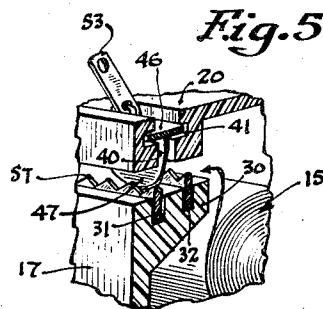
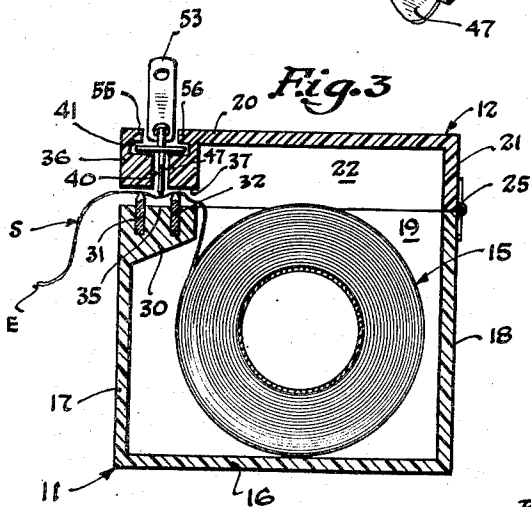
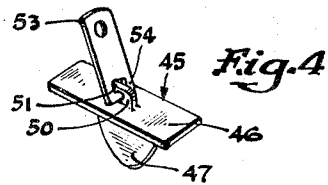
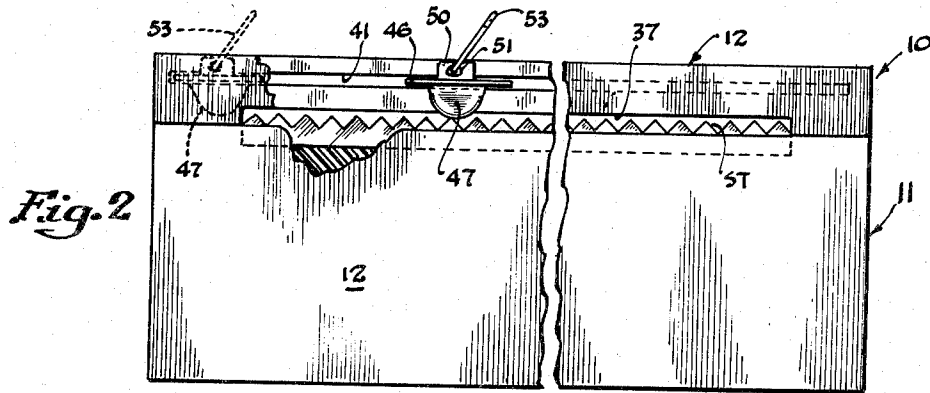
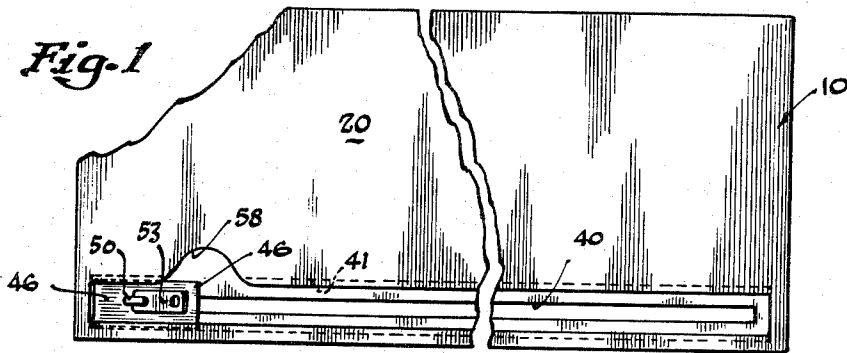


F. C. TRAVER ET AL
SEVERING FILM MATERIAL

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2 Sheets-Sheet 1



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SEVERING FILM MATERIAL

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1 Claim. (Cl. 312—39)

This invention relates to a dispenser for plastic film material that cannot be easily torn along a straight edge.

Transparent film material used in packaging consists of vinyl chloride or like thermoplastic film which is somewhat tough and stretchable in nature, and because of these characteristics considerable difficulty is encountered when it is attempted to tear material of this kind along a straight edge, in contrast to waxed paper or the like which is relatively frangible so far as tearing is concerned. Thus, it is a simple matter to tear a sheet of waxed paper or the like along a saw-tooth edge, but this cannot be accomplished easily or neatly with stretchable rubber-like film materials such as vinyl chloride or the like. It has been proposed to sever film material of an extendable nature by means of a dispenser including a guillotine knife. Such requires very sharp cutting edges, and other disadvantages are manifest, and the primary object of the present invention is to enable a dispenser to be afforded for film material such as vinyl chloride or the like wherein a predetermined length of the material may be withdrawn as a sheet and neatly severed along a straight edge in a relatively safe and easy manner.

