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R. E. J. NORDQUIST

2,850,319

CARRYING DEVICE FOR CONTAINERS

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Fig. 1

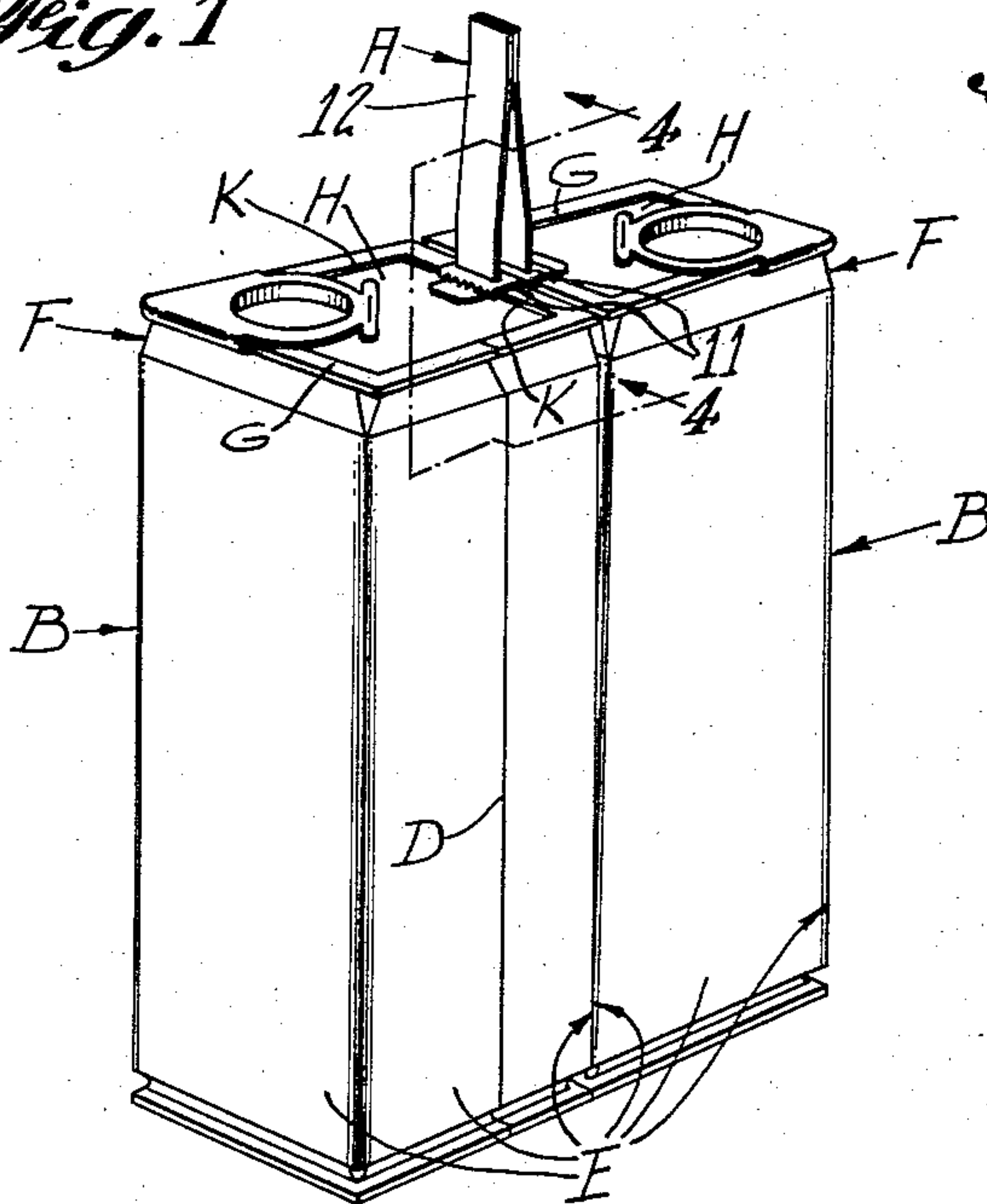


