

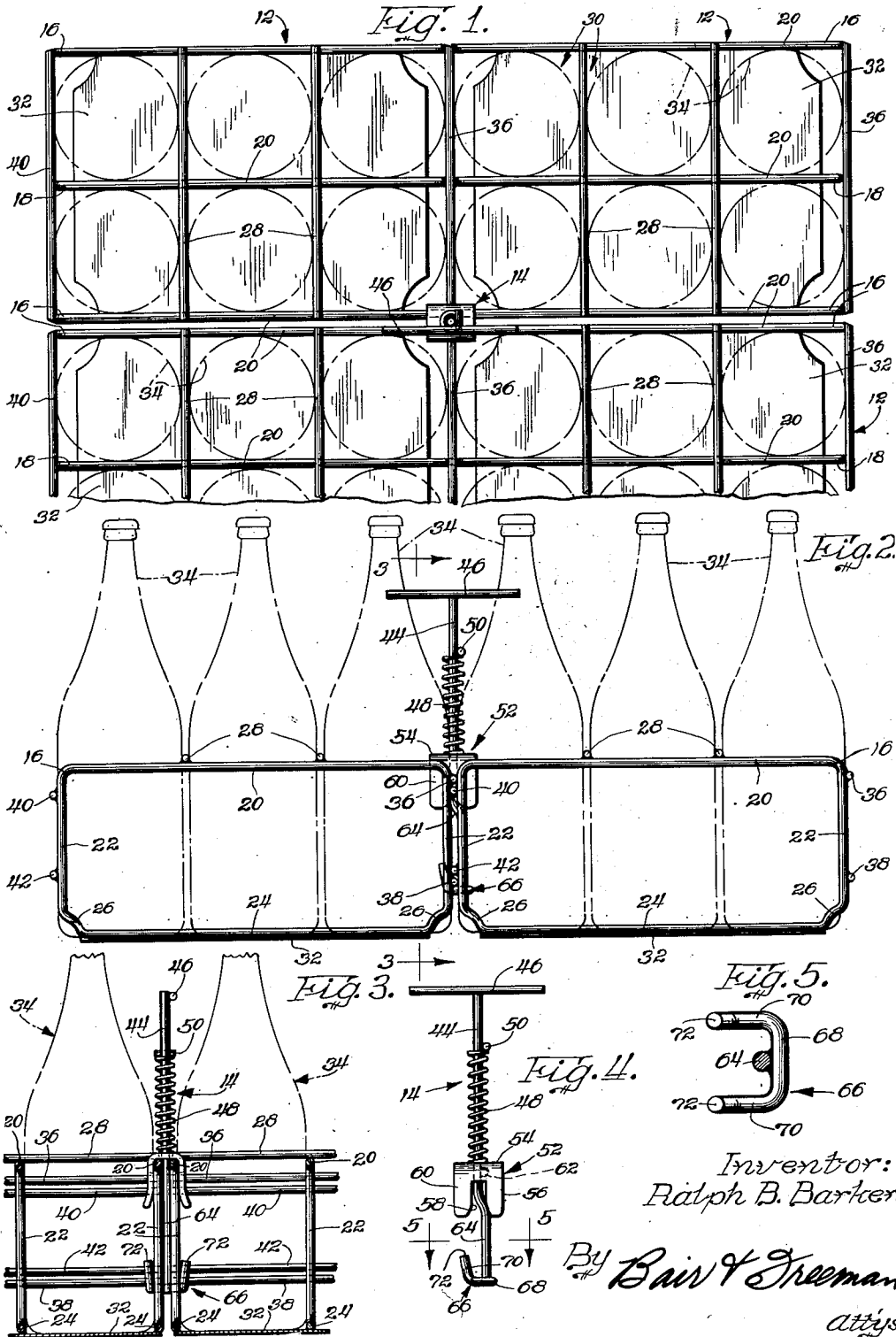
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SECTIONALIZED BOTTLE CARRIER

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SECTIONALIZED BOTTLE CARRIER

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This invention relates to a carrier for bottles such as soft drink bottles and other similar articles.

