Dec. 21, 1954 P. J. BURKE ET AL 2,697,628

BOTTLE CARRIER

Filed Oct. 12, 1950

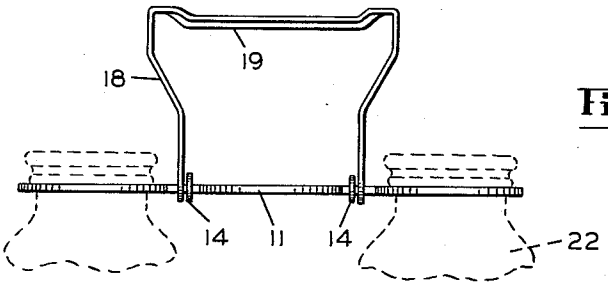


Fig. 1

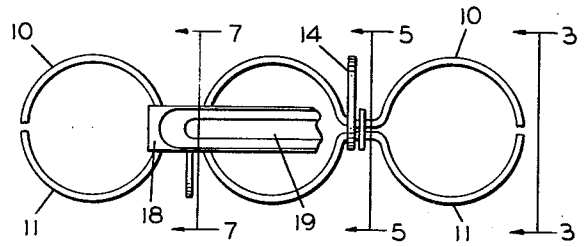


Fig. 2

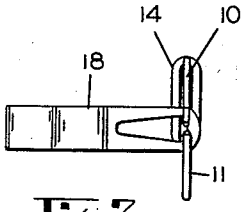


Fig. 3

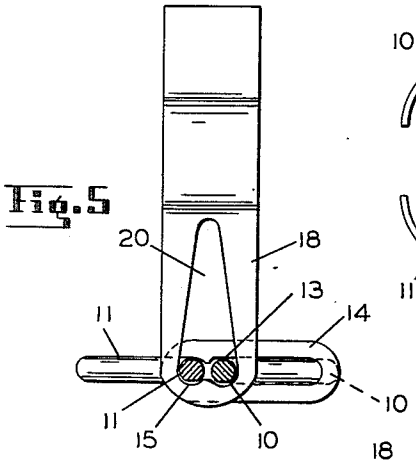


Fig. 5

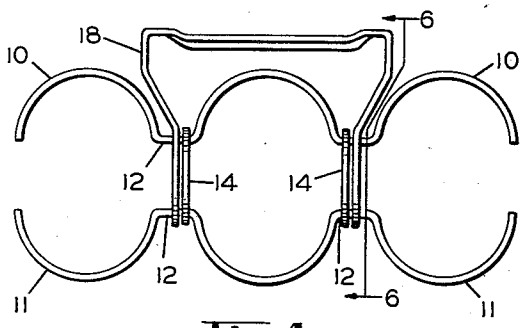


Fig. 4

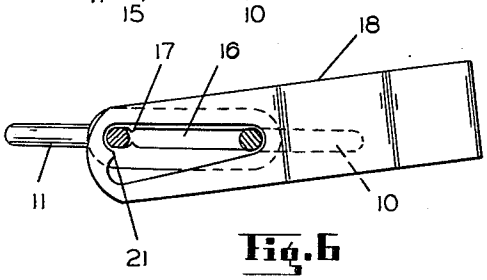


Fig. 6

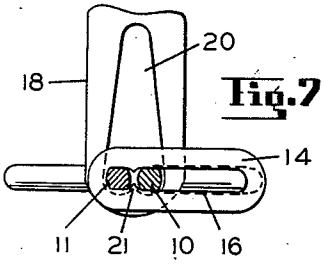


Fig. 7

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BOTTLE CARRIER

Peter J. Burke and Clarence Lietzau, Milwaukee, Wis.

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4 Claims. (Cl. 294—87.26)

Our invention relates to bottle carriers, and more particularly to carriers for conveying a plurality of milk bottles or the like.

The object of our invention is to provide a means for clamping the neck portions of a single bottle or a plurality of bottles, and having the weight of the load retain the device in a clamped position.

Another object of our invention is to provide a device that may be manipulated with one hand, without the necessity of placing the individual clamping portions into a predetermined position.

A further object of our invention is to provide a device constructed of a plurality of individual parts assembled in a manner whereby the component parts cannot become disengaged from one another.

A still further object of our invention is to provide a device that may be folded into a compact unit requiring a minimum of space thereby providing ease of transportation in packing.

It is manifest to anyone familiar with transporting large-sized milk bottles or the like, that the weight of the bottles, together with the cumbersome shape and contour of the bottles, constitute a difficult conveying problem. The device as specified, illustrated and claimed herein affords a simple, convenient and efficient means of supporting either a single bottle or a plurality of bottles. It is easy to manipulate, inexpensive to manufacture and folds into a compact, neat unit when not in use.

Other and further objects of our invention will become more apparent as the description proceeds when taken in conjunction with the drawings in which:

Figure 1 is a side view of the assembled device supporting two bottles, a portion of which is shown in phantom.

Figure 2 is a plan view of the assembled device in a clamped position, with a portion of the handle cut away.

Figure 3 is an end view of the assembled device taken at the line 3—3 in Figure 2.

Figure 4 is a top or plan view of the assembled device in an open position showing the handle portion folded downward in parallel relation to the clamping members.

