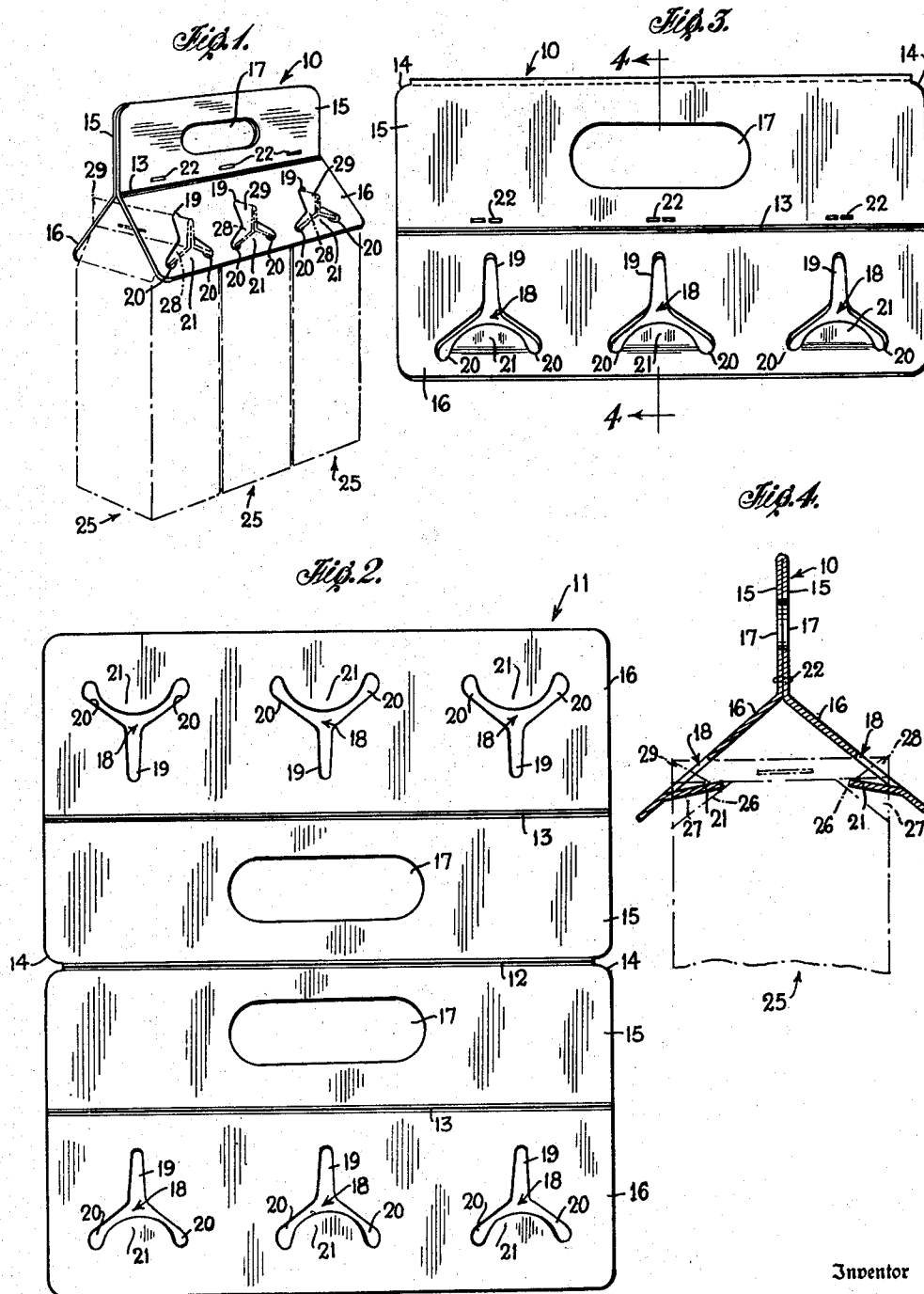


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CARTON CARRIER

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39

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CARTON CARRIER

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1

This invention relates to improvements in carriers for use more particularly in transporting a plurality of cartons of the type known as single service containers.

In recent years, milk bottles and other bottles have been replaced to a large extent by single service containers formed of foldable sheet material, such as cardboard or the like, made liquid tight, which containers are intended for use but once, after which they may be disposed of by the user. These containers are usually square or rectangular in cross-section and have a slanting, folded top with portions overlapping to form substantially triangular-shaped, lateral openings which may be gripped by the fingers in carrying the containers.

