Nov. 19, 1963 W. F. JACOBI 3,111,223

UNITIZED SHELF LOADING CARTON

Filed July 30, 1962 3 Sheets-Sheet 1

Fig. 1.

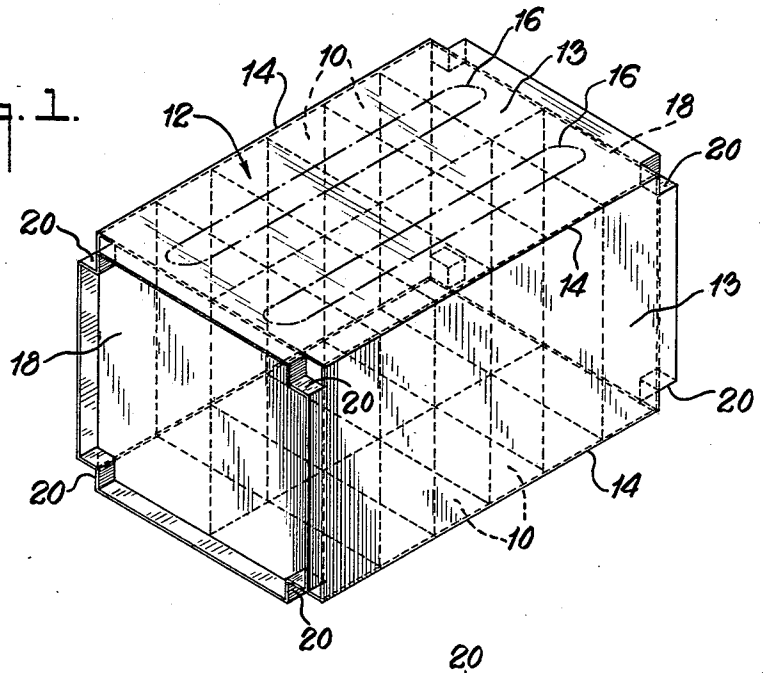
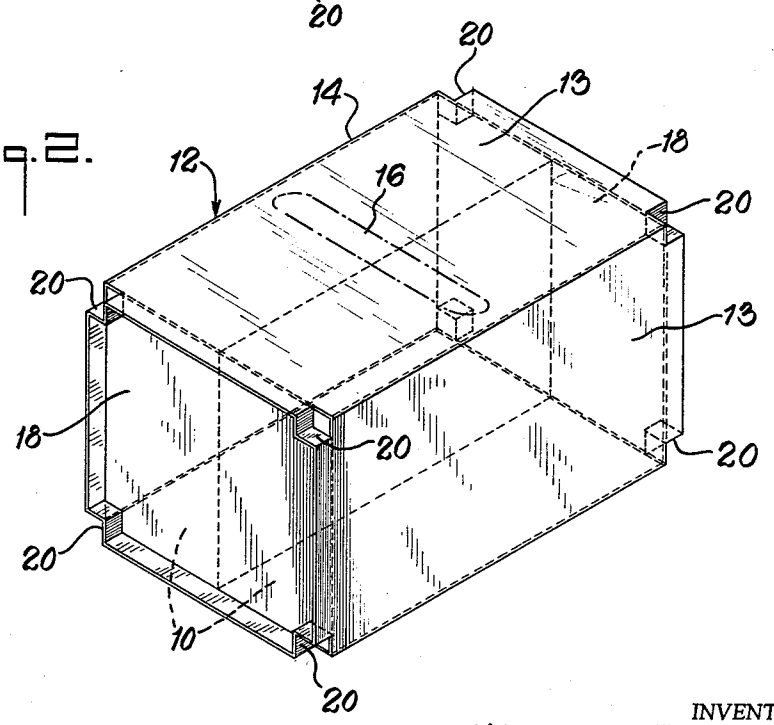


Fig. 2.



