March 29, 1966

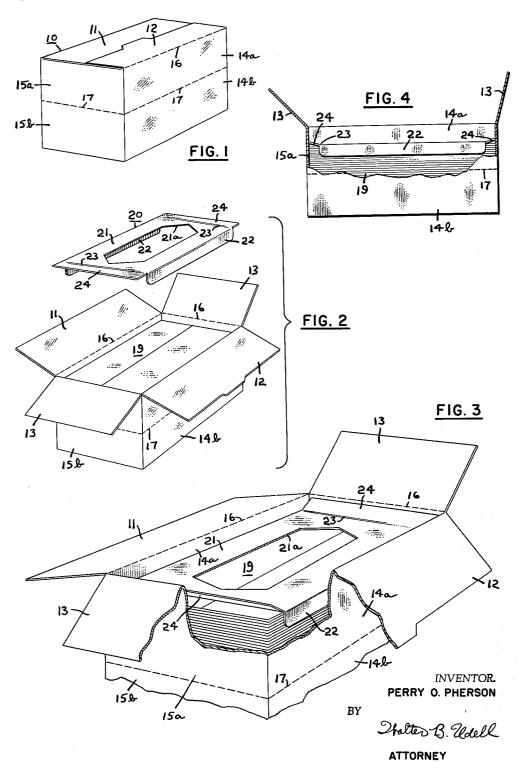
### P. O. PHERSON

3,243,078

SHEET MATERIAL DISPENSER PACKAGE

Filed April 27, 1964

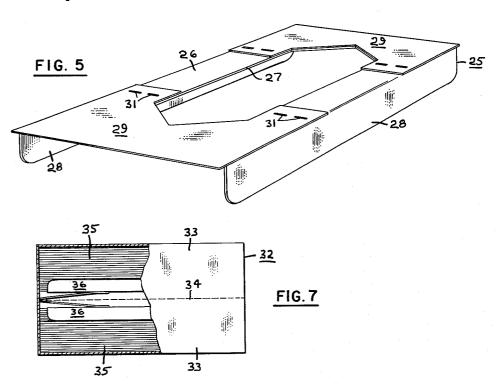
2 Sheets-Sheet 1

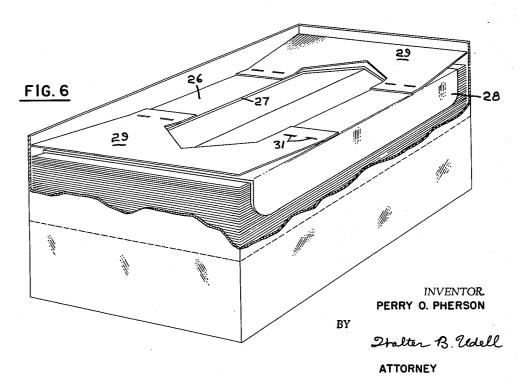


#### SHEET MATERIAL DISPENSER PACKAGE

Filed April 27, 1964

2 Sheets-Sheet 2





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3,243,078
SHEET MATERIAL DISPENSER PACKAGE
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Filed Apr. 27, 1964, Ser. No. 362,796 5 Claims. (Cl. 221—48)

This invention relates generally to a dispenser package for stacked sheets of material. More particularly, this invention relates to a dispensing package made up of an open topped carton containing therewithin a stack of sheet material to be dispensed, and which stack is overlayed by a dispensing top movable downward into the carton as the stack diminishes in height to always thereby maintain the stack in a compacted form and in position for dispensing.

