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DISPENSING CABINET

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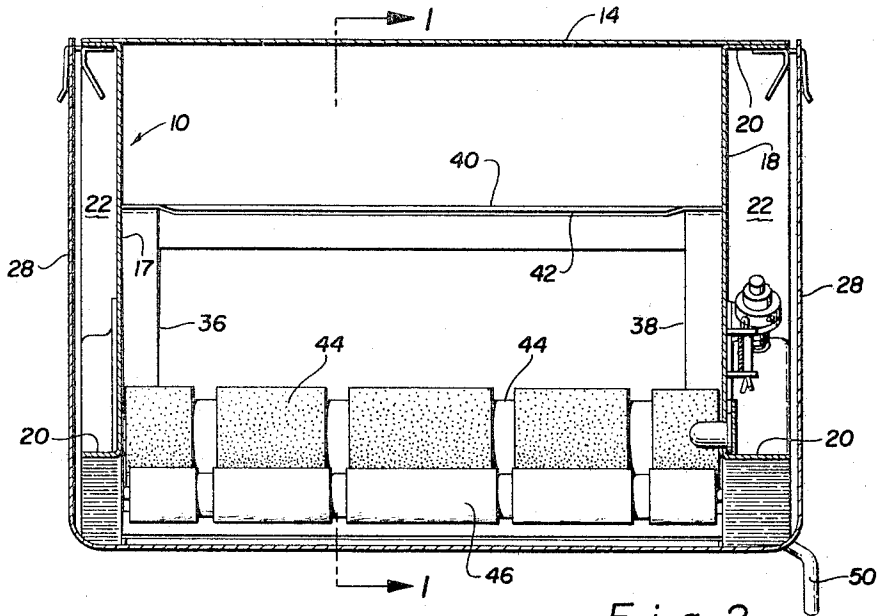


Fig. 2

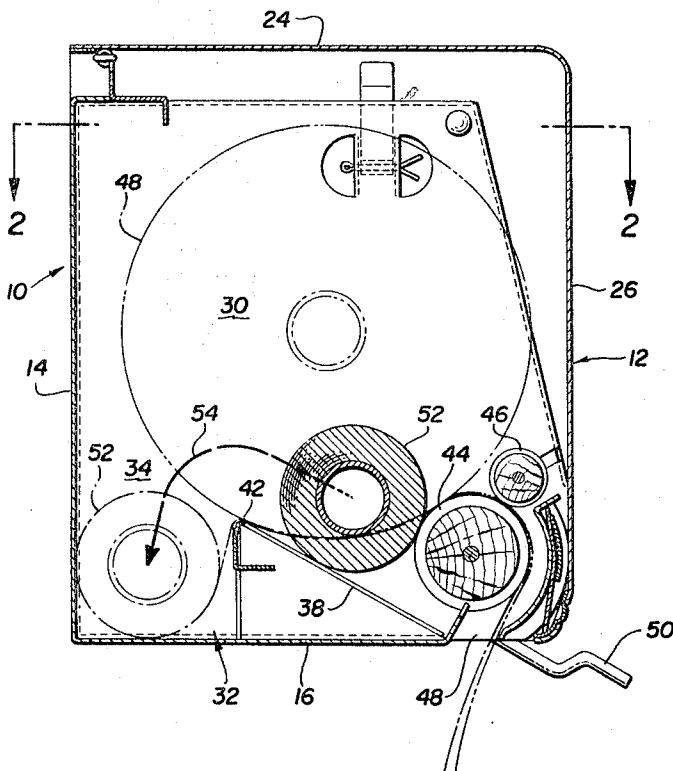


Fig. 1

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DISPENSING CABINET

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4 Claims. (Cl. 312-39)

This invention relates to dispensing cabinets and particularly to such cabinets for supporting and dispensing rolls of web material from a continuous web as, for example, a roll of paper toweling.

