

Sept. 28, 1943.

J. M. GORDON

2,330,278

REEL

Filed March 27, 1943

3 Sheets-Sheet 1

Fig. 1.

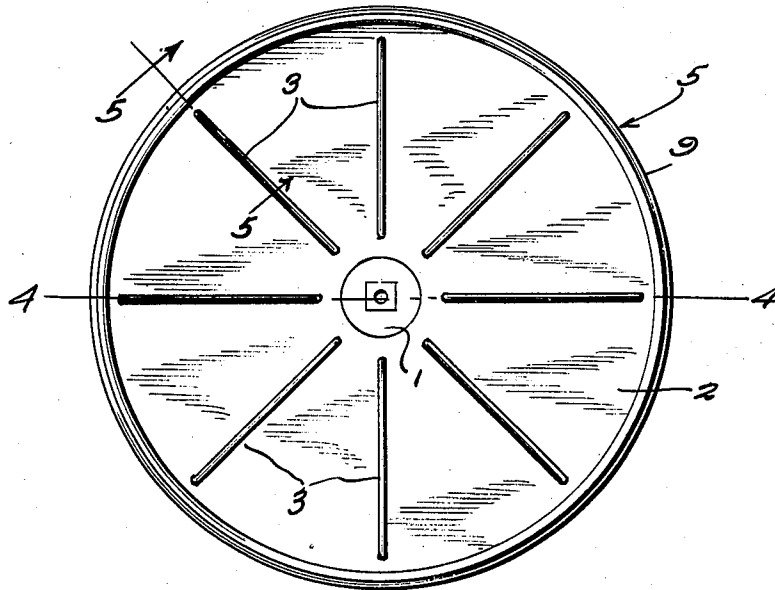


Fig. 2.

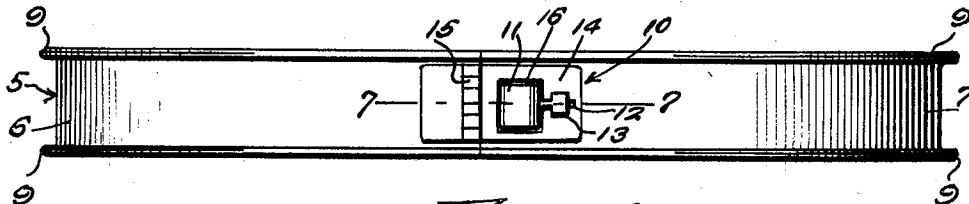
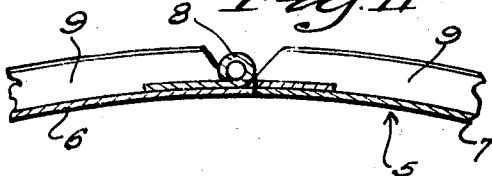


Fig. 4.



Inventor

Fig. 11



Julius M. Gordon

Clarence A. O'Brien
and Harvey B. Jacobson
(Attorneys)

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Fig. 3.

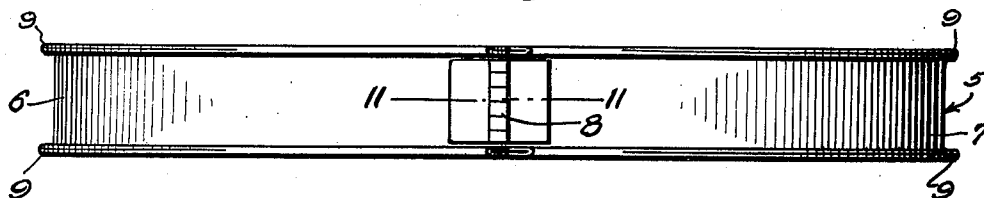


Fig. 5.

