March 13, 1951 E. P. HOYLE 2,545,145

TWO-PART DISPLAY AND TRANSFER REEL

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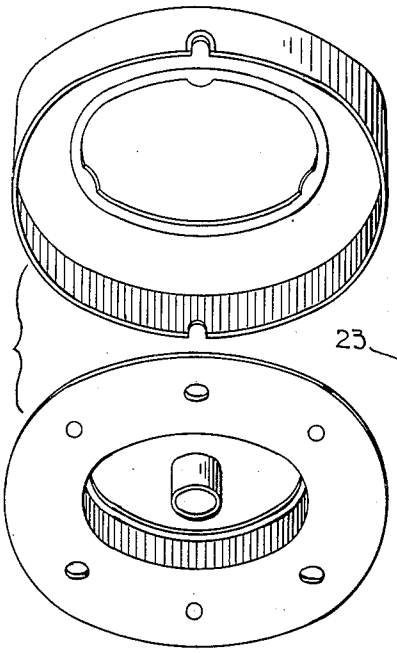


Fig. 1.

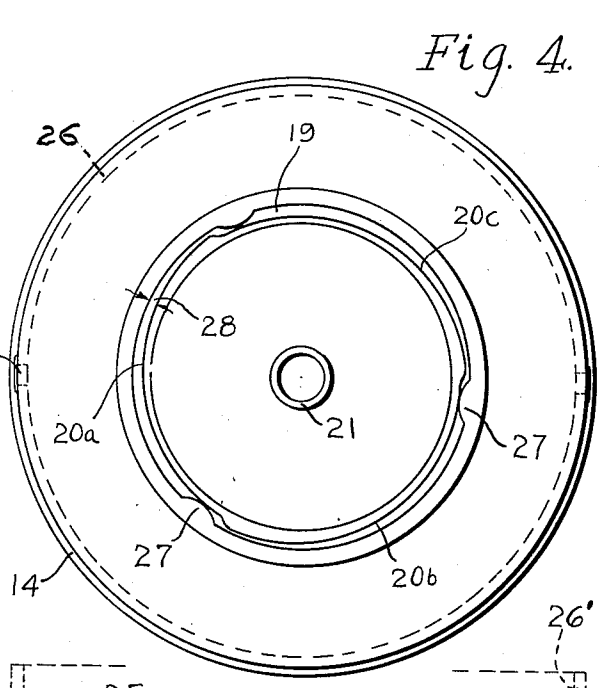


Fig. 4.

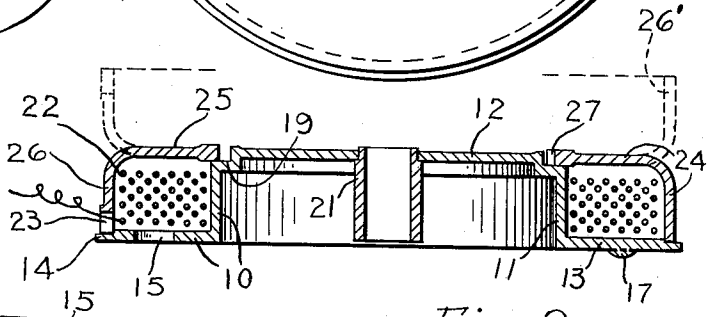


Fig. 2.

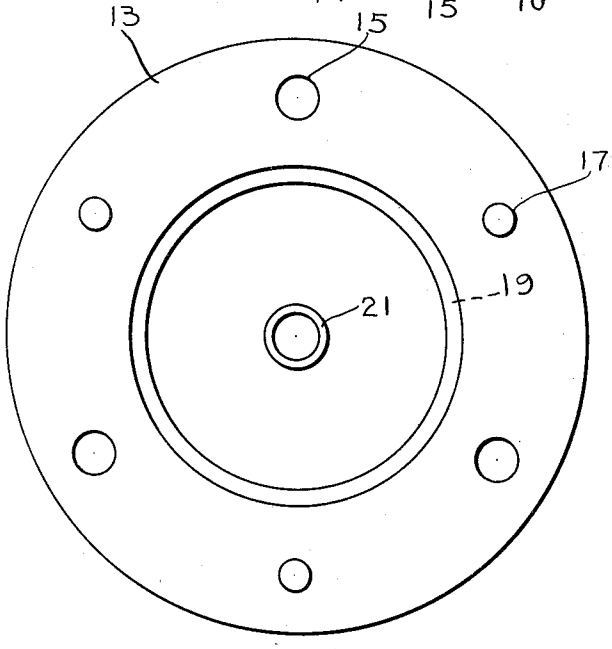


Fig. 3.

