Nov. 3, 1942. C. COSME 2,301,167

RECEPTACLE CARRIER

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Fig. 1.

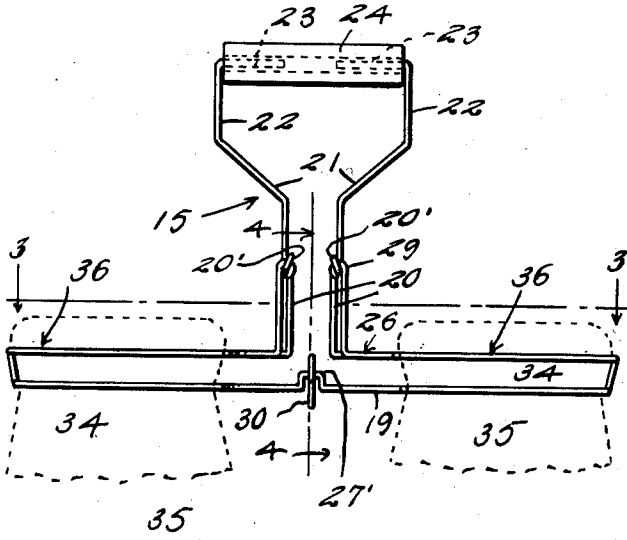


Fig. 2.

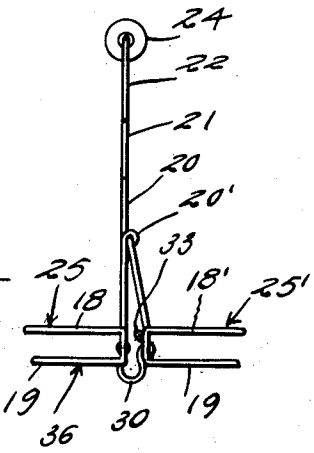


Fig. 3.

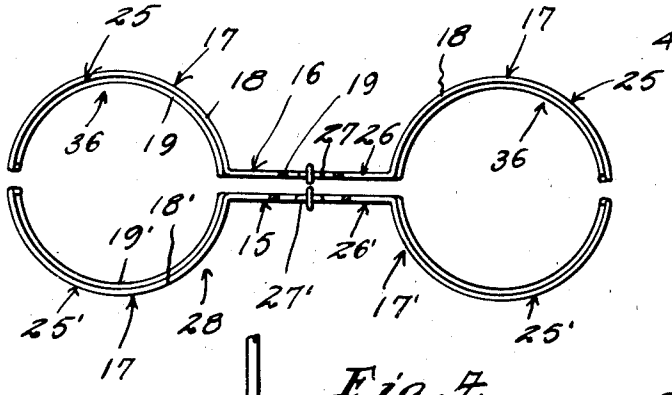


Fig. 9.

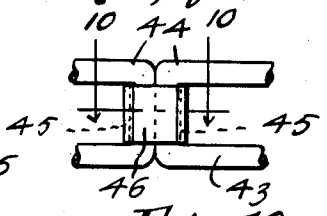


Fig. 10.

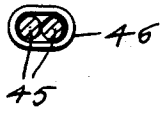


Fig. 4.

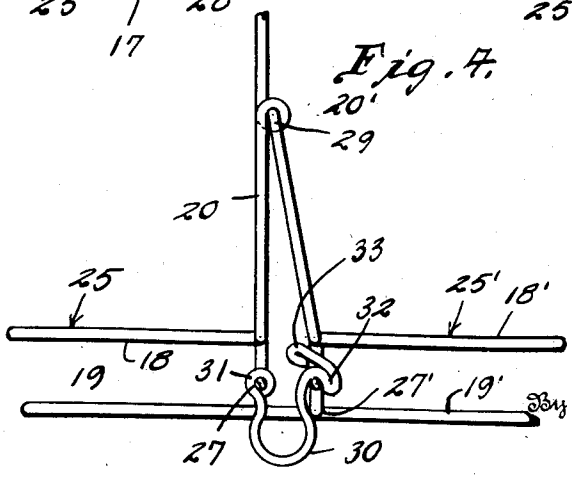
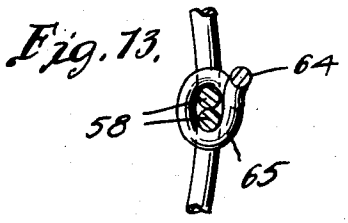


Fig. 13.



