Oct. 21, 1958 W. A. KLEIN 2,857,046

DISPENSING CONTAINERS FOR SHEET WRAPPING MATERIAL

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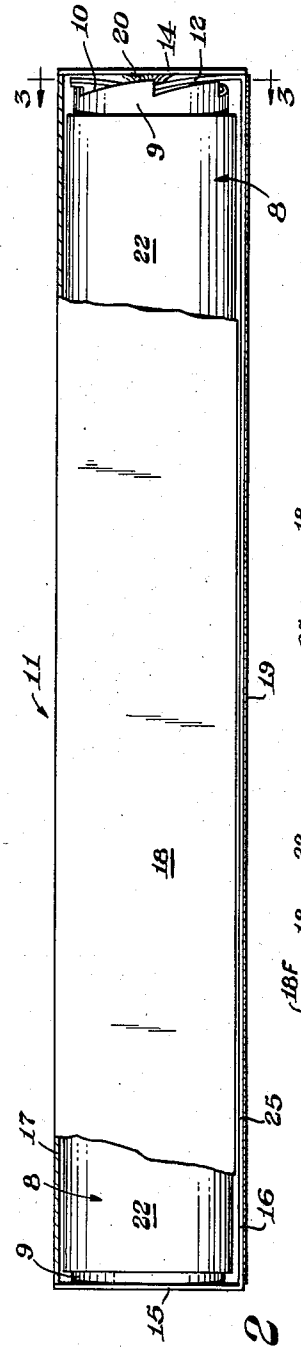


