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FILM CONTAINER

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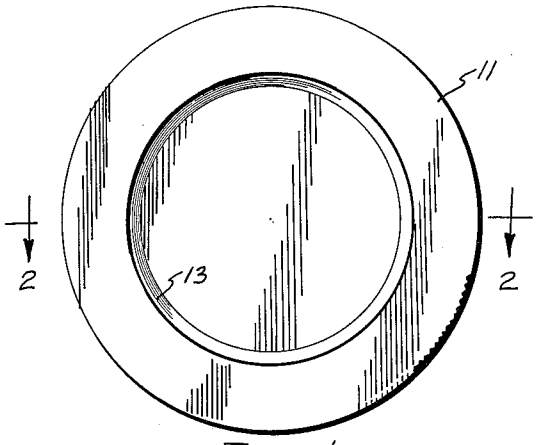


Fig. 1

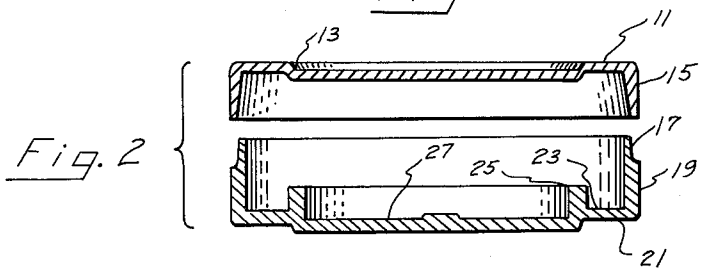


Fig. 2

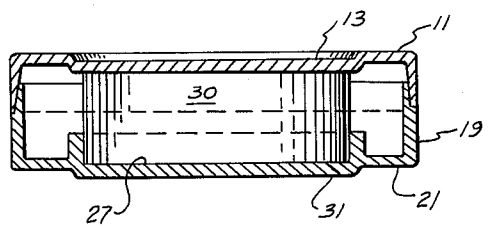


Fig. 3

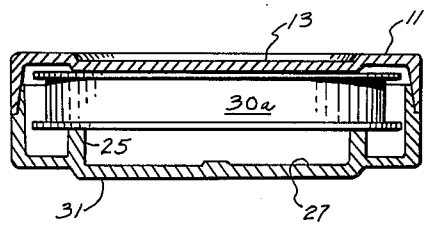


Fig. 4

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FILM CONTAINER

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The present invention relates to a film container and, more particularly, to a container for packaging photographic film rolls in either of two commercial forms. It is particularly adapted for the packaging of conventional 8 mm. movie camera films which commonly assume different diameters and thicknesses before and after processing.

In the past, film rolls of the type mentioned above have commonly been marketed in packages of essentially double unit thickness (or film width), the roll having a relatively small diameter. During processing, the exposed film which is split longitudinally to the unit width, for example 8 mm. film, would after processing is completed, be spliced together and rewound on a spool or reel of essentially single unit thickness or film width, the reel being substantially larger in diameter than the roll which carried the film before processing.

In the past, films of the type described above were packaged in a first container of essentially double unit width and the user, after having exposed them, would repackage the exposed film in the same container and mail it or otherwise deliver it to the processor for development. The processor, after development and other processing, would have to package the finished film reel in a different type of container in view of its different dimensions. This involved not only the use of two containers, one before and another after processing, but also involved transcribing of the customer's name and address and other data with considerable chance of error and frequent loss of time in seeking identification, etc.

According to the present invention, a single container is designed to package the film either in its double unit with and compact diameter form or in its single unit width and expanded diameter.

In the description which follows, it will be understood that reference to single unit width or depth and double unit width or depth is to be interpreted as covering the two forms of rolls, after and before processing respectively. The actual spool width in the two cases will not necessarily be exactly two units, as compared to the single unit width and these terms are to be taken to allow for tolerances involving wall thickness of spools and the like.

In general terms, the invention comprises a main tray type container which may be considered the bottom or body unit having peripherally upstanding walls with a raised rib generally somewhat lower than the peripheral wall spaced inwardly of the periphery. The top of the raised rib will serve as support for the thin or single unit form or reel. This rib also forms the outer wall or periphery of a relatively deep pocket of transverse dimensions and depth suitable to receive the small diameter roll of essentially double unit thickness. The latter form is typical of movie camera rolls prior to processing.

