# United States Patent [19]

# Christine et al.

## [54] DISPENSING RACK AND PACKAGE

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#### [57] ABSTRACT

A dispensing rack for pourable materials wherein the rack is expansible, there being a flexible pouch supported on the rack for holding a quantity of material to be dispensed.

#### 2 Claims, 5 Drawing Figures



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### **DISPENSING RACK AND PACKAGE**

The present invention relates to a dispensing rack for pourable materials such as dressings that are packaged in a pouch whereby desired quantities of the material 5 can be conveniently dispensed into a receptacle, bowl, or the like in a home or other point of use.

An object of the present invention is to provide a dispensing eack for pourable materials such as mayonnaise, catsup, condiments or the like whereby a manually operable means is provided for conveniently and readily dispensing desired portions from a flexible pouch into a container or receptacle so that a convenient means is provided for dispensing the material for cooking purposes or the like.

A further object is the provision of a dispensing rack and package for pourable material wherein there is provided a rack that can expand or contract, there being a means provided for piercing the pouch so that quantities.

Still another object is to provide such a dispensing rack that is compact in construction and attractively formed and wherein the device is rugged in structure and fool-proof in use, as well as being simple and inex- 25 pensive to manufacture and use.

Other details, objects and advantages of the present invention will become apparent from the following description of the novel features of the construction, ar-30 rangements, and combination of the parts taken in conjunction with the drawings which accompany and form part of the specification.

Referring to the Drawings:

FIG. 1 is a perspective view of the dispensing rack of 35 the present invention;

FIG. 2 is a sectional view taken on the line 2-2 of FIG. 1:

FIG. 3 is a sectional view taken on the line 3-3 of FIG. 1:

FIG. 4 is a fragmentary sectional view illustrating a 40modified form of the invention.

FIG. 5 is a fragmentary sectional view, illustrating a further modification.

Referring in detail to the drawings, the numeral 10 45 indicates a dispensing rack that includes a base portion 11 for a pair of similar side members 12, each of the side members 12 include upstanding legs 13 as well as horizontal portions 14 and inclined portions 15. Aperture portions 16 and 17 are provided in the side mem-50 bers 12 for receiving lower and upper cross pieces or rods 18 and 19. Each of the cross pieces 18 and 19 may include telescoping sections 21 and 22 that are adjustably connected together, and securing elements 23 are provided for maintaining the sections 21 and 22 stationary in their adjusted position. The numeral 24 indicates a flexible pouch made of a suitable material such as a suitable transparent material, and the pouch 24 is adapted to hold a quantity of material to be dispensed such as pourable dressings, condiments and the like.

The numeral 25 indicates a support member or holder that includes spaced parallel flanged portions 26 as well as a back portion 27 and a bottom portion 28. Slots or grooves 29 are provided in the holder 25 for receiving the upper cross piece 29 and the slotted portion or grooved portion 30 is also provided in the holder 25 for receiving the lower cross piece 28. The numeral 31 indicates a key way that is adapted to

snuggly receive the fitment 32 of the pouch 24, and the numeral 33 indicates a suitable bowl, receptacle or the like that is adapted to receive the material that is dispensed from the pouch 24.

As shown in the drawings there is provided a dispensing valve and bayonet unit 34 that includes teeth 35 as well as an aperture portion 36 whereby the material in the pouch 24 can selectively flow by gravity out through the valve 34 into the container 33 or else manual pressure can be applied to the pouch 24 in order to cause the material to be dispensed from the pouch out through the valve 34 into the container 33.

From the foregoing, it will be seen that there has been provided a dispensing rack for pourable dressings, 15 condiments and the like that are adapted to be packaged in a metered product dispensing system, and in use with the parts arranged as shown in the drawings, the pouch 24 that is previously filled with a desired quantity of condiments, dressings, or the like is placed the ingredients can be dispensed in metered portions or <sup>20</sup> in the holder 25 so that the fitment 32 is snuggly received in the key way or slot 31. The side members 12 can be readily adjusted toward or away from each other by loosening the securing elements 23 and then the securing elements 23 can be tightened to maintain the telescoping sections or pieces 21 and 22 stationary in their adjusted position. The valve 34 can be arranged so that its teeth 35 pierce the normally closed closure on the fitment or pouch so that by manually actuating the valve 34 the material in the pouch 24 can be conveniently dispensed out through the valve 34 into the receptacle 33 whereby the housewife or the person can have a convenient source or supply of condiments or other materials.

It is to be understood that the parts can be made of any suitable material and in different shapes or sizes as desired or required.