Fig. 2

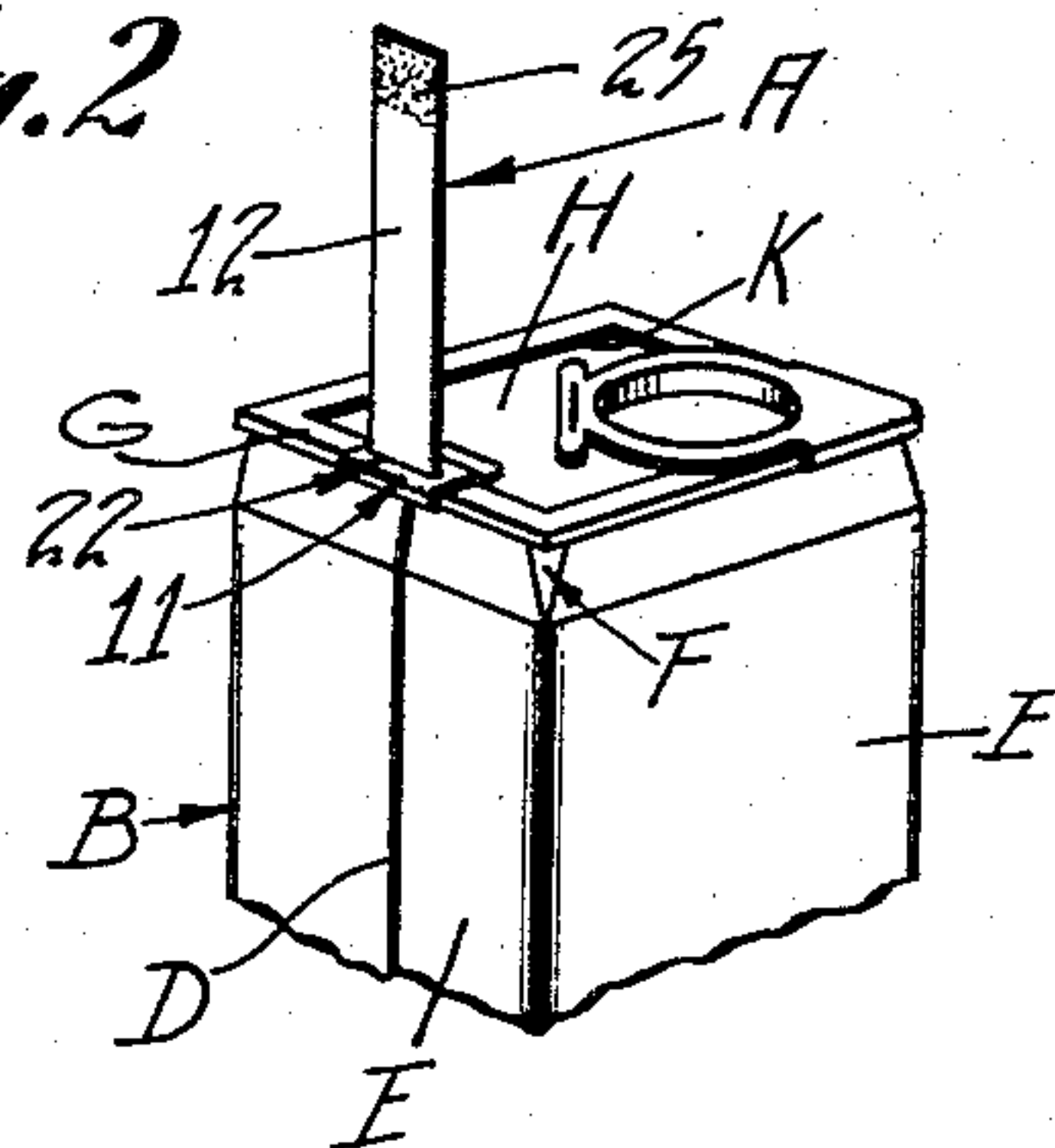


Fig. 3

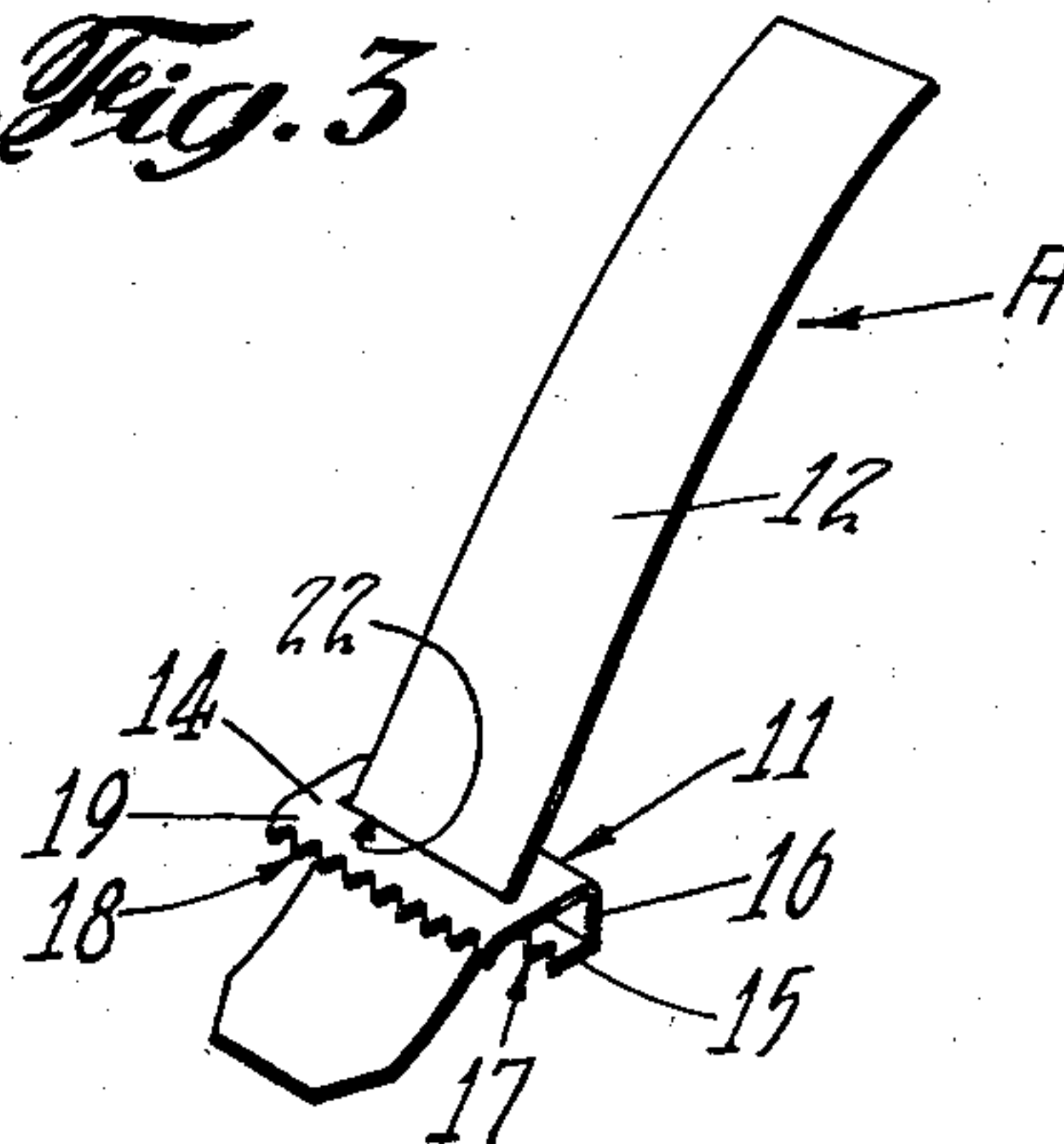
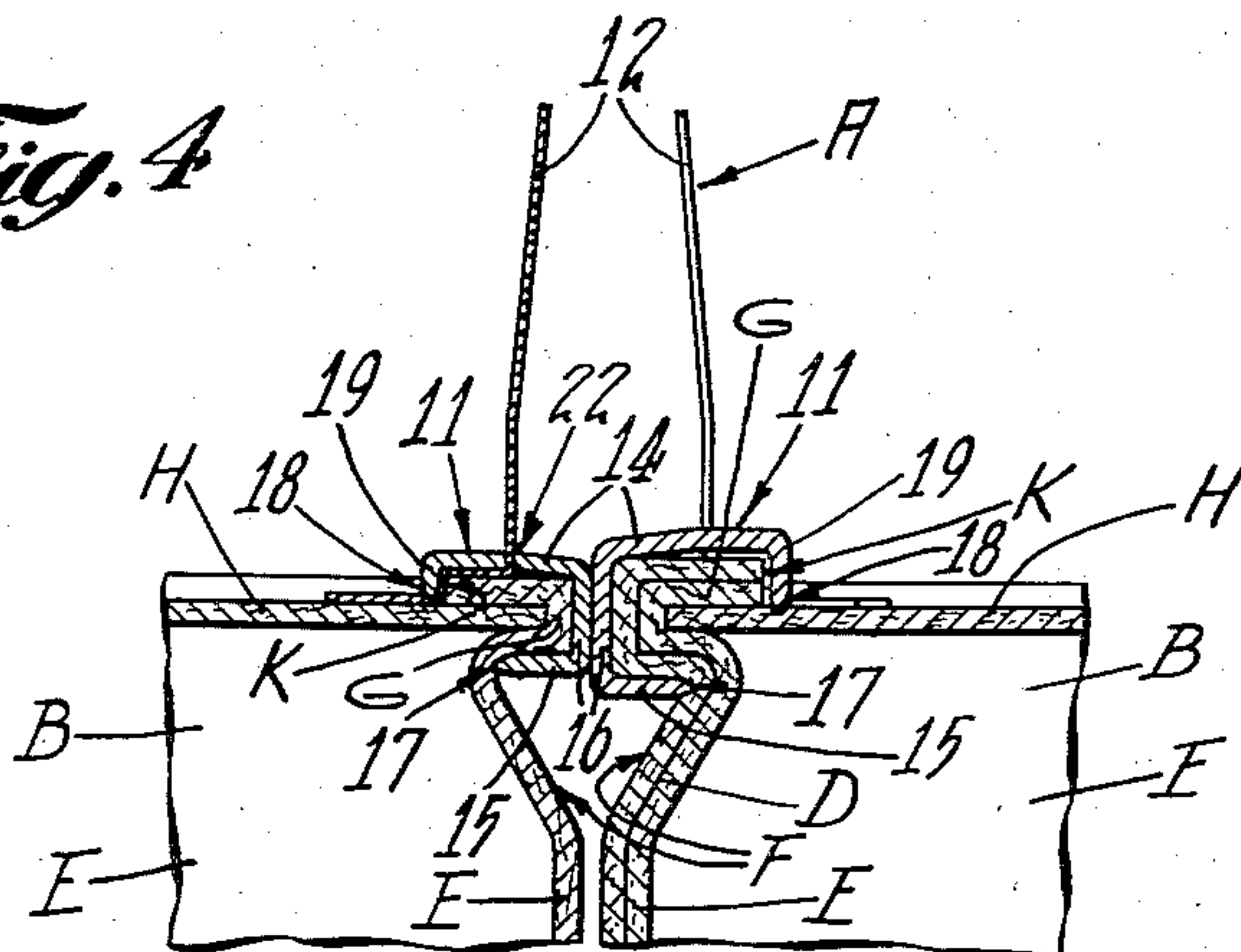


Fig. 4



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CARRYING DEVICE FOR CONTAINERS

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8 Claims. (Cl. 294—87.2)

The present invention relates to devices for carrying one or more containers and the like singly or in juxtaposed relation as a unitary package and has particular reference to a novel gripper member with attached handle for clamping over a ledge of a container.

