Jan. 10, 1956

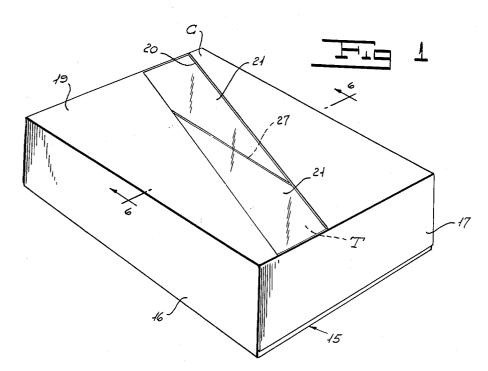
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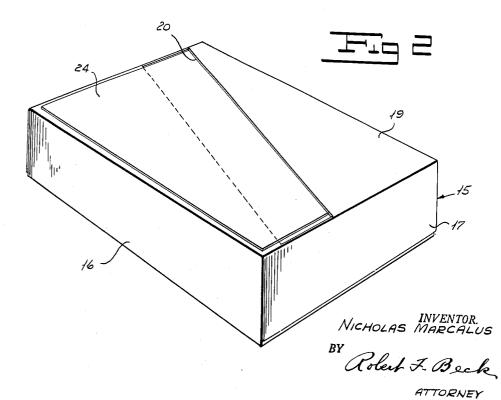
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3 Sheets-Sheet 1





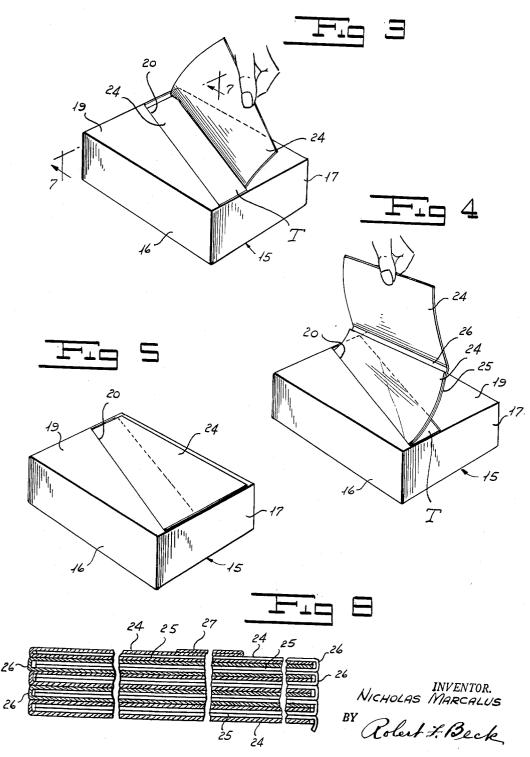
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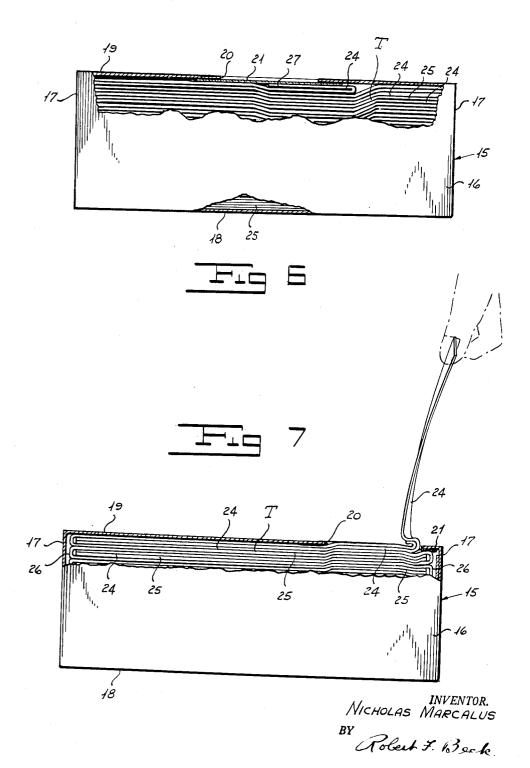
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2,730,267 Patented Jan. 10, 1956

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2,730,267

DISPENSING

Nicholas Marcalus, West Englewood, N. J.

Application January 26, 1953, Serial No. 333,057

2 Claims. (Cl. 221-48)

My invention relates to dispensing and more particu- 15 larly to means whereby articles, for instance, paper towels, may be dispensed or withdrawn from a receptacle or the like for immediate use.