Fig. 2

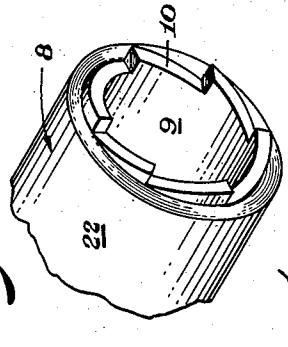


Fig. 1

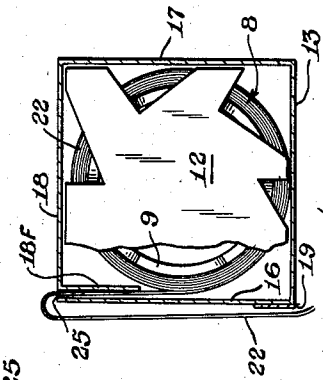


Fig. 3

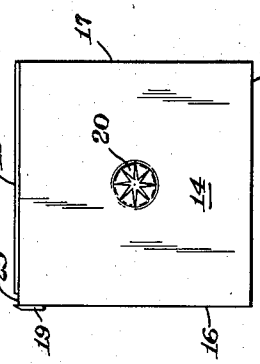


Fig. 5

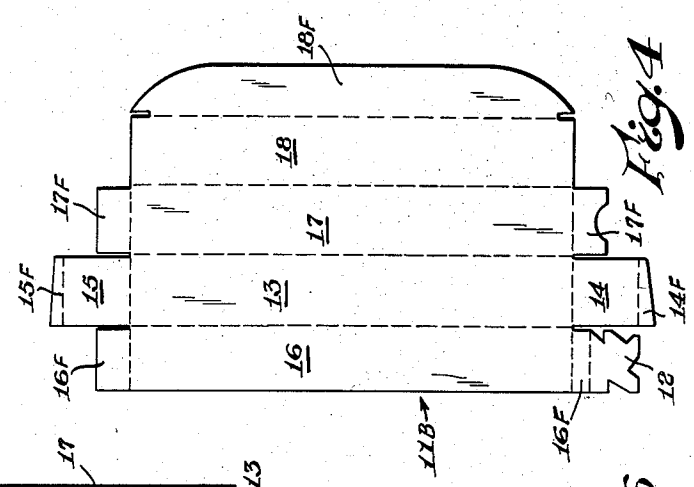


Fig. 4

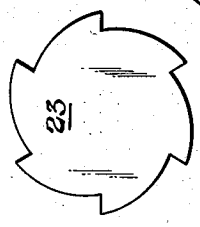


Fig. 6

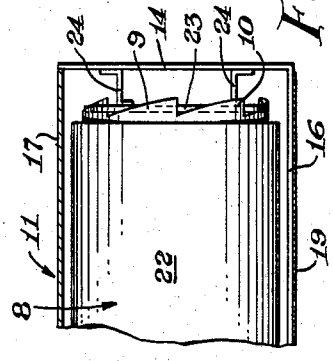


Fig. 7

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DISPENSING CONTAINERS FOR SHEET WRAPPING MATERIAL

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2 Claims. (Cl. 206—58)

This invention concerns certain improvements in and relating to dispensing containers 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 More particularly, this invention has reference to a dispensing container having a means for preventing recoil of the withdrawn exposed portion of the sheet or film material stored therein.

The conventional dispenser cartons in which relatively small rolls of waxed paper, plastic film, metal foil and other commonly employed wrapping materials are packaged for domestic and analogous uses are not ordinarily adapted to prevent recoil or feed back of the withdrawn sheet into the container after a desired length has been severed from the roll on the associated cutting strip which is usually provided near the outlet of such containers.

It would be advantageous to provide an improved dispensing container for rolls of sheet wrapping material, particularly plastic film, having integrally associated therewith a simple, positive and efficient means for preventing the recoil of sheet material after it has been withdrawn from the supply roll. This desirable result and other advantages and benefits may be realized in accordance with the present invention which comprises, in combination with a wound supply package of sheet wrapping material, a core for supporting said supply package having a ratcheted end, a container for receiving said supply package having an outlet through which sheet material from the supply package is dispensed, and a star wheel-like pawl positioned in said container generally concentric with said core, said pawl flatly abutting against and interdigitating with the ratcheted end of said core thereby limiting the rotatability of said supply package for withdrawal of sheet material therefrom to the single direction permitted by said incorporated ratchet arrangement. Advantageously, at least two radiating spokes or teeth are available on said star wheel-like pawl for interdigitating with and engaging the ratcheted end of said core. It may also be beneficial, in certain instances, to provide associated means in or with said container for maintaining the pawl thrust flatly against the ratcheted end of said core to insure an efficient engagement therebetween.

In Figure 1 of the accompanying drawing there is shown in fragmentary perspective view a supply package, indicated generally by the reference numeral **8**, of sheet wrapping material **22** wound in roll form about a suitable core **9** having a notched or ratcheted end **10**. The wound roll is adapted to be placed in an accommodating container, indicated generally by the reference numeral **11**, as shown in the fragmentary, brokenout plan view of Figure 2. The container **11** has an outlet **25** along one of its longitudinal edges for withdrawing the sheet wrapping material. A star wheel-like pawl **12**, positioned generally concentric with the core **9** and substantially parallel with the end wall **14** of the container **11**, is stationarily affixed within the container and thrust against or maintained in an interdigitating engagement

with the ratcheted end **10** of the core. The engagement between the ratcheted end **10** of the core **9** and the star wheel-like pawl is also illustrated in elevation in the cross-sectional view of Figure 3, taken along the line 3—3 in Figure 2. It is usually desirable for the length of the container **11** and that of the core **9** to be in relatively close conformance. Besides providing more efficient utilization of the container, it permits the opposite end wall **15** to have some influence or effect in maintaining the core and the pawl **12** in mutual engagement. Advantageously, as is illustrated in Figure 3, a plurality of radiating, interdigitating teeth are provided on the pawl **12** to engage a plurality of the notches on the ratcheted end **10** of the core **9**.

