

Aug. 18, 1936.

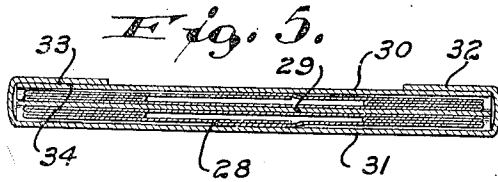
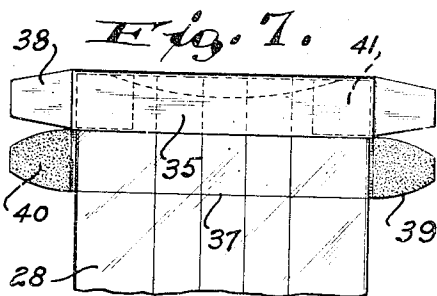
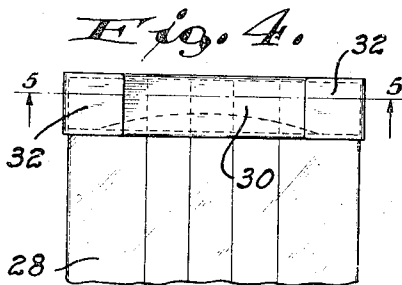
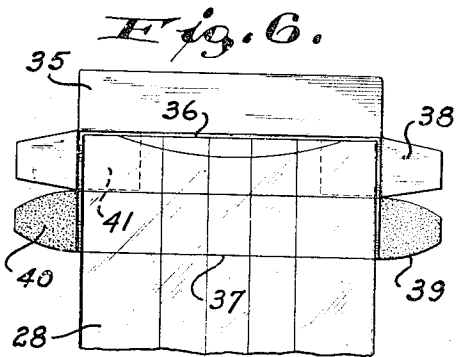
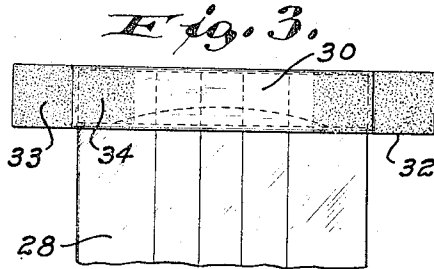
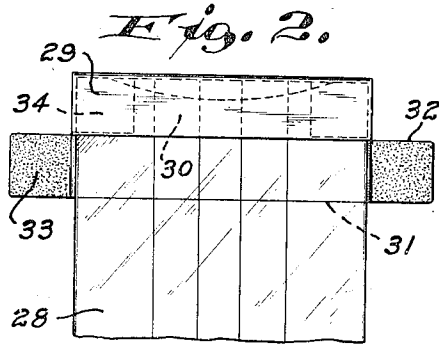
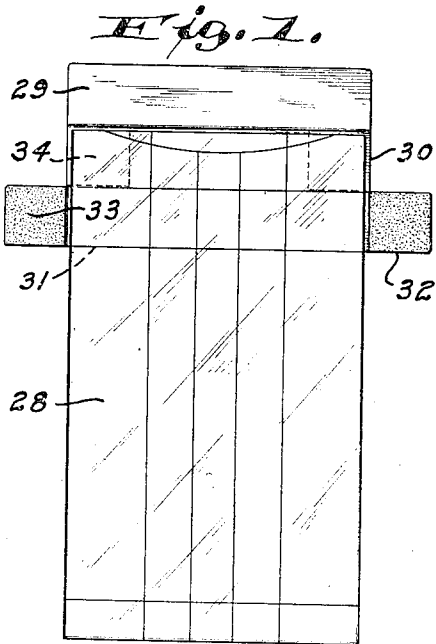
S. ROSEN

2,051,106

BAG CLOSURE

Filed May 13, 1935.

4 Sheets-Sheet 1



INVENTOR.

S. Rosen

BY

Morsell, Lieber & Morsell
ATTORNEYS.

Aug. 18, 1936.

S. ROSEN

2,051,106

BAG CLOSURE

Filed May 13, 1935

4 Sheets-Sheet 2

Fig. 8.

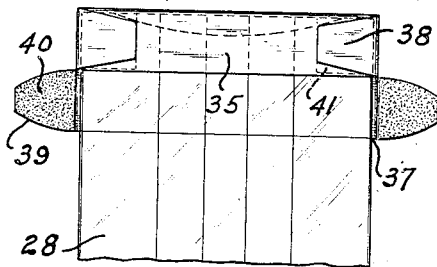


Fig. 9.