The sheet material to be dispensed may be for example disposable paper facial tissues, towels, napkins or the like 20 wherein the sheet material constituting the stack may be interleaved, interfolded or merely stacked one upon the other. Typically, disposable facial tissues which are in wide-spread current use are generally sold in paperboard cartons containing several hundred tissues and having apertures or slots through which individual tissues can be withdrawn as desired. The size of such a box is ordinarily too small to hold an adequate supply for an entire household because it is limited in stack depth in accordance with the width of the tissue contained therewithin, a stack depth in excess of such tissue width normally leading to a condition wherein the lower portions of the stack may fall backward within the box and become inaccessible to the user unless the carton is torn open. The package is thus rendered unsuitable as a dispensing

Another form of presently used tissue dispensing box is one having a top wall with an enlarged opening and a dispenser board loosely fitting within the carton beneath the top wall, such loose fit of the dispenser board allowing the same to move freely vertically within the box in both directions as the tissue stack decreases in height. The disadvantage of this form of container is that the loosely fitting interior dispenser board requires the presence of the carton top wall in order to function. Thus, the height of the container, and consequently the stack of tissues, is again limited since the consumer is not disposed toward purchase of a package into which a substantial portion of the arm must be projected in order to withdraw a tissue placed toward the bottom of the stack.

Accordingly, it is a primary object of this invention to provide a novel sheet material dispenser package including a carton containing a stack of sheet material and an apertured dispenser board overlying said stack within said carton, the dispenser board being so dimensioned relative to the carton dimensions that it may be readily pressed downward into the carton upon the stack as tissues are dispensed, but engages with the side walls of the carton in response to an upwardly directed force thereon which prevents upward movement of the dispenser board while permitting withdrawal of the sheet of material lying immediately therebeneath at the top of the stack.

Another object of this invention is to provide a novel sheet material dispenser package as aforesaid wherein 65 the dispenser board in one form is made of a unitary piece of relatively stiff but springy material cut and folded to a novel configuration, while in another form the dispenser board is formed of a plurality of pieces of material laminated together.

Still another object of this invention is to provide a

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novel sheet material dispenser package as aforesaid in which the carton or container is usable in open topped form with the novel dispenser board according to the invention so that the side walls of the carton may be torn or cut down as the stack of sheet material contained therewithin is consumed, whereby no limitation is imposed upon the initial size of the package, and the top of the stack of sheet material may thus always be near the top of the carton.

A further object of this invention is to provide a novel sheet material dispenser package in the form of a double dispensing package wherein the carton or container part of the package includes a line of perforation completely peripherally thereabout at a point intermediate the top and bottom of the package so that the carton may be cut or broken into two approximately equal units each of which contains its own stack of sheet material and dispenser board disposed in operative position for immediate use.

The foregoing and other objects of my invention will become clear from a reading of the following specification in conjunction with an examination of the appended drawings, wherein:

FIGURE 1 illustrates in perspective view a closed package according to the invention within which are disposed a stack of sheet material and an overlying dispenser board;

FIGURE 2 is a perspective view of the package according to the invention illustrated in FIGURE 1 with the top closure flaps of the package opened out and with the sheet material dispenser board displaced upward out of the container to disclose the underlying stack of sheet material;

FIGURE 3 is a perspective view similar to that of FIGURE 2 but on a somewhat enlarged scale illustrating the dispenser board in position within the sheet material carton, and with the fore corner of the carton broken away to disclose details of the interior arrangement of the parts;

FIGURE 4 is a side view of an opened package of the type seen in FIGURE 1 with a portion of the side wall broken away to disclose the organization of the dispenser board with the carton and sheet stack;

FIGURE 5 is a perspective view of a modified form of a dispenser board according to the invention;

FIGURE 6 is a perspective view of a package utilizing the modified form of dispenser board shown in FIGURE 5, portions of the carton being sectioned away to more clearly disclose interior details of the arrangement; and

FIGURE 7 is a side view, partly in section and partly in elevation, on a reduced scale, illustrating a double dispenser package medially separable into two complete open top units each of which includes its own stack of sheet material and overlying dispenser board.

In the several figures, like elements are denoted by like reference characters.

