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RECEPTACLE FOR MOTION PICTURE FILMS

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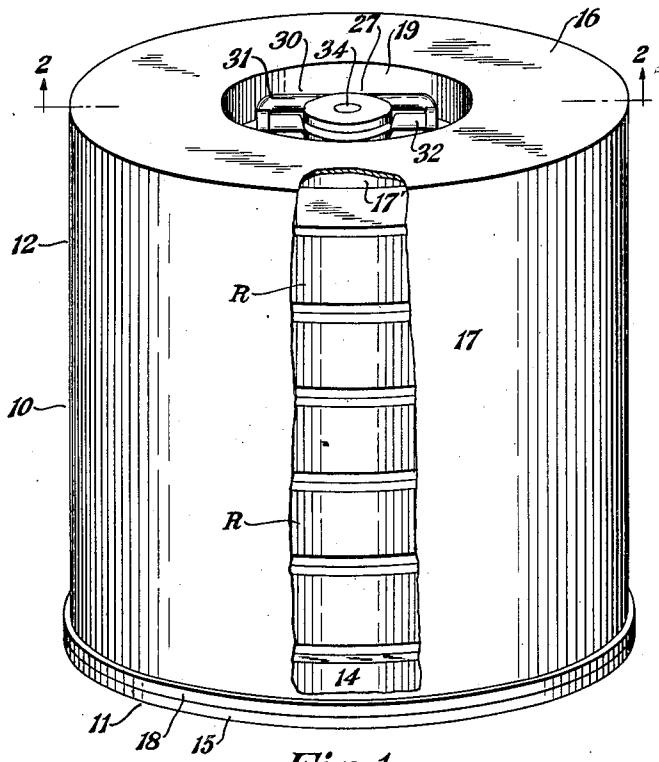

Fig. 1

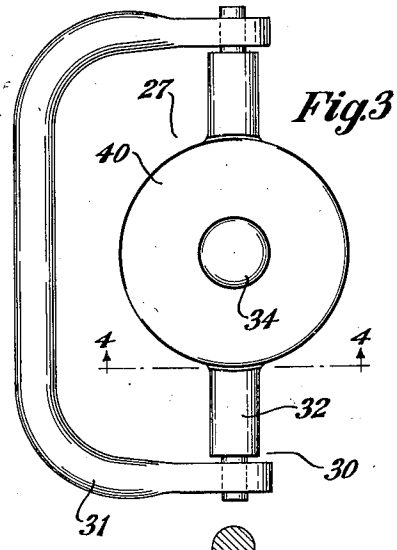

Fig. 3

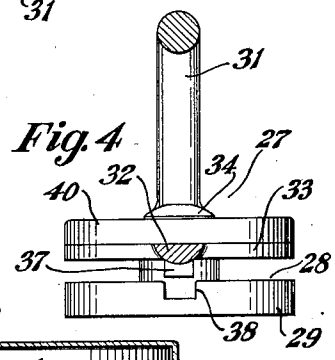

Fig. 4

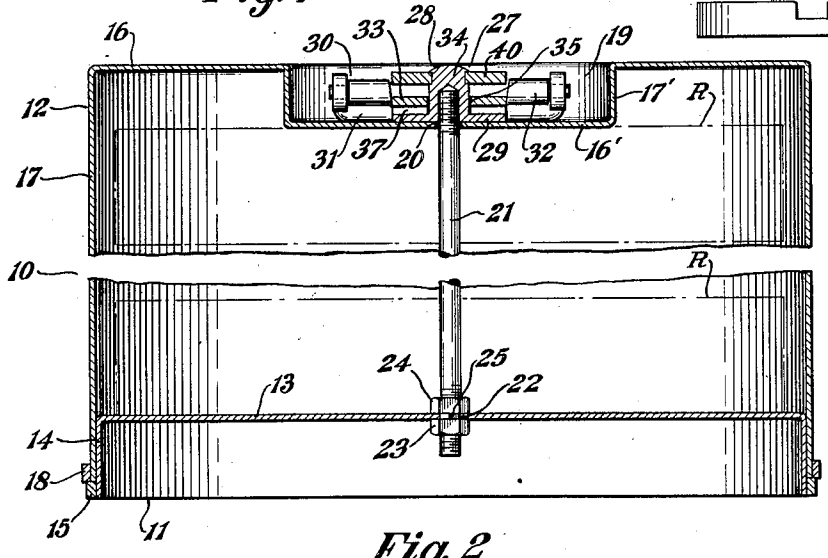

Fig. 2

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RECEPTACLE FOR MOTION PICTURE FILMS

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5 Claims. (Cl. 206—52)

The invention relates to receptacles for containing a plurality of reels of motion picture films, and more particularly to receptacles for protectively housing motion picture film reels for transporting the same.

Under the present motion picture theater system, it is necessary to transport film reels from place to place a great number of times, so that they are subjected to much handling and knocking about.

Prior receptacle constructions have included various sizes and shapes of containers, in which the film reels are capable of moving around considerably and bumping against each other as well as against the walls of the container.

