United States Patent [19]

Booth

[11] **3,904,105**

[45] **Sept. 9, 1975**

[54] **BULK MATERIAL CONTAINER**

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[73] Assignee: **Olinkraft, Inc.**, West Monroe, La.

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[21] Appl. No.: **407,559**

[52] **U.S. Cl.** ..... **229/15**; 229/17 SC

[51] **Int. Cl.²** ... **B65D 1/36**; B65D 3/24; B65D 5/48; B65D 81/00

[58] **Field of Search** ..... 229/17 SC, 17 B, 17 R, 229/75 C, 15, 7 R, 23 R, 14 R, 14 BA, 14 BE, 14 BL, 14 BW, 14 C, 14 H; 222/528, 482, 484, 489

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Primary Examiner—Leonard D. Christian
Attorney, Agent, or Firm—Norvell E. Von Behren

[57] **ABSTRACT**

A bulk material container is formed of an open-ended multicell body having top and bottom caps closing the upper and lower open ends thereof. Each of the cells is formed of a flanged sleeve surrounding and bonded to a liner with common inner side walls of the sleeves of the cells being laminated together. For dispensing through the bottom of the bulk material container, the flanges of the cells are formed to define openings in adjacent corners thereof, and an aperture is formed in the bottom of the cap aligned with the adjacent openings in the cells and with a slot in the bottom cap receiving a pull-plate slidable to open and close the aperture to control dispensing of the contents from the cells simultaneously.

