Sept. 3, 1968 J. R. POTTER 3,399,762

TYPEWRITER PAPER CARTON WITH LIFT STRIP

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Fig. 1

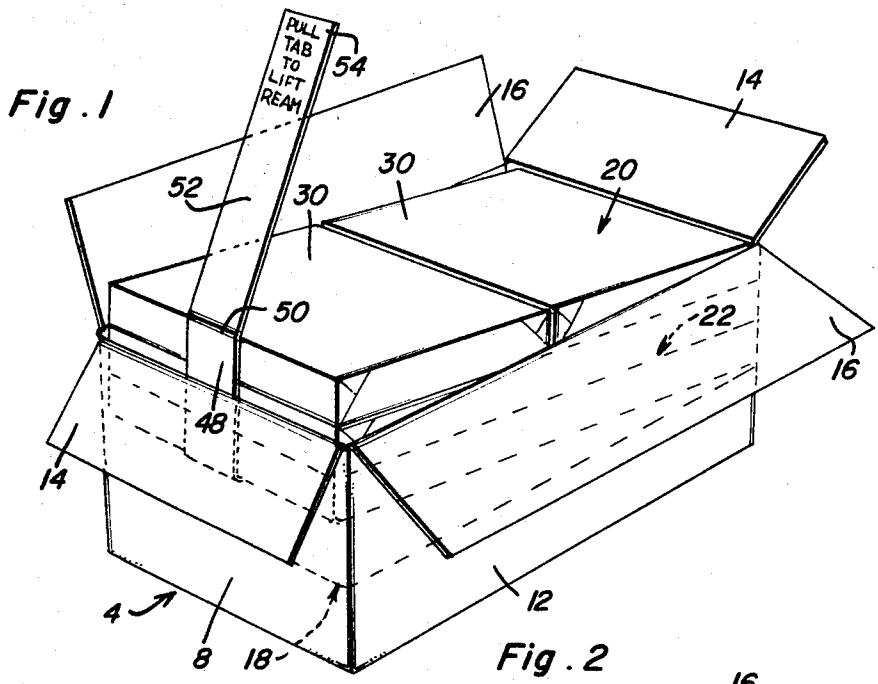
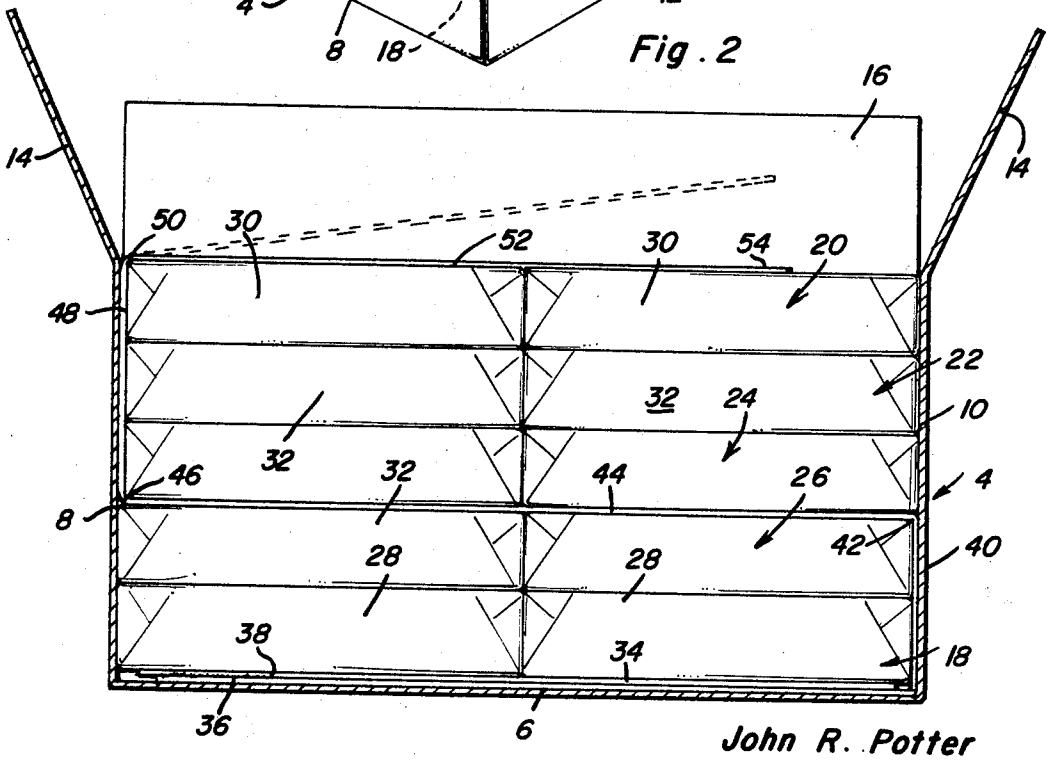


Fig. 2



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TYPEWRITER PAPER CARTON WITH LIFT STRIP

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ABSTRACT OF THE DISCLOSURE

A cardboard carton is loaded with stacked layers of individually wrapped reams of typewriter paper. These layers are conveniently set forth as (1) a bottom layer, (2) a top layer and (3) a plurality of intervening layers. The method and means for progressively emptying the carton is the innovation under consideration. A cardboard insert (called a mat or follower panel) is fitted between the carton's bottom and the two lowermost reams and is extracted by a novelly threaded ream dislodging up-ending lifting tape connected at its lower end to the insert.

