July 30, 1957 R. F. GEGAN 2,801,129

CARRIER CONSTRUCTION

Filed Nov. 17, 1955

Fig. 1.

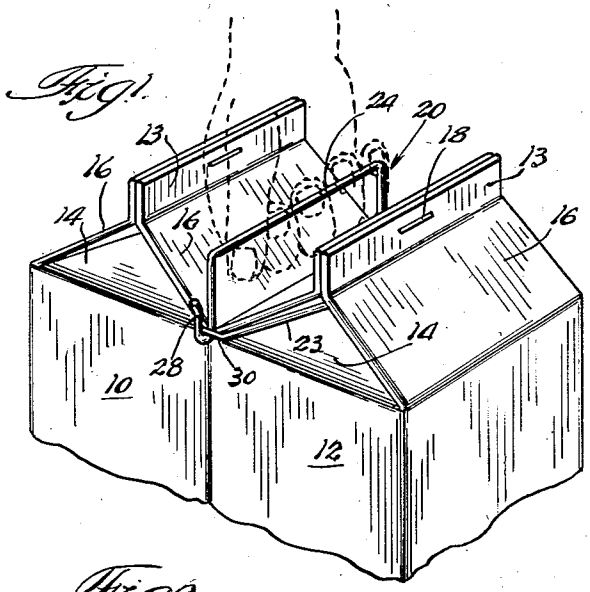


Fig. 4.

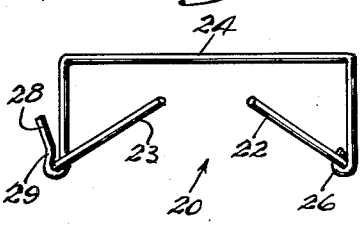


Fig. 2.

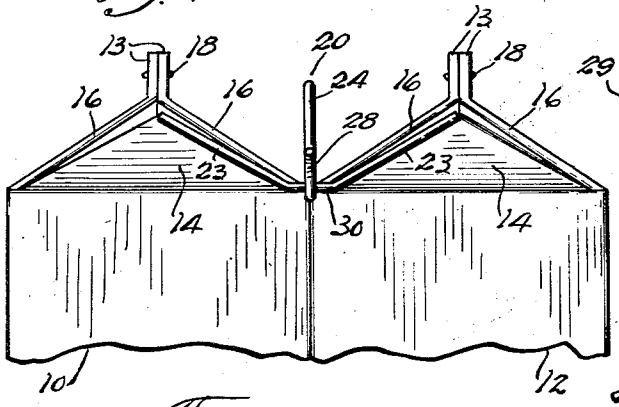


Fig. 5.

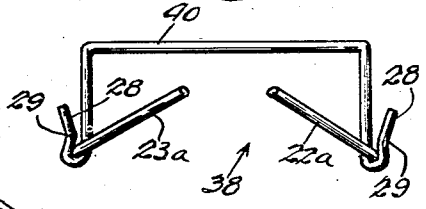


Fig. 6.

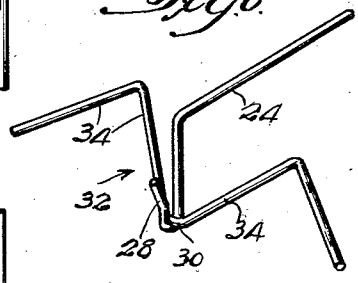


Fig. 3.

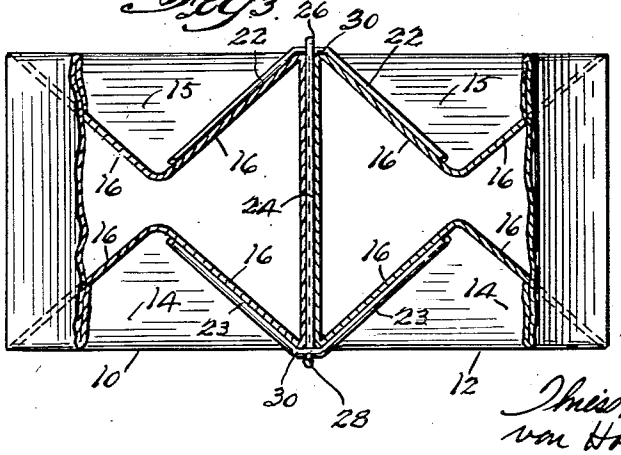
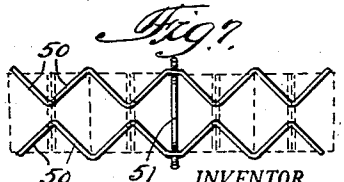


Fig. 7.



