Nov. 27, 1962 R. C. WILSON 3,065,877

CARRIER

Filed Nov. 22, 1960

Fig. 1

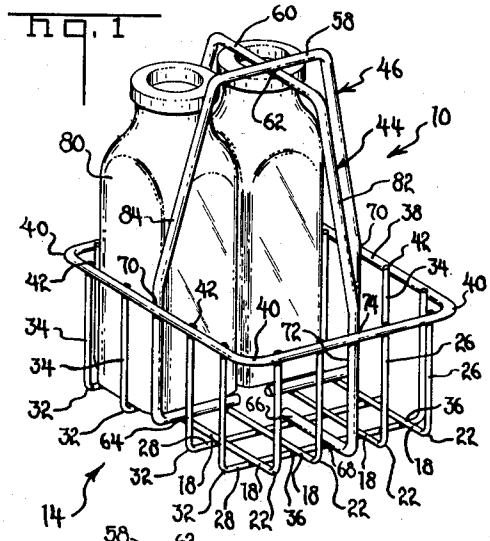


Fig. 2

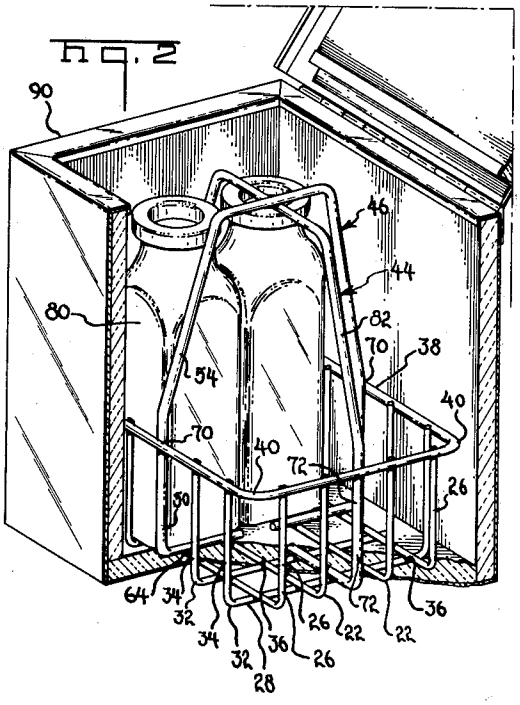


Fig. 3

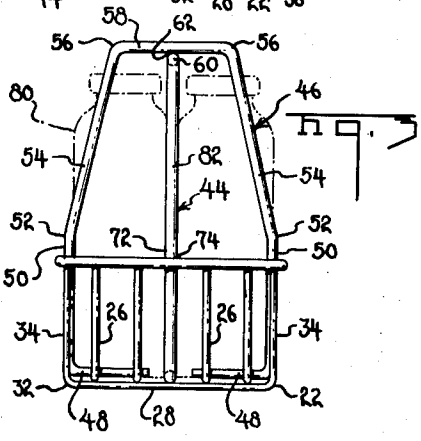


Fig. 4

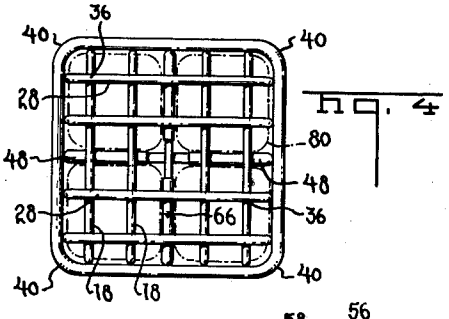


Fig. 5

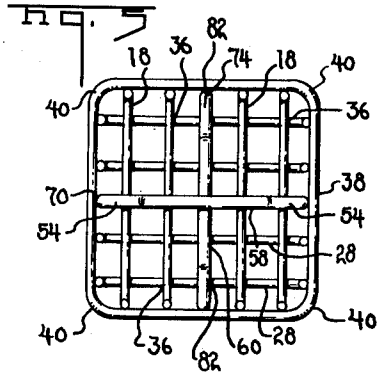
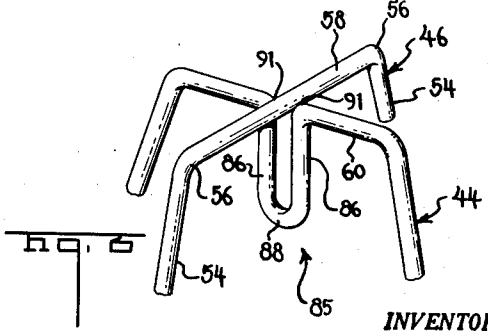