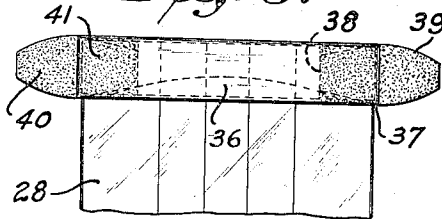


Fig. 10.

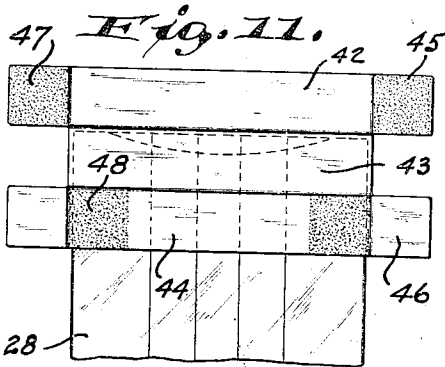
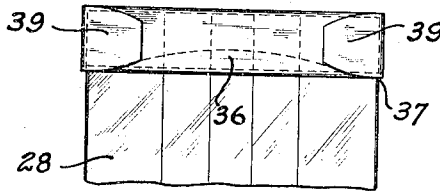


Fig. 14.

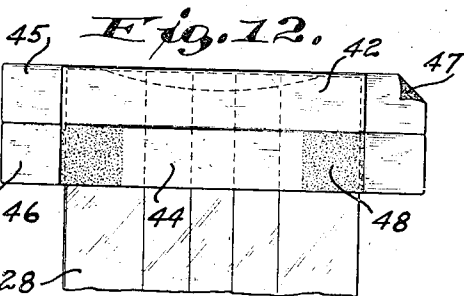
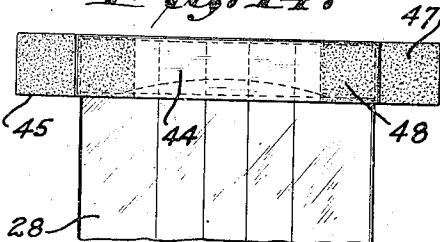
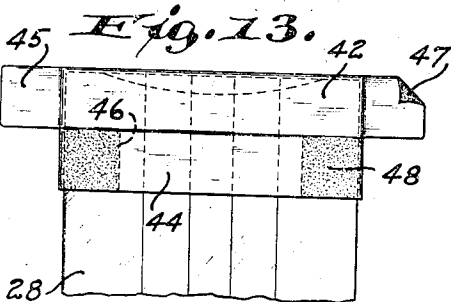
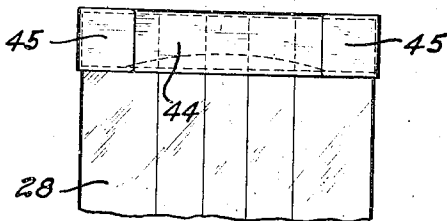


Fig. 15.



INVENTOR.

Sly Rosen

BY

Morsell, Lieb & Morsell

ATTORNEYS.

Aug. 18, 1936.