An object of the instant invention is the provision of a carrying device for containers which is simple in construction and economical in material and which may be readily produced for snapping over a laterally projecting ledge of a container.

Another object is the provision of such a carrying device which is applicable to a single container but which is of such a construction as to permit securing together of a plurality of such devices for carrying a plurality of containers as a unitary package.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawings, discloses a preferred embodiment thereof.

Referring to the drawings:

Figure 1 is a perspective view of a pair of juxtaposed containers secured together for carrying as a unitary package by a carrying device embodying the instant invention;

Fig. 2 is a fragmental perspective view showing the upper end of a single container with the carrying device of the instant invention attached thereto;

Fig. 3 is an enlarged perspective view of the carrying device shown in Figs. 1 and 2; and

Fig. 4 is an enlarged fragmentary sectional view taken substantially along a pair of parallel vertical planes indicated by the broken line 4—4 in Fig. 1.

As a preferred or exemplary embodiment of the instant invention the drawings illustrate a carrying device A for carrying fibre milk containers B, either singly or in a plurality thereof disposed in juxtaposed relation. The containers B preferably are of the character disclosed in United States Patent 2,085,979 issued July 6, 1937 to John M. Hothersall on Container.

Such a container comprises a rectangular body having a lapped side seam D and flat side walls E which at their upper ends are formed with necked-in portions F and an immediately adjacent outwardly or laterally projecting peripheral end seam or ledge G which surrounds and secures in place a flat top member H. The end seam or ledge G is utilized by the carrier A to support the container or containers for carrying purposes. This ledge G terminates inwardly of its outer periphery in a vertical shoulder K. In a juxtaposed relation of the containers B as shown in Fig. 1 two side walls E are directly opposite each other in substantially contiguous relation, with the ledges G adjacent these side walls in substantially coincident relation.

The carrying device A preferably comprises a metal gripper member 11 having a ribbon-like handle 12 composed of fibre, sheet metal, cloth, plastic or other suitable flexible material, attached thereto. The gripper member

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11 preferably is composed of sheet metal such as steel or aluminum or other suitable material and comprises a channel shaped element having upper and lower spaced and preferably parallel horizontal legs 14, 15 (Figs. 3 and 4) connected by a vertical leg or wall portion 16 and proportioned to fit snugly over and around the laterally projecting peripheral ledge G of a container B as best shown in Fig. 4.

Where the gripper member 11 is intended to grip the portion of the ledge G of increased thickness at the lapped side seam D as shown at the right in Fig. 4, the legs of the gripper member are proportioned to compensate for this condition. This preferably requires a slightly longer vertical leg or wall section 16 to compensate for the greater thickness of the ledge G at the side seam.

The horizontal legs 14, 15 are spaced apart just enough to provide for tight frictional engagement with the upper and lower horizontal surfaces of the ledge G to hold the gripper member 11 in place and to facilitate snapping of the member onto the ledge for use. However, provision is made to insure secure gripping of the member along the inner or terminal edges of the horizontal legs 14, 15. For this purpose the terminal edge or end of the lower leg 15 is serrated to provide sharp teeth 17 (Fig. 3) which dig-in or become embedded in the fibre wall of the container when the gripper member 11 is applied to and over the ledge G.