15 Claims, 11 Drawing Figures

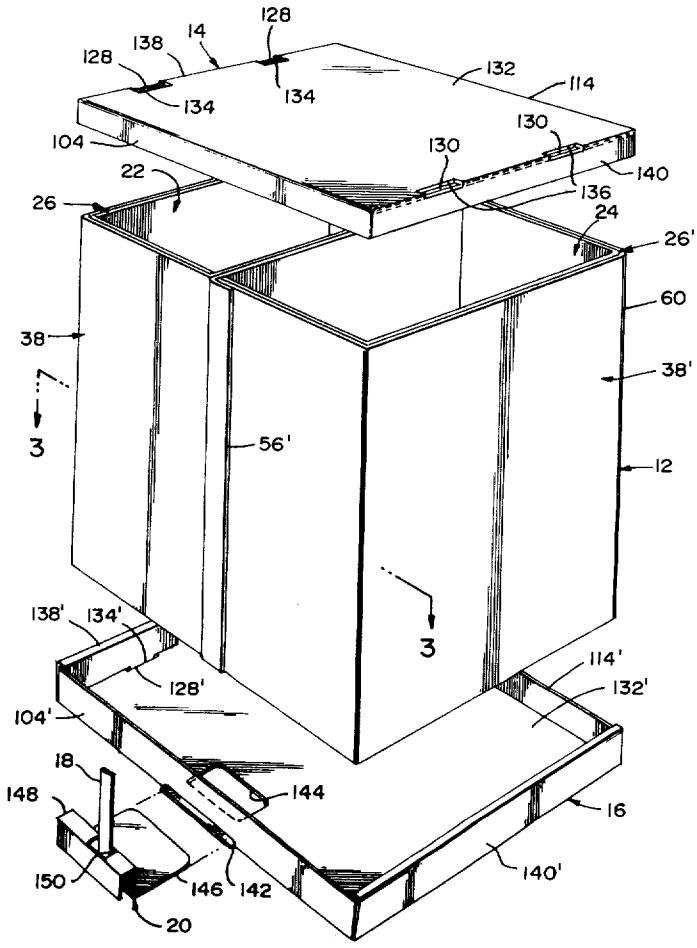


FIG. 1

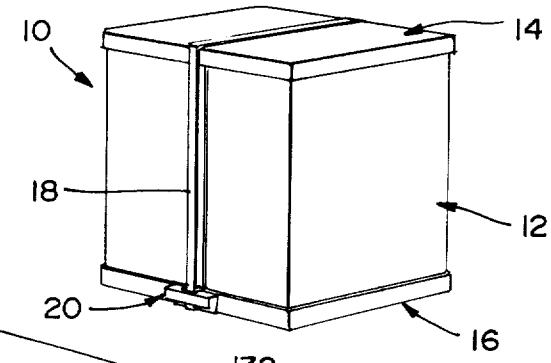

10
14
18
12
20
16

FIG. 2

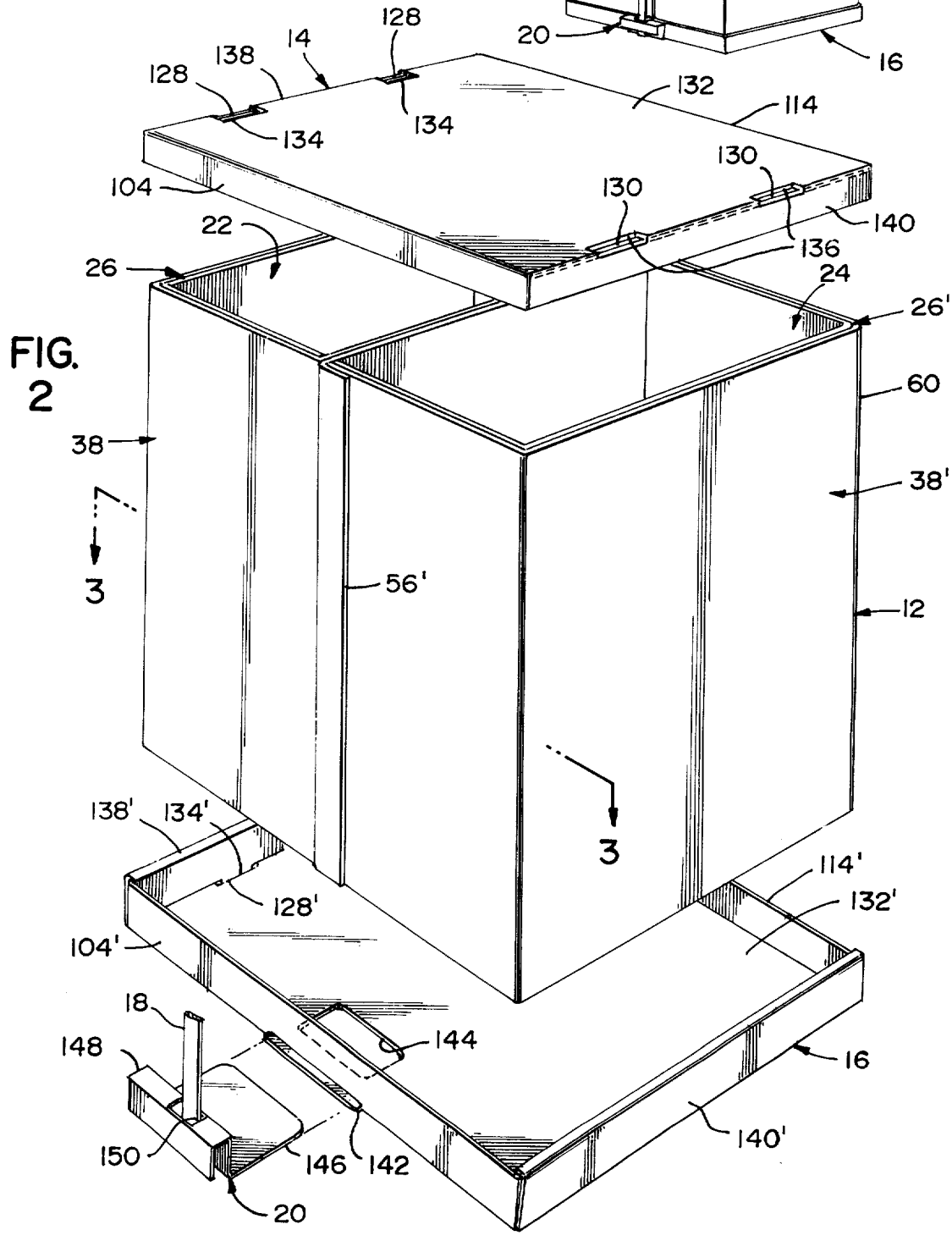

128
14
138
128
134
134
132
114
130
104
130
140
22
136
26
24
26'
60
38
38'
7
3
56'
12
3
138'
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128'
132'
104'
18
144
148
16
150
146
142
140'
20

