facilitating easy opening of the bag top and pouring of the material therefrom, said bag comprising sheet material defining continuous front and back panels and side panels, 25 and having a closed bottom, said interconnected continuous panels extending upwardly above the level to which the bag is normally filled to form interconnected closure flap portions, the upward extension of said front panel defining a closure flap folded across a substantial portion 30 of the top opening along a front line at the top of said front panel with the rear edge thereof defining a discharge opening with respect to the back panel of the bag, a pair of opposed side hold-down flaps formed across the ends of the first-mentioned closure flap in overlying relation thereto, and formed from the material extending upwardly above the side panels of the bag, a triangular closure flap formed from the upward extension of said back panel underlying the inner portions of said side flaps and extending over said first-mentioned closure flap to form a 40 pull-up tab and the portions of said side flaps overlying said triangular closure flap being releasably secured thereto to permit opening of the bag top by pushing upwardly on the underlying triangular closure flap and reclosing of the triangular flap under the hold down flaps. 45

3. A bag containing pulverulent material, comprising bag side walls and a closed bottom, a readily-openable top closure including an innermost closure and materialconfining flap connected with the side wall and extending across a substantial portion of the top of the bag, an intermediate closure flap disposed in generally opposed re-

5 lation to said first-mentioned flap and extending across at least the central portion thereof in overlying relation thereto, and a pair of outermost flaps respectively disposed in opposed relation one to the other and connected to portions of the top of the side walls disposed peripherally
10 between the inner and intermediate flaps and overlying side portions of said flaps and secured to said innermost flap to normally hold said two closure flaps in closed position, said intermediate flap being removably adhered to said innermost flap to facilitate opening thereof with15 out removal of the outermost flaps from the innermost flap to permit reclosing of the bag by inserting the triangular flap under the outermost flaps.

4. A bag for pulverulent materials, comprising sheet material having continuous side walls comprising a front panel, a back panel and a pair of side panels with a closed bottom with pulverulent material therein and extending upwardly above the level of the material in the bag to form top closure flaps, one of said flaps being formed from the upward extension of the front panel of the bag and extending only a part of the distance across the top opening, a pair of diagonally-formed gusset side flaps formed from the upward extension of said side panels and being permanently secured to said first mentioned flap when the same is folded down into closure position overlying triangular end portions of said first-mentioned flap, and a triangular flap formed from the upward extension of said back panel and being arranged in opposed relation to said first-mentioned flap and overlying the same by having the end portions thereof underlying but 35 free from adherence to said holddown side flaps to form a central pull-up tab for opening the bag top to facilitate removal of the pulverulent material packaged therein and reclosing of triangular flap under the hold-down flaps.

References Cited in the file of this patent

UNITED STATES PATENTS

1,291,974	McNeil Jan. 21, 1919
2,087,934	Andorson
	Anderson July 27, 1937
2,355,313	Lurie Aug. 8, 1944
2,722,361	Kindeeth
-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Kindseth Nov. 1, 1955