

June 1, 1954

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CARRIER FOR PAPER MILK CARTONS

2,680,040

Filed Jan. 21, 1953

Fig 1

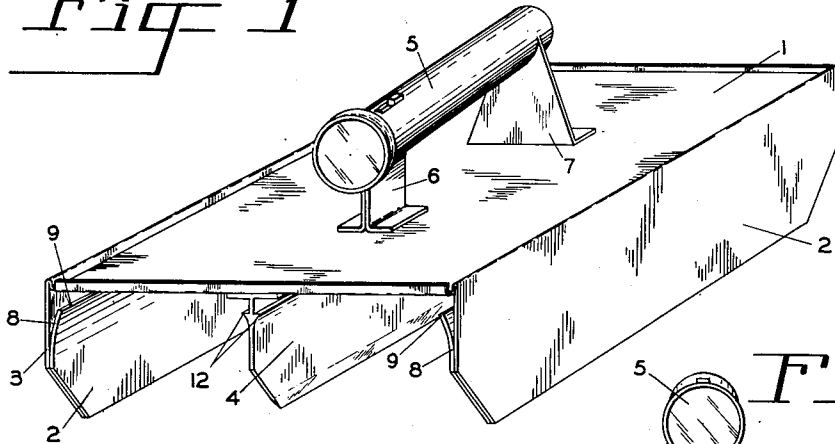


Fig 3

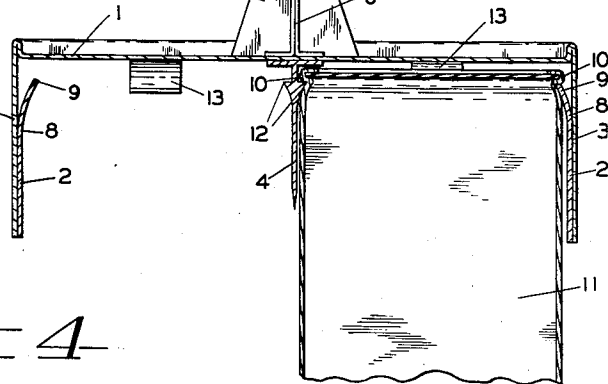
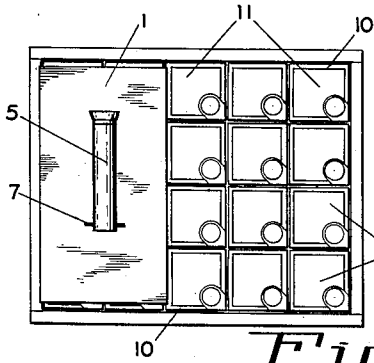


Fig 4

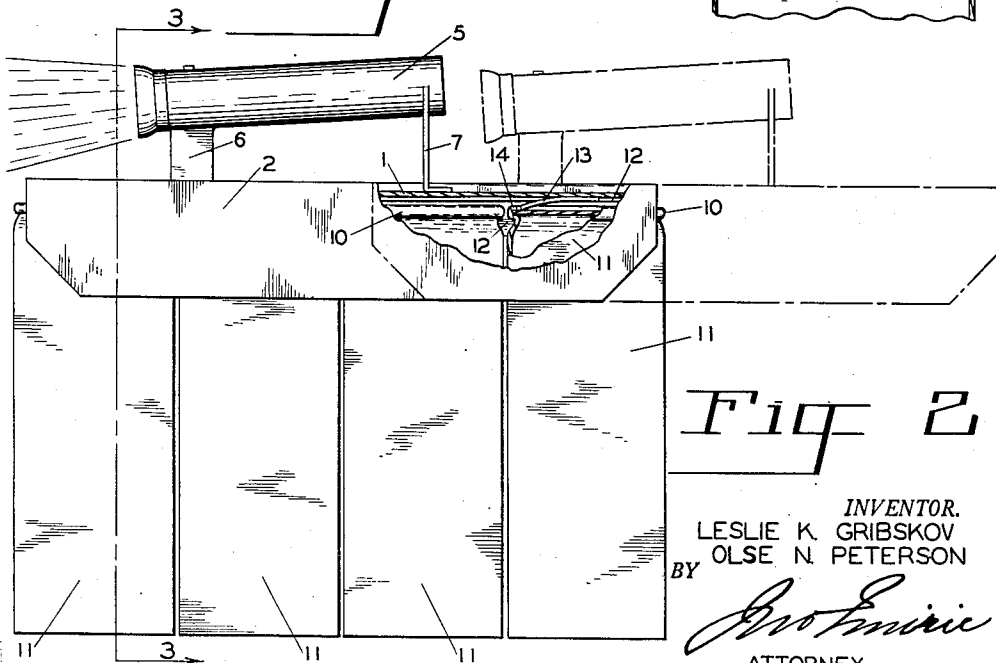


Fig 2

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2,680,040

CARRIER FOR PAPER MILK CARTONS

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Application January 21, 1953, Serial No. 332,286

4 Claims. (Cl. 294—87.2)

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Our invention relates to carriers for milk containers, particularly the paper carton type of container.