FIG. 3

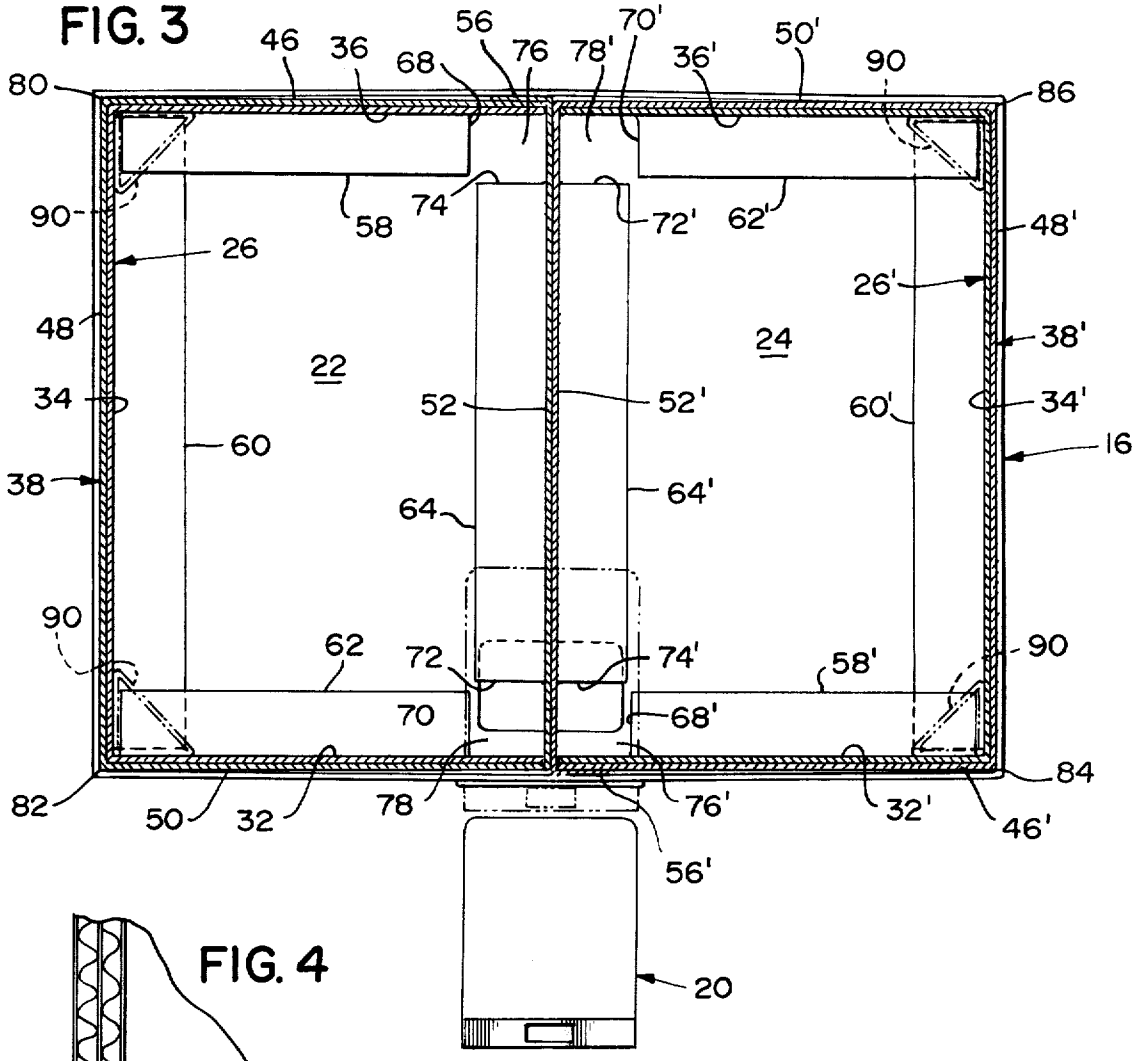


FIG. 4

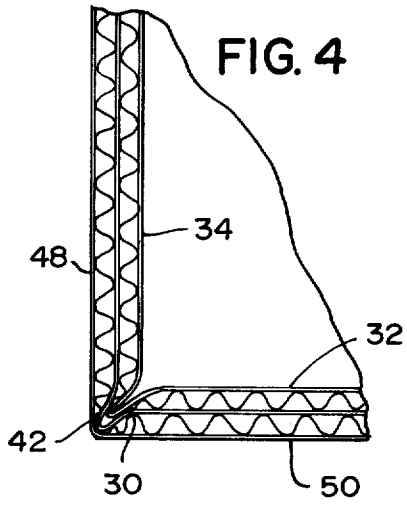
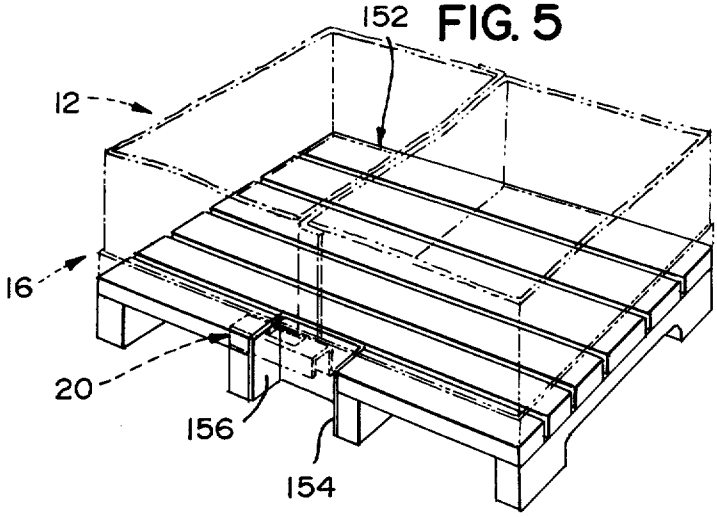


