

Dec. 9, 1969

A. MIERSON

3,482,734

BAG DISPENSING CASE

Filed Sept. 6, 1968

3 Sheets-Sheet 1

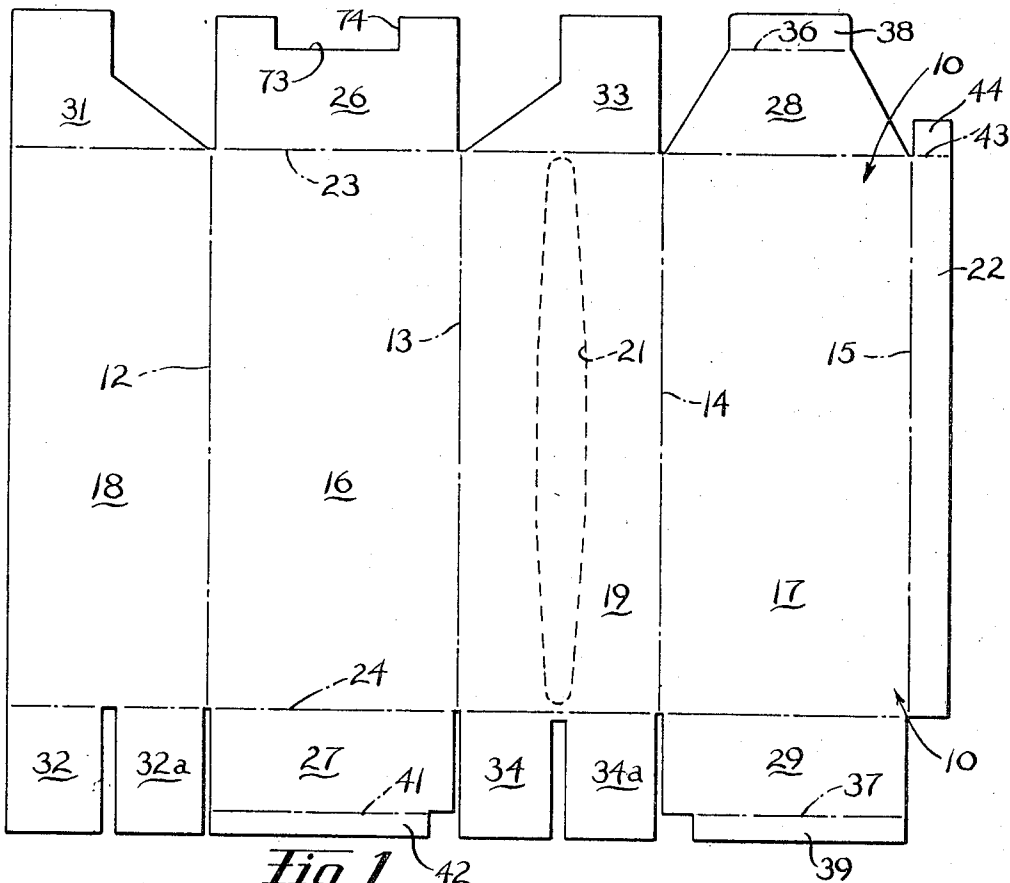


Fig. 1

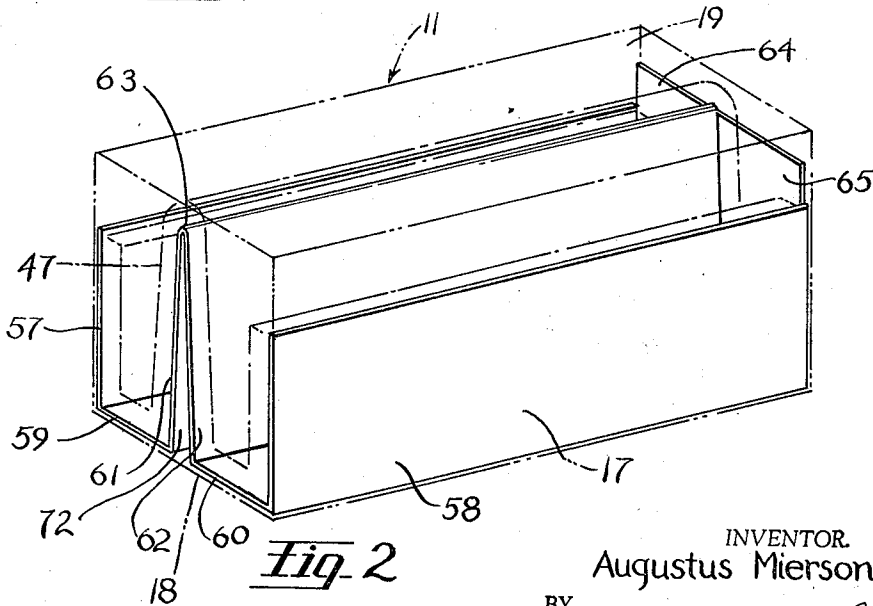


Fig. 2

INVENTOR
Augustus Miersen