The primary object of our invention is to remove the milk containers from their case on the delivery route, delivering the said cartons to their destination. The delivery man inserts the carrier in the top of the case of cartons, pushing the same down on the tops of the cartons, the said carrier automatically gripping the cartons so that they can be removed from the case and carried to their destination by the delivery man.

The carrier is so designed that two or more cartons can be released from the same as desired.

The delivery man can handle the carrier with gloves on in cold weather, which he cannot do when he is removing the cartons by hand from their cases.

By the use of our new and improved milk carrier, much time is saved in the handling of the cartons, reducing the cost of delivery of the same.

These and other incidental objects will be apparent in the drawings, specification and claims.

Referring to the drawings:

Figure 1 is a perspective view of our new and improved milk container carrier.

Figure 2 is a side view of the carrier applied to the cartons, partially broken away for convenience of illustration.

Figure 3 is a sectional view, taken on line 3—3 of Figure 2, illustrating how the carrier supports the carton.

Figure 4 is a plan view of a case of containers, illustrating how our carrier is inserted down into the containers for lifting them out of the case.

Referring more specifically to the drawings:

Our new and improved carrier consists of a base 1, having legs 2, 3 and 4 forming part thereof and extending downwardly therefrom and extending the full length of the base. A handle 5 is mounted to the base 1 by way of the legs 6 and 7. The handle 5 forms the case of a flashlight assembly adapted to provide light in the operation of the carrier after dark.

Running longitudinally and secured to the legs 2 and 3 are barbs 8 of spring material. This material is secured along the bottom edge of the legs by any suitable means, as for instance welding or the like. Their upper edges 9 are bent in towards the center of the carrier. These edges are adapted to spring under the flanges 10 form-

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ing the top of the container 11, as best illustrated in Figure 3.

Barbs 12 are formed on either side of the center leg 4. These barbs are also adapted to engage the undersurface of the flanges 10 of the top of the container 11. Secured under and to one end of the base 1 are barbs 13, which are adapted to engage the inner edge 14 of the top flange 10 of the containers 11, as best illustrated in Figure 2, the object of which will be described later.

In the operation of our new and improved carrier for containers for milk, the operator grasps the handle 5 and places the carrier over the cartons 11, as illustrated in Figure 4, the legs 2, 3 and 4 entering between the cartons. The carrier is pushed down onto the containers until the base 1 contacts their tops.

At this time the edges 9 of the barbs 8 engage the undersurface of the flanges 10 of the containers. Also the said flange is engaged by the barbs 12 located on the center leg 4, as best illustrated in Figures 2 and 3. The barbs 13 also engage the inner surface 14 of the flange 10 of the pair of containers adjacent one end of the carrier, namely the containers located at the rear of the carrier. This prevents the containers from sliding out as the carrier is being carried.

When the carrier is being carried, the front end of the same is held slightly higher than the rear so that the containers will tend to slide towards the rear and against the barbs 13. When it is desired to release the cartons, the front end of the carrier is lowered and the cartons brought to rest on a surface. This permits the removal of the same by sliding the cartons forward within the carrier, dispensing them out the forward end of the same. Any number of cartons can be removed by this operation, namely sliding the carrier backward over the tops of the containers as indicated by the broken lines Figure 2.

It is comparatively easy to slide the carrier off the tops of the cartons when the cartons come to rest on a support, due to the fact that the upper edges of the barbs 8 and 12 are slacked off from under the flanges 10 of the containers. Any number of containers can be handled at a time under the full capacity of the carrier, as well as carrying the full number of containers that can be handled by the carrier.

By the use of our new and improved carrier for paper cartons for milk much time is saved, due to the fact that a number of containers can be removed from the case at one time and the operator does not have to fumble around the top

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of the containers trying to remove one so that others can be removed.

What we claim is:

1. A carrier for milk cartons having a laterally extending flange around the top, comprising a base, a handle on said base, three parallel flanges each outer flange being spaced from the central flange a distance sufficient to straddle a row of milk cartons and said flanges depending from said base, and barbs on both sides of the central flange, resilient barbs on the inner sides of the outer flanges and said flanges being spaced below said base to fit under the lateral flanges on the cartons.

2. A carrier as defined in claim 1 wherein stop means are positioned on the underside at one end of said base between said flanges to prevent removal of cartons at that end.

3. A carrier as defined in claim 2 wherein said stop means comprises a leaf spring fixed to said

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base and biased downwardly to engage the rim on the top of a carton.

4. A carrier for milk cartons having a laterally extending flange around the top, comprising a base, a handle on said base, at least two parallel flanges spaced to straddle a row of milk cartons and depending from said base, and barbs on the facing sides of said flanges and spaced below said base to fit under the lateral flanges on the cartons, the barbs on at least one of said flanges being resiliently biased toward the other flange to permit the lowering of said barbs past the carton flanges.

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