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ADAPTOR PLATE FOR PAPER TOWEL DISPENSING CABINET

Filed March 12, 1962

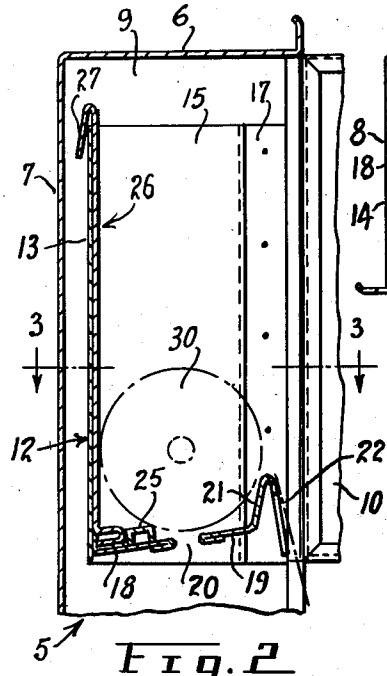


Fig. 2

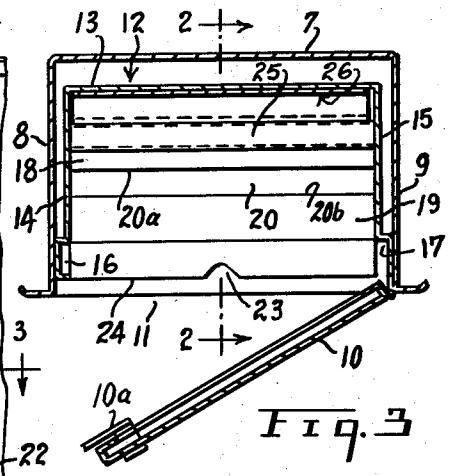


Fig. 3

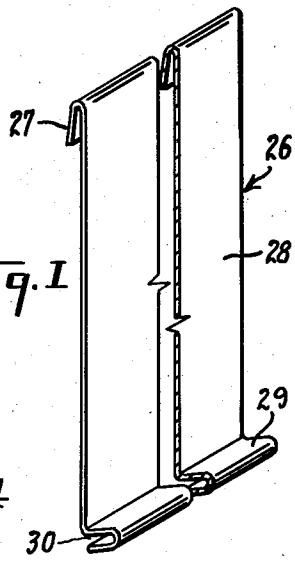


Fig. 1

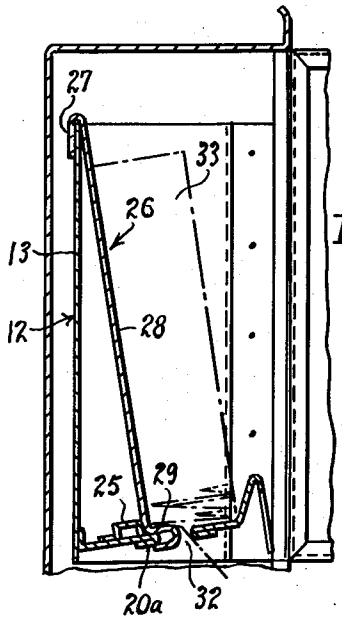


Fig. 4

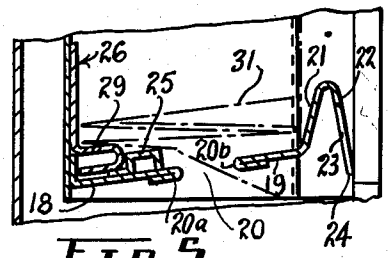


Fig. 5

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ADAPTOR PLATE FOR PAPER TOWEL DISPENSING CABINET

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This invention relates to paper towel dispensing cabinets and particularly to means whereby the towel dispensing cabinet can be adapted to take various types of paper towel packs such as roll towel, single-fold towels and multi-fold towels.

The invention consists essentially in the provision of a loose adaptor plate whose upper horizontal edge is folded over to form a hook for engagement with the top edge of an inner wall of the dispensing cabinet and whose lower horizontal edge is bent forwardly and folded under on itself to form a slotted member at right angles to the plane of the adaptor plate. In one position of the adaptor plate it has its upper horizontal edge in hooked engagement with the top edge of the vertical inner wall of the dispensing cabinet while its lower horizontal edge is located between the inner wall of the cabinet and a raised ridge on the lower horizontal dispensing plate of the cabinet and in this position will permit either roll towel or single-fold towel packs to be accommodated in the dispensing cabinet. In the alternative position of the adaptor plate it has its upper horizontal edge in hooked engagement with the top edge of the vertical inner wall of the dispensing cabinet while its lower horizontal edge is in hooked engagement with one transverse edge of the towel dispensing slot in the lower horizontal dispensing plate of the cabinet for the purpose of reducing the width of the dispensing slot. In this position of the adaptor plate it is disposed at an angle to the vertical against which the relatively high pack of multi-fold towels can rest.