An object of the invention is the provision of a sectionalized carrier, made up of a plurality of small sections which can be assembled and secured together to form a carrier. The assembled carrier is especially suitable for handling by dealers for delivery to stores, etc. and when the sections are dis-assembled each section is especially suitable for carrying home by the customer.

Another object of the invention is the provision of a sectionalized carrier as above referred to in which all of the sections are identical and can be indiscriminately picked and fitted together for assembly.

Still another object of the invention is the provision of a quick-detachable clamp and carrier means for securing the sections together in assembled relation.

A further object of the invention is the provision of a sectionalized carrier as above referred to and a quick-detachable clamp and carrier means which can be attached and detached when all of the sections are filled with bottles and none need be removed for the purpose of attaching or detaching the clamp.

Still further object is the provision of such a carrier as above referred to, having a novel clamp and carrier means so constructed and arranged that the carriers when filled can be stacked one upon another without interference from the handle means.

Still another object is the provision of a sectionalized carrier which when assembled forms a rigid composite carrier and can be handled as such without fear of the sections becoming accidentally dis-assembled.

Still another object of the invention is the provision of a section for a carrier of a novel construction, such that it can be manufactured economically and of simple material such as wire and whereby due to its simple construction it is especially adapted for assembly with others in a final composite carrier.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my sectionalized bottle carrier whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, wherein:

Figure 1 is a plan view of the novel carrier of the present invention;

Figure 2 is a side view of the carrier;

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Figure 3 is a view taken on line 3-3 of Figure 2;

Figure 4 is a view of the novel clamp and carrier means; and

Figure 5 is a view taken on line 5-5 of Figure 4.

Referring now in detail to the drawings, the composite sectionalized carrier illustrated in Figure 1 includes four separate sections 12 fitted together and held in place by a novel clamp and carrier means indicated generally at 14. All of the sections 12 are identical and a description of one will suffice for all.

Each section 12 is made up of a pair of wire loops 16 which determine the size of the section and an intermediate wire loop 18. The loops 16 and 18 are all disposed in vertical planes and are spaced transversely of the section. Each loop 16 and 18 includes a top horizontal segment 20 (Figures 1 and 2), vertical segments 22, one at each end, and a bottom horizontal segment 24. Bent-in portions 26 interconnect the vertical segments 22 and the lower segment 24.

A pair of longitudinally spaced transversely extending wires 28 are secured across the top segments 20 and together with top segments 20 form pockets or cells 30 in which the bottles to be carried are inserted. A bottom plate 32 is secured across the bottom segments 24 to form a bottom supporting surface for the sections. Bottles such as 34 can then be inserted in the pockets or cells 30.

At one end of each section 12 are a pair of vertically spaced transversely extending wires 36 and 38 which are secured to the vertical segments 22 across the end of the section. At the other end of the section are a pair of similar wires 40 and 42 which are also vertically spaced and transversely extending. These wires also are secured to the vertical segments 22 of the section. The two wires 40 and 42 are spaced more closely than the two wires 36 and 38 for purposes of fitting the sections together as will be referred to later.

The clamp and handle means 14 includes a vertical shank 44 having a handle member 46 secured to the top thereof. Surrounding the shank 44 is a compression spring 48 biased between a stop 50 secured to the shank and a hook means 52. The hook means 52 is in the form of an inverted U-shaped member having a web portion 54 and laterally spaced down-turned legs 56. Each leg has a downwardly opening slot 58 forming four prongs 60 on the hook means. A stop means 62 is secured to the shank 44 for limited

downward movement of the hook means 52. The lower end of the shank 44 is offset as indicated at 64 laterally from the upper portion of the shank. Secured to the lower end of the shank is another hook means 66 which has a transverse web segment 68 and laterally spaced leg portions 70 which extend horizontally in a direction opposite to that which the portion 64 is offset from the shank. The extended ends of the legs 70 have upturned portions 72.