Fig. 6



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CARRIER

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2 Claims. (Cl. 220—117)

This invention relates to carrying means, and more particularly to devices for carrying bottles in a separated condition.

Carriers for various articles are well known in the art, and there are a number of well known carriers for bottles, such as cardboard cartons, crates, and the like. However, heretofore there have never been any carriers that have served to properly, safely and conveniently carry bottles, particularly milk bottles, in a separated condition with a minimum of weight and complexity involved in the construction of the carrier.

The present invention is directed to a new and unique device of novel construction that provides a novel structure for the carrying, storing and handling of bottles, particularly milk bottles. The novel carrier of this invention provides the optimum in lightness, compactness and strength. Further, the present novel carrier is provided with a unique and novel divider-handle. The novel divider handle which facilitates the handling of the carrier both empty and loaded concomitantly provides a unique means of maintaining the bottles in the carrier in a separated and upright condition, thus preventing the bottles from bumping together and becoming broken.

It is therefore a primary object of the present invention to provide novel carrying means.

Another object of the present invention is to provide carrying means for a plurality of articles.

Still another object of the present invention is to provide carrying means for a plurality of elongate articles, with integral means for maintaining said articles in an upright condition.

An additional object of the present invention is to provide a latticed carrier with a novel integral divider-handle to facilitate carrying and concomitantly preventing tipping of articles in said carrier.

Still an additional object of the present invention is to provide a unique method of fabricating carrying means.

Yet another object of the present invention is to provide a novel method of fabricating a latticed type bottle carrier having a unique divider-handle.

These and other objects will readily appear from the following detailed description when read in connection with the annexed drawings wherein:

FIGURE 1 is a perspective view of the novel carrier of this invention showing the manner in which the novel divider-handle retains the bottles in an upright separated position;

FIGURE 2 is a cut-away perspective view of a well known outdoor type insulated box showing the novel carrier of this invention mounted therein, and further showing the easy accessibility to the novel handle for lifting the carrier and bottles from the insulated box;

FIGURE 3 is an end elevational view of the novel carrier of this invention, with bottles therein shown in phantom lines;

FIGURE 4 is a bottom plan view of the carrier shown in FIGURES 1, 2, and 3;

FIGURE 5 is a top plan view of the novel carrier of the present invention, and

FIGURE 6 is a fragmentary perspective view of a modification of the upper end of the novel divider-handle of the present invention.

Turning now to the drawings the novel carrying means of the present invention will now be particularly described. The carrier generally comprises a latticed type basket which is preferably formed of wire members, but which also can be formed of other suitable materials such as plastics, or the like.

As clearly seen in FIGURE 1 the carrier of this invention is generally indicated by the numeral **10**. The carrier **10** consists of base-basket portion generally designated by the numeral **14**. Base-basket portion **14** comprises a plurality of parallelly disposed wire members of equal diameter designated by the numeral **18**. Wire members **18** are bent at right angles intermediate their ends, as at **22**, to define upstanding portions **26**. Disposed at right angles to wire members **18** are other wire elements **28**, of a diameter equal to the diameter of wire members **18**, and which are similarly bent at right angles intermediate their ends, as at **32**, to define upstanding sections **34**. The upstanding portions or sections **26** and **34** are of equal height, as clearly seen in the various figures of the attached drawing. As clearly seen in FIGURES 1, 2, 4, and 5 of the drawing the portions or elements **18** and **28** are disposed at right angles to each other to form a grid-like base, the portions or elements **18** and **28** crossing each other and being fixedly secured together at their intersections as by spot welding or the like, as at point **36**.