Consequently, film reels transported in such receptacles become bent or battered out of shape during continued handling and transporting, with the result that the film reels sometimes fail to fit properly the projecting machines on which they are used. Also, the edges of the films themselves tend to become torn or otherwise damaged.

In order to remove any of the film reels from such prior containers, it is usually necessary to unpack all of the reels, and it is sometimes desirable to remove the reels one at a time as they are used.

Accordingly, it is an object of the present invention to provide a motion picture film receptacle for housing a plurality of film reels in such a manner as to prevent movement of the reels in the receptacle.

A further object is to provide a receptacle for transporting motion picture film reels, which receptacle is fire-proof.

Another object is to provide a film receptacle from which the film reels may be removed one at a time without disturbing the other reels in the receptacle.

A still further object is to provide improved handle means for clamping the receptacle, which handle means may be easily manipulated without the use of any tools whatsoever.

And finally, it is an object of the present invention to incorporate all of the foregoing desirable characteristics in a simple and inexpensive receptacle construction of minimum size with respect to its capacity.

These and other objects are attained by the improvements comprising the present invention, which may be stated in general terms as including a receptacle having a preferably circular base, a cover forming the top and side walls of the receptacle and having preferably cylindrical side walls adapted to fit over the base, a reel-threading rod secured at its lower end in the central portion of the base and having its upper end adapted for projecting through the top wall of the cover, and handle means adapted for screwing on the projecting end of the rod to clamp the cover onto the base.

In the drawing forming part hereof,

Figure 1 is a perspective view of the improved receptacle, a portion thereof being broken away to illustrate the manner of housing the film reels therein;

Fig. 2 is a fragmentary sectional view as on line 2—2, Fig. 1;

Fig. 3 is a detached plan view of the improved handle and clamping means; and

Fig. 4 is a sectional view taken substantially on line 4—4, Fig. 3, showing the handle in raised upright position.

Similar numerals refer to similar parts throughout the drawing.

The improved film reel receptacle is indicated generally at 10, and includes the base 11 and the cover 12. The base 11 includes the preferably circular wall 13 forming the bottom wall of the receptacle, and having the downturned angular flange 14 at its outer periphery. At its lower end the flange 14 is preferably provided with an annular abutment bead 15 secured to the outer surface of the flange as by welding or riveting and the like.

The cover 12 preferably includes a top wall 16 and preferably cylindrical side walls 17 extending downwardly therefrom. At its lower end, the cover is preferably provided with a strengthening bead 18 secured to the outer surface of the side walls 17 as by welding or riveting and the like.

The cover 12 and the base 11 are preferably formed of sheet metal, and the side walls 17 are adapted to fit tightly over and around the flange 14 of the base above the bead 15, so as to render the receptacle completely fire-proof.

Preferably, the top wall 16 of the cover has formed therein a central cup-shaped depression 19 having the cylindrical side walls 17' and the normally horizontal bottom wall 16'. At its central portion the bottom wall 16' of the depression is provided with a preferably downwardly flared aperture 20.

A rod 21 is provided within the receptacle for threading the film reels R thereon, the rod being adapted to pass through the central aperture which is provided in all standard motion picture film reels.

The lower end of the rod is detachably secured in the central portion of the bottom wall 13 as by

extending the rod through an aperture 22 provided in the wall 13, nuts 23 and 24 being screwed on the rod below and above the wall 13 for clamping the rod to the wall 13.

Preferably, the aperture 22 is square and the rod is provided with a squared portion 25 for fitting in the aperture 22 to prevent turning of the rod 21.

The rod 21 extends through the receptacle and its upper end is adapted for projecting through the flared aperture 20 in the wall 16' and into the depression 19 formed in the top wall 16. The upper end portion of the rod 21 is threaded, and improved handle means indicated generally at 27 is preferably provided for screwing on the rod to clamp the cover 12 onto the base.

The improved handle means 27 preferably includes the nut member 28 which is adapted to be screwed on the threaded end portion of the rod 21, and the nut member 28 is preferably provided with the flat base portion 29 for abutting the wall 16' to force the cover downwardly onto the base when the nut member 28 is screwed onto the rod 21.

The handle member 30 is provided with a hand hold 31 which is pivoted on the handle shaft member 32, and the shaft member 32 is provided at its central portion with a disk 33 swiveled on the stud portion 34 of the nut member 28, as indicated at 35.

The central disk 33 of the handle member is provided on its underside with one or a plurality of ribs or keys 37 adapted to register with and fit into the grooves or notches 38 provided in the upper side of the base 29 of the nut.

Preferably, a stop disk or flange 40 is secured to the upper part of the stud portion 34 of the nut, and is positioned above the base 29 of the nut a distance sufficient to permit raising of the disk portion 33 of the handle to disengage the ribs 37 from the notches 38.

The depth of the depression 19 formed by the walls 16' and 17', is such that when the handle member is in its normal position with the hand hold 31 resting on the wall 16', the improved handle means is entirely below the top surface of the receptacle, as shown in Figs. 1 and 2.

