May 19, 1959 C. Q. LINVILLE 2,887,389

CARTONS

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FIG. 1.

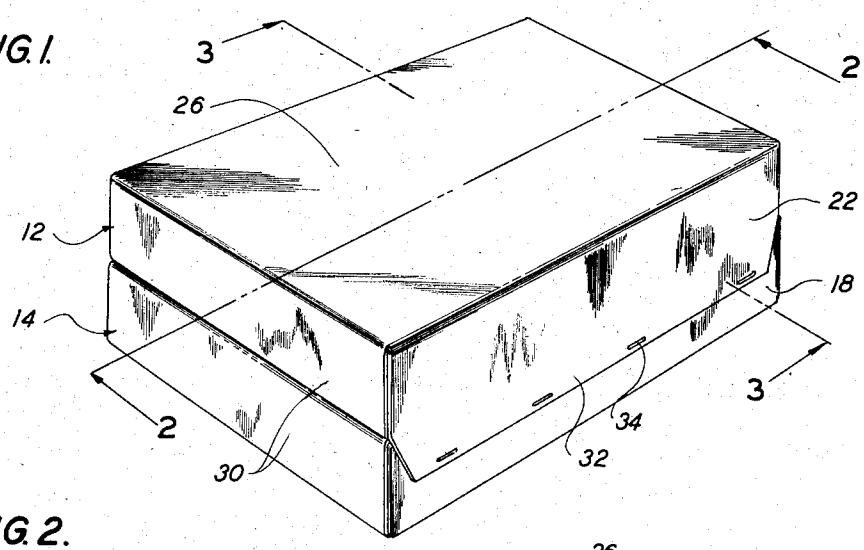


FIG. 2.

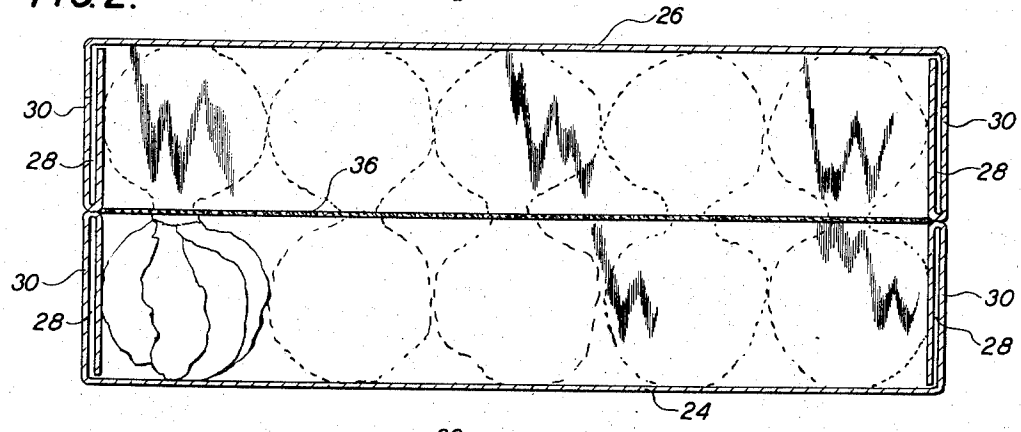
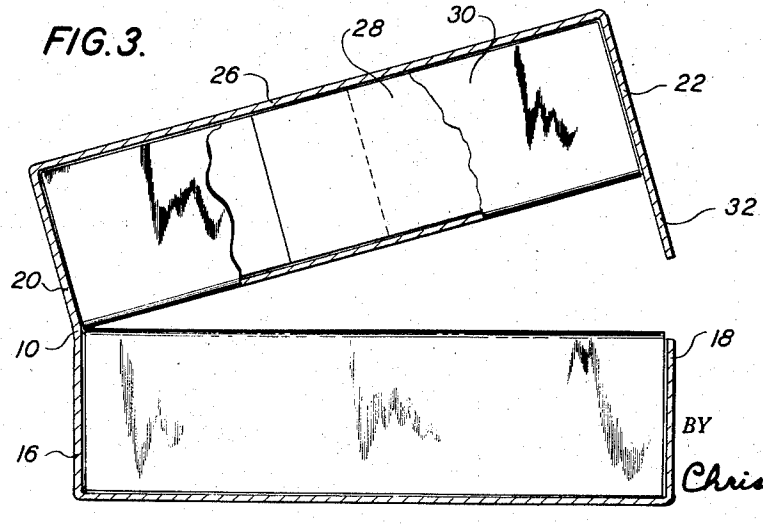


FIG. 3.