At the top of base portion **14** is a single larger diameter wire circumscribing part **38**, bent at right angles as at points **40**, to define a generally rectangular configuration. Part **38** circumscribes all of the upper ends of portions or sections **26** and **34**, as clearly seen in FIGURE 1, and part is fixedly secured to each abutting portion or section **26** and **34** as by spot welding or the like, as indicated at **42**.

The method of forming the base-basket portion **14** is to pre-cut wires **18** and **28** to equal lengths, then to lay wires **18** across wires **34**, at right angles to form a grid-like pattern, and then to gang spot weld all intersections **36** simultaneously. The portions or sections **26** and **34** are then bent upright to right angles over a form, as at **22** and **32**, respectively, and the upper ends thereof are then spot welded to circumscribing part or wire **38** as at the points **42**, thus forming a rigid basket.

It can be readily appreciated that by the foregoing described method there is quickly and economically formed a rigid base-basket portion **14**, which will not distort or bulge, and which is capable of holding or carrying considerable weight. The description of the method of forming the novel divider-handle will be described hereinafter.

Turning now to FIGURES 1, 2, and 3 the unique carrying-divider-handle will now be particularly described. As clearly seen in FIGURE 1 there are two crossed handle members **44** and **46**, hereinafter to be designated as inner and outer handle members, respectively. Both handle members are essentially of the same configuration, with the exception that outer handle **46** is slightly longer by approximately the diameter of the wire for reasons which shall become readily apparent. Therefore, a detailed description of the configuration of the

structural features of one handle shall be sufficient and applicable to both handles.

As clearly seen in FIGURE 3 the diameter of the wire used for forming handle **46** is much larger than the diameter of the wire for portions **18** or **28**. The lower ends of handle **46** are provided with oppositely facing foot portions **48**, approximately equivalent in length to the distance from right angle bend **32** to the second inwardly disposed member **18**, as clearly seen in FIGURES 1, 2, and 3. The outer ends of foot portions **46** are right angularly bent to define a pair of equal upstanding separate vertical portions **50**, which are slightly longer in length than portions **26** and **34**, as also clearly seen in the drawings. The upper ends of portions **50** are slightly inwardly bent as at points **52** to define a pair of converging sections **54**, of the handle **46**. The uppermost ends of converging sections **54** are right angularly bent as at points **56** to define integral horizontal grip portion **58**. As previously stated handle **44** is formed in essentially the same manner and configuration, and identical to handle **46**. As clearly seen in FIGURE 1 handle **46** is mounted midway between the corners of a pair of opposite sides of top wire **38**. While handle **44** is mounted midway between the corners of the pair of the other opposite sides of top wire **38**. The grip portion **58** of handle **46** right angularly crosses the grip portion **60** of handle **44**, as at **62**. The inner ends of foot portions **48** are spot welded to the two underlying right angularly disposed portions **18**, as at **64**, and foot portions **66** of handle **44** to the underlying pair of portions **28**, as at **68**. Also vertical portions **50** of handle **46** are fixedly secured by spot welding to wire **38**, as at **70**, and similarly disposed and secured are vertical portions **72** of handle **44**, as at **74**. The intersection of grips **58** and **60** are also fixedly secured together by spot welding, providing rigid securement for handles **44** and **46** to each other and to basket portion **14**.

As clearly seen in FIGURE 1 the crossing of handles **44** and **46** essentially define four sections or quadrants to basket or carrier **10**. This general configuration together with the use of larger diameter wire for handles **44** and **46** are an essential and unique feature of this novel invention. By virtue of the larger diameter wire used for the handles, foot portions **48** and **66** form upstanding separators or dividers which prevent the bottoms of bottles **80** from sliding from where they are mounted into an adjacent section or quadrant. Thus the bottoms of bottles **80** are positively retained in their mounted positions. The internally disposed upstanding portions **50** and **72** also serve as inwardly extending dividers abutting the sides of bottles **80**, further preventing the bottles from sliding or slipping from one section or quadrant to another. Finally, inwardly converging sections **54** of handle **46** and inwardly converging sections **82** of handle **44** abut the sides of bottles **80**, as indicated at **84** in FIGURE 1, to further preclude the bottles from sliding out of position or tipping and becoming broken.

