March 4, 1969 A. R. KANAGA 3,430,841

TRI-CORNERED BAG

Filed Jan. 26, 1967

Fig. 1

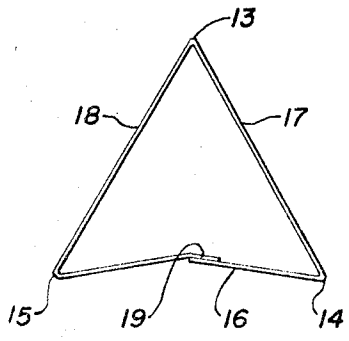


Fig. 2.

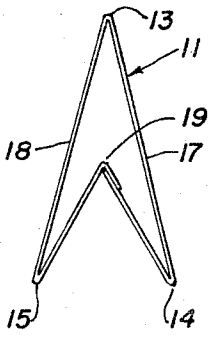


Fig. 3.

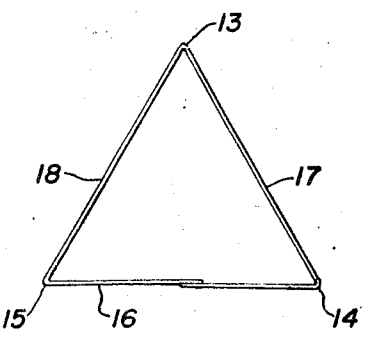


Fig. 4.

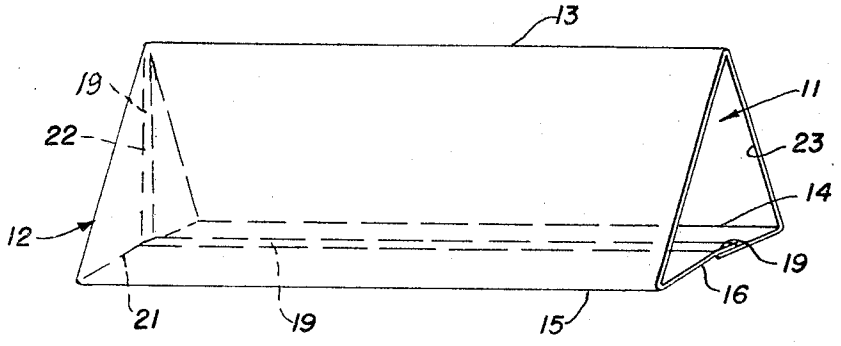
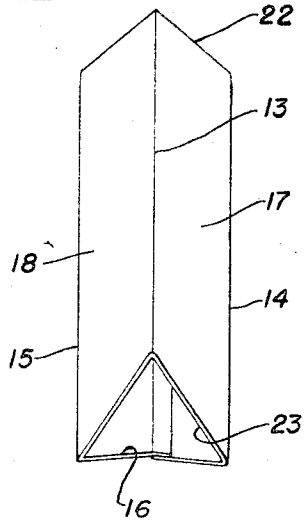


Fig. 5.



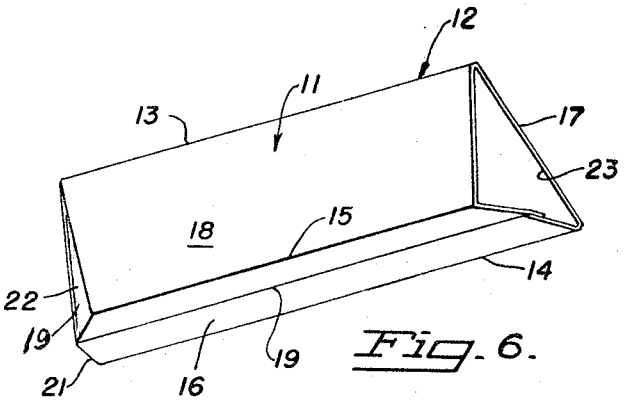


Fig. 6.

INVENTOR
AMOS R. KANAGA
BY
Arlington C. White
ATTORNEY

United States Patent Office

3,430,841

Patented Mar. 4, 1969

3,430,841

TRI-CORNERED BAG

Amos R. Kanaga, 83 21st Ave., San Mateo, Calif. 94403

Filed Jan. 26, 1967, Ser. No. 611,991

U.S. Cl. 229—53 1 Claim

Int. Cl. B65d 5/00

ABSTRACT OF THE DISCLOSURE

The invention comprises a tri-cornered receptacle having an opening at one end thereof for receiving and removing receptacle contents; said receptacle comprising a pair of opposed slanting sides terminating at the top in a longitudinally extending apex, a base consisting of folded and lapped transverse extremities of said slanting sides, and a closure at the opposite end from said opening consisting of a folded extension of said base terminating at said apex and lapped longitudinal extremities of said slanting sides, and means fastening together said lapped transverse extremities of said sides defining said base as well as fastening together said folded extension of said base and said lapped longitudinal extremities of said sides defining said closure.