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FIG. 4.

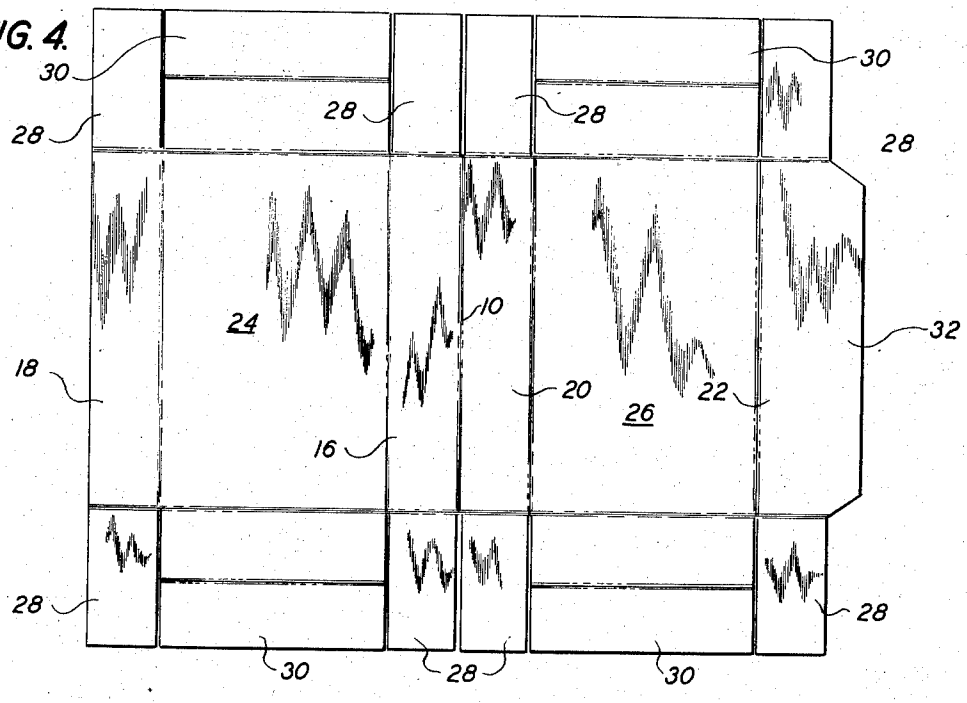


FIG. 5.

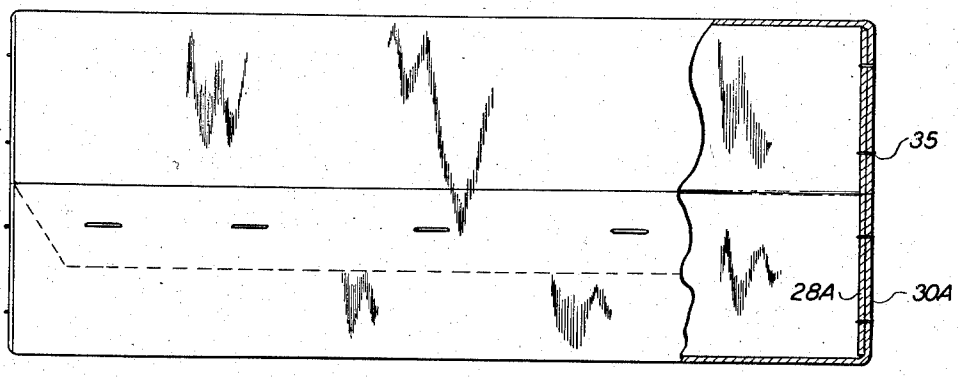
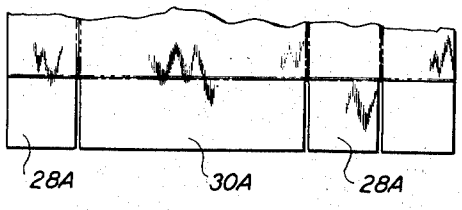


FIG. 6.