Background of the invention

This invention relates to novel means which when properly embodied in a cardboard carton which is tightly packed with wrapped reams of typewriter paper can be readily and reliably employed to systematically dislodge the reams by tilting and up-ending the same, whereby they are then accessible and can be caught hold of and removed in a time and labor saving manner.

Opening a sealed cardboard carton and dislodging and extracting tightly packed reams of paper has always posed a problem for the recipient of the carton. The time and tedious labor involved can be exasperating and try one's patience. As a general rule, by the time one pries the wrapped reams loose for orderly removal he may wind up by destroying the carton to get at the wrapped reams, that is, without too much trouble. It follows that the objective herein is to equip the loaded carton with self-contained or built-in ream lifting and freeing means which, as will be evident, permits unhampered removal of tightly packed reams without having to rip and destroy the then highly useful carton.

Prior art

Lifting ribbons and tapes have been used to project and dispense cigaretes. More explicitly, it is old to use a ribbon-like tape for dislodging and freeing tight-packed cigars from a cigar box. If desired the reader can check the article dispensing package shown in the patent to Butler 1,865,232, the cigar box patented under Number 622,-932 by Tribble, and sinuously folded layer lifting tape shown in the patent to Feld 1,230,388. By contrast the subject matter herein revealed, unlike these prior patents, has to do with a heavy duty tough lifting tape which solves the problem of opening, unpacking, and saving valuable time, labor, and the re-usable carton intact.

Summary

As will be hereinafter clear the cardboard carton is old and the manner in which the wrapped reams of typewriter paper are stacked atop each other and arranged in tight-fitting layers in the containers space is old. It follows that the improvement has to do with the combination of the box-type packaging, shipping and handling carton, the plurality of layers of wrapped reams of typewriter paper snug-fitted in a customary manner and, more particularly, to the featured improvement, that is, the self-contained means for systematically loosening, dislodging and presenting the reams for ready access

and removal and for thus emptying the carton in a convenient step-by-step manner and without having to rip or tear or otherwise destroy the carton.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout.

Brief description of the drawing

FIG. 1 is a view in perspective showing a conventional cardboard packing, shipping and handling carton and showing certain of the wrapped reams of paper being lifted and canted and dislodged for up-ended access after the flaps forming the top wall have been opened and spread out.

FIG. 2 is a view on an enlarged scale which may be said to be a central longitudinal sectional view and the purpose of which is to show the heavy duty self-contained means or lifting or dislodging strip and how it is oriented and systematically arranged for capable handling and usage.

Description of the preferred embodiment

The cardboard container or carton (not necessarily cardboard) is denoted generally by the numeral **4** and comprises a bottom wall **6**, a pair of opposed vertical end walls **8** and **10** and a pair of longitudinal side walls **12**. The top wall is made up of a pair of transverse end flaps **14** cooperable with foldable side flaps **16**. All of the wrapped reams of typewriter or equivalent paper are identical in construction and are tightly packed in the container space of the carton. However and in order to emphasize the innovation herein under consideration, it is desirable to designate the lowermost reams as representing a bottom layer, generally denoted at **18** and the uppermost layer at **20** (FIG. 2). The auxiliary intervening layers (three shown) are differentiated as at **22, 24** and **26**. Each layer for simplicity is shown as made up of a pair of tightly fitted reams, the reams in the lower or bottom layer being denoted at **28**, the two reams in the top or uppermost layer at **30** and the reams in the several intervening layers **22, 24** and **26** at **32**. For simplicity of understanding it can be assumed that there is a bottom layer, a top layer and intervening layers sandwiched between the top and bottom layers. One may also consider the reams of paper as being stacked on each other. It will be understood however that, generally speaking, the carton itself is old and also the reams of paper and the manner in which they are firmly lodged in the container space of the carton. The meritorious aspects of the over-all combination has to do with the tough, suitably long and textured lifting and ream dislodging and dispensing strip means. To the ends desired, an insert, which may be a cardboard mat or panel is placed in the bottom of the carton. It is denoted in FIG. 2 by the numeral **34**. This part **34** is of a suitable size and thickness that it can be sandwiched between the bottom wall **6** and underneath sides of the reams **28** in the layer **18**. The relatively narrow tough-textured ribbon-like lifting strip or tape is amply long to provide a bottom portion, a top portion and an intervening portion. The bottom portion is denoted at **36** and underlies the insert or panel **34** and extends from right to left in FIG. 2 where the terminal thereof is glued or adhesively attached at **38** to the panel. The right hand end portion of the median part of the tape and which is denoted at **40** is threaded through the space between the marginal ends of the reams **28** and **32** where it is then bent as at **42** and extended in a horizontal plane and sandwiched between the auxiliary