FIG. 5



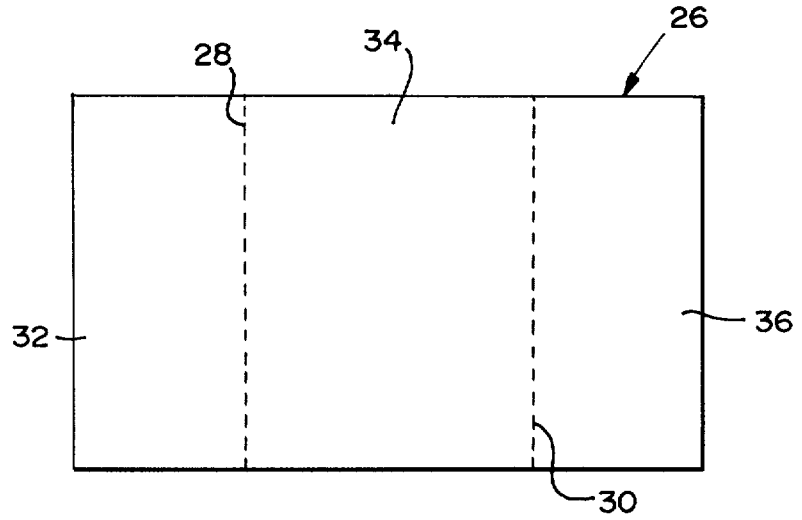


FIG. 6

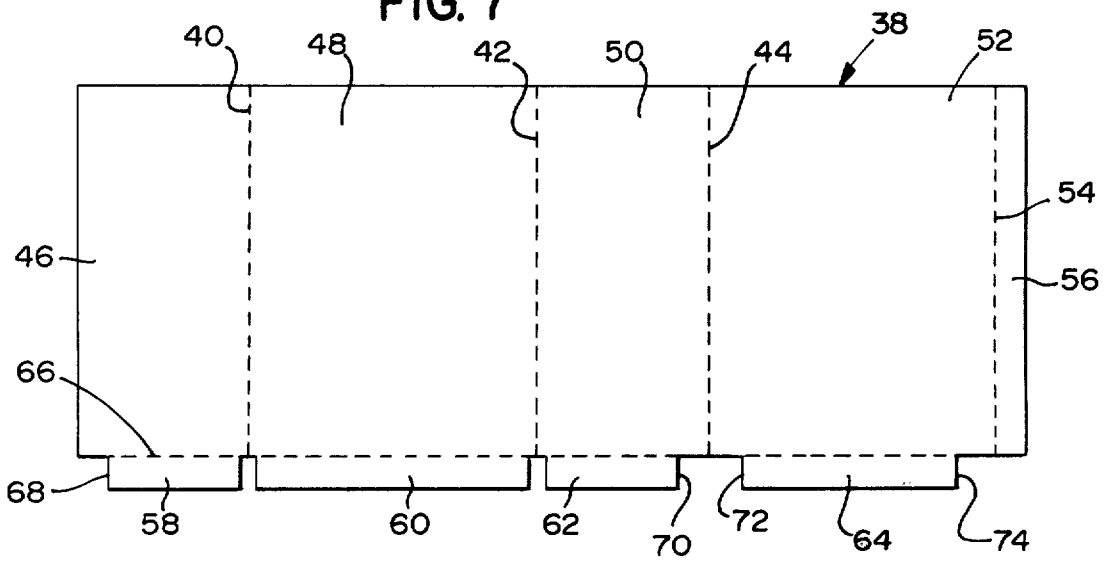


FIG. 7

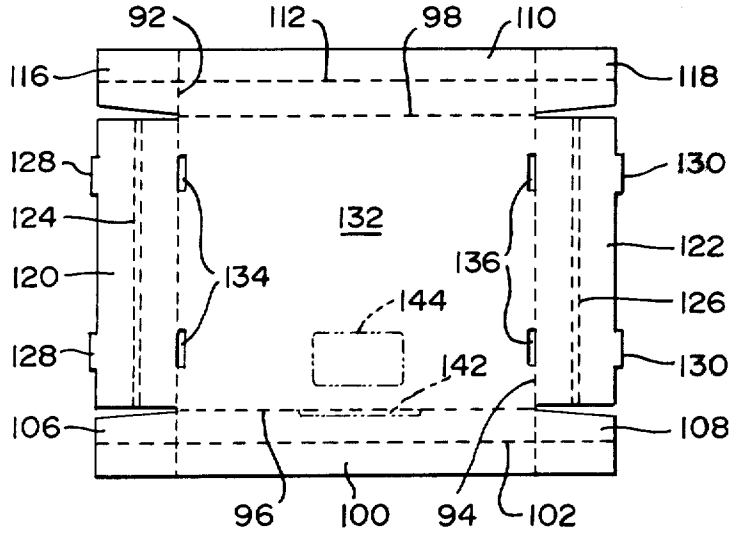


FIG. 8

FIG. 10

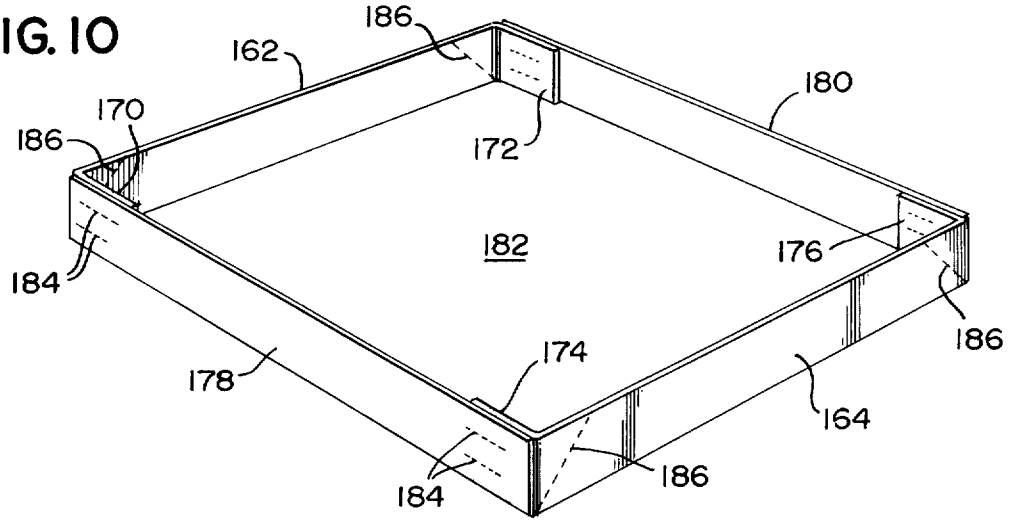


FIG. 11

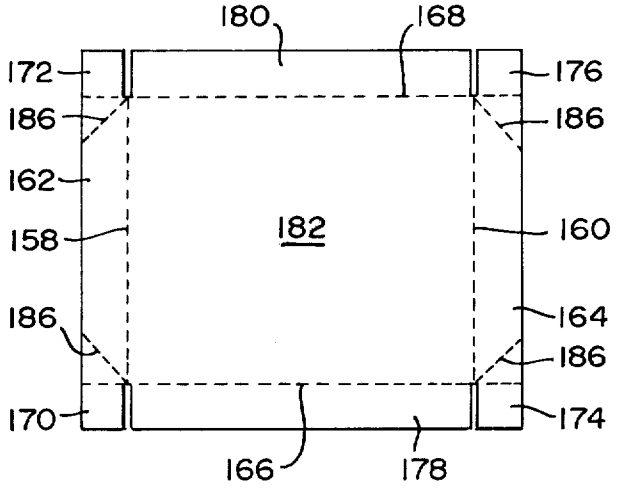
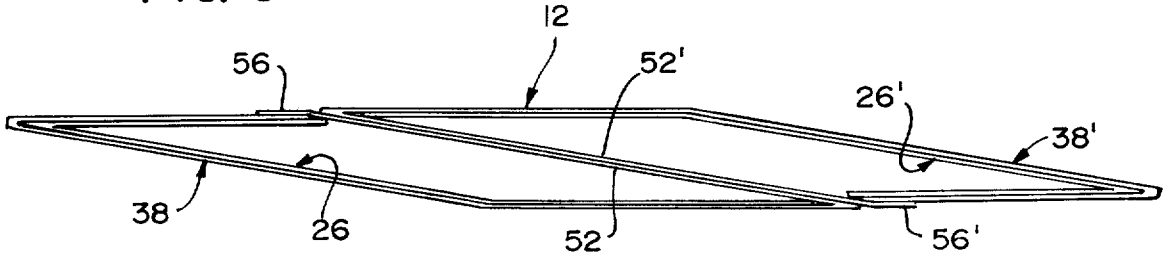


FIG. 9



BULK MATERIAL CONTAINER

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention pertains to bulk material containers and, more particularly, to paperboard bulk material containers for shipping and storing bulk material and dispensing bulk material from the bottom thereof.