Reference is made to the dispensing cabinet as shown in United States Patent 2,411,917, issued December 3, 1946. In that cabinet, suitable means is provided for supporting and dispensing a single roll of web material. Periodically, when the single roll is nearly empty, the cabinet is refilled with a new roll. Heretofore, when the new roll was substituted, the nearly empty roll had to be removed and discarded, causing expensive waste of the remaining material on that roll.

A general object of the present invention is to provide a dispensing cabinet which will overcome the above named disadvantage.

Another object of the invention is to provide a device of the above character in which both a nearly empty roll and full roll of web material can be accommodated at the same time.

Another object of the invention is to provide a device of the above character in which the nearly empty roll and the full roll can be dispensed simultaneously.

Another object of the invention is to provide a device of the above character in which the nearly empty roll can be pushed into a separate or secondary compartment of the cabinet thereby to make the main compartment available for receiving the full roll.

These and other objects and features of the invention are accomplished by the provisions of a cabinet having two compartments. The first or main compartment serves to receive a full roll of web material. The second or secondary compartment is used to receive the nearly empty roll. The two compartments communicate with each other so that the nearly empty roll can be conveniently pushed from the main compartment into the secondary compartment to make the main compartment again available for receiving a new full roll.

A preferred form of the invention is specifically set forth in the following description and in the accompanying drawing of which:

FIGURE 1 is a side elevational view, in cross-section, of a dispensing cabinet constructed according to my invention, taken along the lines 1-1 of FIGURE 2, and showing the positions of rolls of web material.

FIGURE 2 is a top plan view of the device shown in FIGURE 1 taken along the lines 2-2 of FIGURE 1.

The dispensing cabinet shown in the drawings comprises a case 10 and a hood or cover member 12 arranged to conceal the case 10 and contents thereof. The case comprises a back wall 14, a bottom wall 16, and sidewalls 17 and 18, the top and front of the case being left open to facilitate the insertion of a roll of material. The sidewalls 17 and 18 are provided with outwardly extending flanges 20 which serve to give rigidity to the structure and to provide a space 22 at each end of the case for the location of operating mechanisms.

The cover member 12 includes a top 24 which curves to join a front wall 26 and a pair of sidewalls 28 which together serve to conceal the entire case, operating mechanism and contents with the exception of the bottom wall 16. The cover member 12 is hingedly connected to the upper margin of the back wall 14.

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The interior of the cabinet is divided into a main compartment 30 and a secondary compartment 32. These compartments are joined together by a passage generally designated in FIGURE 1 by the reference numeral 34. The main compartment 30 is generally above the secondary compartment 32 and is bounded by ledges 36 and 38, the rear wall 14 and by the top 24 and front wall 26 of the case 12. The secondary compartment 32 is bounded by the bottom and rear walls 16 and 14 and by the imaginary rearward extension of the ledges 36 and 38.

The ledges 36 and 38 are mounted against each of the opposite sidewalls 17 and 18 and are rearwardly and upwardly inclined, terminating in spaced relation to the back wall 14 to define the passage 34 therewith.

A feedplate 40 is mounted to span the upper rear portions of the ledges 36 and 38. The feedplate is curved upwardly and forwardly along its upper edge 42 and provides a smooth contour therealong for supporting the web material as the material passes between compartments.

Journalled in the extending between the side walls 17 and 18 are a dispensing roller 44 and a pressure roller 46. The rollers 44 and 46 are resiliently urged together for frictional engagement with webbing material that is passed therebetween. A roll 48 of web material having a free end extending therefrom lies inside the cabinet and is supported on the ledges 36 and 38 and on the roller 44. The free end of the material is fed from the bottom of the roll 48, over the top of the roller 44 and between the rollers 44 and 46, downward to an opening 43 through which it projects from the cabinet. Thus, rotation of the roller 44 effects a dispensing action on the web material. Means is provided for actuating the roller 44 and such means consists of a mechanism including a crank 50 operating a worm and gear drive of the type described in U.S. Patent 2,411,917, and therefore not further described herein.