The object of the invention is to provide an adaptor plate for paper towel dispensing cabinets which will permit the use of various types of towel packs.

A further object of the invention is to provide means whereby the towel dispensing slot in the cabinet can be narrowed.

A further object of the invention is to provide an adaptor plate which is held securely in place in its alternative positions within the cabinet.

A further object of the invention is to provide an adaptor which will form an inclined wall against which a relatively high loose pack of towels can lie and not be dislodged while individual towels are withdrawn from the bottom of the pack.

A further object of the invention is to provide a towel dispensing cabinet which will have dispensing slots suitable for roll towels, single-fold towels and multi-fold towels.

These and other objects of the invention will be apparent from the following detailed specification and the accompanying drawings in which:

FIG. 1 is a perspective view of the adaptor plate for use in the towel dispensing cabinet.

FIG. 2 is a vertical sectional view on the line 2—2 of FIG. 3 showing the adaptor plate in position in the cabinet when a roll towel pack is fitted.

FIG. 3 is a horizontal section on the line 3—3 of FIG. 2.

FIG. 4 is a vertical section similar to FIG. 2 but showing the adaptor plate in its alternative position and reducing the width of the dispensing slot of the cabinet.

FIG. 5 is an enlarged partial vertical section similar to the lower portion of FIG. 2 but showing in chain dot lines single-fold towels in place of the roll towel.

Referring to the drawings the paper towel dispensing cabinet is here shown as having an outer casing 5 comprising a top wall 6, rear wall 7 and side walls 8 and 9, and a hinged front closure door 10 adapted to be recessed into the front opening 11 of the cabinet and locked with the channel 16 by means of the lock 10*a*. The towel pack holder 12 is mounted within the outer casing in spaced relation to the top, rear and side walls thereof, and is formed from sheet material with a rear wall 13 and side walls 14 and 15. The side wall 14 has its front vertical edge formed into a vertically disposed channel 16, while the front vertical edge of the side wall 15 is offset outwardly at 17. The bottom wall of the towel pack holder is in two portions, a rear portion 18 and a front portion 19, the two portions 18 and 19 being spaced apart to form the towel dispensing slot 20, and are disposed in a plane angled downwardly from front to rear. The rear portion 18 is secured to the rear wall 13 and to the side walls 14 and 15 and has its front edge bent over on itself to form the rear edge 20*a* of the dispensing slot 20. The front portion 19 is secured to the side walls 14 and 15 and has its rear edge bent over on itself to form the front edge 20*b* of the dispensing slot 20. The front portion 19 is bent upwardly at 21 to form a keeper surface for the towel packs, and is then bent downwardly at 22 to form a guide for roll paper towels as will be explained later. The guide surface 22 is slotted at 23 midway of its length to permit gripping the paper towel in the well known manner, while the bottom edge 24 of the guide surface 22 forms a tear edge.

A locating bar 25 is secured on the top surface of the rear portion 18 of the bottom wall of the towel pack holder 12 and is located parallel with the slot 20 and between the slot 10 and the rear wall 13.

The towel pack holder 12 is supported within the casing 5 preferably by spot welding the channel 16 to the adjacent side wall 8 and welding the offset portion 17 to the adjacent side wall 9.

The adaptor plate 26 is of sheet material and has its upper horizontal edge folded backwardly and downwardly to form a wall engaging hook 27. The hook 27 is spaced outwardly at an angle from the vertical portion 28 of the adaptor plate. The lower edge of the adaptor plate is bent forwardly of the vertical portion 28 and is then folded downwardly and rearwardly to form a spacer bar 29 and horizontal slot 30.

In the operation of this device, the adaptor plate 26 can take up two positions as seen in FIGS. 2 and 4. In the position shown in FIG. 2, the adaptor plate 26 is shown in surface contact with the rear wall 13 of the towel pack holder 12 and in hooked engagement with the top edge thereof, while the spacer bar 29 at the lower horizontal edge of the adaptor plate is fitted into the space between the rear wall 13 and the rear edge of the locating bar 25. In this position the adapter plate 26 is held securely against displacement and permits either a roll towel pack 30 to be cradled in the towel pack holder 12 and have the exposed end of the towel draped over the bent up keeper portion 21—22 of the bottom wall front portion 19.

In the position of the adaptor plate 26 shown in FIG. 2 single-fold towel packs 31 can also be accommodated within the towel pack holder 12 as illustrated to an enlarged scale in FIG. 5. In this arrangement the towels are dispensed through the slot 20.