2. Description of the Prior Art

Paperboard containers are desirably used for shipping and storing materials due to their light weight and low cost as well as their capability of being stored in minimal space in a compact, folded, knocked-down state. For shipping and storing bulk materials, however, the structure of the containers must be sufficiently strong to hold extremely large weights, many times on the order of tons; and, prior art attempts to construct bulk material containers have suffered from the disadvantages of complexity of structure and increased weight and cost. U.S. Pat. Nos. **2,634,038, 3,425,615, 3,543,991, 3,701,466** and **3,715,072** are exemplary of prior art efforts to construct bulk material containers of multicell and/or laminated structure in order to increase the capability of such containers for use in storing and shipping materials in bulk quantities. Such prior art bulk material containers leave room, however, for improvement, particularly in the areas of cost, structural and assembly complexity, stacking strength and number of components.

Due to the large size and weight of bulk material containers, it has been found desirable to construct such containers to permit dispensing of the contents from the bottom thereby obviating the necessity of tipping the containers to remove the contents. U.S. Pat. Nos. **2,799,440, 3,021,044, 3,066,842, 3,193,152, 3,606,969** and **3,701,466** are exemplary of prior art efforts to construct bulk material containers with structure for dispensing the contents from the bottom thereof. The prior art bulk containers have the disadvantages, however, of either requiring the contents to be dispensed through an opening or spout in side walls of the containers or requiring the containers to be lifted or otherwise manipulated for dispensing through the bottom walls thereof. Dispensing through the side walls is not satisfactory for materials having a size and configuration so as not to flow smoothly, such as irregularly shaped objects like peanuts; and, manipulation of the containers is difficult, as mentioned above.

Additionally, it is desirable that bulk material containers be simple to knock down and set up such that the containers can be stored in a knocked-down state in a minimal area and set up when it is desired to use the containers. The prior art bulk material containers that permit dispensing of contents from the bottom wall have required complex folding of bottom flaps and panels which increases set-up time and causes inherent structural weaknesses. Bulk material containers having bottom caps are more desirable with respect to knock-down and set-up operations; however, in the past, many of such containers have had the concomitant problems of loose seating of the container body in the bottom cap and bulging of the walls of the body.

SUMMARY OF THE INVENTION

The present invention is generally summarized in a bulk material container including a body having a pair of cells with open bottom portions; a bottom cap receiving the body and having a wall closing the open bottom portions of the cells and an aperture in the wall providing communication with the cells; and a pull-plate slidably mounted in the bottom cap to be movable between a closed position covering the aperture and an open position at least partially opening the aperture to permit controlled dispensing of bulk material simultaneously from the cells.

Accordingly, it is an object of the present invention to overcome the above-mentioned disadvantages and problems of the prior art by providing a bulk material container that is simple in structure while having high stacking strength, is simple to set up and knock down, is formed of a minimal number of components, and can be used to dispense contents from the bottom thereof.

A further object of the present invention is to construct a bulk material container having a pair of open-ended cells laminated together with top and bottom caps held in place by a vertical banding strap.

An additional object of the present invention is to use a pull-plate to close and open an aperture in a bottom cap of a bulk material container to control the dispensing of the contents of the container, and a further object of the present invention is to surround the container with a vertical banding strap passing through the pull-plate to hold the pull-plate in place during shipping and further to provide an inspection seal.

The present invention has another object in the forming of a single blank for constructing each of the cells of a multicell bulk material container, the blank having bottom edges folded to form flanges having openings at corners adjacent the partition between cells.

Yet an additional object of the present invention is to form a body of a bulk material container of a pair of open-ended cells with each cell being formed of a three-sided liner and a four-sided sleeve bonded to the liner, the sleeves of the cells having inner side panels laminated together to form a central partition in the body separating the cells.

A further object of the present invention is to use sleeves having bottom flanges to form the cells of a multicell bulk material container body to strengthen the corners of the body, reduce bulging and keep the body seated in a bottom cap.

Some of the advantages of the present invention over the prior art are the bulk material container has excellent stacking strength, can be knocked down or folded for easy storage and simply set up, and can be utilized to dispense irregularly shaped objects in bulk without jamming or otherwise adversely restricting the dispensing operation.

Other objects and advantages of the present invention will become apparent from the following description of the preferred embodiment taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a bulk material container according to the present invention.

FIG. **2** is an exploded view of the bulk material container of FIG. **1**.

FIG. **3** is a section taken along line **3—3** of FIG. **2**.

FIG. **4** is a broken view of a corner of the body of the bulk material container according to the present invention.

FIG. 5 is a perspective view of a pallet for use with the bulk material container according to the present invention.

FIG. 6 is a plan view of a blank for forming a liner for the bulk material container according to the present invention.

FIG. 7 is a plan view of a blank for forming a sleeve for the bulk material container according to the present invention.

FIG. 8 is a plan view of a blank for forming top and bottom caps for the bulk material container according to the present invention.

FIG. 9 is a side view of the body of the bulk material container of the present invention knocked down.

FIG. 10 is a perspective view of a modified cap for use with the bulk material container according to the present invention.

FIG. 11 is a plan view of a blank for forming the cap of FIG. 10.

DESCRIPTION OF THE PREFERRED EMBODIMENT

A bulk material container **10** in accordance with the present invention is illustrated in FIG. **1** and includes, as basic components, an open ended multicell body **12** closed at its upper and lower ends by top and bottom caps **14** and **16** held in place by a banding strap **18** passing through a pull-plate **20** at the bottom of the container.

As best illustrated in FIGS. **2** and **3**, the body **12** of the container is formed of a pair of open-ended, tubular cells **22** and **24** laminated together to form a strong support structure. The cells **22** and **24** are formed of identical parts; and, accordingly, only cell **22** will be described in detail with the identical parts of cell **24** being given the same reference numbers with primes and not described again. Cell **22** has an inner liner **26** formed of a blank, as illustrated in FIG. **6**, folded along lines **28** and **30** to form an end panel **32**, a side panel **34** and an end panel **36**. A flanged sleeve **38** is disposed around liner **26** and is formed of a blank, as illustrated in FIG. **7**, folded along lines **40**, **42** and **44** to define an end panel **46**, an outer side panel **48**, an end panel **50** and an inner side panel **52**. The inner side panel **52** has a margin thereof folded along line **54** to form a flap **56**, and marginal flanges **58**, **60**, **62** and **64** are folded inwardly along a fold line **66** to extend substantially transversely from the bottom edges of panels **46**, **48**, **50** and **52**, respectively. The side edges of flanges **58** and **60** are closely spaced adjacent fold line **40**; and, similarly, the side edges of flanges **60** and **62** are closely spaced adjacent fold line **42**. However, flange **58** terminates at a side edge **68** spaced from the side edge of end panel **46** while flanges **62** and **64** terminate at side edges **70** and **72**, respectively, spaced from fold line **44**, and flange **64** also has an edge **74** terminating at a position spaced from fold line **54**.