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2,801,129

CARRIER CONSTRUCTION

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8 Claims. (Cl. 294—87.2)

The present invention relates to an improved carrier and, more particularly, pertains to a carrier for cartons having gable tops.

It is well known that waxed board cartons have all but completely replaced glass containers for milk. The carton container occupies a minimum amount of space in the refrigerator because of its design and is readily disposable when empty.

Milk is preferably purchased in small containers so as to eliminate the need for handling a large volume of milk with each use. However, the purchaser is often discouraged from purchasing more than one carton because of the difficulty entailed in handling and carrying two containers.

It is an object, therefore, of this invention to provide a carrier whereby more than one carton may be carried in an efficient and facile manner.

An ever-increasing number of waxed milk cartons are being manufactured with gable tops or pyramid tops. Such a top construction provides an efficient pour spout which eliminates spilling and wastage in the course of pouring.

Therefore, it is another object of this invention to provide a carrier particularly adapted for use with cartons having gable tops.

It is a still further object of this invention to provide a carton carrier which is reusable and thus indefinite in useful life.

It is another object of this invention to provide a carton carrier which is composed of a minimum number of parts, all of which are inexpensive in cost and easy to fabricate and assemble.

It is another object of this invention to provide a carton carrier which does not mar or damage the carton structure in the normal course of use.

The above and other objects will become more apparent from the following description, accompanying drawing and appended claims.

In one embodiment of the invention, a carrier for two gable-top cartons disposed in juxtaposition is provided. The carton tops have inwardly recessed gable portions, one of which may function as a pour spout. The carrier comprises two substantially V-shaped members of wire or other similar material which are adapted to engage the undersurface of the carton roof portions by projecting into the top-recessed portions, and also maintain the juxtaposed cartons in abutting relationship. A handle, which may be readily engaged, is affixed at each end portion to the V-shaped members and maintains both of the latter members in assembled relationship with the cartons and enables the two cartons and the carrier to be handled as a unit.

In a modified carrier construction, the carton-engaging members may be of substantially M-shaped configuration. Such a configuration enables a greater portion of the undersurface of the carton gable tops to be engaged

and thereby effects a more stable carton package, as will hereinafter be described in greater detail.

For a more complete understanding of the invention, reference should now be had to the drawing wherein:

Figure 1 is a fragmentary perspective view showing a carrier fabricated in accordance with the principles of this invention engaging two gable-top cartons;

Fig. 2 is a front elevational view of the carton and carrier assembly illustrated in Fig. 1;

Fig. 3 is a top plan view, partially broken away, of the cartons and carrier assembly illustrated in Fig. 1;

Fig. 4 is a side elevational view of one form of the provided carrier;

Fig. 5 is a side elevational view of a modified carrier;

Fig. 6 is a fragmentary perspective view of a second modified carton carrier; and

Fig. 7 illustrates the invention applied to four cartons.

Referring now to the drawing, and more particularly to Fig. 1, two cartons **10** and **12** are illustrated having what is commonly known in the art as gable tops or pyramid tops. The top of each carton comprises two opposed slanting portions **16** having disposed therebetween and beneath two inwardly recessed gable portions **14** and **15**, more clearly seen in Fig. 3. A staple member **18** or other equivalent securing means maintains and secures the two upturned legs **13** and the gable portions **15** and **16** together in fixed relationship. One of the gable portions, say, portion **15**, may be pulled outwardly after flexing of the sloping carton portions **16** so as to function as an efficient pouring spout. Following use thereof, the portion **15** may be once more bent into place as illustrated. The latter spout feature accounts for the increased popularity of the illustrated gable-top cartons and the manner in which the spout is formed to pour from and then folded back to close the container again so as to protect the contents against odor contamination as is well known in the art.

A carrier **20** illustrated in Fig. 4, which is adapted to carry the two cartons **10** and **12**, fragmentarily shown in Fig. 1, is seen to comprise two substantially V-shaped members **22** and **23** of wire, plastic or other suitable material. A handle member **24**, which may be of the same or other suitable material, engages each of the V-shaped members **22** and **23** in the normal course of use. It is the hand-engageable means by which the carton and carrier assembly is carried in a facile manner as a unit.