In a similar manner, the outer terminal edge or end of the upper leg 14 of the gripper member 11 is provided with serrations or sharp gripping teeth 18. These teeth 18 preferably are formed on an inwardly or downwardly bent tongue 19 which is integral with the upper leg 14 of the gripper member and which extends down over the vertical step or shoulder K of the container ledge G. The teeth 18 preferably engage or bite into the flat top member H of the container as shown in Fig. 4.

The handle 12 preferably is attached to the gripper member 11 by means of a slot 22 (Figs. 3 and 4) which is provided in the upper leg 14 of the gripper member 11 in parallelism with the vertical wall portion 16 and preferably disposed midway between said wall portion and the tongue 19. For this purpose the handle preferably is made narrow, of a width substantially equally to the length of the slot 22 and is threaded through the slot as shown in Fig. 3.

When the gripper member 11 is applied to the ledge G the handle 12 extends between the upper leg 14 of the gripper member 11 and the upper face of the ledge G, extending across the ledge, over the shoulder K and along the container top H with the teeth 18 of the gripper tongue 19 penetrating the end of the handle and holding it secure against the container top H as viewed in Fig. 4. If a wider handle is desired, it may be provided with a narrow tongue for threading through the slot 22 of the gripper member.

Hence with the handle 12 threaded into the gripper member 11 and the latter attached to the ledge G of a container, the container may be readily carried and maintained in a substantially vertical position. The pull on the handle 12 during carrying tends to increase and tighten the hold of the gripper member 11 on the ledge G.

For carrying a plurality of the containers B in juxtaposed position as hereinbefore mentioned, the upper ends of the flexible handles 12 are secured together in any suitable manner, such as by the application of a suitable adhesive, a staple, a clip or clamp or any other appropriate means. Fig. 1 of the drawings shows two such containers B tied together by the handles 12 wherein the upper ends of the handles are secured together by an adhesive 25 (Fig. 2) which is applied to the handles and subsequently reduced to a tacky condition by press-

ing the handles together with a heated tool. The handles 12 thus secured constitute a loop which may be utilized to carry the unitary package.

It is thought that the invention and many of its attendant advantages will be understood from the following description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

1. A carrier for a container having at its upper end a laterally projecting peripheral ledge, comprising a flexible channel shaped gripper member having vertically spaced upper and lower horizontal legs disposed in vertically spaced connected relation for clamping and biting engagement with said container ledge for securing said gripper member to said container, and an upstanding flexible handle secured to said gripper member and clamped thereby to said container for carrying said container.

2. A carrier as defined in claim 1 wherein said handle extends upwardly from the upper horizontal leg of said gripper member.

3. A carrier of the character defined in claim 1 wherein said upper gripper member leg is provided with a transverse slot for receiving therethrough the lower portion of said flexible handle, and means on said gripper member for engaging and anchoring the portion of said flexible handle extended through said slot between said upper gripper member leg and the upper surface of said container.

4. A carrier as defined in claim 1 wherein said upper

and lower gripper member legs adjacent their terminal edges are formed with teeth for biting engagement with adjacent portions of said container for locking said gripper member in place on said container.

5. A carrier of the character defined in claim 1 wherein said upper leg of said gripper member adjacent its terminal edge is provided with an integral inwardly bent tongue for engagement over a stepped shoulder defining the inner edge of said peripheral container ledge.

6. A carrier as defined in claim 3 wherein said handle anchoring means comprises teeth on said upper leg engageable against said container and wherein the portion of said handle extended through said slot is disposed between said teeth and said container for tightly anchoring said handle in place.

7. A carrier for a plurality of juxtaposed containers having at their top ends laterally projecting peripheral ledges, comprising a plurality of separate channel shaped gripper members each having upper and lower legs disposed in vertically spaced relation for clamping engagement over the peripheral ledge of an individual container, and a unitary flexible handle member having its opposite ends connected to said gripper members respectively for carrying said containers as a unitary package.

8. A carrier of the character defined in claim 7 wherein each gripper member is provided with a separate flexible handle strip, said strips being secured together to provide a unitary handle for carrying said containers as a unitary package.

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