The sleeve **38** is bonded to liner **26** with sleeve end panel **50**, outer sleeve side panel **48** and sleeve end panel **46** in juxtaposition with liner end panel **32**, liner side panel **34** and liner end panel **36**, respectively, while the side edges **68** and **74** of flanges **58** and **64**, respectively, are spaced from a rear central corner of cell **22** to form an opening **76** thereat and side edges **70** and **72** of flanges **62** and **64**, respectively, are spaced from a front central corner of cell **22** to form an opening **78** thereat. The flap **56** is adhesively bonded to sleeve end panel **46** to form a manufactured joint for the sleeve **38**.

The inner sleeve side wall **52** of cell **22** is laminated to the inner sleeve side wall **52'** of cell **24** with an adhesive bond to form a central partition separating the cells **22** and **24**, and the sleeve **38'** of cell **24** is turned **180°** relative to sleeve **38** of cell **22** such that flaps **56** and **56'** are disposed at the rear and front, respectively, of the body **12** and the opening **76'** of cell **24** is disposed adjacent the opening **78** of cell **22** at the front central corners of the cells. In this manner, a single blank can be utilized to form the sleeves **38** and **38'** for both of the cells **22** and **24**. The fold lines **28** and **30** of liner **26** are aligned with the fold lines **40** and **42** of the sleeve **38** to form outer corners **80** and **82** of cell **22**; and, similarly, the corresponding fold lines of liner **26'** and sleeve **38'** are aligned to form outer corners **84** and **86** of cell **24**.

Each of the outer corners **80**, **82**, **84** and **86** is formed in the manner of corner **82**, as illustrated in FIG. **4**, with the fold along line **30** of liner **26** being tucked into the fold along line **42** of sleeve **38** to reinforce the structure of the body; and, with the corners so formed, the liners and sleeves adhesively bonded together, the inner side walls of the sleeves laminated together and the flanges of the liners providing an "angle iron" effect, the body **12** forms an extremely stable structure having good vertical stacking strength while being relatively simple in structure and capable of being knocked down or folded for storage in the relatively flat shape illustrated in FIG. **9**. If required for strength, posts **90** having a right angular configuration in cross section can be disposed in each of the outer corners **80**, **82**, **84** and **86**, as illustrated in phantom in FIG. **3**.

The top cap **14** is formed of a blank, as illustrated in FIG. **8**, having parallel fold lines **92** and **94** along the sides thereof and orthogonal parallel fold lines **96** and **98** along the front and rear edges thereof. Fold line **96** defines a front marginal edge **100** which is folded upon itself on a fold line **102** to form a front flange **104** with flaps **106** and **108** on opposite sides thereof folded along lines **92** and **94**, respectively. A rear margin **110** is similarly defined by fold line **98** and is folded along a line **112** to form a rear flange **114** having flaps **116** and **118** folded along lines **92** and **94**, respectively. A pair of side margins **120** and **122** are folded along lines **92** and **94** and are folded upon themselves along lines **124** and **126**, respectively; and the side margins **120** and **122** have pairs of tabs **128** and **130** extending from the outer edges thereof. The area between fold lines **92** and **94** and fold lines **96** and **98** defines a rectangular wall **132** having a pair of slots **134** formed therein adjacent fold line **92** and a pair of slots **136** formed therein adjacent fold line **94**, the slots **134** and **136** being aligned with the tabs **128** and **130**, respectively.

To form the top cap **14**, the front and rear margins **100** and **110** are folded along lines **102** and **112**, respectively; and the flaps **106** and **116** are captured by folding of side margin **120** along fold line **124** to form a side flange **138** while the flaps **108** and **118** are captured by folding of side margin **122** along fold line **126** to form a side flange **140**, the tabs **128** and **130** being received in the slots **134** and **136**, respectively. In this manner, the top cap **14** can be stably formed without securing the folded portions thereof with adhesive or other fastening means; and, when the top cap is disposed over the open upper ends of the cells **22** and **24**,

the wall **132** closes the same to seal the top portion of the container.

The structure of the bottom cap **16** is substantially the same as that of the top cap **14**; and, accordingly, identical parts thereof are given the same reference numbers with primes and are not described again. Bottom cap **16** differs from top cap **14** in that an elongate slot **142** is centrally formed along the fold line **96** and a substantially rectangular aperture **144** is formed in the wall **132'** in alignment with slot **142** and spaced inwardly therefrom, as illustrated in FIG. **2** and shown in phantom in FIG. **8.** The slot **142** and the aperture **144** are formed preferably by the use of a cutting die such that the same blank can be utilized to form both the top and bottom caps.