It is convenient for the pawl **12** to be an integral portion of the container **11** so that it may be provided in place with a minimum of manipulation and handling on assembly of the container. This may be accomplished readily by utilizing, for the assembly of the container, a blank which is similar to the blank **11B** illustrated in Figure 4. In the blank **11B**, the pawl **12** is formed from and provided as an extension of a tuck flap from the side portion **16**. Thus, during assembly of the container, the pawl **12** may be bent along the dotted lines from the tuck flap which is sealed against the upturned end portion **14** of the container. The pawl **12** is thereby made available in the assembled container for engagement with the ratcheted end **10** of the core **9** upon loading of the container with the wound roll of sheet material. The dotted lines, which are drawn in Figure 4 merely to delineate the folding operations that are required on the blank **11B** when assembling the container **11** therefrom, also define the opposite end wall **15**, the tuck flaps **14F** and **15F** on the end walls, the back side **17** for the container, the container joining tuck flaps **16F** and **17F** on the sides of the container and the cover and cover tuck flap **18** and **18F**, respectively.

It is usually beneficial, as mentioned, to provide a means in the container for maintaining the pawl **12** away from the end wall **14** in the container and thrust in engagement with the ratcheted end **10** of the core **9**. This is especially desirable when a unilaterally mounted and secured pawl, as illustrated in Figures 2 and 3 of the drawing, is employed. It may be simply accomplished and provided for by merely indenting or punching through the end wall **14** of the container at any time before or after its assembly or loading with the wound roll of sheet material. Thus, as shown in Figure 2 and illustrated exteriorly of the container in Figure 5, the protrusion that is formed by the punched indent **20** serves as an expedient means to this end. It is usually desirable to provide the indent **20** after the container has been assembled and loaded. Other means may also be employed for this purpose such as resilient folded strips and other thrust-providing contrivances.

If desired, a pawl similar to the pawl **23** which is illustrated in Figure 6 may be employed in order to completely interdigitate with and engage all of the notches in the ratcheted end **10** of the core **9**. Such a variety of star wheel-like pawls may be mounted in the container in any desired manner. For example, as is depicted in the fragmentary, broken-out plan view of the container **11** containing the supply package **8** in Figure 7 of the drawing, the central supports **24**, which may also be resilient, may be employed for fastening the pawl **23** to the end wall **14** of the container and for maintaining it thrust in engagement with the ratcheted end **10** of the core **9**.

Advantageously, a suitable cutting strip **19** may be provided parallel and coextensive with the outlet **25** which is formed between the cover tuck flap **18F** and the front side **16** of the container **11**. The cutting strip **19** may be provided on any desired edge of the container. For

example, it may be adjacent to the outlet **25**, as is shown in Figure 5 of the drawing. Or, as illustrated in Figure 3, greater exposed portions of the unsevered sheet material **22** from the wound roll may be provided for grasping by locating the cutting strip **19** along the lower front edge of the container **11**.

As is apparent, the ratchet arrangement of the present invention prevents recoil of the withdrawn sheet material to insure that an extending portion of the sheet will remain in an accessible position near the container outlet after a desired length has been withdrawn and severed from the roll. In addition, it does not complicate the inserting operations when placing the wound roll in the container, since a precise or critical initial relative positioning is not required between the core and star wheel-like pawl to achieve advantageous subsequent results. It also assists in obtaining a better cutting or tearing action of the sheet material withdrawn from the package on the cutting means that may be associated with the container.

Dispensing containers in accordance with the present 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 great favor as a wrapping material for domestic and other uses.

What is claimed is:

1. In combination, a wound supply package of sheet wrapping material, a headless core for supporting said package, said core being notched so as to have a ratcheted end, a container for receiving said supply package having an outlet through which sheet material from the supply package is dispensed, a star wheel-like pawl positioned in said container generally concentric with said core, said pawl flatly abutting against and interdigitating with the ratcheted end of said core, and an indent formed in said container to press against said star wheel-like pawl for maintaining it in position against the ratcheted end of said core.

2. The combination of claim 1, wherein said sheet wrapping material is plastic film.

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