It is well known that paper towels and the like are disposed in relatively shallow cardboard containers, boxes 20 or receptacles with the latter being formed with dispensing openings or slots through which the towels are withdrawn for use. In many instances, the towels are folded to provide overlying sections with the sections being interfolded with those of adjacent towels in order that a 25 section of a towel will extend outwardly through the slot to facilitate subsequent withdrawal of the towel. Heretofore, due to the arrangement of the slots, considerable drag or resistance to withdrawal is developed when towels are being withdrawn from the receptacles due to 30 the tucking or compressing of their interfolded marginal portions that occurs between the receptacle walls and the adjacent towels. This drag or resistance is usually of such a high degree as to necessitate the use of both hands of the user in order to grasp both the extended towel sec- 35 tion and the receptacle, respectively, to effect the withdrawal and which use is irksome and extremely undesirable in emergency instances. Attempts to withdraw the towel with the use of a single hand, without holding the receptacle by the other hand, usually causes a lifting of the pack and receptacle by the extended section of the towel with the result that when withdrawal is effected the receptacle and towels therein often fall to the floor or in wash basins, toilet bowls, etc.

My invention overcomes the foregoing difficulties and 45disadvantages, it being one of the objects thereof to provide a receptacle or the like which is so constructed and arranged that towels contained within the receptacle may be easily withdrawn therefrom with no appreciable drag and in an open or unfolded condition for immediate utilization by one hand of the user and without the aid of the other hand for holding the receptacle.

Another object of my invention is to provide a receptacle of the foregoing described character which is simple in construction, efficient in use and economical in manu-55

With the above and other objects in view, as will hereinafter appear, the invention consists in the combination and arrangement of parts hereinafter set forth and illustrated in the accompanying drawings from which the several features of the invention and the advantages at-60 tained thereby will be readily understood by those skilled in the art.

Referring to the drawings wherein like reference char-

acters designate like parts throughout the several views: Figure 1 is a perspective view of a receptacle con-65 structed in accordance with my invention with the slot being closed.

Figure 2 is a perspective view of the receptacle illustrating a section of the topmost towel extending through 70the slot and in position to be grasped by the user for removing the towel from the receptacle.

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Figures 3, 4 and 5 are perspective views illustrating different phases of a towel during withdrawal from the re-

Fig. 6 is a sectional view, partly in elevation, taken on the line 6-6 of Figure 1.

Figure 7 is a sectional view, partly in elevation, taken on the line 7-7 of Figure 3.

Figure 8 is a fragmentary transverse sectional view of a pack of the towels, a number of the towels being shown 10 in elevation for clarity.

In practicing my invention, as illustrated in the drawings, I provide a relatively shallow receptacle or container 15 having side, end, bottom and top walls 16, 17, 18 and 19, respectively, and with the top wall 19 being formed with a dispensing opening or slot 20 extending diagonally between the end walls 17 and terminating at the jointure thereof with said top wall 19 and in spatiality with said side walls 16. One of the side walls and each end wall is of a laminated construction with the laminations of each wall being sealed together to form and close the receptacle and to encase therein a stack of folded paper sheets, for instance, a pack of paper towels T. The inner face of the top wall 19 has secured thereto a rupturable window element or closure 21 of a transparent material, for instance, Pliofilm, and which closure extends across and closes the opening or slot 20.

The towels are disposed in interfolded relation with each towel, which is in the form of a sheet, being centrally folded to provide a pair of elongated upper leading and lower trailing sections 24 and 25, respectively, connected together by a longitudinal fold portion 26. sections 24 and 25 have interposed therebetween similar sections of the adjacent towels as clearly indicated in the drawings, particularly Figure 8. Each fold portion 26, which connects the sections 24 and 25 together, embraces and is disposed in proximity to the longitudinal marginal edges of the aforementioned sections of the adjacent towels. When the towels are thus stacked or arranged in a pack of suitable size, the leading section 24 of the initial topmost towel is longitudinally folded to provide a lengthwise extending free edge portion 27 arranged centrally of the pack and longitudinally thereof to permit the fingers of the user, upon rupture of the closure 21, to grasp the portion 27 through the slot 20 and withdraw the section 24 from the receptacle as illustrated in Figure 3 of the drawings.