BY *Arlington White*
Attorney

Dec. 9, 1969

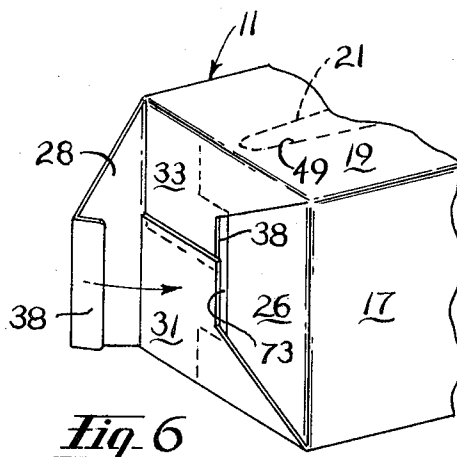
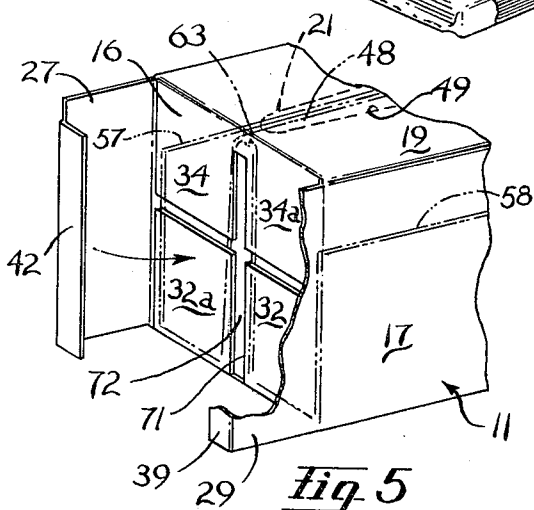
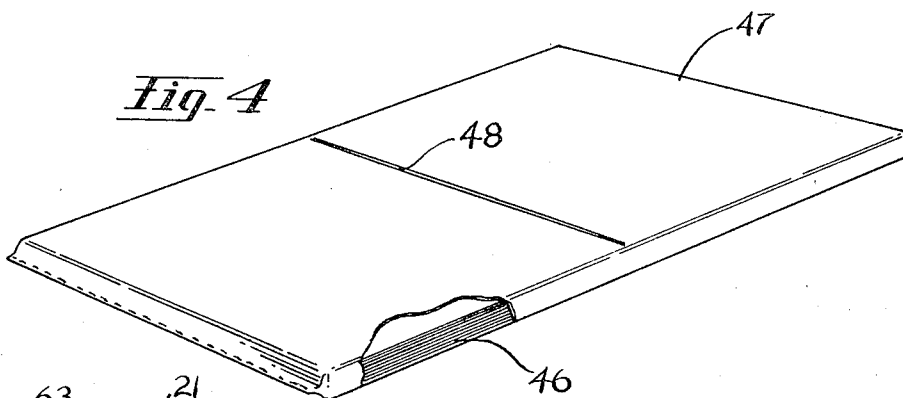
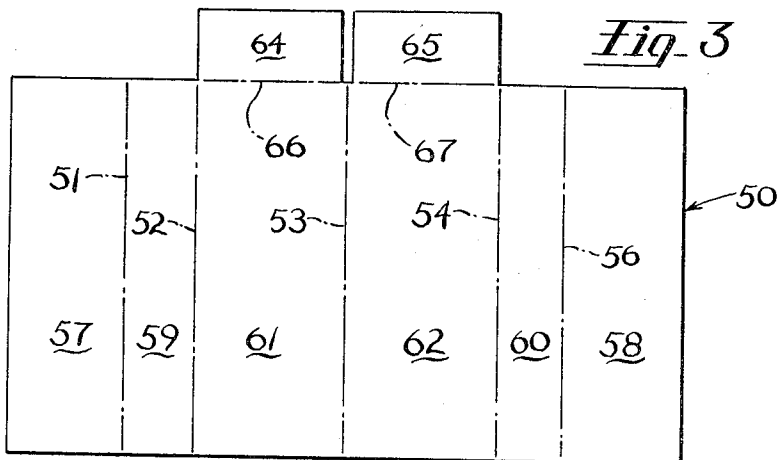
A. MIERSON