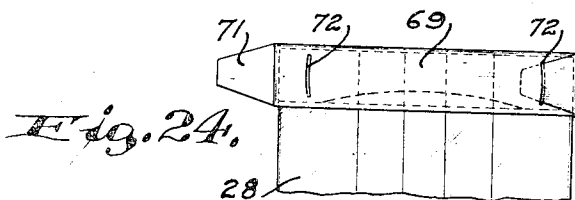
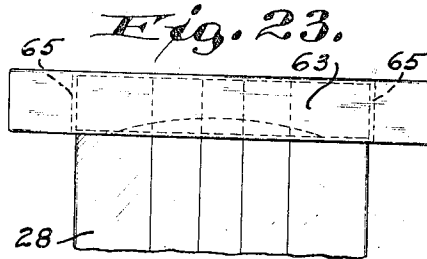
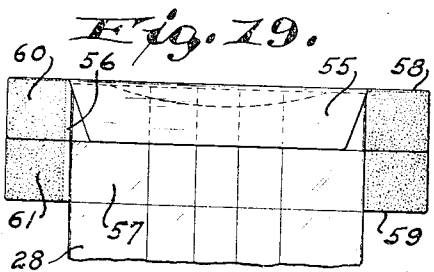
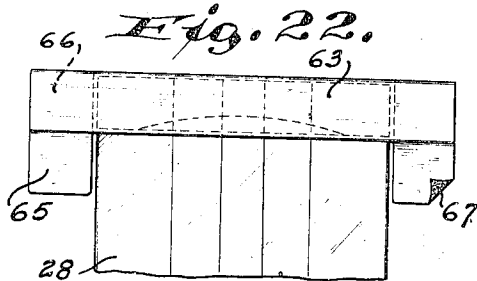
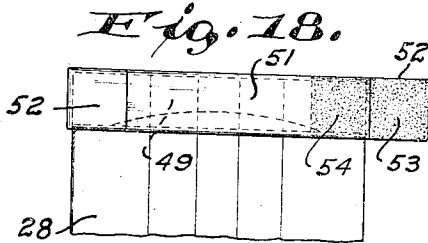
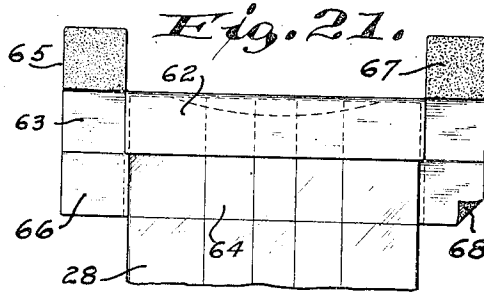
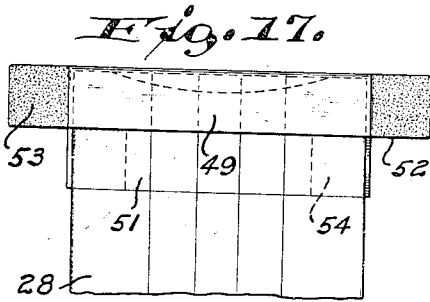
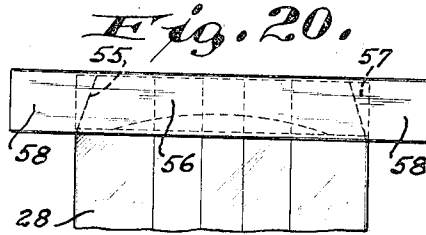
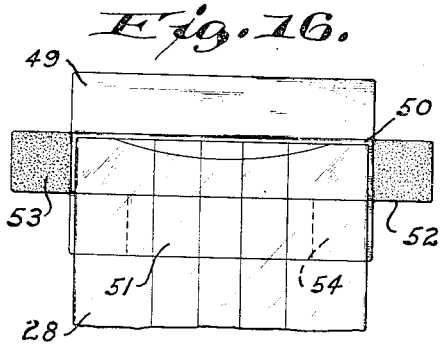
S. ROSEN

2,051,106

BAG CLOSURE

Filed May 13, 1935

4 Sheets-Sheet 3



INVENTOR.

BY *Sky Rosen*

Morsell, Lieber & Morsell
ATTORNEYS.

Aug. 18, 1936.

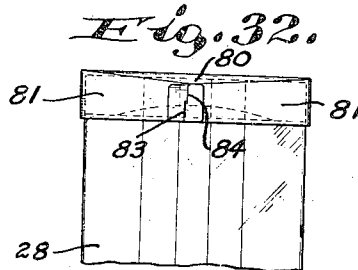
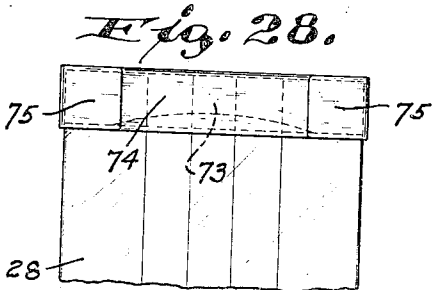
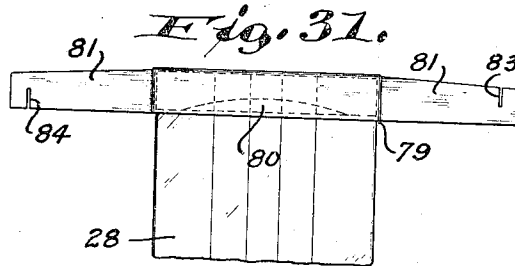
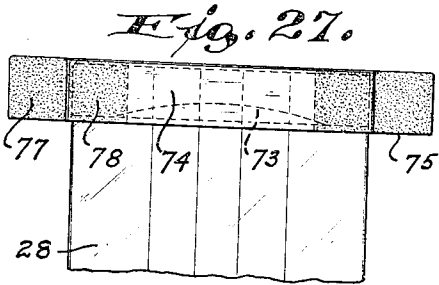
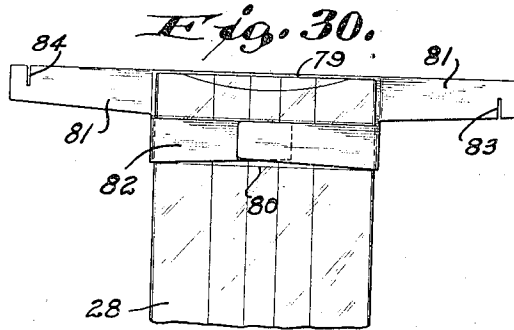
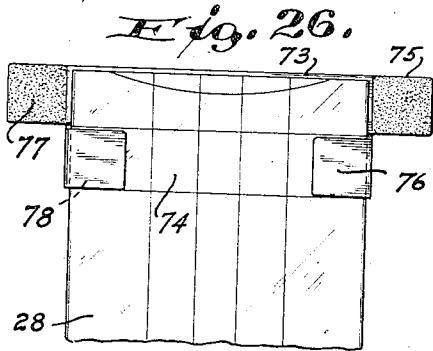
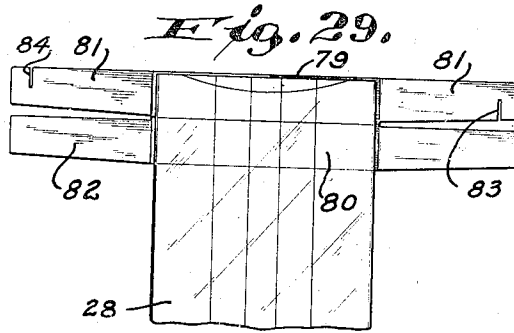
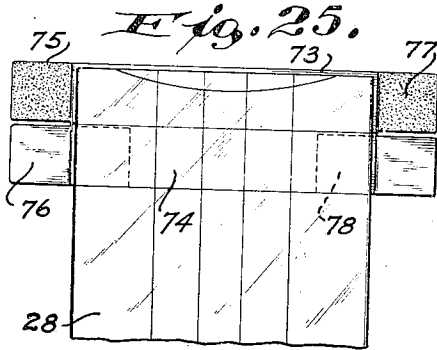
S. ROSEN