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TWO-PART DISPLAY AND TRANSFER REEL

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6 Claims. (Cl. 242—124)

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The present invention relates to a compact low-cost transparent coil display and transfer reel that requires but two simple sectional parts effectively disposed as a supplementary unit adapted to attractively exhibit or visibly stow a coil of high grade fishing line or the like strand product whereby to offer such commodity for sale or use to the sporting goods trade. A minor rearrangement of my casing parts permits such container to be readily utilized as a strand transfer reel when it is desired to apply such previously stowed coil to a fishing rod.

One section of such reel may comprise a socketed hood or cover member preferably fabricated from relatively thin sheet stock cross-sectionally formed to include a cylindrical flank rim flange that is integrally spanned by an annulus of which its inner edge may be provided with perimetrically distributed cleating lug extensions arranged to assume alternative positions to allow my container to be used as a combined coil display or transfer reel.

The mated other casing component may include a hollow plug element of which one end is spanned by a flat circular head plate while the opposed plug end may be equipped with an outstanding brim flange of which one face normally serves to seat a stowed coil thereon. The perimetric region of such head plate is herein shaped to provide for localized wedge shaped beads or the like non-circular cam elements disposed to fall into interlocked registry with the respective cleating lugs when my superimposed container parts are manipulatively given a relative twist about a common axis. The present embodiment represents a material structural refinement over my similar three part prior Patent No. 2,438,805.

The object of the instant improvements is to provide for a simplified combined display and transfer reel of the indicated character having but two cooperating parts that may each be easily fabricated on a rapid productive scale at a low factory cost relative to that of a high grade fishing line coil which it is intended to encase. Embodied herein are also certain structural features organized to promote the end in view and all of which will hereinafter be explicitly set forth.

Reference is had to the accompanying one sheet of drawings which are illustrative of a preferred exemplification, and in which drawings:

Fig. 1 shows a so-called exploded perspective view of my contained parts prior to their being cooperatively interlocked about an inserted coil.

Fig. 2 represents a cross-sectional view after being interlockedly assembled, an alternative reversed position of my cover part being depicted in dotted outline.

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Fig. 3 is a base view of Fig. 2, and Fig. 4 is a top cover view thereof.

My improved style of coil container essentially comprises two separable parts that may respectransparent plastic sheet stock or the like matively be fabricated by simple moulding dies from terial of less than $\frac{1}{16}''$ in gauge thickness. The base section **10** is purposely kept devoid of reenforcing ribs and shaped to provide for an inherently rigid, tubular cylindrical plug element **11** whose one or tip end is integrally bridged by a circular head plate **12**. The opposite plug end is equipped with an integral brim flange **13** that lies in offset parallelism with said plate. The brim flange perimeter may be slightly countersunk at **14** to center my assembled hood part **24**, said brim perimeter being purposely kept somewhat larger in diametral size than the hood to serve as an outstanding gripping agency. One or more holes **15** may be provided to vent an otherwise closed container, the bottom face of the brim flange having titlike projections such as **17** to interspace a stack of such containers.

The perimetric tip region of my cylindrical plug element **11** may be inset radially with respect to the outer plug diameter to constitute a narrow transverse shoulder **19** above which the plug extremity is provided with one or more cam-shaped threads **20A**, **20B**, etc. distributed eccentrically about the plug axis and confined contiguous to the head plate **12**, as shown. The apertured axial region of such plate preferably has an open ended trunnion bushing **21** appended therethrough by which to rotatably mount my interlocked container parts while used as a transfer reel. When serving as a display reel, the fishing line coil **22** is intended to be stowed upon the upturned seating face of the brim flange **13** and the outer coil end arranged to feed through a hood slot such as **23**.

Referring now in detail to my cup-shaped unitary hood section **24**, this preferably comprises an apertured disc or annulus **25** whose outer perimeter may be formed integrally with the cylindrical flank or rim flange **26** as shown. The inner perimetric edge region of said annulus per se may be extended radially inward to provide for one or more tongues or cleating lugs **27** arranged to interlockingly cooperate in registry with the respective distributed eccentric cam elements **20A**, **20B**, etc. The non-circular inner bore of said annulus herein circumscribes the axis of the base section **10** and the several cleating lugs

27 initially provide for a radial clearance gap 28 prior to their wedge engagement. Such interposed gaps are progressively reduced when the complementary sections 10 and 24 are relatively rotated manually to bring the several lugs into tangential interlock with their respective registering cams 20A, 20B, etc.

When such rotative manipulation is reversed, the hood part 24 becomes freely separable from its mated base part 10. Thereupon the flank flange 26 may be interlockingly inverted into its alternative self-retaining dotted position 26' to serve as a transfer reel upon entering a pencil or the like trunnion means through the bushing 21. A structural feature of my reel embodiment resides in the use of a comparatively thin cleating lug 27 that may be confined to the gauge thickness of the non-ribbed plastic hood annulus 25 and still allow of properly interlocking the flank flange 26 into alternate stabilized positions, as described. It will be apparent that my dual interlocking lug and cam means may be inversely disposed to have the lugs 27 carried by the base part 24 and thereby attain an identical result.