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Fig. 5.

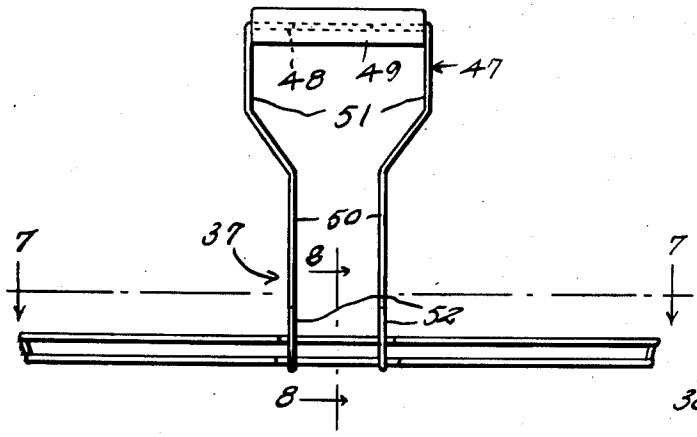


Fig. 6.

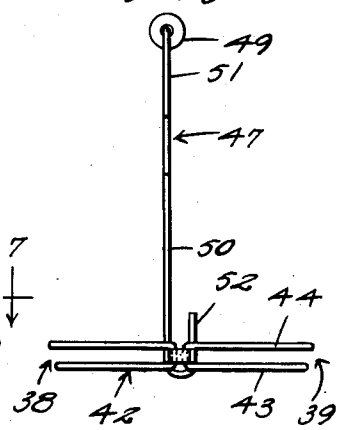


Fig. 7

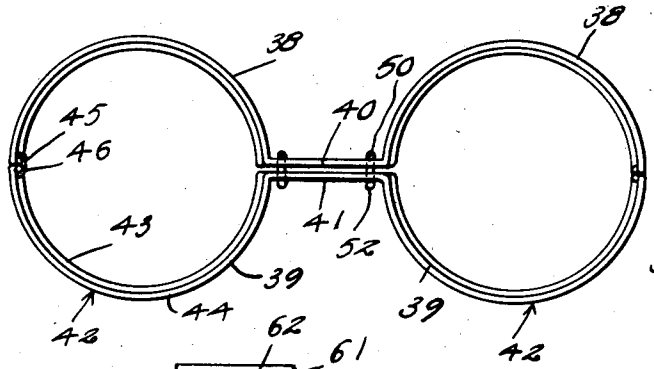


Fig. 8.

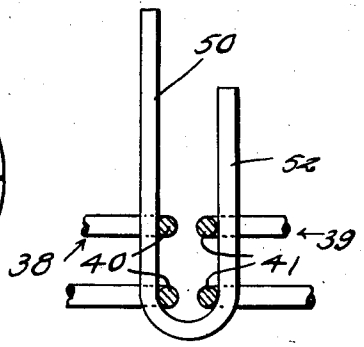


Fig. 11

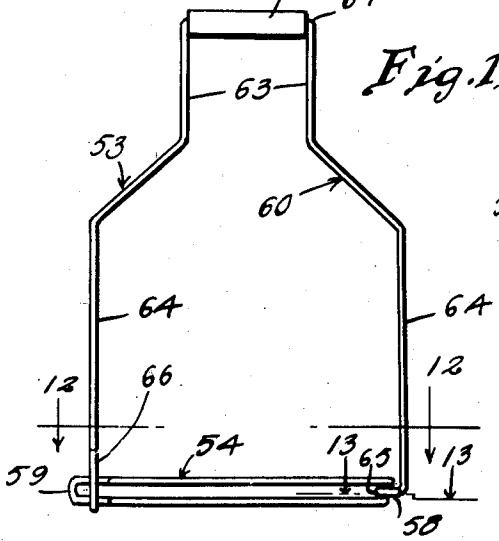
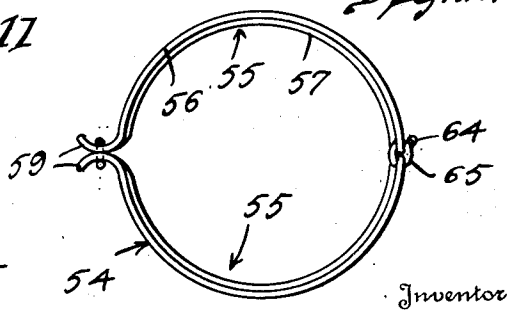


Fig. 12.