2,051,106

BAG CLOSURE

Filed May 13, 1935

4 Sheets-Sheet 4



INVENTOR.

Sky Rosen

BY

Morsell, Lieber & Morsell
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,051,106

BAG CLOSURE

Shy Rosen, Flushing, N. Y.

Application May 13, 1935, Serial No. 21,148

9 Claims. (Cl. 229-62)

The present invention relates in general to improvements in the construction of closures for sealing the access openings of paper bags or similar receptacles.

5 Generally defined, an object of the invention is to provide an improved bag closure which will effectively seal a bag, while permitting convenient access to the bag contents when desired.

10 Some of the more specific objects of the invention are as follows:—

To provide an improved bag closing device which is especially applicable to bag-like receptacles formed of paper or other similar material.

15 To provide an improved closure for bags, which can be readily applied to produce an effective seal, and which can also be quickly removed so as to permit access to the interior of the receptacle.

20 To provide an improved bag sealing attachment which may be formed of relatively inexpensive material such as paper, and which may be produced at moderate cost.

25 To provide an improved closure for the end of a tubular structure formed of flexible sheet material such as paper or "Cellophane", which may be applied so as to fold the end of the structure and to subsequently maintain the same in folded condition so as to produce substantially hermetic sealing.

30 To provide a bag closure comprising a series of interconnected relatively articulable paper or similar panels which may be applied and permanently attached to the bag with minimum effort, and which may be decorated or provided with advertising matter in order to improve the appearance and to enhance the commercial value of the final package.

These and other objects and advantages will be apparent from the following detailed description.

40 A clear conception of several embodiments of the invention, and of the mode of constructing and of applying numerous forms of bag closures made in accordance with the present improvement, may be had by referring to the drawings accompanying and forming a part of this specification, wherein like reference characters designate the same or similar parts in the various views.

50 Fig. 1 is a plan view of a complete bag in folded condition, preparatory to having one form of the improved closure applied thereto;

Fig. 2 is a similar view of the upper end of the bag showing the upper outer panel of the closure initially folded over the open bag end;

55 Fig. 3 shows the same assemblage with the

upper outer and the intervening panels of the closure folded over the lower outer panel so as to fold the upper bag end upon itself;

Fig. 4 discloses the gummed fastening tabs finally applied to maintain the closure in sealing condition;

Fig. 5 is an enlarged and somewhat distorted section through the bag and closure, taken along the line 5-5 of Fig. 4;

Fig. 6 is a plan view of a bag end fragment preparatory to having a modified form of the improved closure applied thereto;

Fig. 7 is a similar view of the assemblage of Fig. 6, showing the closure blank initially folded over the open bag end;

Fig. 8 shows the closure blank of Figs. 6 and 7 further folded to confine the bag end at its opposite sides;

Fig. 9 discloses the same closure additionally folded to fold the bag end upon itself;

Fig. 10 shows the bag closure of Figs. 6 to 9 inclusive, finally applied and sealed;