In the normal course of use, the carrier illustrated in Fig. 4 engages the two cartons arranged in juxtaposed position, as shown in Figs. 1 to 3, inclusive. It will be noted from Fig. 4 that the V-shaped member **22** and the handle member **24** may be preferably maintained in permanent engagement with each other because of a loop portion **26** defining one end limit of the handle **24** and to which member **22** is loosely or pivotally attached. To attach these cartons together, V-shaped member **22** is first inserted into one of the gable recesses of each carton, as is more clearly shown in Fig. 3, with handle **24** carried thereby at end **26**. This member **22** will engage along a portion of the interface or seam of each carton defined by the top portion **16** where reinforced by a double fold and the inwardly recessed carton gable portion **15**. As will be noted from Fig. 4, the V-shaped member **23** of the carrier **20** is detachably engageable with the handle **24** by virtue of a bent hook portion **28** furnished at the other end of handle **24**. The hook portion **28** enables the V-shaped member **23** to be readily snapped into engagement therewith by a single upward pull or lifting action of the handle after its hooked end **28** is inserted under part **30** of member **23**. The hook portion **28** is preferably bent inwardly slightly more at the location **29** to reduce the space and prevent accidental

or unintended disengagement between the V-shaped member 23 and the handle.

Thus, after member 22 engages the undersurface of the carton top portions 16 by projecting into the recesses defined by the sloping carton portions 15 and the overlying carton portions 16, the V-shaped member 23 is inserted in the opposed recesses of the carton defined by the sloping carton gable portion 14 and overlying carton portions 16. The handle 24 attached at one end 26 to V-shaped member 22 is then swung about this end 26 until the hook end 28 engages under the V of member 23, as illustrated in Figs. 2 and 4. In such a position, the carton-engaging V-shaped members 22 and 23 function as clamps, the clamping action becoming more effective under the weight of the contents of the cartons when they are lifted, although effectively maintaining the clamping position between the two cartons when the latter are resting on a surface. Thus, the two cartons may be effectively maintained in abutting relation and carried about as a single unit without the possibility of the cartons separating. The legs of the V members engage the cartons in the seam between the overlying carton portions 16 and what is termed the gable portions 14 and 15, and hence, at a reinforced location without imposing any noticeable strain upon the vertical folds that are stapled together by staples 18.

In other words, by reason of the carrier assembly 20 being projected into the recessed portions of each carton and being engaged by a carton portion defining the interface or seam between inwardly recessed gable portions 14 and 15 and the overlying sloping carton portions 16, little strain is imparted to either of the carton structures. No force component is acting to separate the carton top portions 16. It is readily apparent that the carton assembly as illustrated in Fig. 2 may be readily disassembled by merely depending the hook portion 28 of the handle 24 into the interface between the cartons 10 and 12. The V-shaped member 23 can then become disengaged from the handle portion 24 at end 28 and the two cartons may be readily separated.

It will be noted from Figs. 2 and 3 that junctures 30 between the two legs of the V-shaped members 22 and 23 provide for the double thickness of the two abutting cartons and also provide space between cartons for the hook portion 28 of the handle to depend into in the course of the carrier assembly and disassembly.

In Fig. 6, a modified carrier construction 32 is illustrated. The same handle 24, which is utilized in the carrier construction 20, is employed but modified carton-engaging members 34 of M-shape are employed instead of the carton-engaging V-shaped members 22 and 23. The carrier construction 32 is assembled in exactly the same manner as the carrier 20 illustrated in Fig. 4. However, it is apparent that the carton-engaging members 34 will proceed along substantially the entire undersurface of the carton portions 16. Consequently, upon engaging the handle 24, the lifting effect of the carton-engaging member 34 is exerted along the entire undersurface of the carton portions 16 instead of only half the interface as is apparent in Figs. 2 and 3 when the carrier assembly 20 is utilized.

It is possible that the above-described carriers may be applied to cartons in a dairy by an automatic machine. In such instances, it may then be preferable not to connect V member 23*a*, shown in Fig. 5, to handle 40 by portion 26, but to provide handle 40 with hooks 28 at both ends. In the machine assembly, each member 22*a* and 23*a* will be separately inserted in the gables 14 and 15 of the cartons and the handle 40 may then be lowered by another part of the machine and its hooks 28 engaged in the V of these members 22*a* and 23*a* by a snap action. Various methods of assembly may be followed without departing from the invention.