The invention, in general, relates to bag construction and more particularly relates to an A-frame container of relatively great strength and of relatively simple construction.

Heretofore in the paper bag art, it has been the practice to manufacture bags of general rectangular construction with a square mouth or opening and a square bottom with sealed or fastened overlapped portions of the paper stock forming a bottom or end closure upon which the contents of the bag rest. In many instances, considerable areas of the sides of such rectangular bag perform no function insofar as supporting the contents of the bag are concerned and often there is appreciable waste material as well as space in respect to the contents carried by the bag. Moreover, the weight of the contents placed in these rectangular or square bottom bags is such that the bottom of the bag either sags or breaks to spill the contents. The present invention is directed to the provision of an improved strong bag of paper stock which obviates the disadvantages of prior receptacles and affords a relatively economical but durable bag for carrying various articles particularly warm or hot foods.

A primary object of the invention is to provide a tri-cornered bag which includes a relatively long glue overlap to afford appreciably increased strength and durability.

Another important object of my present invention is to provide a tri-cornered bag of the indicated nature which is additionally characterized by its ready foldability thereby facilitating stacking as well as shipping at reduced expense.

A still further object of the invention is to provide a tri-cornered bag of the aforementioned character which is readily adaptable for carrying hot foods of a variety of kinds with equal facility, such as hot hamburgers, french fries, frankfurters and similar cooked foods, with likelihood of breaking or tearing reduced to a minimum.

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

Referring to the drawings:

FIG. 1 is a front elevational view of a preferred embodiment of the invention.

FIG. 2 is a rear elevational view of the embodiment shown in FIG. 1.

FIG. 3 is a front elevational view of the embodiment shown in FIG. 1 but having a different height or peak line.

FIG. 4 is a side perspective view of the preferred embodiment of the invention, the dotted line shown indicating not only lapped transverse extremities at the approximate center of the base but also the opposite corner and base line of the preferred embodiment of the invention.

FIG. 5 is a partial top plan and a partial development view of the preferred embodiment of the invention.

FIG. 6 is a perspective view of the embodiment of FIGS. 1 to 5 inclusive but in partially folded state.

In its preferred form, the tri-cornered bag of my present invention preferably comprises an elongated sheet having a longitudinally extending major axis and a transversely extending minor axis, three longitudinally extending fold lines in said sheet along said major axis defining in bag opened state a bag apex, a mouth at one end, opposed slanting sides, and a base formed by lapped transverse extremities of said sheet, together with a transversely extending fold line along said minor axis at the other end of said sheet, and folded longitudinal extremities of said sheet extending from said transversely extending fold line to said apex to define a closed end, and means fastening said lapped transverse extremities of said sheet together for the full extent of said base and said closed end as well as fastening said longitudinal extremities of said sheet to said apex at said closed end.

While the present invention is entirely suitable for adaptation to the carrying of various items in a plurality of different environments, it has especial adaptation in the art of food receptacles including the carrying of cooked foods. I shall, accordingly but solely for the sake of brevity and explanation, describe and illustrate the present improvement in the latter environment. In this same connection, reference is made to my prior Letters Patent, No. 3,077,410, entitled Portion Control Holding Bag or Container, granted to me on Feb. 12, 1963, wherein I particularly illustrate, describe and claim a bag provided with a metallized exterior surface for carrying cooked foods and for maintaining the same hot for appreciable periods of time. While not shown in the annexed drawings, my improved tri-cornered bag may include, within the scope of the present advance in the art, the metallized pattern applied to the bag of such former patent.