The operation of the device is as follows. Let it be assumed that sufficient material has been dispensed from the roll 48 that it becomes nearly empty as depicted in FIGURE 1 by the roll 52. The roll 52 is still supported on the inclined ledges 36 and 38 and the roller 44. The attendant raises the cover member 12 to gain access to the interior of the case. With one hand, he pushes the nearly empty roll 52 of web material rearwardly toward the wall 14, the free end of the roll being held by the rollers 44 and 46. Sufficient material unrolls from the roll 52 so that it slides backward as indicated by the arrow 54 and drops into the second compartment 32, taking the position indicated in dashed lines as 52'. The attendant then places another full roll 48 of toweling in the main compartment 30 and feeds the paper therefrom through the rollers 44 and 46 and shuts the cover.

Patrons then receive a double thickness of the toweling from the device until the nearly empty roll 52 is exhausted. In subsequent refill operations, any leftover core must first be removed from the second compartment 32. The cabinet is arranged so that when the roll in the main compartment is nearly empty, the second compartment is easy to reach into for removing an empty core.

Thus, we have provided a compact dispensing cabinet for web material in which the nearly empty and full rolls of material can be simultaneously accommodated and dispensed. The insertion of the new roll is very simple, requiring only that the attendant push the nearly empty roll to the rear of the cabinet, insert a full roll into the main compartment and feed the free end of the new roll through the feed rollers.

We claim:

1. A dispensing cabinet comprising a case having an interior for supporting rolls of web material and means for

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advancing the material and tearing off portions thereof for use, means dividing said interior into two compartments, said last named means being constructed and arranged to provide a main compartment for receiving and supporting a full roll, and further constructed and arranged to provide a secondary compartment for accommodating a nearly empty roll in such manner that a new full roll and a nearly empty roll can be placed in the respective compartments at the same time, said secondary compartment communicating with said main compartment to define a passageway therebetween so that the nearly empty roll can be pushed into said secondary compartment to thereby make the first compartment available for receiving a new full roll and for simultaneous dispersement of web material from both full and nearly empty rolls, said secondary compartment lies behind and at a level below the main compartment so that material fed off the nearly empty roll passes the full roll in the same direction as material fed from the full roll.

2. A dispensing cabinet comprising a case having an interior for supporting rolls of web material and means for advancing the material and tearing off portions thereof for use, said case including spaced sidewalls and a back wall extending between said sidewalls, means dividing the interior of said case into two compartments, said means including opposed ledges mounted on the interior lower portions of the sidewalls of the case, said ledges being inclined upwardly at their rear portions and defining a main compartment thereabove for receiving and supporting a full roll, said ledges terminating in spaced relation to the back wall to define a secondary compartment for accommodating a nearly empty roll and to define a passageway for movement of a nearly empty roll between the main compartment and the secondary compartment so that a nearly empty roll can be pushed into the secondary compartment to thereby make the first compartment available for receiving a new full

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roll for simultaneous dispersement of material from both rolls.

3. A dispensing cabinet comprising a case having an interior for supporting rolls of web material and means for advancing the material and tearing off portions thereof for use, said case including spaced sidewalls and a back wall extending between said sidewalls, means dividing the interior of said case into two compartments, said means including opposed ledges mounted on the interior lower portions of the sidewalls of the case, said ledges being inclined upwardly at their rear portions and defining a main compartment thereabove for receiving and supporting a full roll, said ledges terminating in spaced relation to the back wall to define a secondary compartment for accommodating a nearly empty roll and to define a passageway for movement of a nearly empty roll between the main compartment and the secondary compartment so that a nearly empty roll can be pushed into the secondary compartment to thereby make the first compartment available for receiving a new full roll for simultaneous dispersement of material from both rolls, and a feed plate spanning the rearward portions of the ledges, said feed plate having an upper edge for supporting material being dispensed from the nearly empty roll.

4. A cabinet as in claim 3 in which the upper edge of said feed plate is curved upwardly and forwardly.

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