As a further application of the carrier, Fig. 7 discloses it attached to four cartons arranged in juxtaposed relation, each carton-engaging member 50 of the carrier being of continuous V-shaped configuration so that the gable portion of each carton is engaged by a V, and a handle 51, being formed with depending interconnecting portions, engages the members 50 in substantially the same way as in the previous embodiments. Thus the carrier is not limited to two cartons, but may be used with a greater number, if so desired.

Although the above description has been directed to cartons containing milk, it is, of course, obvious that the contents which the illustrated cartons contain is immaterial. It is thus apparent that a carrier construction has been provided which enables two cartons having gable tops to be carried in a ready and facile manner. The various carrier constructions illustrated are inexpensive and may be reusable if desired. The above-described carrier cannot damage or mar the cartons in the normal course of use.

Without further elaboration, the foregoing will so fully explain the character of my invention that others may, by applying current knowledge, readily adapt the same for use under varying conditions of service, without eliminating certain features, which may properly be said to constitute the essential items of novelty involved, which items are intended to be defined and secured to me by the following claims.

I claim:

1. A carrier for a pair of gable-top cartons when in juxtaposed relationship comprising two opposed substantially V-shaped members for engaging the undersurface of adjacent gable-top portions of said juxtaposed cartons, and handle means engaging at opposite end portions substantially the center portion of said V-shaped members.

2. A carrier for a pair of gable-top cartons when in juxtaposed relationship comprising two opposed substantially M-shaped members for engaging the undersurface of the gable-top portions of said juxtaposed cartons, and handle means engaging at opposite end limits substantially the center portion of said M-shaped members.

3. A carrier for a pair of gable-top cartons when in juxtaposed relationship comprising two opposed carton-engaging means for engaging the undersurface of adjacent gable-top portions of said juxtaposed cartons, and a handle comprising a hand-engageable portion spanning the crosswise dimension between said cartons when in juxtaposed relationship, the end portions of said hand-engageable portion being formed integral with two depending interconnecting portions which are suitably formed at their end limits for engaging said carton-engaging means.

4. A carrier for a pair of gable-top cartons when in juxtaposed relationship comprising two opposed carton-engaging means for engaging the undersurface of adjacent gable-top portions of said juxtaposed cartons and a handle comprising a hand-engageable portion spanning the length of said carton interface, the end portions of said hand-engageable portion being formed with two depending interconnecting portions which are suitably formed at their end limits for engaging said carton-engaging means, one of said interconnecting portions being releasably engageable with one of said carton-engaging means.

5. A carrier for cartons having a sloping top and inwardly recessed gable portions disposed therebetween when in juxtaposed relation comprising rigid support members of continuous substantially V-shaped configuration having the legs of each V disposed along a portion of the interface between said roof portion and said gable portion of each of said juxtaposed cartons, and a handle member spanning the interval between said support members having end portions engaging the same whereby said cartons may be carried by said handle as a single unit.

6. A carrier for gable-top cartons when in juxtaposed relation comprising opposed carton-engaging means for engaging the undersurface of adjacent gable-top portions of said juxtaposed cartons and a handle compris-

ng a hand-engageable portion spanning the length of said carton interface, the end portions of said hand-engageable portion being formed with depending interconnecting portions which are suitably formed at their end limits for engaging said carton-engaging means, both of said interconnecting portions being releasably engageable with one of said carton-engaging means.

7. A carrier for gable-top cartons when in juxtaposed relation comprising opposed carton-engaging means for engaging the undersurface of adjacent gable-top portions of said juxtaposed cartons and a handle comprising a hand-engageable portion spanning the length of said carton interface, the end portions of said hand-engageable portion being formed with depending interconnecting portions which are suitably formed at their end limits into outwardly disposed hook portions for engaging said carton-engaging means, both of said interconnecting portions being releasably engageable with said carton-engaging means.

8. A carrier for gable-top cartons when in juxtaposed

relation comprising opposed carton-engaging means for engaging the undersurface of adjacent gable-top portions of said juxtaposed cartons and a handle comprising a hand-engageable portion spanning the length of said carton interface, the end portions of said hand-engageable portion being formed with depending interconnecting portions which are suitably formed at their end limits for engaging said carton-engaging means, one of said interconnecting portions being releasably engageable with one of said carton-engaging means, said latter interconnecting portion describing an outwardly disposed hook portion having an inwardly bent portion whereby one of said carton-engaging means may be releasably secured thereto.

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