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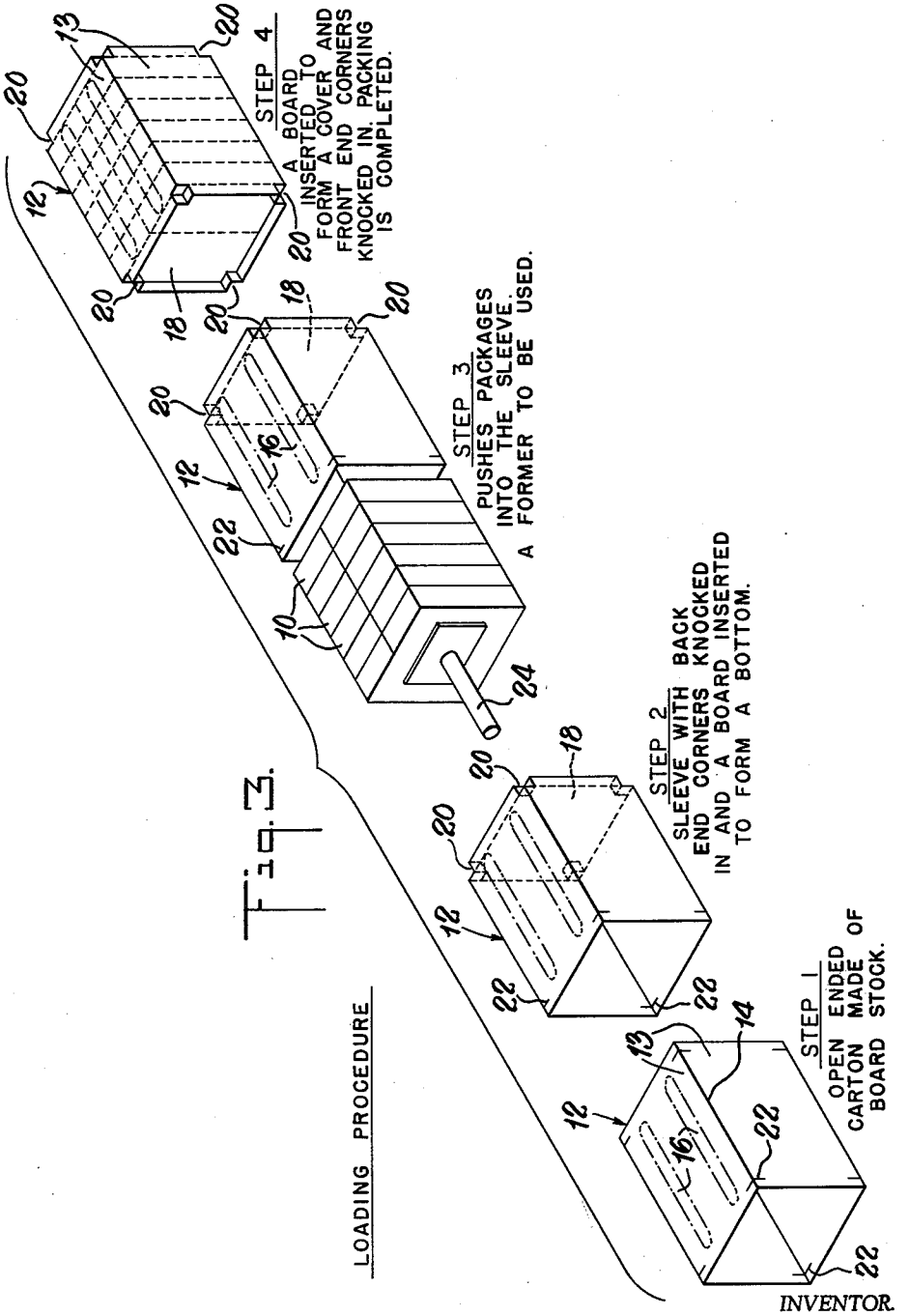


Fig. 3.