3,482,734

BAG DISPENSING CASE

Filed Sept. 6, 1968

3 Sheets-Sheet 2



INVENTOR
Augustus Miersen
BY *H. L. White*
Attorney

Dec. 9, 1969

A. MIERSON

3,482,734

BAG DISPENSING CASE

Filed Sept. 6, 1968

3 Sheets-Sheet 3

Fig. 7

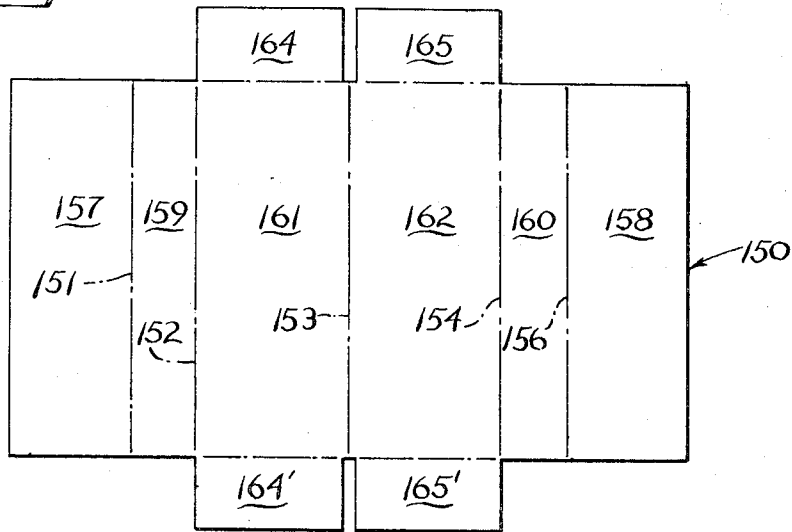
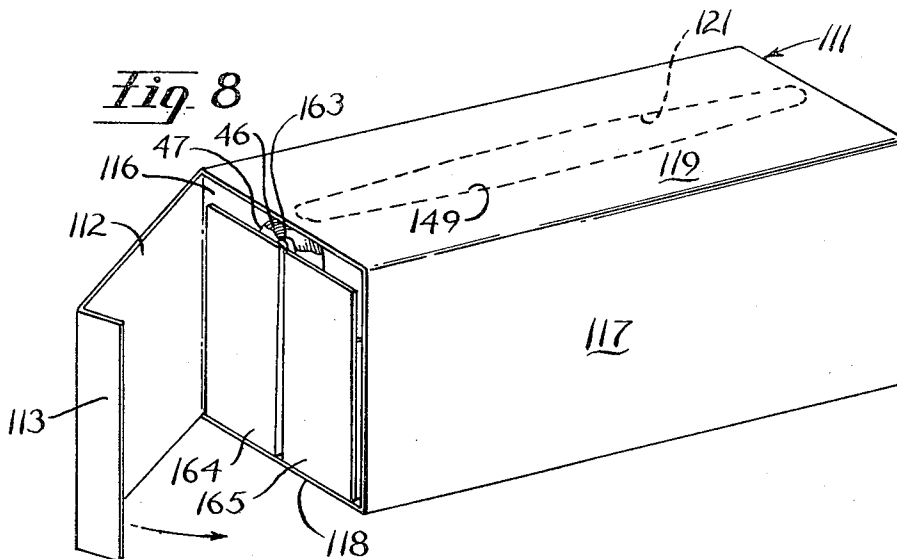


Fig. 8



INVENTOR
Augustus Miersen
BY
Arlington White
Attorney

1

2

3,482,734

BAG DISPENSING CASE

Augustus Mierson, % Jason Products Co.,

530 Howard St., San Francisco, Calif. 94105

Continuation-in-part of application Ser. No. 670,236,

Sept. 25, 1967. This application Sept. 6, 1968, Ser. No.

757,823

Int. Cl. B65h 1/04; B65d 5/42

U.S. Cl. 221-63

7 Claims

ABSTRACT OF THE DISCLOSURE

The invention comprises a case for holding and dispensing a diminishable supply of bags, means on said case for forming an elongated bag-withdrawal opening in one panel of said case, an inner receptacle containing a plurality of bags to be dispensed from said case; said inner receptacle having a transverse opening therein in alignment with said bag-withdrawal opening of said case, together with a bag supporting member removably disposed in said case comprising a pair of opposed upstanding elements, and a crown section merging with said upstanding elements and over which said inner receptacle with its contents is draped, and opposed tuck-in flaps on at least one end of said case lying within the same between said opposed upstanding elements to retain said supporting member and said draped receptacle and contents against displacement.