Turning now to the drawings, FIGURE 1 shows a generally rectangular box 10 having top exterior panels 11 and 12 and top interior panels 13, which latter are as seen in the showings of FIGURES 2, 3 and 4. The side walls and end walls of the package 10 are divided into upper and lower side walls 14a and 14b respectively and upper and lower end walls 15a and 15b respectively by the completely peripherally extending line of perforations or slits 17, the top panels 11, 12 and 13 being readily detachable from the upper edges of the upper side walls and end walls by virtue of the lines of perforation or slitting 16. While only the perforation line 17 is illustrated in the figures so that the package has only two vertically spaced regions as defined by the side walls and end walls 14a and 15a on the one hand and the side walls 14b and end walls 15b on the other hand, it will be more

peripheral perforation, such as that illustrated at 17, which are utilized.

clearly appreciated as the description progresses that the package 10 could be of considerably greater vertical extent and be provided with additional lines of perforation to subdivide the package vertically into as many sections as are desired with each section being of any convenient vertical extent. The two vertical sections illustrated, are, however, sufficient for an understanding of the invention.

As best seen in the exploded perspective view of FIG-URE 2, the top panels 11, 12 and 13 of the package 10 10 have been opened out to disclose a stack of tissues 19 disposed within the box, and a dispenser board designated generally as 20 positioned upward above the box. The dispenser board 20 includes a planar top 21 formed with a longitudinally extending centrally disposed opening 21a 15 therethrough, depending longitudinally extending side flaps 22, and end flaps 24 substantially in plane with the top 21 but divided from the latter by the transversely extending light score lines 23. The overall length of the dispenser board 20 between the outer edges of the end 20 flaps 24 may typically be approximately one eighth inch longer than the inside dimension of the package carton between the inside facings of the end walls 15, and each of the light score lines 23 may be approximately one inch inward from the outer edge of the associated end flap 24. The dispenser board side flaps 22 thus each terminate approximately one inch inward from the opposite ends of the package container.

As best seen in the assembled views of FIGURES 3 and 4, the dispenser board 20 rests upon the stack of 30 tissues 19 within the box with the side flaps 22 disposed between the sides of the stack and the inner surfaces of the upper side walls 14a. As the dispenser board 20 is pushed downward into the box it is clear that the end flaps 24 will bend up slightly about their score lines 23 35 due to the somewhat longer length of the dispenser board 20 as compared to that of the container so that the outer edges of the end flaps 24 frictionally engage the inside surfaces of the upper end wall sections 15a with these end flaps 24 being inclined somewhat upward at an angle, 40

as is clearly seen in FIGURES 3 and 4.

The upward inclination of these end flaps 24 combined with the frictional engagement of the end flaps with the carton end walls creates an anchoring effect which prevents the dispenser board 20 from moving upward when the top tissue of the stack is grasped through the central opening 21a of the dispenser board and pulled upward and removed from the container for use. As tissues are withdrawn one after another, the dispenser board 20 is easily moved down into the container by light hand pres- 50 sure, and, as before, at each point of lower positioning the dispenser board is similarly anchored against upward movement by withdrawal of a tissue due to the frictional engagement of the dispenser board end flaps with the end walls of the package container. Of course, all of the top panels 11, 12 and 13 may be removed by tearing off the same along the lines of perforation 15 since their presence is in no way required for functional operation of the dispensing package.

As the level of the tissue stack 19 drops lower and 60 lower until the dispenser board is completely below the line of perforations 17, it will be at once clear that the upper side walls 14a and end walls 15a of the package container may be torn away since they are no longer functional. The top of the remaining portion of the tissues stack 19 is once again immediately adjacent to the top of the remaining portion of the package so that the tissues are readily accessible without any necessity for the user to insert a hand downward to any appreciable depth into the container in order to withdraw a tissue therefrom. 70 The advantage of this construction should now be clear in that it permits the formation of packages 10 of considerable vertical height if desired, on the order of feet rather than inches. Of course, the taller the package the greater will be the number of vertically spaced lines of 75 cifically as indicated by the appended claims.