After the material in the pouch 24 has been dispensed, the pouch can be discarded and a new pouch can be conveniently arranged on the holder 25. When the material is not being dispensed, the valve 34 can be moved to a closed position. If desired, the unit 10 can be made of one piece construction with a suitable supporting base 11. Suitable securing elements can be provided for connecting ends of the members 18 and 19 to the pieces 12. The numeral 37 indicates a manually operable valve piece that can be used for opening or closing the valve 34 in order to control the flow of material through the passageway 36 into the bowl 33. The serrations or teeth 35 can be used for initially puncturing an

opening in the fitment closure adjacent the fitment 32. Referring now to FIG. 4 of the drawings, the numeral 40 indicates a modified or alternative dispensing system that includes a hollow shipping container 41 that may be made of suitable material such as corrugated material. The number 42 indicates a pouch that may be made of flexible transparent plastic, and the pouch 42 is adapted to hold a quantity of material 43 that is to be dispensed. Numeral 44 indicates a fitment that is suitably affixed to the pouch 42. As shown in FIG. 4 a sump or guide member 45 is provided in the bottom of the container 41, and the sump 45 may have cavities 46 therein. As shown in FIG. 4 an adapted 47 is provided, and the adapter 47 has an interfitfing lug 48 with the sump 45. The adapter 47 also includes a sleeve portion 65 49 that has a plunger or tubular member 50 slidably mounted therein, and the tubular member 50 has a pointed piercing end 51 for selectively puncturing the

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pouch 42 in the vicinity of the fitment 44 so that the material 43 can be dispensed downwardly through the hollow tubular member 50, after the member 50 has been manually actuated.

It will therefore be seen that with reference to the 5 construction shown in FIG. 4 that there has been provided a metered product dispensing system such as a one to five gallon dispensing system that may be in the form of a corrugated container with a foam insert in the container 41 and this construction can use the fitment 10 pouch arrangement. The corrugated shipper 41 may or may not have a corrugated cap depending on the treatment of a scored cutout for the bayonet fitment adapter lock. The bottom of the sump does not necessarily have ing it centered, using the off-center location of the fitment (i.e. not located on the bottom of the pouch).

The product may be arranged in the pouch shown in FIG. 4. The numeral 44 indicates fitment that may be provided with a cover or cap that be removed by the 20 specification will occur to others and therefore it is inuser. The container 41 may be made of corrugated material. The member 50 may have a bayonet construction. The unit 45 may be a plastic sump and fitment lock with a cover or cap. The bayonet fitment adapter lock may be lugged to be applied by the user. The 25 scope of the invention. member 50 may be in the form of a fitting or tubing to the metering dispenser.

In the construction of FIG. 4, the fitment locks into a throw away polystyrene foam sump 45. The locking lugs or the sump can break away for the bayonet fit- 30 base portion, up standing legs, horizontally disposed ment recovery and they are located inside the shipper. The shipper can be fitted with a rip-out access to the sump to eliminate the shipper cap. The sump can be lightened by providing partitioned cavities. When used, the pouch is adapted to be elevated one or two feet 35 above the dispensing level.

Referring now to FIG. 5 of the drawings, there is illustrated a further modification that is indicated by the numeral 55, whereby the numeral 56 indicates a portion of a pouch, there being a fitment 57 secured to the 40 said holder, a flexible pouch having a quantity of matepouch 56, as at 58. The fitment 57 has one or more openings 59 therein. The numeral 60 indicates a bayonet valve that has one or more openings or ports 61 therein, and the numeral 62 indicates the outer end portion of the bayonet valve 60, there being piercing 45 dispensing valve is manually operable. teeth 63 on the inner end of the valve or piercing mem-

ber 60.

Thus, FIG. 5 illustrates a pouch fitment with a selfcontainer bayonet valve combination. The bayonet member 60 is adapted to be pressed in to pierce the pouch 56, and the bayonet can be rotated to open and close the valve by moving the openings 51 into and out of registry with the opening 59, so as to permit the material to flow out through the pouch 56 after the pouch 56 has been pierced by the teeth 63.

The fitment 57 may be secured to the pouch 56 by heat sealing as at 58. The numeral 64 indicates stop members that provide interference to function as a locking means for the bayonet valve prior to use.

In addition, the pouch fitment may have a separate to be centered, in fact there is an advantage to not hav- 15 bayonet valve combination with a rip strip that can be opened to install the valve, and then the bayonet can be pressed in to pierce the pouch and the bayonet can be rotated to open or close the valve.

> Additional embodiments of the invention in this tended that the scope of the invention be limited only by the appended claims and not by the embodiments described hereinabove. Accordingly, reference should be made to the following claims in determing the full

We claim:

1. An apparatus for dispensing pourable materials comprising, a rack including spaced parallel similar side members each embodying a horizontally disposed extensions and inclined portions connecting said up standing legs and horizontal extensions, upper and lower telescoping cross pieces connecting said side members together, securing elements connected to said cross pieces, a holder embodying an inclined back piece having a slotted portion receiving the upper cross piece and a horizontally extending bottom section having a slotted portion adjacent thereto for receiving the lower cross piece, a key way in the bottom portion of rial therein to be dispensed, a fitment on said pouch received in said key way, and a dispensing valve for selectively engaging said fitment.

2. The structure as defined in claim 1 wherein said

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