The present application is a continuation-in-part of my co-pending application entitled Bag Dispenser, Ser. No. 670,236, filed Sept. 25, 1967.

A primary object of my present invention is to provide a bag dispensing case which is capable of being manufactured from flexible material yet which is relatively sturdy and inflexible as a unitary article so as to withstand rough treatment in transit without damage or likelihood of being deformed or broken.

Another important object of the invention is to provide a bag dispensing case of the indicated nature which is additionally characterized by the provision of means to prevent or reduce to a minimum the likelihood of shifting of the contents thereof during shipment as well as in use.

A still further object of my invention is to provide a bag dispensing case of the aforementioned character which is relatively easy to load with a multiplicity of bags to be dispensed therefrom and which is relatively easy to set up in bag-dispensing position for ready withdrawal of individual bags singly from a quantity thereof without disturbing the remainder of the bags.

Other objects of the invention, together with some of the advantageous features thereof, will appear from the following description of a preferred embodiment and a modified embodiment of the invention which are illustrated in the accompanying drawings. It is to be understood, however, that I am not to be limited to the precise embodiments shown, nor to the precise arrangement of the various components thereof, as my invention, as defined in the appended claims, can be embodied in a plurality and variety of forms.

Referring to the drawings:

FIG. 1 is a development of a preferred embodiment of the case component of the invention.

FIG. 2 is a front perspective view of a preferred embodiment of the invention, the dotted lines indicating the case component and a portion of the bag supporting member.

FIG. 3 is a development of the supporting member component of a preferred embodiment of the invention, this view being on a smaller scale than FIG. 1.

FIG. 4 is a perspective view, partly broken away to illustrate contents of the inner receptacle component of the invention.

FIG. 5 is a fragmentary elevational view of one end of the case component, in partially closed position.

FIG. 6 is a fragmentary elevational view of the opposite end of the case component, in partially closed position.

FIG. 7 is a development of a modified embodiment of the insert bag supporting components of the present invention.

FIG. 8 is a perspective view of a carton with modified bag supporting component of FIG. 8 in operative position.

In its preferred form, the bag dispensing case of my present invention preferably comprises a scored blank defining a pair of side panels, a pair of foldable end panels, a bottom panel and a top panel all foldable into a case body; said top panel including opening-forming means, an inner receptacle for holding a plurality of bags to be dispensed; said inner receptacle having a transverse opening therein, together with support means for supporting said inner receptacle with its contents in close proximity to said opening-forming means in said top panel so that the opening when formed is in registry with said transverse opening in said inner receptacle; said support means comprising a pair of opposed upstanding elements merging with a crown section over which said inner receptacle with its contents is draped, a pair of laterally foldable flaps on said upstanding elements, and a pair of opposed flaps on at least one end of said case body for insertion between said opposed upstanding elements to retain the same against displacement.

A modified embodiment of my present invention preferably comprises a carton consisting of a top panel having a score line therein to afford an elongated opening in said top panel, a bottom panel, a pair of side panels merging with said top panel and said bottom panel, a pair of end panels, and an openable closure on one of said end panels, an inner receptacle removably disposed in said carton; said inner receptacle having a transverse slot therein, a plurality of bags within said inner receptacle, and a bag supporting member removably disposed within said carton; said bag supporting member comprising a scored blank defining when folded a pair of side sections, a pair of spaced apart bottom sections seatable on said bottom of said carton, a pair of upstanding elements merging with said bottom sections, a crown section intermediate said upstanding elements and a flap on each end of each of said upstanding elements; said flaps being adapted to be laterally folded to overlie opposite ends of said upstanding elements and to seat with bearing engagement with the inner walls of said side panels of said carton to retain said bag supporting member against displacement with said slot of said inner receptacle in registry with the opening formed in said top panel of said carton whereby individual bags may be dispensed from said inner receptacle through said opening in said top panel.

As particularly illustrated in FIG. 1 of the annexed drawings, I provide a scored blank, designated generally by the reference numeral 10, which may be fabricated or formed from any suitable flexible material such as pressed paper or cardboard or the like. The blank 10 when folded and set up, affords a case 11 which is fashioned with a plurality of transversely extending score lines 12, 13, 14, and 15 upon which the blank may readily be folded so as to define a pair of sides 16 and 17, a bottom 18, and a top 19, with the latter scored in the shape of an ellipse or elongated oval, as indicated at 21, thus providing an opening forming means in such top panel. In addition to defining the sides, bottom and top panels, the transverse

score line 15 permits an additional fold line for defining a flap 22 on side 17 of the blank when set up. A pair of longitudinally extending straight score lines 23 and 24 are provided in blank 10 to define the respective and similar lengths of the sides 16 and 17, the bottom 18 and the top 19 of the made up case; such score lines 23 and 24 also defining specially formed end flaps 26 and 27 on side 16, as well as specially formed end flaps 28 and 29 on side 17, and specially formed end flaps 31 and 32 on bottom 18, as well as specially formed flaps 33 and 34 on top 19 of the made up case 11. In addition, a short score or fold line 36 is delineated in flap 28 of side 17, as well as a short score line 37 is provided in flap 29 of side 17 to afford tabs 38 and 39, respectively, on such side 17. Another short score line 41 is provided in end flap 27 of side 16 of the made up case to form a tab 42 thereon.