To assemble the carrier two sections 12 are fitted together in end-to-end relation such, for example, as the upper two sections shown in Figure 1. When two sections are thus fitted together the transverse members 40 and 42 on the end of one section are disposed between the transverse members 36 and 38 on the end of the other section. The spacing of these pairs of transverse members is such that the inner surfaces of the members 36 and 38 are spaced substantially equivalent to the outer surfaces of the members 40 and 42 and when the sections are thus fitted together the four transverse members are in vertical alignment, as illustrated in Figure 2, so that the four fall in substantially a plane. Next, a third section is fitted in side-by-side relation to one of the first sections. Next, the clamp and handle means 14 is placed in the corner formed by the three sections and the next step is to place the fourth section into position with the other three.

The hook means 52 is then positioned over the elements of the adjacent corners of the sections in such a manner that one of the prongs 60 is inserted in the interior of each section, that is to say the legs 56 are disposed on opposite sides of the pair of top segments 20 with respect to the side-by-side sections (Figure 3).

In the same positioning of the lock means 52 the adjacent ends of the transverse members 36 and 40 are positioned in the slots 58. The user then depresses the shank 44 and by tilting slightly (to the left as in Figure 2) the hook portions 72 are hooked under the bottom members 42 and 38. The offset portion 64 is then disposed to the side of the lower members 42 and 38 and upon releasing the shank the spring 48 biases the shank upwardly and hooks the hook members 70 and 72 under the members 42 and 38.

The four sections are thus effectively and rigidly secured together in a composite carrier and the user needs only to grip the handle portion 46 for carrying the carrier. For purposes of clarity the sections as illustrated in Figure 1 are spaced apart slightly laterally but due to normal tolerances in working with material of which the sections are made the thickness of the shank 44 is only minor and as a result the sides of the respective sections fit together in close and binding relationship so that all four sections mutually support each other around the clamp means. The clamp means and handle can be attached and detached when all of the sections are filled with bottles and it is not necessary to remove any of the bottles such as any of the adjacent four bottles around the clamp means.

It will be noted also that due to the novel construction of the clamp means and handle that the bottles normally extend above the handle so that the filled carriers can be stacked one upon another. Different size bottles obviously will extend to different distances above the handle.

Thus a distributor may deliver carriers, each of four sections, to a dealer, and the carriers can then be disassembled so that a customer may

take only one section of six bottles, as is usually preferred. The individual sections 12 are preferably provided with individual handles for convenience in carrying the sections by the customers.

Although I have herein shown and described a preferred embodiment of my invention, manifestly it is susceptible of modification and rearrangement of the parts without departure from the spirit and scope thereof. I do not, therefore, wish to be understood as limiting my invention to the precise form herein disclosed, except as I may be so limited by the appended claims.

I claim as my invention:

1. In a sectionalized carrier, a plurality of sections, each section having vertically spaced horizontal members at each of opposite ends, the horizontal members on one end having a different vertical spacing than the horizontal members on the opposite end in the case of each section, two of said sections being adapted to be fitted together in a set in end-to-end relation with respective horizontal members disposed adjacent each other, and with all of the horizontal members on adjacent ends of the sections lying in substantially a common plane, two of said sets being adapted to be fitted together with a corner of each section positioned adjacent a central point, a clamp adapted for positioning at said central point, said clamp having hooks movable relatively to each other, each hook adapted to engage, respectively, upper and lower horizontal members on each of said sections, and means biasing said hooks into interacting engagement with the respective horizontal members.

2. In a sectionalized carrier, a plurality of identical sections, each section having a longitudinal horizontal member at the top of each of opposite sides, each section having a vertical member at each corner, each section having vertically spaced transverse horizontal members at each of opposite ends, two of said sections adapted to be fitted together in a set in end-to-end relation, two of said sets adapted to be fitted together with a corner of each section and the respective vertical member positioned adjacent a central point, and a clamp adapted to be positioned at said central point, said clamp including a vertical shank, an upper inverted U-shape hook slidably mounted on said shank intermediate the ends thereof, said upper hook having downwardly extending legs, each leg having a vertical slot therein, forming four prongs, means reacting between the shank and the upper hook biasing the hook downwardly, and a lower hook mounted on the lower end of said shank, said lower hook having laterally spaced legs, each leg having a horizontal portion and a vertical portion, and handle means on the upper end of said shank, each prong on said upper hook adapted to extend into one of said sections and the upper hook thereby being adapted to engage the longitudinal horizontal member and the upper transverse horizontal member in each section, the lower end of said shank adapted to be positioned at one side of the lower transverse horizontal members, the horizontal portions of the legs on said lower hook being positioned on the outer sides of the adjacent vertical members of said sections and under said lower transverse members, and the vertical portions of said legs being positioned on the side of the lower transverse members opposite the lower end of said shank.