Figure 5 is a cross-sectional view as taken at the line 5—5 in Figure 2 showing the handle raised into a clamping position.

Figure 6 is a cross-sectional view of the device with the handle portion in a lowered position taken at the line 6—6 in Figure 4, and

Figure 7 is a cross-sectional view of the device taken at the line 7—7 in Figure 2.

Similar characters of reference indicate corresponding parts throughout the several views, and referring now to the same, the characters **10** and **11** show clamping members formed from wire into a plurality of semi-circular portions integrally joined by straight portions shown as **12**. These straight portions have flat surfaces shown as **13** at their top and bottom so that they may engage the links **14** which are shown with an aperture **15**, and an elongated slot **16**. This aperture **15** and the slot **16** are separated by inwardly projecting members shown as **17**. Thus the clamping unit **11** supports the links **14** within the aperture **15**, and holds them in a fixed position, while the clamping member **10** slides within the elongated slot **16** forming a part of the link **14**.

There is a handle **18** consisting of two members extending parallel to one another, and joined by a grip portion **19** which is shown as an integral part of the handle

structure, and extends in transverse relation to the handle members.

The handle members are provided with a triangular slot shown as **20** which is wider at its lower end, and of a width to support the flat straight portions **12** of the clamping members **10** and **11**. One inner edge of the slot **20**, at the wide side thereof is shown provided with an inwardly extending member **21**.

Obviously, the contour of the semi-circular portions of the clamp members **10** and **11** are of a size to encircle the outer periphery of the neck portions of a milk bottle or the like shown in phantom as **22** in Figure 1.

In operation, the clamping portions **10** and **11** are spread apart as shown in Figures 4 and 6, with the handle **18** in a horizontal position as shown in these Figures 4 and 6. This will permit their engagement over the neck portion of the bottles **22**. The distance of their separation is determined by the length of the slot **16** in the links **14**. The links **14**, being held securely by the member **11**, permit the members **12** to slidably move within the slot **16**.

When the handle **18** is raised, the triangular slot **20** will cause the clamping members **10** and **11** to be brought toward one another as shown in Figures 2 and 5, thereby clamping the neck portion of the bottles **22**, and retaining them in a clamped position when the bottles are lifted from the surface on which they are supported. The weight of the bottles, whether empty or full, will retain the handle **18** in a raised position, thereby retaining the handles **10** and **11** in a clamped position around the outer perpiheral surface of the bottles **22**.

From the above description, it will become manifest that the device is operative, to perform the function for which it is intended. It may, however, be changed in form or contour, and we reserve the rights to make such changes without departing from the spirit of our invention or the scope of the appended claims.

Having thus described our invention, what we claim and desire to secure by Letters Patent in the United States is:

1. A device of the character described in combination with a pair of clamping members, a pair of link members, one of said clamping members acting as a support for link members rigidly attached thereto, said link members provided with elongated slots, the other of said clamping members slidably supported within the slots of said link members, a handle engaging said clamp members, said handle comprising a pair of arms integrally constructed with a grip portion, each of said arms provided with triangular slots, each of which is wide at one end and tapered inwardly toward its other end, both of said clamping members engaging said slots, the movements of said grip portion causing a movement of said clamping members toward and away from one another by changing the angular position of the handle in its relation to said clamping members.

2. A bottle carrier of the character described to be used in combination with bottles to be transported, said device comprising in combination, a handle having a pair of support members, said handle having a grip portion supporting said support members, said grip portions on said handle each equipped with a slot wider at its lower portion and tapered inwardly and upwardly therefrom, a pair of clamping members, said clamping members formed to encircle the neck portion of a plurality of bottles, said clamping members engaging the slots in said handle support members, and a plurality of link members, said link members rigidly attached at one end to one of said clamping members, an elongated slot disposed within each of said link members, the other of said clamping members engaging said slots in said links thereby permitting said clamping member to be brought away from and toward one another by the angular position of said handle.

3. A device of the character described comprising, a pair of clamp members, a pair of link members, each one of said link members attached at one end to one of said clamp members, the other end of said link members slidably supporting the oppositely disposed clamp member, a handle engaging said clamp members, said handle consisting of a grip portion and a pair of angularly disposed support members, said support members each pro-

vided with an elongated slot wider at its end, said clamping members engaging said slots thereby permitting said clamping members to be spread apart from one another within said slots when said handle is in one position, and held securely in contact with one another when the said handle is in another position.

4. A device of the character described comprising in combination, a pair of clamp members, a plurality of slide members, one of said clamp members having the sliding members rigidly attached thereto, the other of said clamp members slidably engaging said slide members, a handle engaging said clamp members, said handle comprising a pair of arms held in parallel relation to one another by a grip portion, each of said arms provided with a triangular shaped slot wider at one end, said clamp members engaging said slots in said arms, thereby bringing said clamping members toward and away from one another when changing the angular position of the handle in its relation to said clamp members.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
2,133,877	Stevenson	Oct. 18, 1938
2,212,237	Jenkins	Aug. 20, 1940
2,265,877	Smith	Dec. 9, 1941
2,291,477	Kolb et al.	July 28, 1942
2,386,859	Hutaff, Jr.	Oct. 16, 1945
2,559,060	Zenick	July 3, 1951
2,609,227	Medill et al.	Sept. 2, 1952