Fig. 11 is a plan view of a bag end fragment preparatory to the application of a further modified type of closure to the bag;

Fig. 12 shows the closure blank of Fig. 11 initially folded over the open bag end;

Fig. 13 discloses the modified blank of Fig. 12 further folded to confine the sides of the bag end;

Fig. 14 illustrates the modified blank of Fig. 13 subsequently folded to fold the confined bag end upon itself;

Fig. 15 shows the closure of Figs. 11 to 14 inclusive, finally applied and sealed;

Fig. 16 is a plan view of a bag end preparatory to application thereto, of a still further modified type of the improved closure;

Fig. 17 is a similar view showing the upper outer panel of the closure blank, folded over the end of the bag;

Fig. 18 shows the blank of the closure of Figs. 16 and 17 finally folded and sealed at one side;

Fig. 19 is a plan view of a bag fragment having still another modified type of the improved closure applied thereto and initially folded;

Fig. 20 is a similar view of the bag and closure of Fig. 19, showing the closure finally applied and sealed;

Fig. 21 is a plan view of a bag end having a further modified form of improved closure applied thereto and initially folded;

Fig. 22 is a similar view of the assemblage of Fig. 21, with the closure further folded preparatory to final sealing;

Fig. 23 shows the closure of Figs. 21 and 22 finally sealed;

Fig. 24 illustrates a modified type of final sealing without the aid of adhesive or gum;

5 Fig. 25 is a plan view of a bag end having another modified type of the improved closure applied thereto preparatory to folding and attachment;

10 Fig. 26 is a similar view showing the lower side tabs folded over the opposite sides of the bag;

Fig. 27 is a reverse view of the assemblage showing the closure panels folded over each other to fold the end of the bag;

15 Fig. 28 is a similar view of the closure showing the same finally sealed;

Fig. 29 is a plan view of a bag end having still another modified type of improved closure applied thereto preparatory to folding and attachment of the closure;

20 Fig. 30 is a similar view of the assemblage showing the lower side tabs folded inwardly over the sides of the bag;

25 Fig. 31 is another similar view showing the panels of the closure folded over each other to fold the intervening end of the bag; and

Fig. 32 is a reverse view of the assemblage with the closure in finally folded and sealed condition.

30 While the improvement has been illustrated and described herein as comprising a paper sealing blank consisting of several panels, especially applicable as a closure for paper or "Cellophane" bags, it is not the intent to unnecessarily restrict the scope by such specific embodiments, since the novel features may obviously be more generally applicable.

35 Referring specifically to Figs. 1 to 5 inclusive of the drawings, the improved closure which is applicable to the open end of a flatly folded bag 28, comprises a blank composed of relatively articu-
40 lable panels 29, 30, 31 and a pair of tabs 32 hingedly associated with one of these panels. The upper and lower outer panels 29, 31 are foldably connected to the opposite longitudinal edges of the intervening panel 30, and the tabs
45 32 are likewise foldably attached to the ends of the lower outer panel 31, thereby providing a unitary structure which may be formed of a single blank. The corresponding faces of the
50 tabs 32 are provided with adhesive or gum 33 such as "Latex" dispersion, and the opposite face of the intervening panel 30 is provided with similarly gummed end areas 34 which are cooperable with the tab gumming 33 in order to
55 effect a final seal.

60 In order to apply the improved closure of Figs. 1 to 5 inclusive to a bag 28, the closure blank should first be positioned relative to the flatly folded open upper end of the bag as specifically illustrated in Fig. 1. The upper
65 outer panel 29 should then be initially folded over the open bag end to the position shown in Fig. 2; after which the panels 29, 30 with the bag end confined therebetween, may be folded
70 over the lower panel 31 as shown in Fig. 3, to thereby fold the bag end toward the bag 28 and to simultaneously position the gummed areas 34 adjacent to the tab gumming 33. The
75 tabs 32 may then be folded over the gummed areas 34 as shown in Fig. 4, to produce permanent substantially hermetic sealing of the package. The final assemblage is clearly shown in Fig. 5, and the closure may obviously be readily removed, either by merely tearing off the

tabs 32, or by cutting or tearing off the end of the bag 28.

Referring specifically to Figs. 6 to 10 inclusive of the drawings, the modified improved closure shown therein, is again applicable to the normally open end of a flatly folded bag 28, and
5 comprises a blank composed of three relatively foldable panels 35, 36, 37, a pair of tabs 38 hingedly associated with the medial panel 36, and another pair of tabs 39 likewise associated with
10 the lower panel 37. The upper and lower outer panels 35, 37 are foldably connected to the opposite longitudinal edges of the intervening panel 36, and the tabs 38, 39 are likewise foldably
15 ably connected to the ends of the panels 36, 37 respectively, thereby providing a unitary structure which may be formed of a single blank and can be handled in one operation. The corresponding
20 faces of the lower tabs 39 may again be provided with gum 40, and the end portions of 20 the opposite face of the medial panel 36 may be provided with similarly gummed areas 41 cooperable with the tab gum 40 to effect final
25 sealing of the closure.