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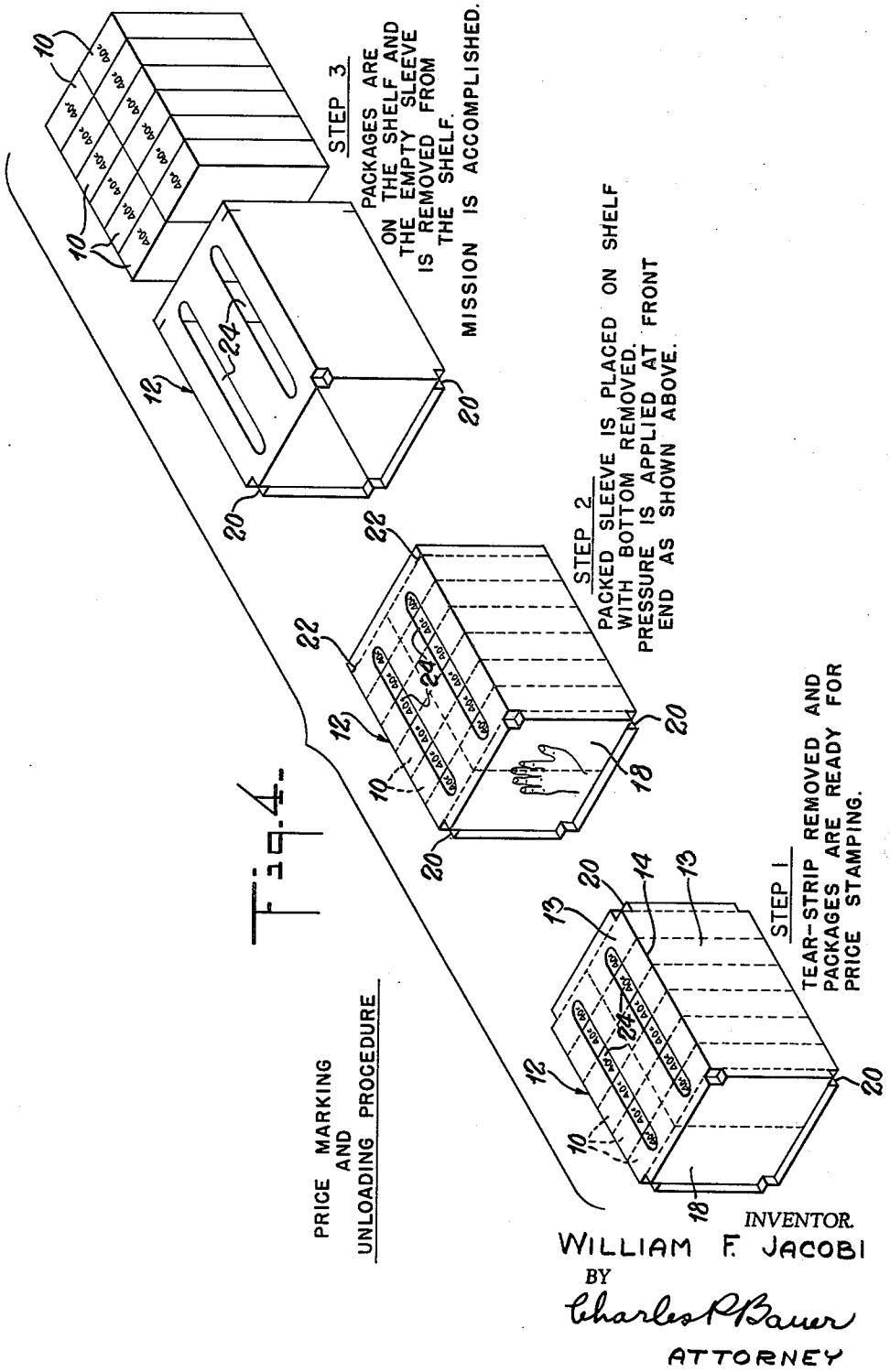


Fig. 4.

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UNITIZED SHELF LOADING CARTON

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1 Claim. (Cl. 206—65)

The present invention relates to unitized shelf loading and price marking carton for temporary storing and handling multiple packages encased therein and a method of packaging, price marking and handling unit packages with the carton.

More particularly, the present invention relates to a novel handling carton structure for encasing a plurality of unit packages which it is desired to price mark on an end of each unit without their removal from the carton or damaging of the carton until the packages are unloaded on a shelf and to a method of unit wrapping, price marking and handling multiple packages by means of the novel carton of the invention.

Present day shipment cartons of corrugated paper used for encasing multiple packaged units are generally of the well-known folded box variety and the shipment cartons are closed at the sides and ends by mechanical fasteners such as staples, and are usually adhesively bonded by the flaps into closed position about the stacked array of unit packages.

When unit packages which all need to be individually price marked are wrapped in such cartons it is usually necessary to first open the carton by unfolding, ripping, or cutting one or more panels thereof to gain access to the packages for price marking. If one or more layers or tiers of packages are contained in the box, first one tier must be priced and removed from the box, then the next tier likewise priced and removed to the desired display shelf location and so on. The package is then destroyed.