Thus it can be readily appreciated from the foregoing that there is herein provided a novel lightweight, rugged bottle carrier, or the like, with a unique configuration to provide maximum strength and where in the integral structure forms a unique simple carrying-divider-handle. Further, the construction of this carrier and its handle is such that it will easily fit into the well known insulated type milk box **90**, as shown in FIGURE 2. It will also be noted in FIGURE 2 that the unique construction of the handle with its converging sections provides grip portions of the handles in a position of easy access, when the carrier is in box **90**, without injury to fingers or permitting slipping of the carrier during withdrawal with the consequent breakage of the bottles in the carrier. With this unique invention a carrier with empty bottles can be easily and conveniently placed in box **90**, the milk man can then withdraw the carrier easily, replace the empty bottles with full bottles, and then easily, quickly and conveniently replace the carrier back into box **90**. The crossed grip portions at the top of the handles **44** and **46** present easy and quick gripping means from most any angle.

Turning now to FIGURE 6, a variation of the novel divider-handle will now be particularly described. Essentially the general configuration of both handles is the same as heretofore described, except for cross grip portion **60** of handle **44**. As clearly seen in FIGURE 6 the midpoint of grip **60** is provided with a downwardly disposed extension generally indicated at **85**, defined by right angularly downwardly bending grip **60** as to form a pair of parallel downwardly extending prongs **86** which are interconnected at their lower ends by integral U-shaped section **88**. Grip **58** of handle **46** is spot welded to grip **60**, as at points **91**, to secure grips **58** and **60** fixedly together. Extension **85** provides a further barrier or divider to prevent the tops of the bottles **80** from tipping over while in the carrier.

The invention may be embodied in other forms without departing from the spirit or essential characteristics thereof. The present embodiments are therefore to be considered in all respects as illustrative and not restrictive the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein.

What is claimed and desired to be secured by United States Letters Patent is:

1. A substantially open-topped rectangular carrying basket comprising, a plurality of equal diameter wire first members disposed in parallel relationship to each other; a plurality of second wire members, equal in diameter to said first members, disposed in parallel relationship to one another and perpendicularly disposed in overlying relationship to said first members; said first and second members fixedly secured together at their intersections; said first and second members having equal and integral perpendicular upstanding portions at their ends defining perpendicular sides of said basket; an interconnecting wire member circumscribing the upper ends of said upstanding portions of said first and second members and fixedly secured thereto; a first divider-handle member of substantially larger diameter than said first and second members having an essential trapezoidal plan form; said first divider-handle member comprising a pair of short inwardly extending foot portions fixedly secured to one of the first members adjacent each foot portion, upstanding vertical side members within said basket fixedly secured to said interconnecting member at opposite parallel sides of said basket; a pair of converging sides converging above the top of said basket and terminating in a relatively short horizontally disposed handle portion parallel to said basket; a second divider-handle member of essentially the same form as said first divider-handle member comprising a pair of short inwardly extending foot portions fixedly secured to one of the second members adjacent each foot portion, upstanding vertical side members within said basket and fixedly secured to the interconnecting member at the other opposite parallel sides of said basket; a pair of converging sides converging above the top of said basket and terminating in a relatively short second handle portion horizontally disposed and parallel to said basket and overlying said first handle portion and fixedly secured thereto; the foot portion of both of said divider-handle members extending substantially above said first and second members, the vertical upstanding side members of said divider-handle members extending substantially into said basket beyond the sides thereof, and the converging sides of said divider-handle members extending substantially angularly inwardly above said basket, whereby said foot portions, upstanding side members, and converging sides all define positive separators to maintain articles in said basket in a separated condition, and said

secured handle portions of the divider-handle members provide positive multiple handles for said basket.

2. The device as set forth in claim 1 wherein the first horizontally disposed handle portion is provided with an integral substantially downwardly extending loop portion extending downwardly from the intersection of said handle portions toward said basket providing further means to maintain articles in said basket in a separated condition.

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