April 30, 1957 W. A. KLEIN ET AL 2,790,545

DISPENSING CONTAINER FOR ROLLS OF SHEET WRAPPING MATERIAL

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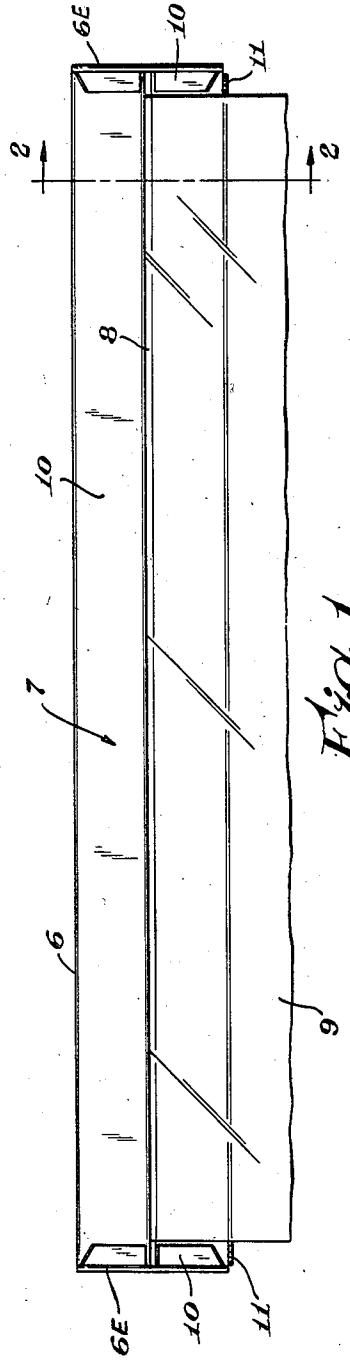


Fig. 1

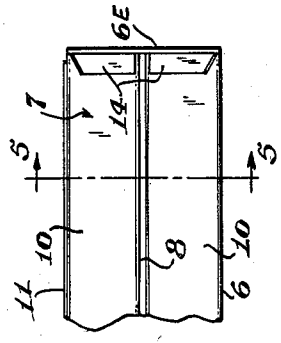


Fig. 4

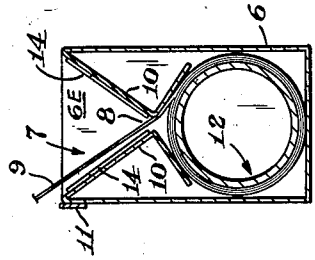


Fig. 5

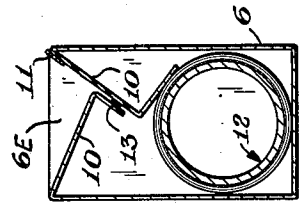


Fig. 3

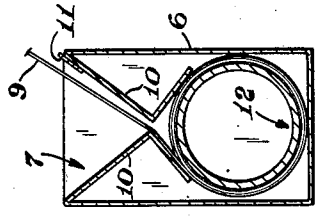


Fig. 2

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DISPENSING CONTAINER FOR ROLLS OF SHEET WRAPPING MATERIAL

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9 Claims. (Cl. 206—58)

This invention relates to an improved dispensing container or carton for sheet material, particularly plastic film and the like for wrapping purposes, which is packaged in wound rolls that are provided in the container. More particularly, this invention relates to a dispensing container having means for maintaining in accessible disposition a portion of the sheet or film material stored therein in order to facilitate withdrawing a desired length for severance from the roll while effectively preventing or minimizing the propensity of withdrawn portions of the sheet to recoil or feed back onto the roll in the package and firmly holding the unwound roll against movement within the container during its handling or other commoving.