As the section 24 is thus withdrawn through the slot 20, the upper leading section of the adjacent towel will be automatically lead or pulled through the slot with the trailing section 25 as depicted in Figure 4 of the drawings. As the latter section 25 is withdrawn and released from the pack, the leading section of the topmost towel, within the pack, is disposed through the slot and overlies the top wall 19, to one side of the slot 20, as shown in Figure 5, to permit easy grasping thereof by the fingers of the user to effect withdrawal of the top most towel from the pack. As the towels are thus withdrawn from the pack, the leading section of the topmost towel remaining in the pack will be disposed through the slot and overlie the top wall 19 of the receptacle and to either side of the slot in alternate orders due to the interfolded relation of the towels and until such time as all of the towels are withdrawn from the receptacle.

In the withdrawing of the towels from the receptacle, the folded portions 26 and the marginal edges of the sections 24 and 25 tend to compress between the top wall and the adjacent towels and thus create an appreciable drag or resistance to movement if not for my invention. However, inasmuch as the slot 20 is arranged diagonally across the top wall 19, the pressure or pull is greatly minimized and is almost nil because the portions 26 and marginal edges of the topmost level are progressively

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freed due to the diagonal advance through the slot. It will therefore be apparent that by arranging the slot diagonally across the top wall 19 I eliminate any appreciable pull or resistance to the withdrawal of the towels from the receptacle thereby permitting the towels to be withdrawn without necessitating the use of both hands which would ordinarily be employed, for instance, one for holding the container and the other grasping and withdrawing the towel therefrom.

Without further elaboration, the foregoing will so fully 10 explain the invention that others may, by applying current knowledge, readily adapt the same for use under various conditions of service. Moreover, it is not indispensable that all the features of the invention be used conjointly since they may be employed advantageously 15 in various combinations and subcombinations.

It is obvious that the invention is not confined to the herein described use therefor as it may be utilized for any purpose to which it is adaptable. It is therefore to be understood that the invention is not limited to the spe- 20 cific construction as illustrated and described, as the same is only illustrative of the principles involved which are capable of extended application in various forms, and the invention comprehends all construction within the scope of the appended claims. It is also to be understood that 25 the thickness of the towels or paper sheets and the walls of the receptacle or container has been somewhat exaggerated in the interest of clarity.

What I claim is:

1. In a container construction of the class described, 30 an elongated closed receptacle comprising elongated top and side walls and end walls of shorter dimension than the peripheral length of the top and side walls, a similarly shaped pack of interfolded paper sheets in said receptacle, said pack of sheets being of a type wherein each sheet is folded on a line extending longitudinally of the receptacle to provide top and bottom sections connected together along coincident longitudinal margins by a fold portion embracing the free longitudinal margin of the top section of the subjacent sheet with the top section 40 of the topmost sheet of said pack arranged for withdrawal from said receptacle in progressive zig-zag order from the topmost sheet to the bottommost sheet of the pack, said top wall overlying said topmost sheet and being formed with a substantially straight diagonally ex- 45 tending elongated slot extending substantially from one

end wall to the opposite end wall and in angular relation to the longitudinal fold line of said pack and through which slot said topmost sheet is adapted to be withdrawn, the edge faces of said top wall defining said slot being spaced inwardly away from said side walls in proximity therewith and cooperating with the top edges of said end walls to solely define the confines of said slot whereby to insure withdrawal and release of one end of the fold portion of the topmost sheet in advance of its other end to thus minimize any resistance to the withdrawal of said topmost sheet and the positioning of the top section of the adjacent sheet through said slot for subsequent with-

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2. In a container construction of the class described, drawal. an elongated closed receptacle comprising elongated top and side walls and end walls of shorter dimension than the peripheral length of the top and side walls, a similarly shaped pack of interfolded paper sheets in said receptacle, said pack of sheets being of a type wherein each sheet is folded on a line extending longitudinally of the receptacle to provide top and bottom sections connected together along coincident longitudinal margins by a fold portion embracing the free longitudinal margin of the top section of the subjacent sheet with the top section of the topmost sheet of said pack arranged for withdrawal from said receptacle in progressive zig-zag order from the topmost sheet to the bottommost sheet of the pack, said top wall overlying said topmost sheet and being formed appreciably inwardly of said side walls with a substantially straight diagonal slot extending from said end walls in angular relation to the longitudinality of said pack and through which slot said topmost sheet is adapted to be withdrawn, the edge faces of said top wall defining said slot being so spaced and arranged as to facilitate release of one end of the fold portion of the topmost sheet in advance of its other end to thus minimize 35 resistance to the withdrawal of said topmost sheet and the positioning of the top section of the adjacent sheet through said slot for subsequent withdrawal.

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