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2,301,167

UNITED STATES PATENT OFFICE

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RECEPTACLE CARRIER

Charles Cosme, Bronx, N. Y.

Application August 7, 1941, Serial No. 405,843

3 Claims. (Cl. 294—87)

This invention relates to a receptacle carrier and more particularly to a carrier especially adapted for use for carrying one or a plurality of milk bottles.

It is a primary aim of the invention to provide a milk bottle carrier having ring portions or collar portions formed of sections and which may be readily applied around the restricted portion of a neck of a bottle or bottles and the ring sections secured relatively to one another for holding the bottles.

Still another aim of the invention is to provide a carrier in which a milk bottle, enclosed in a paper bag may be readily carried.

Still another aim of the invention is to provide a carrier having novel means forming a part of the handle of the carrier for detachably retaining the ring sections in positions to form the ring portions which engage about the restricted necks of the bottles to be transported.

Still a further aim of the invention is to provide a carrier which may be constructed to include any desired number of ring portions for carrying any number of bottles including sets of ring sections each forming unitary structures whereby the ring sections, forming each of the ring portions are simultaneously opened or closed and simultaneously latched or released by latch means which is common to all of the ring portions.

Other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawings, which illustrate preferred embodiments of the invention, and wherein—

Figure 1 is a side elevational view of one embodiment of the bottle or receptacle carrier,

Figure 2 is an end view in elevation of the same,

Figure 3 is a horizontal sectional view taken substantially along the plane of the line 3—3 of Figure 1,

Figure 4 is a transverse vertical sectional view taken substantially along the plane of the line 4—4 of Figure 1, and on an enlarged scale,

Figure 5 is a view similar to Figure 1, of a slightly modified form of the invention,

Figure 6 is an end view in elevation of the same,

Figure 7 is a horizontal sectional view taken substantially along the plane of the line 7—7 of Figure 5,

Figure 8 is an enlarged transverse vertical sectional view taken substantially along the plane of the line 8—8 of Figure 5,

Figure 9 is a fragmentary end view in elevation and on an enlarged scale showing the means for pivotally connecting the sets of ring sections,

Figure 10 is a sectional view taken substantially along the plane of the line 10—10 of Figure 9,

Figure 11 is a side elevational view of another form of the invention,

Figure 12 is a horizontal sectional view taken substantially along the plane of the line 12—12 of Figure 11, and

Figure 13 is an enlarged horizontal sectional view taken substantially along the plane of the line 13—13 of Figure 11.

Referring more particularly to the drawings, wherein like reference characters designate like or corresponding parts throughout the different views, 15 designates generally the bottle carrier, illustrated in Figures 1 to 4, and which includes a strand of wire 16, the intermediate portion of which is bent to form two elongated loops or wings 17, each comprising an upper portion 18 and a lower portion 19. The ends of the strand of wire 16 project upwardly, intermediate of the ends of the wing portions 17, to form the adjacently disposed substantially parallel shank portions 20 which are provided with loops 20', intermediate of their ends. The end portions, of the strand 16, are flared outwardly at the upper ends of the shank portions 20, as seen at 21. Above the outwardly flared portions 21, the ends of the strand 16 include portions 22 which are offset outwardly relatively to the shank portions 20. The extremities of the strand 16 extend inwardly from the upper ends of the portions 22, and said extremities 23 are adapted to engage the ends of a tubular member 24 which forms the handle of the bottle carrier 15. The outer ends of the wings 17 are bowed outwardly to form substantially semi-circular ring sections 25 each including an upper portion 18 and a lower portion 19. As best seen in Figure 3, the upper portions 18 are of greater diameters than the lower portions 19, for a purpose which will hereinafter become apparent. The portion of the strand of wire 16 which is disposed between the ring sections 25 and which includes the lower portion 19 and longitudinally spaced upper portions 18, forms a neck portion 26, which is substantially straight. The portion 19 of the neck 26 is provided, intermediate of its ends, as best seen in Figure 1, with an upwardly offset portion forming a keeper 27 which is disposed beneath and between the shank portions 20.