The tissues in the stack 19 may be interfolded or interleaved to provide a pop-up characteristic for each following tissue as a leading tissue is withdrawn from the stack, or the tissues may be stacked flat one upon another and the pop-up feature dispensed with inasmuch as it is not particularly important in the package according to the invention since the top tissue is always immediately beneath the dispenser board with no intervening empty space into which the tissue can fall and thereby become inaccessible. Additionally, if desired, the tissue stack 19 may be formed of groups of interleaved tissues stacked one upon another with no interleaving between the contiguous top and bottom tissues of successive groups, and the break points between groups may be arranged to coincide as closely as possible with lines of perforation 17 in the package container so that the package may be broken open if desired at a perforation line to provide two open containers each with its own stack of tissues.

Turn now to a consideration of FIGURES 5 and 6 which illustrate a sheet material dispenser package of the general type previously described hereinbefore but which utilize a dispenser board of somewhat modified form. The modified dispenser board includes a base 25 of relatively stiff material, such as a heavy cardboard, having a planar top 26 through which is cut a longitudinally extending tissue dispenser central opening 27 and having side marginal edges turned downward to form longitudinally extending depending side flaps 28. The relatively heavy and stiff base part 25 is cut to a length of approximately one quarter inch shorter than the inside length of the carton 30 shown in FIGURE 6. Overlying the opposite ends of the dispenser board base part 25 are a pair of opposite end laminations 29 made of relatively springy material, such as a light cardboard, these end laminations 29 being fixedly secured to the planar top 26 of the base part as for example by means of the staples 31, or by any other convenient method of securement. The end laminations 29 are longitudinally spaced so as to provide an overall length for the dispenser board of approximately one eighth inch longer than the inside length of the carton 30. Of course, if desired the two separate end laminations 29 may be part of one overall lamination secured downward upon the base part 25. Moreover, if the material of the base part 25 is sufficiently stiff, the depending side flaps 28 may be dispensed with entirely.

The dispenser board of modified form as shown in FIG-URES 5 and 6 functions according to the same principle as that already described in connection with the one piece dispenser board of FIGURES 2, 3 and 4, the upward angulation of the dispenser board end laminations 29 starting from the points of securement established by the

staples 31 as is most clearly seen in FIGURE 6.

FIGURE 7 illustrates a modified form of package in which a carton 32 is divided into identical upper and lower sections 33 by a peripherally extending perforation line 34 along which the carton may be split in half, each such half 33 containing therewithin a stack of tissues 35 each having its own dispenser board 36. The dispenser boards 36 are face to face within the carton 32, and the tissue stacks 35 are of a proper depth so that the perforation line 34 falls between the dispenser boards 36 as shown. When the carton 32 is thereafter split in half 65 along the perforation line, it is evident that two complete and independent dispenser packages are provided and ready for use.

Having now described my invention in connection with particularly illustrated embodiments thereof, it will be understood that modifications and variations of my invention may now occur from time to time to those persons normally skilled in the art without departing from the essential scope or spirit of my invention, and accordingly it is intended to claim the same broadly as well as spe-

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What is claimed as new and useful is:

1. In a package of facial tissues, in combination, a box having top, bottom, side and end walls and at least one endless line of severance disposed about the side and end walls, a stack of a plurality of facial tissues disposed in the box and interleaved except at spaced intervals which are in alignment with each line of severance, and a dispenser board having means defining a tissue withdrawal opening therein and having downwardly depending flaps and upwardly extending flaps disposed about its periphery, 10 said dispenser board being disposed in said box to overlie said stack of tissues with the downwardly depending flaps disposed between the box side walls and the stack of tissues and with the upwardly extending flaps disposed for frictional engagement with the box side walls.

2. In a package of facial tissues, in combination, a box having bottom and side walls, a stack of a plurality of facial tissues disposed in the box, and a dispenser board having means defining a tissue withdrawal opening therein and having downwardly depending and upwardly extend- 20 ing flaps spaced about its periphery, said dispenser board being disposed in said box to overlie said tissue stack with the said depending flaps disposed between the box side walls and the tissue stack and with the upwardly extending flaps disposed for frictional engagement with  $^{25}$ 

the side walls.