A further object of the present invention is to enable a sheet of stretchable film of the foregoing kind to be gripped or held along spaced-apart parallel lines and severed therebetween by a cutting edge drawn along the sheet between the holding means. An arrangement of this kind may be readily embodied in a carton dispenser or the like adapted to retain a supply of the film material, and this constitutes a further object of the present invention. To further assure a neat and quick cut of film material such as vinyl chloride, it is advantageous to stretch or hold the film taut where the cut is to be made and to enable this to be readily effected in a dispenser for the material is a further object of the invention.

Other and further objects of the present invention will be apparent from the following description and claim illustrated in the accompanying drawings which, by way of illustration, show preferred embodiments of the present invention and the principles thereof and what we now consider to be the best mode in which we have contemplated applying these principles. Other embodiments of the invention embodying the same or equivalent principles may be used and structural changes may be made as desired by those skilled in the art without departing from the present invention and the purview of the appended claim.

In the drawings:

Fig. 1 is a broken-away top plan view of a dispenser of the present invention;

Fig. 2 is a front elevation of the dispenser shown in Fig. 1;

Fig. 3 is a vertical sectional view through the dispenser shown in Fig. 2;

Fig. 4 is a perspective view of a cutting means;

Fig. 5 is a detail sectional view showing in perspective the grippers and cutting edge relation;

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Fig. 6 is a fragmentary front elevation of a modified dispenser;

Fig. 7 is a vertical sectional view of the dispenser of Fig. 6;

Fig. 8 is a fragmentary front elevation of a further modification of the invention; and

Fig. 9 is a vertical sectional view of the dispenser shown in Fig. 8.

The present invention is illustrated in Figs. 1 to 5 as embodied in an elongated carton-like dispenser 10 that includes a container or box 11 and an associated lid 12, Fig. 2. The container 11 is adapted to retain a supply roll 15 of film-like packaging material in the form of vinyl chloride or the like, and this container includes a bottom wall 16, opposite front and rear walls 17 and 18 and opposite end walls as 19 defining a cavity for receiving the supply roll 15.

The lid 12 includes a top wall 20, a rear wall 21 and opposite end walls as 22, and the lid 12 is attached to the rear wall of the container 11 by hinges 25 for a purpose that will be apparent from the description to follow.

Preferably, the dispenser 10 is produced from durable light-weight plastic material, but it will be appreciated that resort may be had to heavy card stock or other durable material.

Under the present invention, the upper edge of the front wall 17 of the container 11 is formed with an elongated block or ledge 30 in which are mounted in a suitable manner a pair of parallel spaced-apart sheet holding means 31 and 32, and the arrangement is such that the spacing between the sheet holders 31 and 32 defines an intermediate surface 35. In this modification of the invention, the upper edges of the holders 31 and 32 are formed with saw teeth ST for a purpose to be mentioned.

The forward edge of the lid 12 is likewise formed with a block 36 which when the lid 12 is closed will be disposed over and just above the saw teeth elements ST to enable the loose or free end E of the film material comprising the roll 15 to be easily withdrawn through the passageway 37, Fig. 2, that is thereby afforded over the sheet holding means 31 and 32. Such withdrawal affords a sheet S of predetermined length, and may be done in such a way that the sheet will be stretched taut in the portion between the respective sets of saw teeth afforded on the members 31 and 32.

In accordance with the present invention, a cutting edge is to be applied to the portion of the sheet S that is thus held by the members 31 and 32. Thus, the holders or grippers 31 and 32 having the saw tooth edges ST enable the sheet to be placed under tension by the cutting edge so that the desired severing may be accomplished in a facile manner. In the embodiment of the invention shown in Figs. 1 to 5, such cutting edge is included as a part of the dispenser. To this end, the block 36 is provided with a longitudinal vertical slot 40, and a longitudinal horizontal slot 41. A knife 45, Fig. 5, including a flat guide shoe 46 and a dependent blade 47 is mounted in the block 36 so that the shoe 46 thereof is adapted to slide in the slot 41 serving as a track, with the blade 47 extended downwardly through the slot 40 so that the cutting edge thereof will normally be disposed somewhat below the points of the saw tooth elements ST. The upper face of the shoe 46 is provided with a medially located lug 50 having an opening 51 therein. A tab 53 is formed at one end with ears as 54, and these ears are sprung into the opening 51 in the lug 50 in a well known manner.

Thus, the knife 45 is adapted to be drawn along the block 36 by means of the tab 53, and the length of the slots 40 and 41 will of course be at least equal to the width of the sheet to be severed. To facilitate withdrawing movement of the film through the passageway 37 as aforesaid, the slots 40 and 41 are extended beyond what

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amounts to the actual width of the sheet as S, so that the knife 45 may be stored in a position at the end of these slots as shown in Fig. 2 that does not interfere with withdrawing movement of the sheet as S from roll 15.

As will be observed particularly in Fig. 3, portions 55 and 56 of the wall 20 of the lid 12 over-hang the side edges of the shoe 46 in the slot 40 so as to prevent accidental displacement of the knife relative to the block 36. In this connection, it will be observed in Fig. 1 that the upper wall 20 of the lid 12 is preferably cut away at 53. The cut-away portion 58 enables the knife 45 to be removed from the dispenser if desired. The knife 45 is so constructed that when the draw tab 53 is down on the shoe 46 no part of the knife projects above the upper face of the wall 20 of the lid 12, so the dispensers as 10 may be stacked neatly one on the other.