When carrying one or two of these containers, no great difficulty is encountered by the user since one may be carried in each hand. But when three or more containers are involved, difficulties are presented which it is an object of this invention to overcome.

Another object is to provide a carrier formed with spaced, cut-out portions and adjacent tongues, which tongues fit within the lateral openings at the tops of the containers and which cut-out portions receive the projecting ends of the container tops to thereby permit a plurality of such containers to be transported by a single carrier.

Further objects are to provide a carrier that is simple and easy to construct; that uses a minimum of material; that may be quickly and easily attached to the containers; that cannot readily become accidentally disengaged from the containers; that is inexpensive and efficient; that occupies only a small space when not in use; and that may be re-used a relatively large number of times.

Other objects and advantages will become apparent from the following description taken in conjunction with the accompanying drawing.

In the drawing:

Fig. 1 is a perspective view of my carrier with three containers carried thereby shown in broken lines;

Fig. 2 is a plan view of a single piece of material from which the carrier is formed;

Fig. 3 is a side elevation of the carrier properly assembled; and

Fig. 4 is a section taken substantially on line 4—4 of Fig. 3 with a container shown in broken lines in position to be engaged by the tongues of the carrier.

Referring to the drawing, the numeral 10 des-

2

ignates the carrier as a whole, formed from a single blank or sheet of foldable material such as cardboard, or the like 11 (Fig. 2). This blank is substantially rectangular in plan and is creased, scored or furrowed centrally as indicated at 12, and intermediate its center and ends, as indicated at 13, while the longitudinal margins are arcuately indented, as at 14. This arrangement provides identical panels on opposite sides of the center line 12, each panel consisting of inner sections 15 and outer sections 16.

Each section 15 is cut out to provide an elongated hand or finger opening 17, while each section 16 is provided with a plurality of spaced, cut-out portions or openings, indicated as a whole by the numeral 18. The latter openings are of substantially wish-bone shape, having a longitudinal branch 19, preferably slightly tapered, and having arcuate branches 20 leading from branch 19 in a manner to provide a plurality of spaced, arcuate-shaped tongues 21 extending generally toward the centerline 12, on each side thereof.

In the present embodiment of the carrier, three of the openings 18 and tongues 21 are arranged in oppositely disposed relation in each section 16, and as will be later explained, opposite pairs of these openings and tongues cooperate in holding a container. Thus, no more than three containers are adapted to be carried at one time by the carrier illustrated, but it will be apparent that the blank 11 may be made larger, if desired, and that additional openings and tongues may be provided for carrying additional containers.

After the blank 11 has been scored and cut out as previously described, it is folded on the center line 12, the two sections 15 being brought together in face-to-face relation and being fastened or secured in such relation. In the present instance the sections 15 are secured by a plurality of spaced staples 22 passing between these sections adjacent the score lines 13, but obviously other fastening means may be provided. When sections 15 are properly secured, the hand openings 17 are in alignment and these sections then become the handle portion of the carrier.

At this time the sections 16 will also be substantially in face-to-face contact and the carrier may be kept in this flattened condition for transportation or other purposes or until it is desired to use same. To be made ready for use, it is only necessary to bend the sections 16 outwardly in opposite directions along the score

3

lines 13 to approximately the angular positions shown in Figs. 1 and 4. The effect of the arrangement is to provide a pair of flaps, hinged along lines 13 to the handle portion of the carrier, independently of each other, and the flexible nature of the material will permit the distance between the flaps to be varied in accordance with the size of the containers to be carried.

The style of container with which this carrier is more particularly adapted for use is shown in broken lines at 25 in Figs. 1 and 4. This style of container is usually formed of foldable sheet material, such as cardboard or the like, made liquid tight, and comes in different sizes, such as quarts, pints, etc. The body of the container is usually square or rectangular in cross-section and the top thereof is substantially uniform in size and shape whether the container is of quart or pint size, the size being controlled by shortening or lengthening the body, as the case may be, without changing the arrangement of the top.

For a more complete understanding of the top construction in this type of container, reference may be had to the United States Patents Nos. 2,329,797, 2,270,617, 2,263,957, and 2,218,670. In general, the top comprises four slanting, folded portions which are continuations of the four walls of the container. Two oppositely disposed portions 26 of the top are slanted inwardly toward each other and folded so as to provide a substantially triangular-shaped opening 27 at each side of the top. The other two oppositely disposed portions 28 are also slanted inwardly toward each other, overlapping the first two portions, and being joined together at their upper ends so as to provide an upstanding horizontal ridge 29, slightly tapered, at the top of the structure. An opening (not shown) may be formed in one of the portions 28 to allow for passage of liquid into and out of the container.