In assembling or setting up case 11, the bottom 18 is laid upon a flat or planar surface and side 12 is afforded by folding the blank 10 on the score line 12. The blank is then folded on score line 13 and the top panel 19 brought over the upper portion to lie parallel to bottom panel 18. Moreover, the blank 10 is then folded on lines 14 and 15 to form the side 17 and also to provide a tuck-in by means of flap 22 on formed side 17; such tuck-in preferably being cemented to the bottom panel 18. By means of a short score line 43 in the flap 22 at one end thereof, a short tab 44 is provided which conveniently is cemented to an end flap as hereinafter explained. Before closing the various end flaps defined by the score or fold lines 23 and 24, reference will be made to the contents of the dispensing case 11 when assembled and ready for use.

As indicated hereinabove, the case 11 is devised for dispensing one at a time, or singly, a plurality of bags designated generally by the reference number 46, see FIG. 4 of the annexed drawings. As shown, I provide a plurality of the bags 46 which may be 100 thereof, or 250 or even 500 thereof and place them in an inner receptacle 47 having a transverse slit 48 therein at its approximate longitudinal center. Preferably, the receptacle 47 is a polyethylene container and each of the bags 46 preferably is a polyethylene garbage or other disposal bag. The container 47 is designated herein as an inner receptacle inasmuch as it is disposed within the case 11 for individual withdrawal of bags therefrom.

In FIG. 3 of the annexed drawings, I have illustrated a case insert or bag supporting member 50 which is set up as hereinafter explained for introduction and disposal within the case 11 and so arranged in connection with inner receptacle 47 that the latter with its contents of polyethylene garbage bags is draped over the insert with the transverse slit 48 of receptacle 47 aligned or in registry with the elongated opening 49 of the case 11 when the top panel 19 thereof is opened along the score line 21. By insertion of the hand through opening 49 as well as aligned opening or slit 48 of inner receptacle 47, individual garbage bags 46 can be grasped and withdrawn singly through opening 49 in the top 19 of the case 11.

The bag supporting member comprises a blank 50 of cardboard or paper board which is transversely scored on lines 51, 52, 53, 54 and 56 to define when folded on such score lines a pair of side sections 57 and 58 at opposite ends of the blank 50, a pair of bottom sections 59 and 60 which seat on the bottom of the case 11 when the insert is disposed therein, as well as a pair of opposed upstanding elements 61 and 62 which define at the merging tops thereof a crown section 63 constituting a longitudinally extending ridge, see FIG. 5. In addition, I provide upon the insert blank 50 a pair of end bearing flaps 64 and 65 by extending the elements 62 and 62 providing score lines 66 and 67 so that the end bearing flaps 64 and 65 can be folded to positions normal to the lengths of the upstanding opposed elements 61 and 62 when the insert or bag support member is set up within the case 11.

It may be observed here, that in assembling the inner receptacle 47 and the bag supporting member 50, I first

fill the receptacle 47 with bags 46 to be dispensed and heat seal the receptacle 47 so that it is closed at both ends as well as along its sides. The receptacle 47 is then laid upon the blank 50 with the slit 48 uppermost. The blank 50, with the inner receptacle 47 and its contents of bags 46, is then folded on the score lines 51 and 56 to bring up the sides 57 and 58 and simultaneously to define bottom sections 59 and 60. The blank is again folded on the score lines 52 and 54 to bring to upstanding opposed positions the elements 61 and 62, as shown in FIG. 5, which provides the intermediate crown section 63. In this operation, the contained bags 46 and inner receptacle 47 is folded and approximately the center portion of the receptacle 47 is draped over the crown section 63 of the insert with the slit 48 stretched wider and in alignment with opening 49 defined by tearing out the top panel 19 of the case 11 along score line 21. Folds of the receptacle 47 with folded bags 46 lie between one side section 57 and upstanding element 61 as well as between the other side section 58 and upstanding element 62. Upon insertion of this bundle of bags 46, within inner receptacle 47, and the insert support member constituting the folded blank 50, into the case 11, one end of the upstanding elements 61 and 62 will abut the end flaps closing one end of case 11, with the other end of the upstanding elements 61 and 62 abutting the turned over bearing flaps 64 and 65 extending beyond the elements 61 and 62.