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3. Clamp means for securing together sections making up a sectionalized carrier, comprising, a vertical shank, hook means slidably mounted on said shank, said hook means having downwardly extending laterally spaced legs, each leg having a downwardly opening vertical slot, forming four downwardly extending prongs, means reacting between said hook means and shank biasing the hook means downwardly, stop means secured to said shank for limiting the downward movement of said hook means, a portion of said shank below said stop means being offset laterally with respect to the upper portion, lower hook means rigidly secured to the lower end of said shank, said lower hook means having laterally spaced legs extending horizontally in the direction opposite that in which the lower portion of said shank is offset, the extended ends of said legs having upstanding portions, and handle means on the upper end of said shank.

4. In a sectionalized carrier composed of a plurality of carrier sections each having a pair of upright end walls; the improvement comprising a plurality of vertically spaced horizontal members secured to and on the outer side of one of said pair of end walls, a plurality of vertically spaced horizontal members secured to and on the outer side of the second of said pair of end walls, said horizontal members on the first and second end walls being positioned at different levels, whereby, when the first and second end walls of a pair of carrier sections are adjacent each other, the plurality of horizontal members on said adjacent walls are alternately interposed and lie substantially in a common vertical plane, a clamp for securing together said carrier sections, said clamp including a first and a second hook means, said first hook means having a pair of prongs adapted to be positioned on opposite sides of some of said alternately interposed horizontal members and the second hook means having prongs extending vertically adjacent some of said alternately interposed members, whereby separation of adjacent carrier sections is prevented.

5. In a sectionalized carrier composed of a plurality of carrier sections each comprising vertical and horizontal edge frame members which form said carrier sections and each carrier section including a pair of upright end walls; the improvement comprising a plurality of vertically spaced horizontal members secured to and on the outer side of one of said pair of end walls, a plurality of vertically spaced horizontal members secured to and on the outer side of the second of said pair of end walls, said horizontal members on the first and second end walls being positioned at different levels, whereby, when the first and second end walls of a pair of carrier sections are adjacent each other, the plurality of horizontal

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members on said adjacent walls are alternately interposed and lie substantially in a common vertical plane, a clamp for securing together said carrier sections, said clamp including a first and a second hook means, said first hook means having a pair of prongs adapted to be positioned on opposite sides of some of said alternately interposed horizontal members, one of said hook means being adapted to clasp horizontal edge frame members of adjacent carrier sections together, and the other hook means adapted to clasp vertical edge frame members of adjacent carrier sections together.

6. In a sectionalized carrier composed of a plurality of carrier sections each comprising vertical and horizontal edge frame members which form said carrier sections and each carrier section including a pair of upright end walls; the improvement comprising a plurality of vertically spaced horizontal members secured to and on the outer side of one of said pair of end walls, a plurality of vertically spaced horizontal members secured to and on the outer side of the second of said pair of end walls, said horizontal members on the first and second end walls being positioned at different levels, whereby, when the first and second end walls of a pair of carrier sections are adjacent each other, the plurality of horizontal members on said adjacent walls are alternately interposed and lie substantially in a common vertical plane, a clamp for securing together said carrier sections, said clamp including a first and a second hook means, one of said hook means having a pair of prongs adapted to be positioned on opposite sides of some of said alternately interposed horizontal members, whereby separation of adjacent carrier sections is prevented, one of said hook means adapted to engage and clasp only horizontal edge frame members of adjacent carrier sections together, and the other hook means adapted to engage and clasp only vertical edge frame members of adjacent carrier sections together.

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