In the arrangement illustrated in FIG. 4, the adaptor plate 26 has been lifted up from behind the locating bar 25 and relocated with its spacer bar 29 fitting over the rear edge 20*a* of the slot 20 and with the bottom rear edge of the adaptor plate in contact with the forward edge of the locating bar 25. With the top end of the adaptor plate 26 in hooked engagement with the top of the rear

wall 13 the adaptor plate takes up an inclined position and at the same time the forward edge of the spacer bar 29 defines the rear edge of a reduced width dispensing slot 32. Multi-fold towel packs are considerably less in width and stand much higher than single-fold packs. With the arrangement of the adaptor plate 26 shown in FIG. 4 the multi-fold pack 32 rests against the inclined surface of the adaptor plate and individual towels are dispensed through the reduced width slot 32.

In each position of the adaptor plate, the paper towel pack is held in a stable position for either roll towel or fold towel and in the case of fold towels will provide for the width of slot most suitable for either single-hold or multi-fold towels.

What we claim is:

1. In a paper towel dispensing cabinet having provision to accommodate and dispense roled paper towels and single and multi-fold towels, a walled cabinet, a towel pack holder within said cabinet, the said towel pack holder including a bottom member having a folded towel dispensing slot, a removable adaptor plate suspended from its upper end within towel pack holder, means to locate the lower end of said adaptor plate in two operative positions relative to the bottom member of said towel pack holder, in one operative position to hold said adaptor plate vertically in contact with the top surface of the said bottom member to accommodate either roll towel packs or wide width single-fold towel packs within said towel pack holder, and in a second operative position to incline the said adaptor plate and locate its lower end in engagement with one edge of the dispensing slot in the bottom member of the towel pack holder to effect a reduction of width of the towel pack holder and of the dispensing slot to accommodate and dispense narrow width multi-fold towel packs.

2. In a paper towel dispensing cabinet as set forth in claim 1, in which the said towel pack holder has rear and side walls spaced inwardly off and secured to the inner surfaces of the said cabinet and a slotted plate located at the lower end of said towel pack holder, the said slotted plate at its edge remote from the said rear wall terminating in the roll towel guide plate.

3. In a paper towel dispensing cabinet as set forth in claim 2, in which the upper edges of the said rear and side walls are spaced apart to the adjacent surface of the said cabinet and the upper end of the said adaptor plate is in hooked engagement with the upper edge of the said rear wall.

4. In a paper towel dispensing cabinet as set forth in claim 2, in which the said slotted plate is inclined upwardly and forwardly of the rear wall of the towel pack holder.

5. In a paper towel dispensing cabinet as set forth in claim 2, in which the said slotted plate includes an adaptor plate locating bar positioned between the said rear wall and the slot in the plate.

6. In a paper towel dispensing cabinet as set forth in claim 2, in which the said adaptor plate is of sheet material and has its top horizontal edge folded backwardly and downwardly to form a hook and its lower horizontal edge is bent forwardly, downwardly and then rearwardly to form a slotted spacer bar substantially at right angles to the plane of the adaptor plate.

7. In a paper towel dispensing cabinet as set forth in claim 6, in which the slotted spacer bar of the adaptor plate in the second operative position thereof engages with an adjacent edge of the slot in the said slotted plate to reduce the width of the said slot.

8. In a paper towel dispensing cabinet, an outer casing, an inner towel pack holder including a vertical rear wall and a pair of vertical side walls secured in spaced relation to the adjacent surfaces of the said casing, a slotted towel pack supporting member located in the lower portion of said towel pack holder, a locating bar on the upper facing surface of said supporting member and situated between the slot in the member and the said rear wall, a removable adaptor plate having its upper horizontal edge in hooked engagement with the upper horizontal edge of said rear wall, the said adaptor plate in one operative position resting against said rear wall and having its lower horizontal edge located between said rear wall and said locating bar, and in a second operative position having its lower horizontal edge located on the side of said locating bar remote from said rear wall and blanking off a portion of the width of the slot in the said towel pack supporting member.

9. In a paper towel dispensing cabinet, an outer casing, an inner towel pack holder including a vertical rear wall and a pair of vertical side walls, a first side wall having its vertical edge remote from said rear wall formed into a vertical channel disposed between the said first side wall and the adjacent surface of said outer casing, and a second side wall having its vertical edge remote from said rear wall offset and contacting the adjacent surface of said outer casing, a door hingedly mounted on said casing, the said door being recesed into said casing and contacting said vertical channel and means to lock said door with said channel, a slotted towel pack supporting member located in the lower portion of said towel pack holder, a locating bar on the upper facing surface of said supporting member and situated between the slot in the member and the said rear wall, a removable adaptor plate having its upper horizontal edge in hooked engagement with the upper end of said rear wall, the said adaptor plate in one operative position resting against said rear wall and having its lower horizontal edge located between said rear wall and said locating bar, and in a second operative position having its lower horizontal edge located on the side of the said locating bar remote from said rear wall and blanking off a portion of the width of the slot in the said towel pack supporting member.

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