In accordance with the present invention, after the insert folded blank 50 has been disposed within case 11 with its folded bags 46 within inner receptacle 47, and after the bearing flaps 64 and 65 have been folded against the adjacent end of upstanding elements 61 and 62, the end flaps of the case per se are then folded. While the end flaps 32 and 34 on the same ends of bottom 18 and top 19 may be single flaps, these end flaps may be provided in two pieces each, designated 32, 32a and 34, 34a in FIG. 1 of the annexed drawings. When folded into operative positions on above line 24, see FIG. 5, the flaps 32, 32a, 34 and 34a will overlie the bearing flaps 64, 65 of the insert supporting member 50 with such bearing flaps 64 and 65 so turned that their outer edges 64 and 65 engage and bear against the inner walls of the sides 16 and 17 adjacent to the corresponding end of the case firmly to retain the insert supporting member 50 against displacement. This positioning of bearing flaps 64 and 65 within the case 11 provides a space 71 therebetween, herein termed a first transverse space, into which are fitted the tabs 39 and 42 of end flaps 29 and 27, respectively, on the corresponding ends of such sides, after such flaps 29 and 27 have been folded on score line 24. This folding of end flaps 29 and 27, together with the 39 and 42, respectively, entered into the first transverse space 71 between bearing flaps 64 and 65 of the insert 50 further strengthens the case 11 and further prevents displacement of the contents of the case during shipment as well as when in bag dispensing use. The tabs 39 and 42 also enter an underlying second transverse space 72 which is afforded between the upstanding elements 61 and 62 of the supporting member 50 to prevent any dislodgement of such elements.

It may be mentioned here that prior to loading case 11 with the inner receptacle 47 and its contents of individual bags 46 draped over the crown 63 of the insert supporting member 50, I turn in the flap 22 of side 17 and cement or otherwise adhesively secure such flap 22 to the bottom 18 of the case. The end tab 44 on flap 22 is left unsecured until the case 11 is closed at the corresponding end thereof by first folding inwardly on score line 23 the end flaps 31 and 33 of the bottom 18 and top 19 of the case at which time the tab 44 is cemented to the inside of the bottom end flap 31 adjacent to the folded over section 17 defining a side flap. Thereafter the end flap 26 of side 16 is folded on line 23 to overlie portions of the folded end flaps 31 and 33 of the bottom 18 and top 19, respectively. It is to be noted here that end flaps 31 and

5

33 are cut away in opposite directions so that when folded down into closure position a relatively wide space remains; such wide space being largely covered by the corresponding end flap 26 on side 16 of the case but nevertheless leaving a relatively narrow space, indicated at 73 provided by the cut-out section 74 of such end flap 26. The relatively narrow space 73 thus afforded by the closure folding of end flaps 26 overlies or is in registry with the second transverse space 72 between the upstanding elements 61 and 62 of bag supporting member 50. The closure of case 11 is completed by the folding of end flap 28 on score line 23 to bring such end flap into overlying relation with the remaining portions of the end flaps 31 and 33 on the bottom 18 and top 19, respectively of the case, and the further folding of tab 38 on score line 36 of the end flap 28 and the insertion of such tab 38 into the opening or space 73 afforded between end flap 26 and the underlying end flaps 31 and 33, as well as into the second transverse space 72 afforded between the upstanding elements 61 and 62 of the insert supporting member 50 within the case 11.

The end closure inner and outer flaps of the case 11 actually effect an interlock with the contained bag supporting insert 50 inasmuch as such end flaps coact with the insert to afford bearing engagement not only with respect to the inner walls of the case but also with one another. As indicated above, the end flaps 64 and 65 of the upstanding elements 61 and 62 of insert 50 engage and are in bearing engagement with the inner walls of the sides 16 and 17 of case 11, and such end flaps 64 and 65 when folded into operative positions are in bearing engagement with an end of insert 50 per se. Further, when the tabs 39 and 42 of the outer end flaps 29 and 27 overlying inner end flaps 32, 32a, 34 and 34a are tucked in or inserted into the first transverse space 71 between the end flaps 64 and 65 of insert 50 and second transverse space 72 between the upstanding elements 61 and 62 of bag supporting insert 50, there is afforded additional bearing engagement between the end flaps 29 and 27, and the insert 50, per se, as well as an interlock therebetween. Similarly, at the opposite end of case 11, the folding over of the inner first pair of end flaps 31 and the inner second pair of end flaps 33 of the bottom 18 and top 19, respectively, of the case with the tab 44 of side flap 22 secured to the inner side of flap 31, together with the folding of the outer flaps 26 and 28 to overlie the flaps 31 and 33 and the tucking in of tab 38 into the space 73, defined by flaps 31, 33 and 26, and second transverse space 72, afforded between upstanding elements 61 and 62 of bag supporting insert 50, effects an interlock at such opposite end of case 11. The two interlocks between the case 11 and the bag supporting insert 50 affords a rigid case capable of withstanding extraneous forces and also effectively prevents shifting of the load in shipping of the case as well as during bag-withdrawal use of the dispensing case.