The dispensing container of the present invention represents an improvement over the container disclosed by Robert I. Kallman, Thomas M. Steinbach and Robert F. Stoming in their copending application for patent covering a Dispensing Container for Rolls of Sheet Wrapping Material having Serial No. 579,266, which was concurrently filed on April 20, 1956. More specifically, it comprehends an amelioration of the dispensing container disclosed jointly by Richard J. Lee and the above-identified inventors in their copending application for an Improved Dispensing Container for Rolls of Sheet Wrapping Material having Serial No. 579,475 which was also concurrently filed on April 20, 1956.

The conventional cartons in which relatively small rolls of waxed paper, plastic film, metal foil and other commonly employed sheet wrapping materials are packaged for domestic and analogous uses are not ordinarily adapted to maintain a portion of the sheet material exposed for easy access in order to facilitate withdrawing a desired length for severance from the roll. Neither are they usually adapted to prevent recoil or feed back of the withdrawn sheet onto the roll in the container after the cutting operation. Withdrawn portions of plastic film wrapping material, in particular, have a tendency to recoil onto the supply roll from which they are unwound, especially when only a relatively short portion of the film has been withdrawn or is exposed from the roll. This tendency may frequently be aggravated by movement of the supply roll within the container, which may occur whenever the container is handled or caused to be otherwise jostled or moved as, for example, upon closing a storage drawer or the like in which the container may be kept. The conventional cartons are not ordinarily adapted to prevent such movement of the supply roll.

It would be advantageous to provide an improved dispensing container for rolls of sheet wrapping material, particularly plastic film, which, simply and expeditiously, would be adapted to maintain the loose or unwinding portion of the sheet or film material stored therein in accessible disposition and to effectively prevent or minimize its recoiling onto the supply roll while firmly holding the supply roll in relatively fixed disposition in the container. This result and other advantages and benefits may be realized in accordance with the present invention which comprises a dispensing container for packaging a wound supply roll of sheet wrapping material, trough forming elements in said container providing therein an open, V-shaped, outwardly funnelled trough having an outlet for said sheet wrapping material disposed longitudinally along its bottom, said trough extending in the direction of the roll width-accommodating length of said container, said elements consisting of a pair of L-shaped sections hinged to the container along their upper edges and elsewhere unattached and being disposed apically contiguous to one another to form said outlet, the bottom leg of each L-shaped side being adapted to press flatly against a roll of said sheet wrapping material in order to frictionally snub and brake it when it is contained in and being dispensed from the container.

The frictional snubbing and braking of the L-shaped trough forming elements on the supply roll to provide a locking effect thereon may be further enhanced by arranging the outlet formed between their apically contiguous edges to nip or frictionally clutch sheet material withdrawn from the roll and emerging through the outlet of the container. It may frequently be beneficial to provide a dust sealing means, such as an overlapping strip extending from the end wall of the container, at each of the longitudinal ends of the trough in order to minimize the entry into the container of dust and other foreign matter which might accumulate on and contaminate the sheet wrapping material packaged therein. Advantageously, a sheet cutting means may be provided at or near one of the upper edges of said trough on said container.

Further features and advantages of the present invention will be apparent in the following description and specification in connection with the accompanying drawing, in which like reference numerals refer to like parts, wherein;

Figure 1 is a plan view of an embodiment of a dispensing container in accordance with the present invention;

Figure 2 is a cross-sectional view taken along the line 2—2 in Figure 1;

Figure 3 is a cross-sectional view of a dispensing container according to the invention showing one of its trough sides positioned as a cover;

Figure 4 is a fragmentary plan view of another embodiment of a dispensing container in which dust sealing means are provided; and

Figure 5 is a cross-sectional view taken along the line 5—5 in Figure 4.