3. For use in conjunction with an open-topped carton having side walls and containing a stack of sheet material articles, a dispenser board including a top portion adapted to directly overlie and seat downward upon the stack of sheet material and having an opening therethrough to expose the top one of the stack of sheet material articles for withdrawal of the latter therethrough, and two pairs of spaced flaps carried by said top portion, each pair of flaps being adapted to engage a respective pair of sidewalls of the carton as said dispenser board is pushed downward into the carton upon the stack of sheet material articles therein, and length of said dispenser board between the points of engagement of the flaps of one 40 pair with the carton sidewalls being slightly longer than the distance between the carton sidewalls engaged by said flaps of said one pair whereby, said flaps of said one pair are turned upward away from the said dispenser board top portion by frictional engagement with the carton sidewalls as the dispenser board is moved downward into the carton, the flaps of the other pair being disposed between the other carton sidewalls and the stack of tissues, the flaps of said other pair being in fractional engagement with said other carton sidewalls, such frictional 50 engagement preventing upward movement of said dispenser board when a sheet material article is withdrawn from the stack through the opening in said dispenser board.

4. A package comprising,

(a) a carton having top, bottom and sidewalls and an endless line of severance disposed about the sidewalls spaced from both the top and bottom walls to form a carton top section and a carton bottom section,

(b) a stack of sheet material disposed in said carton 60 top section with one end of the stack against the inside of the top wall and with the other end of the stack located above the said endless line of severance,

(c) a stack of sheet material disposed in said carton bottom section with one end of the stack against 65 the inside of the bottom wall and with the other end

of the stack located below the said endless line of severance,

(d) a pair of dispenser boards within said carton disposed face to face respectively above and below said line of severance and each including a top portion directly seated against the associated stack of sheet material and having an opening therethrough to expose the immediately adjacent sheet of said stack of sheet material for withdrawal of the latter therethrough, and a plurality of spaced flaps carried by said top portion in frictional engagement with the sidewalls of said carton, the length of said dispenser boards between the points of engagement of the flaps thereof with the carton sidewalls being longer than the distance between the carton sidewalls engaged by said flaps,

whereby, said carton may be separated along the said endless line of severance to form two complete sheet material dispenser packages from said carton top and bottom sections each of which includes its own stack of sheet mate-

rial and dispenser board therefor.

5. A dispenser board structure for use in conjunction with an open-topped carton having sidewalls and containing a stack of sheet material articles, comprising a top portion adapted to directly overlie and seat downward upon the stack of sheet material and having an opening therethrough to expose the top one of the stack of sheet material articles for withdrawal of the articles therethrough, said top portion being a substantially planar non-flexible member of smaller size than the top opening of the carton within which it is to be disposed, and a plurality of spaced flaps carried by said top portion and having free edges adapted to engage the sidewalls of the carton as said dispenser board is pushed downward into the carton upon the stack of sheet material contained therein, said plurality of spaced flaps being formed from relatively springy material fixedly secured to said top portion at points spaced away from said free edges, the distance between the free edges of said flaps being greater than the distance between the carton sidewalls engaged by said flaps, whereby, said dispenser board flaps are turned upward away from the said dispenser board top portion by frictional engagement with the carton sidewalls as the dispenser board is moved downward into the carton, such frictional engagement preventing upward movement of said dispenser board when a sheet material article is withdrawn from the stack through the opening in said dispenser board.

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LOUIS J. DEMBO, Primary Examiner.

RAPHAEL M. LUPO, Examiner.

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### Dedication

3,243,078.—Perry O. Pherson, Cheltenham, Pa. SHEET MATERIAL DIS-PENSER PACKAGE. Patent dated Mar. 29, 1966. Dedication filed Dec. 17, 1974, by the assignee, International Paper Company. Hereby dedicates to the Public the entire remaining term of said patent. [Official Gazette April 22, 1975.]