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United States Patent Office 2,887,389 Patented May 19, 1959

2,887,389

CARTONS

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Application June 3, 1955, Serial No. 512,925

1 Claim. (Cl. 99—171)

This invention relates to improvements in cartons, and it has particular reference to cartons of simple construction which may be opened and closed like a suitcase.

Conventional cartons for use in packaging and shipping goods are formed in the shape of a box which is provided with removable closures at its top and at its bottom. These closures are ordinarily in the form of four flaps which are stapled or taped together in order to close the carton.

With such cartons, it is difficult to pack and unpack some types of goods. If more than one layer of goods is packed in such a carton, some difficulty is encountered in locating the goods properly in the lower portion of the carton. If the goods to be packed extend above the top of the carton, it is difficult to provide a satisfactory closure because the flaps cannot be positioned to close the carton completely. Also, it is difficult to inspect the goods located in the lower portion of the carton, and ordinarily the carton cannot be employed to display the goods.

These difficulties are particularly troublesome in cartons which are employed for shipping lettuce. Lettuce is ordinarily packed in cartons in the field while it is being picked. Two layers of lettuce are usually packaged in each carton, and it is difficult to locate the lettuce properly by hand. If over-size lettuce is packed in the cartons, it is difficult to close the flaps at the top of the cartons because the lettuce extends above the top of the carton. In many instances the carton cannot be closed completely. Such cartons are hard to handle and usually a higher freight rate must be paid for transporting them.

It is desirable to provide a moist blotter in each carton of lettuce so as to provide some moisture for the lettuce while it is being shipped. In conventional cartons this blotter is located in the top of the carton and only the upper layer of lettuce comes in direct contact with it. Ordinarily it is not practical to locate the moist blotter between the two layers of lettuce.

These difficulties are overcome in the present invention by providing a carton in the form of two closure portions which are hinged along one side and which provide mating units which abut together along their outer periphery to form a carton which may be opened and closed like a suitcase.

In its preferred form, the carton is formed from a single pre-cut piece of material which is divided by a hinged area into two portions, with the respective portions defining mating units which abut together to form a carton. While the end and side portions of each of the units may be stapled together to form a rigid carton, this is not necessary. The end portions are preferably secured to flaps which extend from the sides of the respective units by being doubled over the flaps. In the latter arrangement, the staples may be employed if desired, but the doubled-over end portions may be held in place by the goods which are packed in the cartons. Such an arrangement reduces the amount of work required to assemble the carton, and this feature is desirable if the carton is to be used in the field.

The pre-cut sheet of material from which the carton is formed is of simple configuration so that it is inexpensive to manufacture and easy to assemble.

Goods may be packed in the suitcase-type structure with ease because the goods are placed directly in the two portions of the structure while it is open. It is closed simply by forcing the two portions of the structure together. Staples may be employed to hold the two portions of the suitcase-type structure together.

If lettuce is packed in the carton, a blotter may be employed between the two layers of lettuce, with the butts of each layer of lettuce being in direct contact with the blotter so as to enhance the delivery of water from the blotter to the lettuce.

Also, the suitcase-type structure provides a carton which may be opened and used as a display container. Both halves of the carton may be employed in displaying the goods, or the two halves may be separated by cutting and then employed separately for displaying goods.

My co-pending application Serial No. 484,358, which was filed on January 27, 1955, discloses cartons which are also of suitcase-type construction but which are constructed in two separate portions which are joined together by locking keys.

The cartons of the present invention are disclosed in more detail with reference to the drawings, in which:

Fig. 1 is a perspective view of a carton in accordance with my invention;

Fig. 2 is a sectional view along line 2—2 of Fig. 1;

Fig. 3 is a sectional view partially broken away along line 3—3 of Fig. 1;

Fig. 4 shows a pre-cut sheet of material from which the carton of Fig. 1 may be formed;

Fig. 5 shows a modification of the carton of Figs. 1 to 4 employing a different end structure, and

Fig. 6 is a fragmentary view showing how the pre-cut sheet of Fig. 4 is altered for constructing the carton of Fig. 5.