Pull-plate **20** is substantially L-shaped in cross section and has a tongue **146** extending substantially transversely from an upstanding member **148** forming a handle. The upstanding member **148** is bent upon itself to form a top wall having a slot **150** formed therein of a size to accommodate the banding strap **18.**

The body **12** can be stored in a knocked-down configuration by folding the cells **22** and **24** to have the substantially flat configuration illustrated in FIG. **9** such that the container **10** requires only a minimal amount of storage space for the body, the top and bottom caps and the pull-plate. In order to use the container **10,** the body **12** is set up with the flanges of the sleeves having a shape-retaining "angle iron" effect, and the body **12** is positioned to be received in the bottom cap **16** with the wall **132'** thereof closing the open bottom portions of the cells **22** and **24** and the aperture **144** aligned with and spanning the openings **78** and **76'** in the cells **22** and **24,** respectively. The pull-plate **20** is fully inserted in the slot **142** in the bottom cap **16** to a closed position such that the tongue **146** covers the aperture **144** to close the same and prevent any dispensing of the contents in the bulk material container; and, thereafter, the container can be filled with any desired bulk material, such as for example peanuts. Filling desirably takes place directly from the top; and, once the cells **22** and **24** are properly filled, the top cap **14** is placed over the body **12** such that the wall **132** closes the open top portions of the cells. The banding strap **18** is then positioned around the body **12** and the top and bottom caps to hold the caps tightly against the body while simultaneously holding the pull-plate **20** in its closed position and providing a seal for the bulk material container. In this fashion, the bulk material container can be shipped in any manner desired and stored.

When it is desired to dispense the contents from the container **10,** the banding strap **18** is cut to permit the pull-plate **20** to be slid out of the bottom cap to an open position at least partially opening the aperture **144** thereby permitting the contents of the cells to be simultaneously dispensed from the bottom of the container by passing through the openings **78** and **76'** in the cells **22** and **24,** respectively, and through the aperture **144.**

In order to facilitate the dispensing of contents from the bulk container **10,** the container is desirably supported on a pallet **152,** as illustrated in FIG. **5.** The pallet **152** is conventional in nature with the exception that a rectangular notch **154** is formed in the center of the front edge thereof having a width corresponding substantially to the width of the aperture **144** formed in the wall of the bottom cap **16.** A galvanized metal insert **156** is mounted in the notch **154.** The notch **154** is positioned to be aligned with aperture **144** in the wall **132'** of the bottom cap such that when pull-plate **20** is removed, the contents of the container are dispensed vertically by the force of gravity through the notch **154.**

A modification of the top and bottom caps is illustrated in FIGS. **10** and **11** and is formed of a blank having side fold lines **158** and **160** defining side margins **162** and **164,** respectively, and front and rear fold lines **166** and **168** extending across the blank to form flaps **170** and **172** on side margin **162** and flaps **174** and **176** on side margin **164.** The blank is notched to form a front flange **178** defined by fold line **166** and a rear flange **180** defined by fold line **168,** and the fold lines **158** and **160** along with the fold lines **166** and **168** define an area forming a wall **182** for closing the open ends of the cells **22** and **24** of the body **12.** In assembling the caps, the side margins **162** and **164** are folded along lines **158** and **160** while the flaps **170** and **174** are folded along line **166** and the flaps **172** and **176** are folded along line **168** such that the flaps extend within the front and rear flanges **178** and **180** which are bent to extend transversely from the wall **182.** The flaps are fastened to the front and rear flanges by staples **184,** and the caps can be flattened for storage by folding the side margins along **45°** diagonal score lines **186.**

If if is desired that the bulk material container be utilized for dispensing the contents from the bottom thereof, the bottom cap formed in accordance with the modification of FIGS. **10** and **11** can have an aperture and slot formed therein by a cutting die in the same manner as described above with respect to bottom cap **16;** however, if the bulk material container is desired to be utilized as a shipping and storage container only without the bottom dispensing feature, the bottom caps, as illustrated in FIGS. **2** and **10,** can be formed without the apertures and slots and the pull-plate **20** can be dispensed with such that the top and bottom caps are held in place merely by the banding strap **18** surrounding the same and the body **12.**

The bulk material container **10** of the present invention is extremely strong due to the double-panel structure of all of the walls of body **12** and has excellent stacking strength while being easily knocked down to the folded state shown in FIG. **9.** The only components required for the bulk material container **10** when utilized without the controlled dispensing feature are the top and bottom caps **14** and **16** and the body **10;** and, thus, minimal storage room is required while set up is a simple operation requiring only the unfolding of the body and the flanges at the bottom edges thereof to the rectangular cross-sectional configuration and the seating of the body in the bottom cap. The rectangular configuration of the bottom cap with the upstanding flanges extending transversely from the edges thereof permits the bottom portion of the body to be easily positioned in the bottom cap, and the weight of the bulk material on the flanges seats the body in the bottom cap. Since adjacent openings are formed on both sides of the body, the body does not have to be oriented prior to assembly with the bottom cap when the controlled dispensing feature is desired in that the aperture **144** will always span adjacent openings in the cells. Accordingly, in order to provide controlled dispensing only a pull-plate need be added to the basic components of the bulk material container with the bottom cap being cut to provide slot **142** and aperture **144.** The banding

strap provides the function of maintaining the pull-plate in the closed position as well as maintaining the top and bottom caps on the body and providing an inspection seal. While the body and top and bottom caps of the bulk material container are preferably constructed of paperboard, any suitable foldable material could be utilized.

Inasmuch as the present invention is subject to many variations, modifications and changes in detail, it is intended that all matter described above or shown in the accompanying drawings be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A bulk material container comprising

a body including a pair of cells having open bottom portions;

a bottom cap receiving said body and having a wall closing said open bottom portions of said cells and aperture means in said wall providing communication with said cells;

pull-plate means slidably mounted in said bottom cap to be movable between a closed position covering said aperture means and an open position at least partially opening said aperture means to permit controlled dispensing of bulk material simultaneously from said cell;

wherein each of said pair of cells is formed of a folded paperboard sleeve having an inner side panel, said inner side panels of said sleeves being laminated together to form a central partition in said body separating said pair of cells;

wherein a paperboard liner is bonded to each of said sleeves;

wherein each of said sleeves has an end panel disposed transverse to said inner side panel to define a front central corner for each of said cells, said inner side panels and said end panels each having a bottom edge with a flange extending therefrom, said flanges having side edges spaced from said front central corners to define adjacent openings on opposite sides of said central partition, and said aperture means includes an aperture spanning said adjacent openings; and

wherein said pair of cells of said body have open top portions and said pull-plate means has a slot formed therein, and further comprising a top cap closing said open top portions of said cells, and a banding strap extending around said body and said top and bottom caps and passing through said slot in said pull-plate means to hold said pull-plate means in said closed position.