or intermediate layers as denoted at **44**. It is then bent at **46** and extended vertically in the space between the end wall **8** where it then bridges the marginal portions of the reams embodied in the layers **22**, **24** and **20**. This vertical stretch of the tape is conveniently denoted at **48**. The terminal or free end portion is bent from left to right at **50** to provide the upper free end portion **52** whose terminal part provides a pulling or lifting tab conveniently denoted at **54**. The component portions **52** and **54** simply reside atop the reams **30** in the upper or top layer **20** at the time the top wall or cover is closed. By thus threading the lifting tape to provide the vertical portion **40**, the horizontal portion **44**, the vertical portion **48** and the terminal free end portion **52**, the lifting means is properly embodied to accomplish the dislodging, up-ending and ream-removing steps desired. The cardboard mat or panel **34** is properly sandwiched between the bottom and underlies the reams in the two lower layers and the tape is then criss-crossed to the other side of the carton and the three additional reams or layers are placed thereon. The end of the strip is folded across the top when the carton is sealed. Upon opening the carton a suitable tug on the strip means causes the reams on the side nearest the strip to be up-ended slightly so that they can be easily removed from the carton with one hand. Once they are removed the other layers or reams can likewise be easily removed because of the space left by the removal of the first three. A further lifting of the strip then tilts two of the reams in the bottom of the carton permitting them to be removed. The last two reams can then be removed and the insert and paper strip removed and disposed of if desired.

What is claimed as new is as follows:

1. In combination, a box-type packaging, shipping and handling carton, a plurality of layers of wrapped reams of typewriter paper tightly stacked atop each other within the confines of the encompassing walls of the container portion of said carton, there being a bottom layer, a top layer and at least one intervening layer sandwiched between said top and bottom layers, the reams of paper in each layer being arranged in firm edge-to-edge abutting relationship and firmly lodged in place to avoid relative shifting or displacement, and self-contained means for systematically loosening, dislodging, and presenting said reams for ready access and removal and for thus emptying the carton step by step without having to rip, tear or destroy the carton, said means comprising a substantially inelastic uninterrupted one-piece lifting tape, said tape having (1) a lower end located between the reams of paper comprising the aforementioned bottom layer and the bottom wall of said carton, said lower end being free of positive connection with either the reams constituting said bottom layer or said bottom wall, (2) a median portion threaded between the reams embodied in said bottom layer and intervening layer, (3) and a free complemental upper end positioned in an accessible place atop the surface of the reams of paper embodied in said top layer and providing a tape pulling and ream lifting tab, and, in combination, a tape holddown and anchoring panel fittingly but removably sandwiched between the reams of said bottom layer and interior of said bottom wall. said panel being substantially commensurate in size with said bottom wall, said tape being narrow compared to the size of the panel and having a substantial portion centralized and superimposed upon the underneath side of and secured to said panel, whereby the panel and tape constitute a unit which, having served its ream ejecting and unloading purpose can then be discarded.

2. The combination according to claim **1**, and wherein said carton embodies interconnected bottom, side, end, and top walls, said top wall being made up of separable overlapping flaps adhesively seamed for shipping, handling and ultimate opening purposes.

3. In combination, a cardboard box-type packaging, shipping and handling carton embodying a bottom wall marginally provided with corner-connected upstanding end walls, side walls, and a complemental top wall having side and end closing flaps, a bottom layer of wrapped reams of typewriter paper tightly packed and lodged in place in the bottom part of the container portion, a cardboard panel sandwiched between said reams of paper and said bottom wall, a ream dislodging and lifting tape, said tape being of tough inelastic flexible load lifting strip material and having a lower end portion, an upper end portion, and an elongated median portion, said lower end portion being parallel to, underlying and centrally fastened to an underneath surface of said panel, a top layer of wrapped reams of typewriter paper like said first-named reams and likewise tightly packed but located in the upper part of said container portion for initial manual dislodgement and removal, and a plurality of intermediate layers of wrapped reams of typewriter paper also like the aforementioned reams of paper and stacked upon the first-named reams and each other and fully and tightly packing the encompassing container portion, the median portion of said tape having (1) a first vertical part passing upwardly in the space between one end wall and corresponding marginal edges of adjacent reams of paper, (2) a second horizontal part passing lengthwise between confronting surfaces of reams of paper embodied in said intermediate layers, (3) a second vertical part threaded and passing upwardly in the space between the other end wall and cooperating marginal edges of reams of paper not only in said intermediate layers but said top layer too, the upper end portion of said tape being folded in and over the top surfaces of said top layer reams of paper and providing a pull tab which when caught hold of and lifted serves to tilt and up-end an initial one of said reams and which continues by pulling up to progressively dislodge other reams for easy access and removal.

4. The combination according to claim **3**, and wherein said panel and lifting tape constitute a prefabricated ready-to-use unit which can be inserted and handled step by step as the container portion is tightly packed and loaded for closing, shipping and handling.

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