30 In applying the improved closure of Figs. 6 to 10 inclusive to a bag 28, the blank should first be positioned behind the open flatly folded end of the bag 28 in the manner illustrated in Fig. 6. The upper panel 35 should then be initially folded
35 over the bag end to the position shown in Fig. 7, whereupon the upper tabs 38 may be folded inwardly over the panel 35 to confine the open end of the bag as disclosed in Fig. 8. The next
40 step of the series is shown in Fig. 9, wherein the panels 35, 36 have been folded over the lower panel 37 thereby folding the bag end upon
45 itself and positioning the gummed areas 41 adjacent the gummed faces of the tabs 39. The tabs 39 may be subsequently folded to the position shown in Fig. 10, to bring the gum 40 in contact
50 with the areas 41, thus hermetically sealing the package.

55 Referring specifically to Figs. 11 to 15 inclusive, the further modified improved type of closure shown therein, is likewise applicable to the normally open flatly folded end of a bag 28, and again comprises a blank consisting of three relatively
60 foldable panels 42, 43, 44, a pair of gummed tabs 45 hingedly associated with the opposite ends of the upper panel 42, and a pair of plain tabs 46 hingedly associated with the opposite
65 ends of the lower panel 44. The upper and lower panels 42, 44 are foldably connected to the opposite longitudinal edges of the medial panel 43, and the tabs 45, 46 are likewise foldably
70 connected to the ends of the panels 42, 44 respectively, thereby again providing a unitary structure which may be formed of a single blank. The corresponding faces of the upper tabs 45 are provided with adhesive or gum 47, and the end
75 portions of the same face of the lower panel 44 are provided with gummed areas 48 which are cooperable with the tab gum 47 to finally seal the closure.

In applying the improved closure of Figs. 11 to 15 inclusive to a bag 28, the blank may be preliminarily positioned relative to the folded bag end, as shown in Fig. 11, after which the upper
80 panel 42 with its tabs 45 may be initially folded over the open bag end as indicated in Fig. 12. The lower tabs 46 may then be folded about the opposite edges of the bag 28 as illustrated in
85 Fig. 13, whereupon the upper and intermediate panels 42, 43 may be simultaneously folded over the lower panel 44 as shown in Fig. 14 to fold

the bag end upon itself. This last folding operation will again position the gummed faces of the tabs 45 on the same side of the assemblage as the areas 48, and directly adjacent to each other, so that by folding the tabs 45 as indicated in Fig. 15, the bag 28 will be finally and substantially hermetically sealed. The disposition of the tab gum 47 and the gummed areas 48 on the same side or face of the blank, in this modification, may facilitate manufacture thereof.

Referring specifically to Figs. 16 to 18 inclusive of the drawings, the modified type of improved closure shown therein, is again applicable to the normally open but flatly folded end of a bag 28, and consists of a blank comprising three relatively foldable panels 49, 50, 51, and a pair of gummed tabs 52 hingedly associated with the opposite ends of the medial panel 50. The upper and lower panels 49, 51 are foldably connected to the opposite longitudinal edges of the intermediate panel 50 and the tabs 52 are likewise foldably connected to the opposite ends of the medial panel 50. The corresponding faces of the tabs 52 are provided with gum 53, and the end portions of the opposite face of the lower panel 51, are provided with gummed areas 54 which are cooperable with the tab gum 53 to finally seal the closure.

In applying the improved closure of Figs. 16 to 18 inclusive to a bag 28, the blank may be primarily positioned with reference to the open flatly folded end of the bag 28 as shown in Fig. 16, after which the upper panel 49 may be folded downwardly over the upper end of the bag as indicated in Fig. 17. The upper and intermediate panels 49, 50, may be subsequently folded over the lower panel 51 as indicated in Fig. 18 to thereby fold the upper end of the bag 28 upon itself, after which the tabs 52 may be folded over the gummed areas 54 to finally and substantially hermetically seal the bag.

