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[54] **ROLL FILM DISPENSER**

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[52] **U.S. Cl.**..... **211/135,** 211/44, 211/126, 225/38, 312/39, 312/40

[51] **Int. Cl.**..... **B26f 3/02,** A47f/1/00

[58] **Field of Search**.....211/44, 128, 126, 72, 135, 211/49 D, 13, 45; 225/46, 38, 77; 242/58; 108/59; 312/45, 72, 40, 20, 39; 248/109, 105

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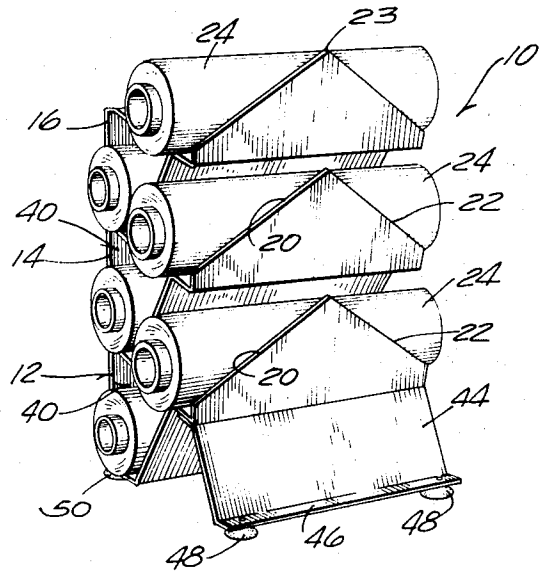
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[57] **ABSTRACT**

A roll film dispenser having a base unit provided with a storage roll trough and an upwardly and forwardly located dispensing trough supports additional units to form a vertical array of staggered dispensing and storage troughs for rolls of perforated sheet film. Each unit is formed from a single piece of sheet material with angularly related converging portions forming the troughs. The forward walls of the dispensing troughs are at a sufficient angle with the vertical to eliminate the need for a core weight.