A modified embodiment of my present invention is illustrated in FIGS. 7 and 8 of the annexed drawings. In this modification, any suitable case or carton, designated by the reference numeral 111, may be provided for dispensing of bags of predetermined dimensions; such carton conveniently being fabricated from pressed paper, paper board or cardboard, as desired, and conveniently being provided with a foldable closure 112 having a tuck-in flap 113 to one end thereof. The carton 111 when set up affords a pair of sides 116, and 117, a bottom 118, and a top 119, and such top panel 119 is formed with an elongated generally elliptical score line 121 therein to provide opening-forming means therein.

The modified carton is adapted to dispense singly a plurality of bags, such as garbage disposal bags, in the same manner as the preferred embodiment of the invention dispenses bags 46 contained in a receptacle 47 having a transverse slit 48 therein, all removably dis-

6

posed within the carton along with a bag supporting member which holds the inner receptacle 47 in such manner as to prevent shifting thereof as well as its contents of bags.

In accordance with my present invention, the modified embodiment illustrated in FIGS. 7 and 8 includes a bag-supporting member 150 for disposal within carton 111 along with the inner receptacle 47 and its plurality of contained bags. In this modification, the bag-supporting member 150 preferably is formed with a series of transverse score lines 151, 152, 153, 154 and 156 to define when folded on such score lines a pair of side sections 157 and 158 at opposite ends of the blank 150, a pair of bottom sections 159 and 160 which merge with side sections 157 and 158, respectively, and which seat upon the bottom 118 of carton 111 when the bag-supporting member is disposed in the carton in operative position, as well as a pair of upstanding elements 161 and 162 which define at the merging tops thereof a crown section 163 constituting a longitudinally extending ridge, see FIG. 8, over which the inner receptacle 47 is draped and by which the receptacle 47 and its contents of bags 46 are supported with the transverse slot 48 thereof, aligned with an opening 149 in top panel 119 of carton 111 when a portion of such top panel within the score line 121 is removed. The blank 150 is scored longitudinally at the upstanding elements 161 and 162 and is extended at both ends of said elements to define when folded laterally on such longitudinal score lines, a pair of flaps 164 and 164' on element 161, as well as a pair of flaps 165 and 165' on the element 162. The scored blank 150 is first laid out on a planar surface and the inner receptacle 47 is laid thereon with its contents of a plurality of individual bags 46 and with the transverse slot 48 of receptacle 47 presented to the top. The entire blank 150, together with receptacle 47 and its contents, is then folded on the transverse score lines 151, 152, 153, 154 and 157 to provide the side sections 157, 158 as well as bottom sections 159 and 160, well as upstanding elements 161 and 162 and is disposed within carton 111 through an open end thereof, and the carton end closed by folding closure 112 and tucking in flap 113 thereof. This disposal of bag supporting member or folded blank 150 positions the slot 48 over the crown section 163 of supporting member 150 and in alignment with the opening 149 of carton 111 formed by removing the portion of top panel 119 within the score line 121. The modified embodiment is completed by first laterally folding the end flaps 164 and 164' of upstanding elements 161 to have the outer ends of such flaps 164 and 164' in bearing engagement with the inner walls of the sides 116 and 117 of the carton 111, as shown in FIG. 8. The other end flaps 165 and 165' are laterally folded before slipping the blank 150 into the carton so that the outer ends of such flaps will be in bearing engagement, not shown, with the inner walls of the side panels 116 and 117 at the opposite end of carton 111 from that shown in FIG. 8. This bearing engagement of the four end panels 164, 164', 165 and 165' against the inner walls of the side panels of the carton as well as against the ends of the upstanding elements 161 and 162 effectively prevents the shifting of inner receptacle 47 and its contents of bags 46.