When it is desired to utilize my carrier with a plurality of the containers 25, the latter are arranged side by side as indicated in Fig. 1, preferably but not necessarily, with as many containers 25 being provided as there are pairs of openings 18 in the carrier. The sections 16 of the carrier are then bent outwardly along the score lines 13 until the desired angular positions of the sections are obtained. Next the carrier is placed in position with sections 16 straddling the tops of the containers as indicated in Fig. 1. When in proper position, each pair of oppositely disposed openings 18 and their associated tongues 21 will cooperate with one of the containers 25 to engage the latter for carrying purposes. This engagement is brought about by having the end portions of each ridge 29 project through opposite openings 18 so that each tongue 21 may extend into the adjacent opening 27 and engage the folded top under the ridge 29, as shown in Fig. 4. If necessary, to insure proper engagement of each tongue 29, the latter may be bent or folded slightly inwardly, as indicated in Fig. 4. When all of the opposite pairs of tongues 21 have been properly positioned, the carrier will simultaneously lift all of the containers.

It will be observed that the angular arrangement of the sections 16 readily permit the ends of each container top to extend through opposite openings 18, with each branch 19 of the latter receiving the slightly tapered ridge 29, and with the branches 20 receiving the adjacent folded edge portions of the respective tops. When the containers are lifted by the carrier, they are firmly held and will not be accidentally displaced.

4

However, these containers may readily be removed from the carrier when it is desired to use them, by merely spreading the sections 16 farther apart until the tongues 21 pull out of the openings 27.

Generally the containers 25 are only used once for holding a liquid and are then disposed of by the user. For this reason they are known as single service containers. But the carrier may be used over and over for many times.

It is believed to be apparent that I have provided a carrier which is well calculated to achieve the objects and advantages of the invention. While I have illustrated and described one embodiment of the invention, it will be understood that the invention is not so limited, and modifications and changes may be made therein without departing from the spirit of the invention or from the scope of the subjoined claims.

What is claimed is:

1. In a container carrier of the character described, a hand grip portion, and a pair of flaps hinged to said hand grip portion independently of each other along the same margin thereof, each of said flaps being formed with a plurality of spaced apertures of substantially wishbone shape, each of said flaps having a tongue adjacent each aperture that extends generally in the direction of said hand grip portion.

2. In a container carrier of the character described, the combination of a hand grip portion, and a pair of flaps hinged to said hand grip portion independently of each other along the same margin thereof, each of said flaps being formed with an aperture of substantially wishbone shape, said apertures being oppositely disposed in their respective flaps and each flap having a tongue adjacent its aperture that extends generally in the direction of said hand grip portion.

3. In a container carrier of the character described, the combination of a hand grip portion, and a pair of flaps hinged to said hand grip portion independently of each other along the same margin thereof, each of said flaps being formed with a plurality of spaced apertures of substantially wishbone shape, each aperture in one flap being oppositely disposed from an aperture in the other flap, and each flap having a tongue adjacent each aperture that extends generally in the direction of said hand grip portion, each tongue being bendable with respect to its flap.

4. In a container carrier for containers having slanting tops comprising portions folded upon each other to define finger receiving openings on opposite sides of each container, the combination of a hand grip portion, and a pair of flaps hinged to said hand grip portion independently of each other along the same margin thereof, each of said flaps being formed with a plurality of spaced apertures and each of said flaps having a tongue adjacent each aperture that extends generally in the direction of said hand grip portion, each aperture in one flap being oppositely disposed from an aperture in the other flap and each tongue being bendable with respect to its flap so that the respective tongues associated with each oppositely disposed pair of apertures may be extended into said openings in one of said containers.

5. A container carrier of the character described in claim 4 wherein said apertures are of substantially wishbone shape, and the respective branches of each oppositely disposed pair of apertures are adapted to receive opposite ends of

5

the folded portions of the top of one of said containers.

6. In a container carrier for a container having a slanting top comprising portions folded upon each other to define finger receiving openings on opposite sides of the top, the combination of a hand grip portion, and a pair of flaps hinged to said hand grip portion independently of each other along the same margin thereof, each of said flaps being formed with an aperture and a tongue adjacent each aperture which extends generally in the direction of said hand grip portion, said apertures being oppositely disposed in their respective flaps so that their associated tongues may be extended into said openings in said top.

7. A container carrier of the character de-

6

scribed in claim 6 wherein said apertures are of substantially wishbone shape, and the respective branches of each aperture are adapted to receive opposite ends of the folded portions of said container top.

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