As intimated above, present day box cartons do not provide for unit handling of multiple packages at the location where the packages are to be removed from the box and placed on display, for example, food product packages to be placed on a supermarket shelf for display. Thus the present day procedure almost uniformly is to rip or tear a panel from the box carton, price mark the exposed packages open to view, lift the priced packages from the box, and place them at the desired location. This is followed by price marking the remaining tiers of packages within the box and lifting and placing these on the shelf until the box is emptied. In lifting the packages from the box, small easily handled groups can only be taken, and often, this may mean the removal of two packages only at a time. Needless to say, the task of unloading many small packages from the box cartons in present day huge supermarkets and retail outlets is time consuming and expensive.

It is an object of the present invention to provide a carton for multiple packages comprising a sleeve section having price marking tear strips adapted to expose a portion of each package within the carton when the tear strips are removed.

It is a further object of this invention to provide a carton for multiple packages comprising three simple elements, i.e., a sleeve, and two end panels, which end panels are retained in position with respect to the sleeve by simple, reversedly-bent sleeve end corners without the need for mechanical or adhesive securing means.

It is still another object of this invention to provide a method of wrapping and handling multiple packages to be individually price marked and unloaded as a unit at a desired location.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises the several steps and the relation of one or more of such steps with respect to each of the others, and the article possessing the features, properties and the relation of elements, which are exemplified in the following detailed disclosure, and the scope of the invention will be indicated in the claim.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken in connection with the accompanying drawings, in which:

FIGURE 1 is a perspective view of a completed and filled carton embodying the invention;

FIGURE 2 shows an alternative form of the carton shown in FIGURE 1;

FIGURE 3 is a diagrammatic representation of the method of filling and forming the carton embodying the invention; and

FIGURE 4 is a diagrammatic representation of the method of using and unloading the carton embodying the invention.

As seen in FIGURE 1, the carton embodying this invention is adapted to hold a plurality of packages, and comprises a corrugated paperboard sleeve section 12 having sidewall panels 13 intersecting at fold lines 14.

One of the sidewall panels 13, according to the preferred embodiment of the invention, is provided with price marking tear strips 16 which are suitably disposed and shaped so as to expose a portion of each of the packages within the carton when the strip is removed. It will be readily apparent that any number of tear strips disposed in a manner consistent with the number and arrangement of packages within the carton may be provided, so long as the general standard is met and that a portion of each of the packages contained within the sleeve section of the carton is exposed upon removal of the tear strip or strips, and that such portion will be accessible for price marking through such opening provided in the sidewall panel of the sleeve. In FIGURE 2, for example, where only two packages are contained in the carton of the invention, only one pricing tear strip 16 may be required, and this tear strip may be disposed transversely with respect to the sleeve 12. Other possible variations not shown will readily be obvious, such as tear strips in two or more panels of the sleeve 12, and so forth.

As seen in FIGURE 1, sleeve 12 of the carton of the invention is provided with end panels 18 formed of relatively rigid corrugated paperboard material of suitable dimension to fit freely within the open end areas of the sleeve 12.

For retaining the end panels 18 against outward movement, the sleeve end corner sections 20 are slit transversely and reversedly bent inwardly. It will be readily apparent that when the sleeve 12 is filled with packages, each of the end panels 18 will be freely held in place between the endmost packages 10 within the sleeve 12 and the reversedly-bent sleeve end corner sections 20 without the need for any mechanical fastening or adhesive bonding. The completed carton in this form therefore comprises only three simple sections, i.e., the sleeve 12 with its tear strip or strips, and the two end panels. It is inexpensive to produce, lightweight, requires no mechanical or adhesive fasteners to close it and maintain it closed. It is sufficiently rigid to protect the packages contained therein, the end panels serving to aid the sleeve to maintain its form, and, if desired could be readily reused with the tear strips removed, since no damage to the carton is involved other than in removing the tear strips prior to unloading the carton as will become apparent below.

In FIGURE 3 there is illustrated diagrammatically the

method of filling the carton of the invention. At step 1 of FIGURE 3, the empty sleeve 12 is shown with the tear strips 16 and sleeve end corners slit at right angles 22. In step 2 of FIGURE 2, the end corners 20 at one end of the sleeve 12 have been reversedly bent along the slits 22 and an end panel has been placed within this end of the sleeve to close it. The end panel at this point is restrained against outward movement by means of the reversedly-bent corners 20. At step 3 of FIGURE 3, the packages 10 are loaded into the open end of the sleeve as a unit by suitable means such as a pusher means 24. At step 4 of FIGURE 3, an end panel 18 has been inserted into the open end of sleeve 12 so as to bear against the endmost packages 10, and the sleeve end corners 20 have been reversedly bent to retain the end panel 18 in position within the sleeve. It will be apparent that in any specific use of the carton of the invention the dimensions of the sleeve 12 and the location of the slits 22 will be suitably determined so that there will be substantially no free space between the end panels 18 and the endmost packages 10 within the carton when the carton is completely formed.