8 Claims, 3 Drawing Figures



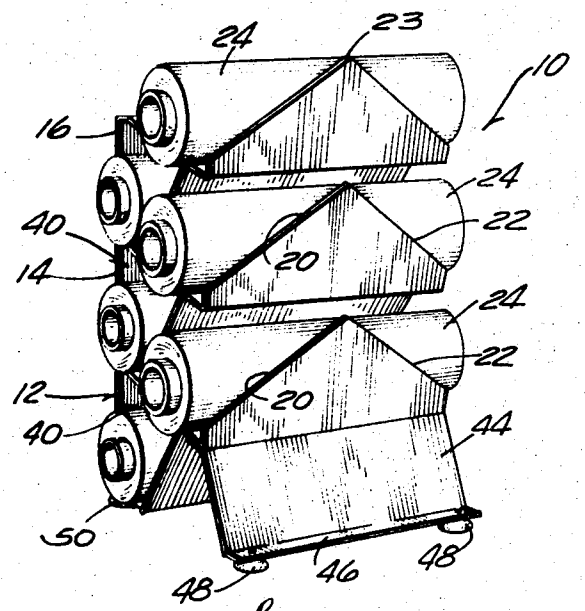


Fig. 1

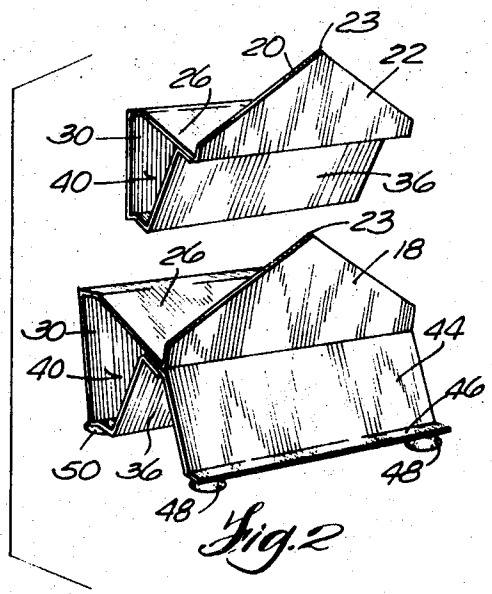


Fig. 2

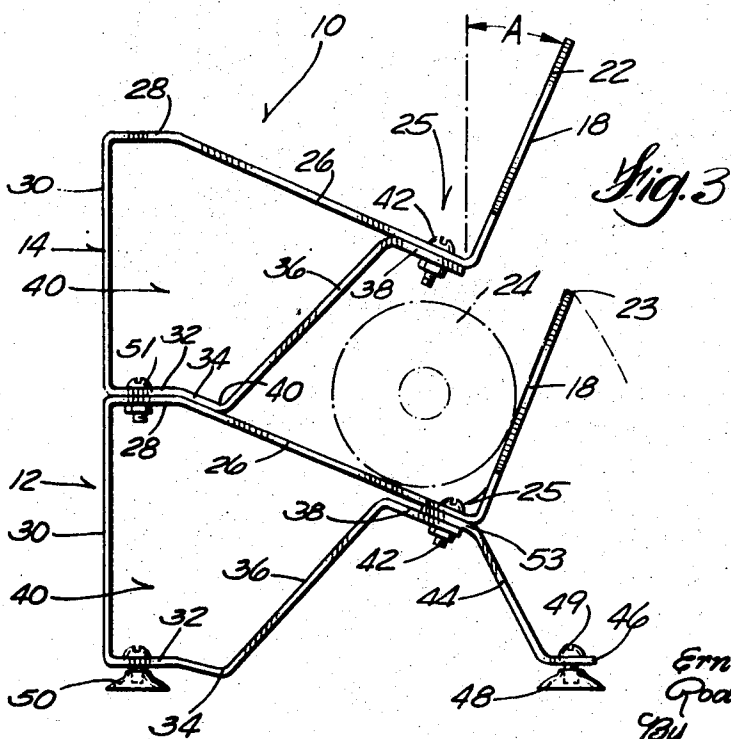


Fig. 3

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ROLL FILM DISPENSER

BACKGROUND OF INVENTION

The invention relates to dispensers and more particularly to roll film dispensers for dispensing rolls of web material having perforations at equally spaced intervals.

SUMMARY OF INVENTION

The invention provides a roll film dispenser for storing and dispensing multiple rolls of web material with a base unit formed from a single piece of sheet material to provide a storage trough and a forwardly and upwardly located dispensing trough. Additional units can be added on as required to form a vertical array of staggered storage and dispensing troughs. The staggered relationship of the troughs minimizes the overall height of the dispenser and lowers the center of gravity to provide a compact dispenser capable of storing a number of rolls of various types of film. Each unit has complementary, parallel, horizontal wall portions which permit the units to be stacked. Fasteners extending through the wall portions secure the adjacent units together.

The base unit is provided with a detachable forwardly extending leg with a horizontal foot which is provided with suction cups. Suction cups are also secured to the horizontal wall portion of the base unit. The forward wall portion of the storage trough of each unit extends upwardly and connects to the rearward wall portion of the dispensing trough to support the dispensing trough and rigidify the forward wall of the storage trough. The forward wall portions of the dispensing troughs are at an angle of 20° to 25° with the vertical to eliminate the need for a core weight.

It is an object of the invention to provide a film dispenser in which units formed from a single piece of material and having a storage trough and dispensing trough can be added as required to a base unit to form a rigid vertical stack.

It is an additional object of the invention to provide a compact film dispenser for storing multiple rolls of film comprising a vertical array of units with staggered storage troughs and dispensing troughs with the forwardly and upwardly inclined wall portions of the storage troughs supporting the dispensing troughs and in which horizontal parallel wall portions form abutting supporting surfaces for adjacent units.

Further objects and advantages of the invention will become apparent from the following disclosure.

DESCRIPTION OF DRAWINGS

FIG. 1 is a perspective view of a film dispenser in accordance with the invention.

FIG. 2 is an exploded view of two dispenser units.

FIG. 3 is an enlarged end view of a dispenser in accordance with the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Although the disclosure hereof is detailed and exact to enable those skilled in the art to practice the invention, the physical embodiments herein disclosed merely exemplify the invention which may be embodied in other specific structures.

Referring to the drawings, FIG. 1 shows a film dispenser in accordance with the invention which is generally designated **10** and which includes three vertically stacked units or tiers including a base unit **12** and upper units **14** and **16**. Each of the units can be formed from a single piece of material with a first wall portion **18** having edges **20** and **22** which converge upwardly to form a piercing or tear edge **23**. The wall portion **18** and a wall portion **26** converge downwardly to form a trough **25** which supports a roll of film **24** in a dispensing position.

To facilitate stacking of the units, each unit is provided with a generally horizontal wall portion **28** which connects wall portion **26** to a vertical wall portion **30**. The vertical wall portion **30** is connected with a forwardly extending generally horizontal wall portion **32** which is parallel with wall portion **28** and is connected with a downwardly inclined wall portion **34** which is parallel with wall portion **26**. As shown in FIG. **3**, the wall portions **32** and **34** are respectively supported on wall portions **28** and **26** of the lower unit when the units are stacked.