A strand of wire, designated generally 28, has an intermediate portion bent to form wings 17', corresponding to the wings 17, including upper

portions 18' and lower portions 19', corresponding to the portions 18 and 19, respectively, and a neck portion 26', corresponding to the neck 26 and including an upwardly offset portion 27' which is formed in the portion 19', intermediate of its ends. The ends of the wings 17' are curved to form ring sections 25', corresponding to the ring sections 25. The ends of the strand 28 extend upwardly from the neck 26' and terminate in hooks 29 which loosely engage the loops 29' for pivotally connecting the strand of wire 28 to the strand of wire 16 for swingably mounting the ring sections 25 and 25' relatively to each other and so that the complementary sections 25 and 25' can move toward and away from one another with the two ring sections 25 and the two ring sections 25 moving as units.

A latch member 30, which is formed of a short strand of wire, is provided with an eye 31 in one end for pivotally engaging the upwardly offset portion 27 and with a curved and turned back opposite end forming a hook 32 for frictionally and detachably engaging the keeper 27' and a handle 33 for moving the hook 32 into and out of engagement with the keeper 27'.

From the foregoing it will be apparent that the latch 30 can be released and the ring sections 25 and 25' moved away from one another to position the bottle carrier 15 relatively to the necks 34 of two adjacently disposed milk bottles 35 so that when the ring sections 25 and 25' are swung toward one another and latched the complementary ring sections 25 and 25' will each engage around a bottle neck 34 to form a ring portion 36 for releasably engaging and supporting a bottle 35. It will be obvious that the portions 18 and 18' of the ring sections 25 and 25', respectively, are made larger than the portions 19 and 19' so that the ring sections will be constructed to fit the curvature of the bottle necks 34, as best seen in Figure 1. It will also be apparent that the carrier 15, with the bottles 35 clamped therein, may be readily carried by its handle 24. It will also be apparent that by a single movement of the latch 30 both of the bottles 35 may be released from the ring portions 36 or clamped therein.

A modified construction of bottle carrier, designated generally 37, includes two strands of wire which are connected at their ends and which are bent similarly to the intermediate portions of the strands of wire 16 and 28 to form corresponding ring sections 38 and 39, and corresponding neck portions 40 and 41. The neck portions 40 and 41 connect the integral ring sections 38 and 39, respectively. The complementary ring sections 38 and 39 combine to form the ring portions 42, each of which is adapted to engage the neck of a milk bottle in the same manner as the ring portions 36, and each of which includes a lower portion 43 which is smaller in diameter than its upper portion 44 to fit the curvature of the neck 34 of a bottle 35, as illustrated in Figure 1. The remote ends of the ring sections 38 and 39 form corresponding portions 45 which are disposed substantially at right angles to the planes of the ring portions 42. The portions 45 of one of the rings 42 are connected by means of a link 46 so that the ring portions 38 and 39 may be swung outwardly of one another for opening the rings 42 to permit bottle necks 34 to be inserted therein and may be swung inwardly of one another to close the rings 42 for engaging the bottle necks 34. When the rings 42 are closed, as best seen in Figure 7, the necks 40 and 41 are disposed in adjacent, substantially parallel relationship.

A bail 47 is provided with a substantially straight intermediate portion 48 on which is mounted a tubular member 49 forming a handle. The bail 47 has its ends bent at right angles to the intermediate portion 48, beyond and adjacent the ends of the handle 49. Said ends include portions 50 which are offset inwardly of one another, relatively to the portions 51, which are disposed adjacent the handle 49. The extremities of the portions 50 are turned back upon themselves to form hooks 52 which are adapted to engage under and around the neck portions 40 and 41 when the rings 42 are in closed positions, as illustrated in Figures 5, 6 and 7, to provide means for connecting the handle 49 to the rings 42 and to also provide latch means for detachably holding the rings in closed positions for engaging the necks 34 of the bottles 35, which are shown in Figure 1.