A modification of the invention is illustrated in Figs. 6 and 7 as embodied in a dispenser 10A. In this instance, the box container 11A is formed with a block 30A. The block 30A is provided with a longitudinal groove that is trapezoidal or V-shaped in cross-section, and such construction affords a pair of opposed spaced-apart sloped surfaces 61 and 62. The lid 12A is hinged as described above, and adjacent the forward edge thereof is formed with a block 65 that is complementary to the groove 61 so as to fit snugly therein when the lid 12A is closed. A longitudinal slot 66 is formed medially in the block 65 so as to open at the upper face of the lid 12A and at the ledge 68 afforded between the surfaces 61 and 62, and on either side of the slot 66 are holders 65A and 65B. To withdraw a sheet S-1 from the supply roll 15-1, the block 65 is lifted the required amount from the groove in the block 30A, and the sheet S-1 is drawn out, a portion thereof being disposed in the groove in the block 30A. The lid 12A is then closed tightly and preferably at this time tension is applied to the loose end E-1 of the sheet S-1 so that the sheet will be somewhat taut in the portion between the holders 65A and 65B. After this has been accomplished, a cutting edge is then extended in to the slot 66 and drawn along the ledge 68 to sever the taut portion of the sheet S-1.

A further modification of the invention is illustrated in Figs. 8 and 9 as embodied in a dispenser 10B having a container 11B and a lid 12B as described above. In this instance, the block 30B of the container 11B is formed with a pair of parallel spaced-apart grooves 71 and 72 affording a ledge 73 therebetween, and the lid 12B adjacent the forward edge thereof is provided with a pair of correspondingly spaced and parallel elongated gripper or holder bars 73' and 74 which when the lid 12B is closed are adapted to enter the slots 71 and 72. Previous to this, a portion of the film material is withdrawn to afford a sheet S-3 of the desired length, and when the lid 12B is closed to dispose the holders in the grooves the sheet S-3 will be stretched taut in the portion that overlies the ledge 73. The ledge 73 between the slots 71 and 72 serves to support a cutting edge, and this cutting edge is adapted to be applied through a slot 75 that is provided in the lid 12B opposite the cutting-edge-supporting surface 73. As shown in Fig. 8, the holders 73' and 74 may if desired be provided at the lower edges with saw teeth ST.

It will be seen from the foregoing that in accordance with the present invention a dispenser is afforded for film material of known kinds that are not easily torn along a straight edge, such dispenser including spaced-apart elements that are adapted to engage and hold the film along parallel lines so that a cutting edge may be applied to the portion of the film lying between said holding elements.

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It has been found that "gathering" of the film during severing is prevented if the film is held taut, and while not always essential the present invention makes the attainment of this possible.

While vinyl chloride has been mentioned as a material that may be severed in accordance with the present invention, it will be appreciated that this is but an example; other materials are included as well, including Pliofilm and films of polyethylene.

Hence, while we have illustrated and described the preferred embodiments of our invention, it is to be understood that these are capable of variation and modification, and we therefore do not wish to be limited to the precise details set forth, but desire to avail ourselves of such changes and alterations as fall within the purview of the following claim.

We claim:

A dispenser for plastic film or like material that cannot be easily torn along a straight edge and comprising, means affording a box-like container member for holding a supply of said material in recessed relation therein and from which a sheet of said material of predetermined length may be withdrawn forwardly past and over the front edge portion thereof, a lid member pivotally attached to said container member and having a top wall, said lid member having means along the front edge portion thereof cooperating with the front edge portion of said container member when the lid member is at least partly closed on the container member affording a passageway in which a portion of said sheet of predetermined length can be disposed for severing, said lid member adjacent the front edge portion thereof having means affording a knife slot extended in a direction normal to the path of said material through said passageway, said knife slot having a first relatively wide horizontal portion and a second relatively narrow vertical portion, a knife including a flat guide shoe slidably mounted in the wide portion of said knife slot, said knife having a relatively narrow blade and a cutting edge depending from the underside of said guide shoe and disposed in said vertical portion of said knife slot, said cutting edge being in line engagement with said sheet in said passageway when said lid is closed, spaced means extended along the front edge portion of said container member at said passageway and across which said sheet in said passageway can be stretched so as to establish free space below the line engagement of said cutting edge with said sheet as afore-said, spaced portions of the top wall of said lid overhanging marginal portions of said guide shoe for the length of the path of said knife to retain said knife in place, the spacing between said overhanging portions affording a channel below the plane of the upper face of the top wall of said lid, a collapsible pull tab pivotally attached to the upper side of said guide shoe opposite said blade, said pull tab being of less width and of not greater thickness than the width and depth respectively of said channel so as to be reposable entirely in said channel when the knife is not in use, and said lid member having an opening therein communicating with said knife slot and through which said knife is insertable and removable into and from said knife slot.

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