To support the dispensing trough **25** and provide a storage trough for an extra roll, a wall portion **36** extends angularly upwardly from wall portion **34** and is connected with a wall portion **38** which is parallel with the wall portion **26**. The wall portion **36** is connected to wall portion **26** by fasteners **42** and provides rigidity for the dispensing trough **25**.

The lower unit **12** is provided with a forwardly extending leg **44** which has an upper leg portion **53** connected to a wall portion **38** by a fastener **42**. The leg **44** has an out-turned flange or foot **46** provided with suction cups **48** fastened to the foot **46** by bolts **49**. The wall portion **32** of the base unit **12** is also provided with two suction cups **50** for anchoring and supporting base unit **12** on a surface. Inasmuch as the wall portions **28** and **32** and the wall portions **26** and **34** of each of the units are parallel, they can be stacked as shown in FIG. **3** with wall portion **32** of unit **14** in engagement with wall portion **28** of unit **12**. The wall portion **34** of unit **14** is supported on the wall portion **26** of unit **12**. Fasteners **51** secure the adjacent units together.

The vertical row of storage troughs **40** adjacent the rear walls **30** and the stored rolls contained herein provide weight on the suction cups **50**. The vertical row of dispensing rolls adjacent the suction cups **48** provides weight on the suction cups **48** thus stabilizing the vertical stack of units and insuring that the suction cups remain in firm engagement with the supporting surface. The staggered relationship of the storage troughs and dispensing troughs provide a compact dispenser with a low center of gravity to minimize translatory movement of the dispenser during severance of sheets from the rolls.

The angle A between the forward wall portions **18** and the vertical is desirably between 20° and 25°, to eliminate the need for a core weight which is employed with prior art dispensers to prevent the roll from climbing out of the dispensing trough during withdrawal of film.

What is claimed is:

1. A roll film dispenser comprising a vertical array of dispensing units, each of said units being formed from a single piece of material having a first wall portion extending angularly upwardly and forwardly, a second wall portion extending upwardly and rearwardly from said first wall portion and forming a trough with said first wall portion for supporting a roll of film, a third

wall portion extending rearwardly and generally horizontally from said second wall portion, a fourth wall portion extending downwardly and generally at right angles with said third wall portion, a fifth wall portion extending forwardly at generally right angles with said fourth wall portion and parallel to said third wall portion, a sixth wall portion extending forwardly and downwardly from said fifth wall portion and parallel to said second wall portion, a seventh wall portion extending upwardly from said sixth wall portion to adjacent said second wall portion, said seventh wall portion and said sixth wall portion forming a trough for storing a roll of film, and an eighth wall portion extending forwardly from said seventh wall portion and generally parallel to said second wall portion.

2. Dispensing apparatus in accordance with claim **1**, wherein said second and eighth wall portions of said units are secured together.

3. Dispensing apparatus in accordance with claim **1** including means fastening said fifth wall portion of one of said units to the third wall portion of an adjacent lower unit.

4. A dispensing apparatus in accordance with claim **1** including means connected to and extending from the fifth wall portion of the lower unit supporting the dispenser on a surface.

5. Dispensing apparatus in accordance with claim **1** including a supporting leg having an upper leg portion, a forwardly extending foot, means connecting said upper leg portion to said eighth wall portion of the lowermost of said units, and means extending from said foot supporting said leg on a surface.

6. A roll film dispenser comprising a base unit having converging wall portions defining a dispensing trough and converging wall portions defining a storage trough spaced rearwardly and below said dispensing trough, said storage trough converging wall portions including a forward wall portion connected to one of said converging wall portions of said dispensing trough to support said dispensing trough, a vertical rear wall and parallel upper and lower generally horizontal wall portions extending forwardly from said rear wall and connected to said wall portions forming said troughs and an add-on unit having a horizontal wall portion and a converging storage trough portion extending from the horizontal wall portion at an angle equal to the angle defined between said base unit upper horizontal wall portion and the adjoining dispensing trough wall portion so that said add-on unit is supported by said upper horizontal wall portion of said base unit, and means connecting said add-on unit to said base unit.

7. A dispenser in accordance with claim **6** including a vertical array of add-on units above said base unit with said adjacent horizontal wall portions of said units secured together.

8. A dispenser in accordance with claim **6** wherein said converging wall portions defining said dispensing trough include a forward wall portion having an angle of between 20° and 25° with the vertical.

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