The invention will be more fully and clearly understood by reference to the accompanying drawings wherein:

FIG. 1 is a top plan view of a container embodying a preferred form of the invention;

FIG. 2 is a transverse sectional view in elevation taken substantially along the line 2—2 of FIG. 1 showing the tray or main container and the lid or cover separated;

FIG. 3 is a sectional elevation similar to FIG. 2 showing the double unit thickness or depth of roll seated in the centrally located pocket or recess;

FIG. 4 is a view generally similar to FIG. 3 showing the completed roll of unit depth or thickness and larger diameter resting on the raised rib which defines the pocket for the film seated in FIG. 3.

Referring first to FIG. 1, this shows the top view of cover 11 of the container. As here shown, this cover is circular and preferably has a centrally depressed shallow pocket 13 having a purpose to be mentioned later. The lid, or cover 11, in addition to its generally horizontal disc-like form, has a down-turned peripheral flange 15 which is adapted to fit over a receiving surface 17, preferably slightly rebated into the upstanding peripheral wall 19 of the main tray or receptacle body 21. The receptacle 21 is preferably of generally cylindrical form, that is of essentially right circular cylinder shape. It may, however, be other than circular, for example, somewhat oval or even polygonal, if desired. For ease of manufacture, however, and also for maximum structural strength, both the tray 21 and the cover 11 are preferably made circular in form. Either or both may be made of suitable material such as metal, plastic, resin, or paper, or a combination of such materials. Reinforced plastics are very suitable for the purpose and the parts, both tray and cover, may be formed by molding, casting, drawing, spinning or other suitable processes. For example, they may be molded from paper pulp, reinforced or otherwise, if desired.

Within the tray and spaced from the outer wall 19 by a more or less annular space 23, is an upstanding rib 25. This rib preferably is continuous in its extent, forming an upstanding annular element shown as continuous throughout a full periphery and located within and generally similar in shape to the outer wall 19. Obviously, if desired, the rib may be circular and the wall 19, non-circular, or vice versa, but it is normally preferred that both be of right circular cylindrical form.

The upstanding rib, which may also be considered an inner wall, surrounds and refines a relatively deep pocket 27. Referring to FIG. 3, it is seen that a double unit width or depth roll 30 will fit neatly within the pocket 27, being restrained from lateral movement and a tendency to unwind by the rib 25. The rib 25 is of such height that when the finally processed film of single unit width or roll thickness as wound on its reel 30A is placed in the container, it fits neatly between the upper surface of rib 25 and the applied lid or cover 11, particularly the slightly depressed central area thereof 13.

In forming the tray, the bottom of the central recess 27 is preferably depressed slightly in the same manner and over the same or corresponding area as the depression 13 in the cover. This provides a slightly downwardly projecting surface area 31 which is adapted to fit neatly within the recess 13 of another container when one container is stacked on another. In this manner, the receptacles are nested together in groups of two or more. They are thus neatly stacked and simply wrapped together. The cooperation of the male projection 31 and the female recess 13 insures compact and rugged packaging enabling convenient shipment of plural packages wrapped together.

It will be understood that various modifications may be made in the form and feature above described. Obvious variations will occur to those skilled in the art and it is intended to cover such by the following claim so far as the prior art permits.

What is claimed is:

A container for packaging alternatively a double width small diameter spool of unprocessed film and a single width larger diameter reel of processed film, said container being comprised of an outer peripheral wall of internal diameter to fit and contain said reel, an annular bottom portion connecting said wall to a second and

downwardly offset pocket having its centrally located bottom portion below the plane of said first mentioned bottom portion and an annular upstanding rib projecting above both said bottom portions, said rib being annularly spaced within and from said outer peripheral wall and being of inside diameter to fit and confine said spool with its upper edge adapted to give support to said reel inwardly of the periphery of the reel, and a cover member having a recessed top adapted to receive the downwardly projecting offset bottom wall aforesaid of another and similar container whereby multiple containers may be nested for firm and protective packaging selectively of said spool or reel.

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