Referring to Figures 11, 12 and 13, 53 designates generally another construction of bottle carrier for use in carrying a single milk bottle 35 and which includes a single neck engaging ring 54 formed of corresponding ring sections 55, each of which is substantially semi-circular in cross section, each of which includes an upper portion 56 and a lower portion 57, corresponding to the portions 18 and 19, respectively, and which are arranged to fit the curvature of the neck 34 of a bottle 35 when the ring 54 is closed. The ring sections 55 are provided with corresponding ends having portions 58 corresponding to the portions 45. The opposite ends of the ring sections 55 are bent outwardly to form ears 59, as best seen in Figure 12, which are bowed longitudinally and inwardly of one another so that their intermediate portions are arranged to contact when the ring 54 is closed.

A bail 60 is provided with an intermediate portion 61 on which is loosely mounted a tube 62 forming the handle of the bottle carrier 53. The ends of the bail 60 are bent substantially at right angles to the intermediate portion 61 and include the portions 63, which are disposed adjacent the portion 61 and the end portions 64, which are offset outwardly relatively to the portions 63. The extremity of one of the portions 64 is bent to form a loop or eye 65, as best seen in Figure 13, which loosely engages the end portions 58 of the ring sections 55 for pivotally connecting the ring sections to each other and for pivotally mounting the bail 60 relatively to the ring 54. The opposite end 66 of the bail 60, forming the extremity of the other portion 64, is bent back upon itself to form a hook which is adapted to engage the intermediate portions of the ears 59, when the ring sections 55 are closed, as seen in Figure 12, for connecting the bail 60 to the diametrically opposed portions of the ring 54 so that the ring may be readily supported by the bail for supporting a bottle 35, such as shown in Figure 1, the neck portion 34 of which is clamped in the ring 54. It will likewise be obvious that the hook 66 functions as a latch to hold the ring sections 55 in closed positions and may be readily released by swinging the bail 60 on its pivot 65 for releasing the ends 59 of the ring sections 55 to permit the ring 54 to be opened for disengaging it from the neck of the bottle or for attaching it thereto.

Various other forms of the invention are contemplated and may obviously be resorted to and various modifications, in the embodiments of the

invention as disclosed, may obviously be made, as only preferred embodiments of the invention have been disclosed.

I claim as my invention:

1. A bottle carrier formed of wire and including a plurality of ring portions for engaging around the necks of bottles, said ring portions each being formed of semi-ring shaped sections, said ring portions including complementary, integral ring sections, means for detachably retaining said ring portions in engagement with the bottle necks, and a handle projecting upwardly from and forming a part of one set of the ring sections, said sets of ring sections being pivotally connected, each of the ring sections including upper and lower arcuately shaped portions, and the upper arcuately shaped portions being of a greater diameter than the lower arcuately shaped portions.

2. A receptacle carrier comprising a plurality of ring portions for engaging the necks of receptacles to be carried, said ring portions each being formed of corresponding, substantially semicircular sections, the complementary ring sections of the ring portions being formed integral and each being formed of a single strand of wire, the extremities of one of the strands of wire, forming one of said sets of ring sections, terminating in upwardly projecting portions forming a handle and a handle shank portion, the shank portion being provided with loops, the extremities of the strand of wire forming the other set of ring sections being provided with looped ends for engaging said first mentioned loops for pivotally connecting the sets of ring sections, a fixed keeper forming a part of the first mentioned strand of wire, and a latch member pivotally connected to the last mentioned strand of wire for detachably engaging the keeper for holding said ring sections in positions for forming the ring portions.

3. A receptacle carrier as in claim 2, each of said strands of wire including portions turned back upon themselves to form upper and lower arcuately shaped portions forming parts of each of the ring sections, and said upper portions of the ring sections being of greater diameters than the lower portions.

CHARLES COSME.