My split coil container is rendered pleasing in appearance and otherwise affords a neat protective jacket trim appropriate to present needs for selectively displaying and promoting the sale of strand goods by the use of but two light weight plastic parts that fully visualize the quality, finish, gauge size and other pertinent characteristics for selection by a prospective buyer or fishing line user.

The described embodiment will make apparent to those skilled in this art, the advantages afforded by my inherently simple and relatively cheap combined stowage and transfer reel, it being understood that certain structural changes may be resorted to in attaining a like end, all without departing from the spirit and scope of my invention as more particularly defined in the appended claims.

I claim:

1. A coil stowage container comprising two demountably nested parts that are relatively rotatable of which one such part consists of a tubular plug of which one end is spanned by a head plate and the opposite plug end has a circumscribing brim flange affixed in substantial parallelism to said plate, and the other of which container parts comprises a unitary cup-shaped hood including a rim flange spanned by an annular disc that is laterally spaced from the brim flange to stow a coil therebetween, the marginal region of the head plate being inset radially from the plug perimeter and provided with a plurality of relatively narrow cam elements distributed about the axis of said plug and the inner edge of the annular disc being provided with tongue-shaped cleating lugs arranged in cooperative registry with the respective cam elements to initially leave a radial clearance gap therebetween, said gaps being progressively reduced when said container parts are relatively rotated to bring the lugs into wedged tangential interlock with their respective cams.

2. A coil stowage container comprising two demountably nested parts that are relatively rotatable of which one such part consists of a tubular plug of which one end is spanned by a head plate and the opposite plug end has a circumscribing brim flange affixed in substantial parallelism to said plate, and the other of which container parts comprises a bodily reversible cup-shaped hood including a rim flange spanned

by an annular disc that is laterally spaced from the brim flange and which head plate perimeter is inset radially from the plug perimeter, a plurality of cam elements mounted between the aforesaid perimeters, the inner edge of the annular disc being provided with tongue-shaped cleating lugs arranged to cooperatively register with the respective cam elements to initially leave a clearance gap therebetween adapted to be progressively reduced when said container parts are manipulatively brought into tangential interlock with their respective cams in either position of said hood.

3. A stowage container comprising two demountably nested parts that are relatively rotatable of which one such part consists of a tubular plug of which one end region is spanned by a head plate and the opposite plug end region has a brim flange disposed in substantial parallelism to said plate, and the other of which container parts comprises a unitary cup-shaped hood including a rim flange spanned by an annular disc that is laterally spaced from the brim flange and the perimeter of which rim flange is smaller in diametral size than the corresponding dimension given to said brim flange, the perimeter of said plate being radially inset from the plug perimeter to provide for a shoulder upon which to superimpose the inner disc edge, and cooperating lug and cam means disposed within the marginal confines of said shoulder and each carried respectively by a different container part arranged to shift said lug and cam means into wedged tangential interlock when the container parts are relatively rotated.

4. A stowage container comprising two demountably nested parts that are relatively rotatable of which one such part consists of a tubular plug of which one end is spanned by a head plate and the other plug end has a circumscribing brim flange disposed in substantial parallelism to said plate, and the other of which container parts comprises a cup-shaped head including a rim flange spanned by an anular disc having a non-circular inner bore therethrough, the edge of said bore being extended radially inward to constitute a plurality of angularly interspaced tongue-shaped lugs whose thickness is substantially equal to said disc and the perimeter of said plate being radially inset with respect to the plug perimeter to provide for a shoulder upon which to superimpose said annular disc, and cam means disposed within the marginal confines of such shoulder and carried by the plug to wedgingly cooperate with said lugs.

5. A ribless container comprising two demountably nested parts that are relatively rotatable and respectively formed from plastic sheet material substantially uniform in thickness of which one such part consists of a hollow cylindrical plug of which one end is integrally spanned by a head plate and the other plug end is integrally circumscribed by a brim flange, and the other of which container parts comprises a unitary cup-shaped hood including a cylindrical rim flange spaned by an annular disc whose inner perimeter circumscribes said head plate to leave an interspace therebetween, and cooperating cam elements and lug elements inbuilt within such interspace and each carried respectively by a different container part and which cooperating elements tangentially interlock such dual parts when relatively rotated.

6. A ribless container comprising two demountably nested parts that are relatively rotatable about a common axis and respectively formed

from transparent plastic sheet material of which one such part consists of a hollow cylindrical plug of which one end is integrally spanned by a head plate having an axially centralized bushing aperture therethrough and the other plug end is provided with a brim flange, and the other of which container parts comprises a cup-shaped hood including a rim flange spanned by an annular disc whose inner perimeter encircles said

head plate to leave an interspace therebetween, and cam elements and lug elements each carried respectively by a different container part, said elements being arranged within said interspace to wedgingly interlock when the container parts are manipulatively rotated.

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No references cited.