Referring specifically to Figs. 19 and 20 of the drawings, the improved modification shown therein is again applicable to the normally open but flatly folded end of a bag 28 and consists of a three-panel blank comprising panels 55, 56, 57 and gummed tabs 58, 59 hingedly associated with the extreme ends of the medial and lower panels 56, 57 respectively. The upper and lower panels 55, 57 are foldably connected to the opposite longitudinal edges of the intermediate panel 56, and the tabs 58, 59 are likewise foldably connected to the opposite extreme ends of their carrying panels 56, 57 respectively, thereby providing a unitary structure capable of being formed from a single blank. The corresponding faces of the upper tabs 58, are provided with gum 60, while the opposite faces of the lower tabs 59 are likewise provided with gum 61.

In applying the modified closure of Figs. 19 and 20 to a bag 28, the blank may be primarily positioned relative to the bag end and initially folded as shown in Fig. 19 to bring the upper panel 55 downwardly over the end of the bag and adjacent to the intermediate panel 56. The upper and medial panels 55, 56 may be subsequently folded over the lower panel 57 as indicated in Fig. 20, to simultaneously fold the end of the bag 28 upon itself and to bring the gum 60 of the tabs 58 into direct contact with the gum 61 of the tabs 59. By subsequently pressing the adjacent tabs 58, 59 together, the closure may be finally sealed to thereby substantially hermetically seal the end of the bag 28.

Referring specifically to Figs. 21 to 23 inclusive of the drawings, the improved modified type

of closure shown therein is likewise applicable to the flatly folded open end of a bag 28, and consists of a three-panel blank comprising panels 62, 63, 64, and gummed tabs 65, 66 carried by panels 63, 64 respectively. The upper panel 62 is somewhat shorter than the others, and is foldable over the medial panel 63 between the tabs 65 which extend laterally away from the end of the panel 63. The lower panel 64 is likewise foldably connected to the medial panel 63, and is of the same length as the medial panel, thereby also causing the tabs 66 to be foldably connected to the longitudinal lower edge of the panel 63. The corresponding faces of the upwardly projecting tabs 65 are provided with gum 67, while the opposite corresponding faces of the tabs 66 are provided with similar gum 68.

In applying this modified closure of Figs. 21 to 23 inclusive to a bag 28, the blank may first be properly positioned with respect to the flatly folded end of the bag whereupon the upper tab 62 may be folded over the bag end as shown in Fig. 21. The upper and intermedial panels 62, 63 may be subsequently folded downwardly over the lower panel 64 as shown in Fig. 22, to thereby simultaneously fold the confined end of the bag upon itself. The tab 65 may be subsequently folded over the gummed area 66 as shown in Fig. 23, to finally seal the closure and to maintain the same in sealed condition.

Referring specifically to Fig. 24, it will be noted that the adhesive or gum need not be utilized in order to finally seal the improved closure and to maintain the same in sealed condition. In Fig. 24 is shown a modified type of attaching means, and the closure disclosed therein may comprise relatively foldable upper and lower panels 69, 70 which are hingedly connected to each other. The upper panel 69 may be provided with end slots 72 adapted to receive locking tabs 71 which are hingedly connected to the opposite ends of the lower panel 70, and by causing these tabs 71 to enter the slots 72 as illustrated, the closure may obviously be finally attached without the aid of gum.

Referring specifically to Figs. 25 to 28 inclusive of the drawings, the improved type of closure illustrated therein, is also applicable to the flatly folded end of a bag 28, and consists of a two-panel blank comprising panels 73, 74, gummed tabs 75 carried by the opposite ends of the upper panel 73, and plain tabs 76 carried by the opposite ends of the lower panel 74. The tabs 75 have their corresponding faces provided with gum 77, and the end portions of the opposite face of the lower panel 74 are provided with gummed areas 78 which are cooperable with the gum 77 of the tab 75.

In applying this two-panel closure to a bag 28, the blank may first be positioned as shown in Fig. 25 with the upper open end of the bag lying against the panel 73, 74. The plain tabs 76 may subsequently be folded over the sides of the bag 28 as shown in Fig. 26 whereupon the upper panel 73 may be folded over the tabs 76 to thereby simultaneously fold the end of the bag upon itself, as shown in Fig. 27. By subsequently folding the gummed tab 75 over the gummed areas 78 of the lower panel 74, the closure will be finally sealed as indicated in Fig. 28, thereby substantially hermetically sealing the open end of the bag.

Referring specifically to Figs. 29 to 32 inclusive, the improved closure shown therein is again 75

of the two-panel form and is applicable to the flatly folded open end of a bag 28. In this modification, the two-panel blank comprises an upper panel 79, a lower panel 80, notched tabs 5 81 carried by the upper panel 79, and plain tabs 82 carried by the lower panel 80. The upper and lower panels 79, 80 are foldably connected along the adjacent longitudinal edge thereof, and the tabs 81, 82 are foldably connected to the ends of 10 the panels 79, 80 respectively. The tabs 81 are provided with interlockable notches 83, 84 and this form of closure is not provided with gummed areas.