I claim:

1. A bag dispensing case comprising a case body comprising a pair of sides, a bottom, a top having opening-forming means therein, a first pair of inner end flaps on one end of said bottom, a second pair of inner end flaps on a corresponding end of said top; said first and said second pair of inner end flaps defining a first transverse space therebetween when folded down, an inner receptacle having a transverse slit therein at approximately the longitudinal center thereof, a plurality of bags to be dispensed singly from said body contained within said

inner receptacle, and a bag supporting member within said case body; said bag supporting member comprising a pair of side sections lying in engagement with said sides of said case body, a pair of bottom sections seated in spaced relationship to one another on said bottom of said case body, a pair of upstanding elements arranged in elevated positions in respect to said bottom sections and said bottom; said upstanding elements defining a second transverse space therebetween extending to said one end of said case body as well as to the other end of said body, and a crown section merging with said pair of upstanding elements and over which said inner receptacle with its contents is draped to align said slit of said inner receptacle with an opening in said top of said case body, and a first pair of outer end flaps on said one end of said sides of said case body, a tab on each of said outer end flaps; said tabs being disposed in said first and said second transverse spaces at said one end of said case body to interlock said case body with said bag supporting member at said one end thereof, a second pair of outer end flaps on the other end of said sides of said case body, and a tab on one of said second pair of outer end flaps disposed through a cut-out section of the other of said second pair of outer end flaps in said second transverse space at the other end of said case body to interlock the case body with said bag supporting member at said other end of said case body, thereby to prevent shifting of the load within the same.

2. A bag dispensing case as defined in claim 1, and a flap on one end of each of said upstanding elements of said bag supporting member; said flaps on said bag supporting member engaging at their outer ends with the inner walls of said sides of said case body.

3. A bag dispensing case as defined in claim 1, and a side flap on one side of said case body; said side flap being adapted to be foldable within said case body and cemented to the bottom thereof.

4. A bag dispensing case as defined in claim 3, and a tab on said side flap engageable with the inner wall of one of said outer-end flaps on the said other end of said case body.

5. A bag dispensing case comprising a carton body consisting of a pair of side panels, a bottom panel, a top panel, opening-forming means in said top panel, and a pair of end panels at least one of which is openable so that bags may be disposed therein, an inner receptacle having a transverse slot therein, a plurality of bags in said inner receptacle, and a bag supporting member removably disposed as a unit with said inner receptacle and its contents within said carton body; said bag supporting member comprising a foldable blank defining when folded a pair of side sections engageable with the inner walls of said side panels of said carton body, a pair of spaced apart bottom sections seatable upon said bottom panel of said carton body, a pair of upstanding elements merging with said bottom sections, and a crown

section intermediate said upstanding elements and at an elevation from said bottom panel of said carton body; said crown section supporting said inner receptacle and its contents of bags in draped arrangement with said transverse slot of said inner receptacle in alignment with an opening formed in said top panel of said carton body, and a pair of flaps on opposite ends of each of said upstanding elements; said pair of flaps being adapted to be laterally folded to engage the inner walls of said side panels of said carton body at opposite ends thereof to prevent displacement of said bag supporting member and said inner receptacle and said bags.

6. A bag dispensing case comprising a case body comprising a pair of sides, a bottom, a top having opening-forming means therein, a first pair of inner end flaps on one end of said bottom, a second pair of inner end flaps on a corresponding end of said top; said first and said second pair of inner end flaps defining a first transverse space therebetween when folded down, a load supporting member within said case body; said load supporting member comprising a pair of side sections lying in engagement with the sides of said case body, a pair of bottom sections seated in space relationship to one another on said bottom of said case body, a pair of upstanding elements arranged in elevated positions in respect to said bottom sections and said bottom; said upstanding elements defining a second transverse space therebetween extending to said one end as well as to the other end of said case body, and a crown section merging with said pair of upstanding elements and over which a load of a plurality of individual elements is draped for individual withdrawal, and a first pair of outer end flaps on at least one end of said sides of said case body, a tab on each of said outer end flaps, said tabs being disposed in said first and said second transverse spaces at said one end of said body to interlock said case body and said load supporting member and prevent shifting of the load within said case body.

7. A bag dispensing case as defined in claim 6 wherein said load comprises a plurality of individual bags which may be withdrawn from said case body individually through the opening formed by said opening-forming means.

References Cited

UNITED STATES PATENTS

1,476,750	12/1923	Casey	229—27
1,799,656	4/1931	Tinsley	229—27 X
2,314,491	3/1943	Greenberg	229—27 X
2,761,584	9/1956	Johnson et al.	221—63
3,243,079	3/1966	Rettmer	221—63
3,265,241	8/1966	McColgan	221—47

SAMUEL F. COLEMAN, Primary Examiner

U.S. Cl. X.R.

229—27