There is shown in plan view in Figure 1 of the accompanying drawing a dispensing container 6 in accordance with the present invention having end walls or sides 6E. It is usually preferable for the container 6 to be in the form of a generally rectangular, roll-accommodating box made of cardboard, paperboard, fiberboard or like material of construction although, in certain instances, other more permanent materials may also be employed. The upper or dispensing side of the container is comprised of an open, V-shaped, outwardly funnelled trough, indicated generally by the reference numeral 7, which extends the length of the container parallel with a supply roll (not shown in Figure 1) of sheet wrapping material contained therein. As shown, an entire side of the container may be made up of the trough although, if desired, only a portion of the width of one of the sides may be comprised of the dispensing trough. An outlet 8 for the sheet material 9 is provided by an opening between the apically contiguous bottom edges of the sloping L-shaped trough forming elements or sides 10. One of the apically contiguous bot-

tom edges of one of the sides **10** may be formed to overlap the bottom apical edge of the other trough forming side. A cutting strip **11** may advantageously be provided at or along the upper edge of one of the sides of the trough **7** in order to permit severing withdrawn length of the sheet material on the container. The cutting strip **11** may be of any desired material and it may have a serrated or straight cutting edge, as may be preferred.

As depicted in the cross-sectional view of the container **6** in Figure 2, taken along the line **2—2** in Figure 1, both of the apically contiguous L-shaped trough sides **10** are hinged to the side walls of the container along their upper edges and elsewhere unattached. The bottom leg of each of the trough sides **10** is adapted to press flatly against the wound roll, indicated generally by reference numeral **12**, in the container **6**. This frictionally snubs and brakes the sheet material **9** excepting during its positive withdrawal from the container. In addition to effectively locking the wound roll **12** against undesired rotation, the L-shaped trough sides tend to keep it firmly disposed against rattling interior movement during handling or other commoving of the container. This, as mentioned, further eliminates the recoil or feed back propensities of the unwound gripping portion of the sheet material which is accessibly exposed in the trough.

If desired, and as shown in Figure 3, one of the L-shaped sides **10** may advantageously be employed as a cover for the container **6** during shipment and handling by raising it to extend over to the sloping side of the opposite L-shaped trough forming element with the bottom leg of the extending side being employed as a tuck flap. In such cases, the flap portion of the extending L-shaped side may be sealed with an adhesive material **13** on the opposite side of the trough **7**. The employment of one of the L-shaped trough sides in this manner conveniently permits the shipment and handling of a completely boxed-in, substantially straight-sided container without exposing any portion of the trough until the container is converted for dispensing use. This may be accomplished readily by forcing the container covering L-shaped side under the bottom edge of the opposite side of the trough in order to complete the trough arrangement in the dispensing container after it has been loosened from any adhesive seal that may have been employed. The L-shaped trough sides **10** may also be adapted, as mentioned, to form the outlet **8** sufficiently narrow, as by overlapping of the sides, to cause it to nip the loose end of sheet material being withdrawn from the roll in the container.

There is no precise criticality involved in the included angle which is described by the roll-engaging trough **7**. Generally, an angle between about 45° and 160° will be found suitable. Likewise, the depth of the trough may be varied over a relatively wide range. Ordinarily, it is beneficial for it to be at least ½ inch deep to insure that a suitably engageable length of the sheet material will remain exposed in accessible disposition in the trough. On the other hand, troughs which are deeper than an average index-finger length may be unsatisfactorily deep. Of course, the dimensions of the trough sides forming the trough must be adjusted to accommodate the diameter of the wound roll of sheet wrapping material and the size of the container.

The hinged, L-shaped trough sides **10** permit a wound roll of the sheet material to be inserted through the trough in order to load the container when it is desirable to package the wound roll in such a manner. Their arrangement also facilitates threading the loose or free end of the sheet material **9** from the wound roll **12** in the roll holding section of the container through the outlet **8**. This may readily be accomplished, either in the case of a fresh package or whenever the loose end of the sheet material has been lost, by removing the supply roll **12** from the container **6**, as through an openable end flap therein (not shown), unwinding the loose end of sheet material from the roll and loading the roll through the trough **7** into the roll holding portion of the container **6** while retaining the unwound end exposed in the trough.