In applying the modified closure of Figs. 29 to 15 32 inclusive to a bag 28, the blank may first be positioned with respect to the end of the bag 28 as shown in Fig. 29. The plain tabs 82 may subsequently be folded inwardly over the bag 28 as illustrated in Fig. 30, and the upper panel 79 20 may subsequently be folded over the tabs 82 to thereby simultaneously fold the end of the bag 28 upon itself, as shown in Fig. 31. By subsequently causing notch 83 to engage the notch 84, the locking tabs 81 may be secured to each other 25 and the bag finally sealed as shown in Fig. 32.

From the foregoing description of the various modified forms of closures embodying the present invention, it will be apparent that the invention provides simple and highly effective means 30 for substantially hermetically sealing the end of a paper bag or the like, both rapidly and in an effective manner. While the provision of gummed tabs and areas permits sealing of the closure so as to prevent tampering with the contents of the bag, such gummed fastening is not 35 necessary and may be replaced by the types of fastenings illustrated in Figs. 24 and 32. The closure may be constructed of strong paper or other suitable sheet material, and may either be 40 formed of a single blank or of a multiplicity of pieces attached to each other in any suitable manner. The various types of closures may be constructed at moderate cost and readily applied by a novice, and while the three-panel closure 45 may provide a somewhat more effective seal, the two-panel closure may be more readily constructed and applied. In providing such a two-panel closure, it is however desirable to also provide means for preventing withdrawal of the 50 bag from within the finally sealed closure, and the plain tabs associated with the lower panel, obviously serve such function.

It should be understood that it is not desired to limit the present invention to the exact details of construction and to the precise application of the closures to the bags, for various modified forms of closures within the scope of the claims, may occur to persons skilled in the art.

60 It is claimed and desired to secure by Letters Patent:—

1. A bag closure comprising, a pair of relatively foldable panels and tabs independently inwardly foldably associated with each panel, said panels 65 being relatively foldable to fold an intervening bag end, and some of said tabs coacting with said bag end to retain the same between said panels while others coact with said panels to retain the same in folded condition.

2. A bag closure comprising, relatively foldable panels several of which have independently foldable tabs at their opposite ends, the tabs on one of said panels being inwardly foldable over the opposite sides of the bag and another panel being 5 foldable thereover to fold the bag end over said inwardly folded tabs and upon itself between said panels, and the tabs of another panel being subsequently foldable to retain said panels and bag ends in folded condition. 10

3. A bag closure comprising, relatively foldable panels several of which have independently foldable tabs at their opposite ends, said panels being foldable over each other to fold an intervening bag end upon itself and the tabs of one of said panels being inwardly foldable to maintain said 15 folded bag end between said panels while the tabs of another panel are subsequently foldable to maintain said panels in folded condition.

4. A bag closure comprising, elongated adjoining panels two of which have independently inwardly foldable tabs at their corresponding opposite ends, the tabbed panels being foldably attached to each other and an untabbed panel being 20 foldably attached to one of said tabbed panels, and means for attaching the tabs of the other of said tabbed panels to the exterior of one of the other panels. 25

5. A bag closure comprising, three elongated relatively foldable adjoining panels, the intermediate and one end panel having independently inwardly foldable tabs at their opposite corresponding ends, and means for attaching the tabs of said end panel to the exterior of said intermediate panel when the tabs of the latter have 30 been folded inwardly and the panels have been folded over each other. 35

6. A bag closure comprising, a pair of elongated relatively foldable panels each having independently inwardly foldable tabs at the opposite corresponding ends thereof, and means for 40 attaching the tabs of one panel to the exterior of the other when the tabs of said other panel have been folded inwardly and the panels have been folded upon each other. 45

7. A bag closure comprising, at least two hingedly connected panels having independently articulable tabs at their opposite corresponding ends, and means for securing the tabs of one panel to the exterior of the other after the tabs of the 50 latter have been folded inwardly and the panels have been folded upon each other.

8. A bag closure comprising, at least two relatively foldable panels having independently foldable tabs at the corresponding ends thereof, and means for securing the tabs of one panel in folded position after the tabs of the other panel have 55 been folded inwardly between said panels and said panels have been folded upon each other.

9. A bag closure comprising, an intermediate panel and outer panels foldably connected to the opposite side edges thereof, said intermediate and one of said outer panels having independently inwardly foldable tabs at the opposite corresponding ends thereof, and means for attaching the 60 tabs of said outer panel directly to said intermediate panel after the tabs of the latter have been folded inwardly between said panels and said panels have been folded upon each other. 65

SHY ROSEN.