In packing a plurality of film reels R in the improved receptacle for transporting the same, assuming that the cover 12 has been removed from the base 11, the reels may be threaded on the rod 21 with the bottom reel resting on the bottom wall 13 in the manner indicated in Figs. 1 and 2.

The receptacle may be designed to accommodate any desired number of film reels, the receptacle 10 being shown in the drawings as having a capacity of five.

The receptacle 10 is preferably made cylindrical and has a diameter slightly larger than the diameter of the film reels so as to be of minimum dimension laterally, or in other words, to have a minimum size and weight for shipping and transporting.

After the capacity number of reels has been threaded on the rod 21, the cover 12 is placed over the base and the aperture 20 passed over the upper end of the rod 21. The downwardly flared aperture 20 facilitates the insertion of the rod through the aperture.

The improved handle means 27 is then placed in the depression 19, and with the ribs 37 engaged in the notches 38 the nut 28 may be screwed on the rod by turning the handle member 30.

As the nut 28 is screwed upon the rod 21, the base 29 of the nut abuts the bottom wall 16' of the depression 19 to force the cover downwardly onto the base until the bottom ends of the side walls 17 and the annular bead 18 abut the annular abutment bead 15 on the base.

In this position the cover is securely clamped on the base, and the bottom wall 16' of the depression abuts the upper surface of the topmost reel so as to clamp all of the reels between the top and bottom walls of the receptacle.

Thus the reels R are held against movement in any direction within the receptacle so as to prevent any damage to the reels or the films thereon during their transportation.

In carrying the receptacle by means of the hand hold 31, the upward pull thereon disengages the ribs 37 from the notches 38, allowing the handle member 30 to swivel on the stud portion 34 of the nut 28 without turning the nut and unclamping the cover on the receptacle.

When it is desired to remove one or more of the film reels R from the receptacle, the handle member 30 is lowered and rotated until the ribs 37 register with and engage in the notches 38, after which the handle means 27 may be unscrewed from the rod 21. Thus the handle member 30 is adapted for selectively engaging the nut member for turning the same.

The cover 12 is then removed from the base 11 by pulling the cover upwardly off the rod 21, and the topmost film only may be removed without dislodging the others. By then screwing the improved handle means 27 on the rod 21, with the cover 12 removed, the reels R may be handled as a unit for inspection purposes.

The improved receptacle 10 is completely fireproof when closed and is simple and inexpensive to construct. Also, it is of minimum size and weight so as to reduce the cost of transportation. Furthermore, since the rod 21 is detachably secured to the base, any of the parts, if damaged, may be easily replaced without requiring an entire new receptacle.

The improved handle means 27 provides for clamping the cover on and unclamping the cover from the base, and for securely clamping the film reels between the top and base of the receptacle, without the use of any tools whatsoever. Moreover, the improved handle means 27 affords a means of carrying the receptacle without danger of unclamping the cover from the base.

I claim:

1. A receptacle for motion picture film reels including a base, a cover having a top wall and side walls fitting around the base, the top wall having an aperture therein, a reel-threading rod secured at one end in the base and having its other end projecting through the aperture in the top wall, a plurality of film reels threaded on said rod and supported on the base within the cover, and handle means for clamping said cover on said base, said handle means including a nut member for screwing on the projecting end of the rod and a handle member swiveled on the nut member and adapted for selectively engaging the nut member for turning the same.

2. A receptacle for motion picture film reels including a base, a cover having a top wall and side walls fitting around the base, the top wall having an aperture therein, a reel-threading rod secured at one end in the base and having its other end projecting through the aperture in the top wall, a plurality of film reels threaded on said rod and supported on the base within the cover, and handle means for clamping said cover on said base, said handle means including a nut

member for screwing on the projecting end of the rod, and a handle member swiveled on the nut member and adapted for normally engaging with the nut member for turning the same and for disengaging from the nut member when the handle member is pulled upwardly.

3. A receptacle for motion picture film reels including a base, a cover having a top wall and side walls fitting around the base, the top wall having a depressed portion with an aperture therein, a reel-threading rod secured at one end in the base and having its other end projecting through the aperture in the top wall, a plurality of film reels threaded on said rod and supported on the base within the cover, and means for screwing on the projecting end of the rod for clamping the cover on the base to force said depressed portion of the top wall into abutment with the topmost reel.

4. A receptacle for motion picture film reels including a base, a rod secured at one end in the base, a stack of film reels supported on the base, each reel having a central aperture passed over the rod, a cover having a top wall and side walls, said side walls fitting on said base and said top wall having an aperture therein passed over the other end of said rod, and a handle screwed on said other end of said rod for clamping the cover against the base and for carrying the film reels on the base when the cover is removed.

5. A receptacle for motion picture film reels including a base, a rod secured at one end in the base and projecting upwardly therefrom, a stack of film reels slidably positioned over the rod and supported on the base, a handle detachably mounted on the other end of the rod, and a cover member comprising a top wall and side walls for fitting on said base, said top wall having an aperture for passing over said other end of said rod when the handle is removed, whereby the cover may be held on the base by replacing the handle on the rod.

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