In FIGURE 4, there is diagrammatically depicted the method of preparing the packages in the carton of the invention for unloading and the method of unit unloading the packages from the carton onto a shelf or other desired location. In step 1 of FIGURE 4, the tear strips 16 shown in FIGURE 1 have been removed to leave access openings 24 in the sidewall panel 13 of the sleeve 12. Each of the packages 10 within the carton have been price stamped upon their exposed portions. It will be noted that no cutting, ripping or otherwise damaging of the carton body is involved in gaining access to the packages for price marking other than removal of the tear strips. The operation is a simple one and does not require any tool or other implement since the tear strip may readily be torn manually.

In step 2 of FIGURE 4, the end corners 20 at one end of the sleeve have been returned to their normal outwardly-bent configuration, and the end panel at this end of the sleeve has been removed outwardly. The now open end of the sleeve will be the unloading end thereof. To unload the packages as a unit from the carton, force is applied inwardly against the remaining end panel 18. As seen in step 3 of FIGURE 4, the packages 10 are in place at a desired location, price marked and in neat pre-arranged order. If desired, stacking of units is readily accomplished by merely unloading a plurality of the cartons of the invention in a particular arrangement, such as side by side and/or one above the other.

An important point is that the carton of the invention and its method of use provides a simple, efficient and economical means for packaging, handling, pricing and unloading packages of merchandise with a minimum expenditure of effort and time. Unlike with present cartons on the market, it is not necessary with the carton of the invention to rip open a panel of the carton to gain access to the packages therein for pricing, with the subsequent necessity of removing the packages from the carton either singly or in small, easily handled groups and carrying them to the desired location on a display shelf. Moreover, the carton is a simple arrangement of three basic elements held together by simple, folded corner sections without a requirement for mechanical or adhesive securing means.

Under certain circumstances, the present shipping package is reusable in the supermarket, grocery store or warehouse. Loose unit packages are always in temporary storage locations for assembling and price marking on the shelves where they will be available for view by the customer. The sleeve element alone is capable of holding these units or the end panels may be applied after the tear strip has been removed to expose the portion of each package to which the price has been applied. In this respect, the novel handling carton of the present invention possesses an advantage which is not at all possible with the conventional corrugated shipping container and the user is furnished wiht a palletizing device uniquely adapted for marking and movement of the unit packages to the shelves which was not heretofore available.

Although the sleeve and end panels have been described as made of corrugated paperboard, it will be understood that such elements of the carton may be made of any suitable fibrous board or similar material capable of containing and supporting the units within it.

Since certain changes in carrying out the above method, and certain modifications in the article which embody the invention may be made without departing from its scope, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claim is intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

In combination, a unitary carton and a group of stacked rectangular packages with the ends of the packages being aligned in a row in a common plane for marking with price indicia within said carton, said unit carton consisting of an open-ended rectangular unitary paperboard sleeve, said sleeve having four interconnected planar sidewall panels joined along fold lines and encasing all of the edges of said group of packages; said sleeve being provided with reversedly-bent transversely aligned corners at each of the eight corners of said sleeve, said reversedly-bent sections being formed by cutting slits through the fold line at each corner at a transverse short line located adjacent the end edges of said corner; flat, substantially rigid rectangular closure panels retained at each open end of said sleeve, said panels being retained solely by said reversedly-bent corner sections which hold the packages within the closure panels by bending of said corner sections at the slitted lines to reverse the corners and thereby hold the end panels without additional means, either adhesive or mechanical, for fastening the end closure; and a removable tear strip in a side wall panel, said panel being located immediately over and contacting the said ends of the said row of enclosed packages, said tear strip traversing the said ends of each package to view for identification or marking upon removal of said strip, the exposed ends of each package bearing indicia so that every package in a row in the sleeve will be seen from the outside of the unit carton with the markings exposed to view prior to removal of the packages from the unit carton.

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