Beneficially, as mentioned, dust sealing means may be provided at the longitudinal ends of the trough to keep the sheet wrapping material in a clean condition. Such means, for example, may simply and conveniently be the strips **14** extending from the end walls **6E** of the container **6** to overlap the unjoined ends of the L-shaped trough sides **10**, as is depicted in the fragmentary plan view of Figure 4 and the cross-sectional illustration of Figure 5, taken along the line **5—5** in Figure 4. Such strips **14**, which may be folded sections of cardboard or the like attached to the end walls **6E** or may be formed by doubling over and folding the end walls, slope about parallel with the sides of the trough **7**. Besides preventing the entry of dust into the container, the sealing strips **14** also serve to assist in maintaining the L-shaped sides **10** in a trough forming disposition.

As is apparent, the L-shaped trough sides, adapted to frictionally snub the sheet material being withdrawn, provides a simple and efficient means in the dispensing container of the present invention for maintaining a withdraw portion of the sheet material in accessible disposition after a desired withdrawn length has been severed from the supply package while effectively preventing or minimizing recoil onto the supply roll and firmly positioning the roll within the container. Further, although the accessible portion is maintained from the supply roll, it is protected by reason of its location in the trough in the container. In addition, the trough secures an efficient cutting angle for the sheet material on the associated cutting means that may be provided on the container to facilitate severing withdrawn lengths from the package. The braking or locking of the sheet material being withdrawn from the package also assists in obtaining a better tearing or cutting action thereof. In addition, as has been discussed, the roll-engaging, L-shaped trough forming elements firmly and stationarily maintain the roll in the container.

Dispensing containers in accordance with the invention may be employed with particular advantage for plastic wrapping films such as those which are comprised of copolymers of vinylidene chloride and vinyl chloride which may frequently be generically characterized as being sarans and which enjoy widespread popularity and have great favor as a wrapping material for domestic and other uses.

Since certain changes in the practice of this invention may be made without substantially departing from its spirit or scope, it is to be understood that all the foregoing be interpreted as being merely illustrative and in no sense or manner limiting or restrictive of the invention excepting as it is particularly set forth and defined in the appended claims.

What is claimed is:

1. A dispensing container for packaging a wound supply roll of sheet wrapping material, trough forming elements in said container providing therein an open, V-shaped, outwardly funnelled trough having an outlet for said sheet wrapping material disposed longitudinally along its bottom, said trough extending in the direction of the roll width-accommodating length of said container, said elements consisting of a pair of L-shaped sections hinged to the container along their upper edges and elsewhere unattached and being disposed apically contiguous to one another to form said outlet, the bottom leg of each L-shaped side being adapted to press flatly against a roll of said sheet wrapping material in order to frictionally snub and brake it when it is contained in and being dispensed from the container.

2. In the container of claim 1, said trough comprising an entire side of said container.

3. In the container of claim 1, said trough forming an included angle of between about 45° and 160°.

4. In the container of claim 1, one of the L-shaped

trough forming elements being adapted to extend over to the sloping side of the opposite L-shaped element to cover the trough portion of said container prior to forming said trough, the bottom portion of said extendable L-shaped member being adapted to be disposed against the side of the opposite trough forming member in a flap-like manner when said L-shaped section is so extended.

5. In the container of claim 1, the outlet formed between the apically contiguous edges of said L-shaped trough forming elements being adapted to nip the loose end of sheet wrapping material being withdrawn from a supply roll of the wrapping material when it is contained in the container.

6. The container of claim 1 and including, in addition, dust sealing means between the end walls of the container and the longitudinal ends of the trough.

7. The container of claim 1 and including, in addition, dust sealing means between the end walls of the container and the longitudinal ends of the trough consisting of overlapping strips extending from said end walls over the longitudinal unjoined ends of said L-shaped trough forming elements.

8. The container of claim 1 and including, in addition, a sheet cutting means at one of the upper edges of said trough.

9. The container of claim 1 in combination with a wound supply roll of plastic wrapping film packaged therein.

No references cited.