2. A bulk material container as recited in claim **1** wherein said pull-plate means includes a tongue extending within said bottom cap to cover said aperture means and a handle extending transversely from said tongue and having said slot formed therein.

3. A bulk material container as recited in claim **2** wherein said wall of said bottom cap has a rectangular configuration and said bottom cap has flanges extending transversely from the sides and ends of said wall, one of said end flanges having a slot therein aligned with said aperture, said tongue of said pull-plate means extending through said end flange slot.

4. A bulk material container comprising

a body including a pair of cells having open bottom portions,

a bottom cap receiving said body and having a wall closing said open bottom portions of said cells and aperture means in said wall providing communication with said cells,

pull-plate means slidably mounted in said bottom cap to be movable between a closed position covering said aperture means and an open position at least partially opening said aperture means to permit controlled dispensing of bulk material simultaneously from said cells,

said pair of cells of said body having open top portions and said pull-plate means having a slot formed therein, and further comprising

a top cap closing said open top portions of said cells, and

a banding strap extending around said body and said top and bottom caps and passing through said slot in said pull-plate means to hold said pull-plate means in said closed position.

5. A bulk material container as recited in claim **4** wherein said pull-plate means includes a tongue extending within said bottom cap to cover said aperture means and a handle extending transversely from said tongue.

6. A bulk material container as recited in claim **5** wherein said bottom cap has flanges extending transversely from the edges of said wall, and each of said pair of cells of said body is formed of panels having bottom edges and flanges extending transversely from said bottom edges, said flanges resting on said wall of said bottom cap whereby the weight of bulk material on said flanges seats said body in said bottom cap.

7. A bulk material container as recited in claim **4** wherein each of said pair of cells is formed of a paperboard liner bonded to a paperboard sleeve surrounding said liner and has a rectangular configuration in cross section, and said bottom cap has a rectangular configuration.

8. A bulk material container comprising

a bottom cap formed of a rectangular wall and flanges extending transversely from the edges of said wall

a paperboard body having a rectangular configuration seated in said bottom cap and formed of a pair of open-ended cells,

each of said cells including a liner folded to define first and second liner end panels joined by a liner side panel and a sleeve folded to define first and second sleeve end panels and inner and outer sleeve side panels extending between said first and second sleeve end panels, said sleeve surrounding said liner and being bonded thereto with said first and second sleeve end panels and said outer sleeve side panel juxtaposed with said first and second liner end panels and said liner side panel, respectively,

said pair of cells being arranged with said outer sleeve side panels facing and bonded to each other to form a double-panel partition between said cells, and wherein

said inner side sleeve panel of each of said sleeves has a side edge with a flap extending therefrom, said flap being bonded to one of said first and second sleeve end panels.

9. A bulk material container as recited in claim **8** wherein said flaps of said pair of cells are disposed on opposite sides of said body.

10. A bulk material container as recited in claim 9 wherein said panels of each of said sleeves have bottom edges and flanges extending transversely from said bottom edges, said flanges resting on said wall of said bottom cap whereby the weight of bulk material on said flanges seats said body in said bottom cap.

11. A bulk material container as recited in claim 10 and further comprising a top cap closing the open top ends of said pair of cells, said top cap being formed of a rectangular wall and flanges extending transversely from the edges of said wall.

12. A bulk material container as recited in claim 11 wherein said flanges extending from said bottom edges of said inner sleeve side panels and said first liner end panels of each of said sleeves terminate at positions spaced from the junctures of said inner sleeve side panels and said first liner end panels to define adjacent openings on opposite sides of said partition, said wall of said bottom cap has an aperture therein aligned with and spanning said adjacent openings, and one of said flanges of said bottom cap has a slot therein aligned with said aperture, and further comprising a pull-plate having a tongue extending through said slot to cover said aperture whereby bulk material in said pair of cells can be simultaneously dispensed through said aperture by sliding said pull-plate out of said bottom cap.

13. A bulk material container comprising

a bottom cap formed of a rectangular wall and flanges extending transversely from the edges of said wall,

a paperboard body having a rectangular configuration seated in said bottom cap and formed of a pair of open-ended cells,

each of said cells including a liner folded to define first and second liner end panels joined by a liner side panel and a sleeve folded to define first and second sleeve end panels and inner and outer sleeve side panels extending between said first and second sleeve end panels, said sleeve surrounding said liner and being bonded thereto with said first and second sleeve end panels and said outer sleeve side panel juxtaposed with said first and second liner end panels and said liner side panel, respectively,

said pair of cells being arranged with said outer sleeve side panels facing and bonded to each other to form a double-panel partition between said cells, and wherein

each of said pair of cells has bottom edges with flanges extending transversely from said bottom edges whereby the weight of bulk material on said flanges seats said body in said bottom cap.

14. A bulk material container as recited in claim 13 wherein said flanges extend from said sleeves of each of said pair of cells.

15. A blank for forming each of the cells of a multi-cell bulk material container comprising a sheet of paperboard having first, second, third and fourth parallel fold lines defining first, second, third and fourth panels and a marginal flap extending from said fourth panel, and a fifth fold line extending transverse to said first, second, third and fourth fold lines along an edge of said sheet to define first, second, third and fourth marginal flanges extending from said first, second, third and fourth panels, respectively, said first flange terminating at a first side edge spaced from an edge of said first panel, said third flange terminating at a second side edge spaced from said third fold line and said fourth flange terminating at third and fourth side edges spaced from said third and fourth fold lines, respectively, such that said first and fourth side edges define an opening and said second and third side edges define an opening when said blank is folded to form a cell whereby said blank can be used to form each of the cells of a multi-cell bulk material container with said fourth panels in juxtaposition and said openings aligned at adjacent corners of the cells.

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