As particularly illustrated in FIGS. 4 to 6 inclusive of the accompanying drawings, I provide an elongated sheet **11** which may be fabricated from light weight, medium weight or heavy paper stock or, as desired, from any suitable plastic substance such as a urea or a phenol condensate for purposes of durability. Sheet **11**, being elongated, has a longitudinally extending major axis and a transversely extending minor axis and I preferably fashion or form sheet **11** into a bag, which is generally designated by the reference numeral **12**, by folding the sheet along three longitudinally extending fold lines **13**, **14** and **15** at predetermined spaced apart distances so that fold line **13** defines the peak or apex of my improved tri-cornered bag **12**, and fold lines **14** and **15** defined opposite terminals of a formed bottom **16** while the spaces between the apex and the opposite terminals of bottom **16** define or constitute inclined opposed sides **17** and **18**, respectively, of the bag.

It is to be noted that in fashioning the bag **12**, I bring the transverse extremities of sheet **11** to lapped positions

along the entire major axis of the sheet, thus defining a lapped joint **19** at approximately the center and extending along the entire bottom **16** of the bag as well as beyond the same. In accordance with the present invention, the sheet **11** also is folded transversely adjacent to one end thereof and for the entire length of the minor axis of the sheet **11** to provide a transverse base line **21** for a closed end **22** for the tri-cornered bag **12**; such closed end **22** containing a portion of lapped joint **19** extending beyond the bottom **16** of the bag. By folding the sheet **11** on transverse base line **21** and raising the end portion of sheet **11** normal to such base line, the closure **22** is formed after cementing or otherwise adhesively fastening the extremities of sheet **11** at such end to the corresponding end of fold line **13** at the apex of the bag. It is, of course, to be understood that the lapped joint **19** is sealed along the entire bottom **16** as well as beyond through the closed end **22**, prior to raising and fastening at the apex, by applying a suitable water-proof cement or other water-proof adhesive to the meeting surfaces of the joint and pressing the lapped extremities defining the joint firmly together. The other or opposite end of the thus formed tri-cornered bag **12** is left open to provide the relatively wide and high mouth **23** for the deposit and removal of contents into and from the bag with facility.

In FIGS. 1 to 3 inclusive of the annexed drawings, I have illustrated the manner of folding and opening my improved tri-cornered bag. In FIG. 1, the bottom **16** is shown as slightly raised adjacent to the lapped joint **19**. Thus showing how the folding of the bag is initiated. In FIG. 2, I have shown the lapped joint **19** of bottom **16** in its approximately highest position in relation to its normal flat position as shown in FIG. 3, with the bottom **16** in folded halves. The view of FIG. 3 shows the tri-cornered bag in fully open position with the bottom **16** flat. The bag can readily be popped open from its folded position as shown in FIGS. 2 and 6. When fully folded to a longitudinally flat position, the bags can be readily stacked and shipped in suitable cases or cartons.

It is to be understood that the hight of the tri-cornered bag can be as desired and this is governed by the transverse dimension of sheet **11**. For low apices, the sheet **11** can be relatively narrow in width. As the height increases, the width of sheet **11** increases, and the positions of the fold lines defining the dimensions of the sides and the bottom of the bag necessarily will vary.

By virtue of the securely fastened, relatively long lapped joint **19** extending throughout the length of sheet **11**, I have provided a rugged, durable tri-cornered bag which will hold appreciable weight without breaking at the seam or lapped joint **19**. The improved tri-cornered bag finds especial application to the carrying of hot foods such as cooked hamburgers, frankfurters, fried shoestring or french fried potatoes and similar items usually sold at so-called drive-in stands.

It is to be further understood that the appended claim is to be accorded a range of equivalents commensurate in scope with the advances made over the prior art.

I claim:

1. A tri-cornered bag having a relatively wide and high opening at one end thereof for admission and removal of contents into and from the bag; said bag comprising a pair of elongated opposed inclined sides joined together at the tops thereof to define a bag apex extending throughout its entire major axis and spaced apart transversely at the bottom thereof to define the minor axis of the bag, a bottom on said bag joined at its transverse extremities to the bottoms of said opposed inclined sides and coextensive with the lengths thereof, a sealed lapped joint in said bottom at its approximate transverse center and extending longitudinally thereof throughout the major axis of the bag, a folded extension on said bottom and on each of said sides defining a closed end on said bag opposite to said wide and high opening therein, and a sealed lapped joint in said closed end at its approximate transverse center and extending longitudinally thereof.

References Cited

UNITED STATES PATENTS

1,240,564	9/1917	Harrington.	
1,221,785	4/1917	Williams	229—22 X
2,279,327	4/1942	Kehn	229—53
3,077,410	2/-1963	Kanaga	229—53

DAVID M. BOCKENEK, *Primary Examiner.*

U.S. Cl. X.R.

229—22