The carton in Figs. 1 to 3 is formed from a single pre-cut piece of material, such as shown in Fig. 4. The sheet of material is divided by a hinged area **10** into two portions, and the two portions are formed into mating units **12** and **14** which abut together to form a closed carton.

The two units of the carton have opposed sides **16**, **18** and **20**, **22**, which are located on opposite sides of the body areas **24** and **26**. Each side portion is provided with flaps **28** extending from its sides.

End portions **30** extend from opposite ends of the body areas **24** and **26**, and the end portions **30** and the flaps **28** extend the same distance from the body areas so that their outer edges extend along a line. This facilitates manufacture of the pre-cut sheet of material because the sheets may be pre-cut with high speed rotary equipment rather than die-cut, and it also makes the cartons of simplified structure so that they can be assembled with ease by unskilled labor.

A closure flap **32** is provided for securing the two units of the carton together, such as by employing the staples **34** illustrated in Fig. 1. The closure flap is a full width extension of the side **22** and provides an overlap for securing the two units of the carton together, even when over-size lettuce is packed in the cartons.

In the embodiment of the invention which is illustrated in Figs. 1 to 4, the end portions **30** of each unit are secured to the flaps **28** by being doubled over the flaps. The doubled-over side portions may be held in place by the goods which are packed in the carton. If desired, staples may be employed to provide an even stronger end structure, but this is not necessary.

Fig. 5 illustrates a modification of the carton wherein the end portions 30A of the units are secured to the flaps 28A solely by the staples 35. In this embodiment of the invention, the end portions 30A are not doubled over the flaps 28A, and both the end portions and the flaps may be shorter, as shown in Fig. 6.

The suitcase-type structure facilitates packing goods such as lettuce in the cartons. Lettuce may be arranged so that the butts of both layers of the lettuce abut one another in the central portion of the carton. If desired, a moist blotter 36 may be located between the butts of the lettuce, as illustrated in Fig. 2.

The cartons may be constructed of any desired material, such as conventional corrugated fiberboard, or waxed or wetproof fiberboard. If the latter is employed, the lettuce may be ice-packed for shipment, and it does not have to be vacuum cooled, as is the custom with conventional cartons.

It will be apparent that the cartons of my invention may be made in various sizes and shapes for packaging various types of products. I prefer that the two mating units be of the same size so as to provide a symmetrical carton structure. However, one of the units may be larger than the other if desired, provided the edges of the units abut together to form a closed carton which may be opened and closed like a suitcase.

I claim:

A special shipping and display package consisting of two layers of compressed leafy heads, such as lettuce, of varying size, a blotter holding water for supplying moisture to said heads, and a carton formed from a single blank; said carton when erected including a pair of like compartments each including a rectangular bottom wall, a pair of opposite end walls, and a pair of opposite side walls, the edge of one of the side walls of one compartment being integrally connected along a creased fold hinge line with the edge of one side wall of the other compartment to form a hinge connection between the two compartments, the end walls of each compartment having foldable portions on their outer edges which are folded over to form double thickness end walls, and the side walls having projecting flaps at the corner edges of the compartment which are folded at right angles to the side walls and project between the double portions of the end walls to form the corners of the compartments, said blotter being positioned medially between the compartments, said heads or the like positioned as a laterally compressed single layer in each of said compartments with their butts positioned at the opening of said compartments and in contact with the blotter, a closure flap extending along the full length of a side wall opposite a hinged side wall of one compartment and extending in overlapping relationship to the corresponding side wall of the other compartment, and means for securing said closure flap to said corresponding side wall within an overlap range determined by the degree of butt extensions outwardly beyond their respective compartments further establishing top to butt compression of the heads and tension of the carton wherein the said blotter is clamped between the compartments by the butts of the heads to supply the required moisture to the butts.

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