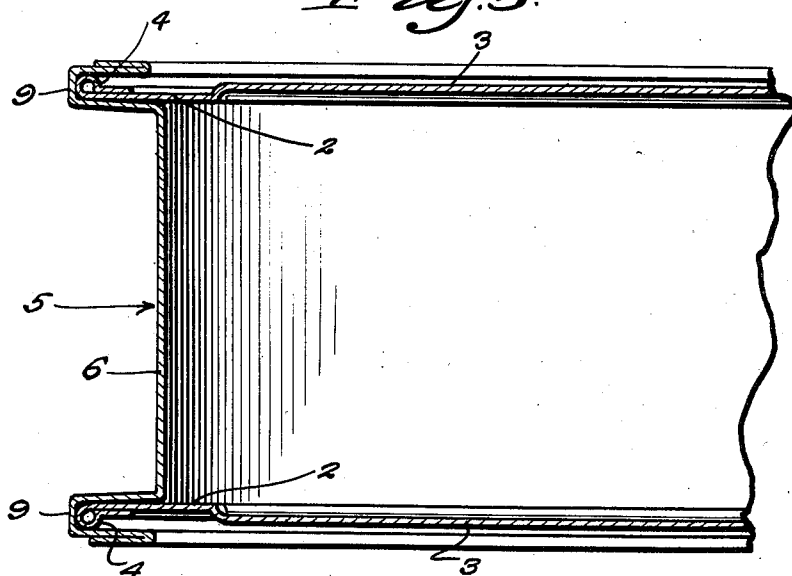
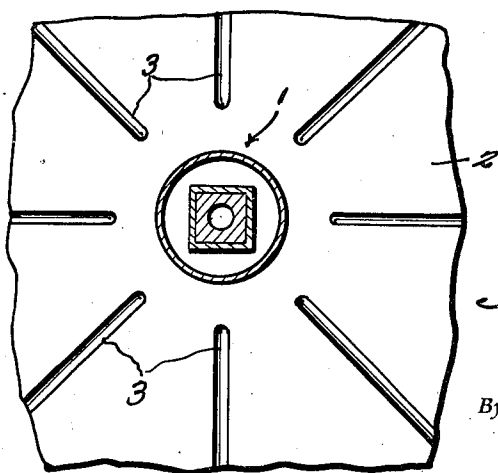


Fig. 10.



Inventor

Julius M. Gordon

By

Clarence W. O'Brien
and Harvey B. Jacobson
Attorneys

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J. M. GORDON

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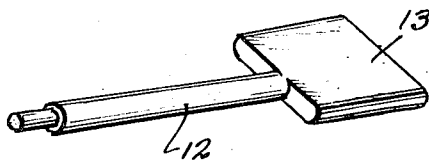
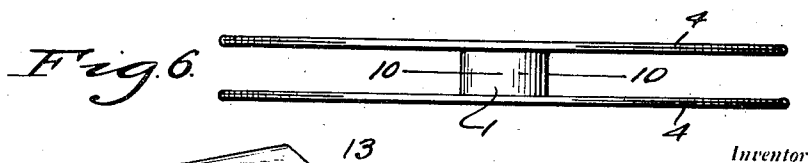
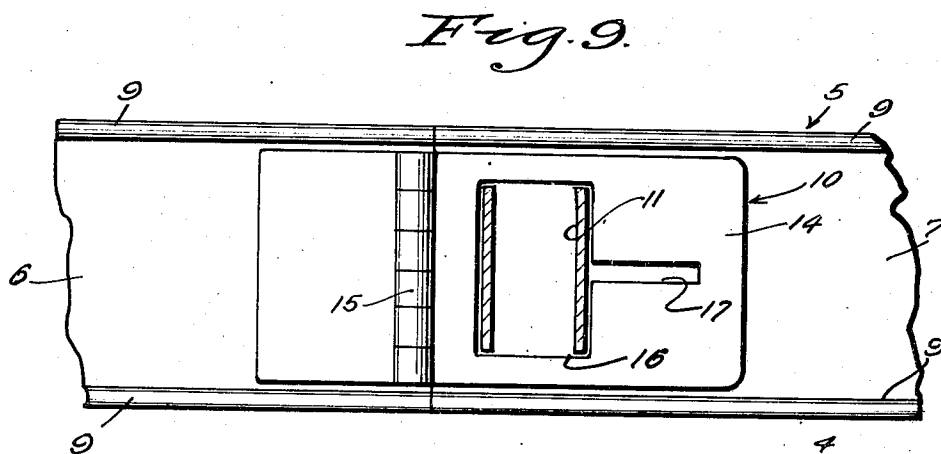
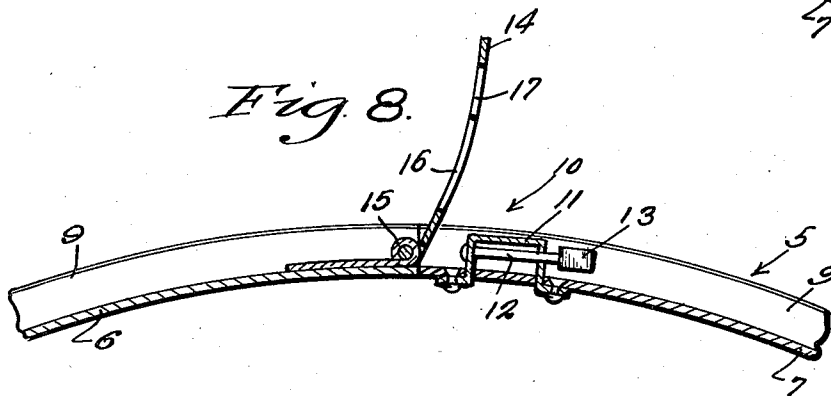
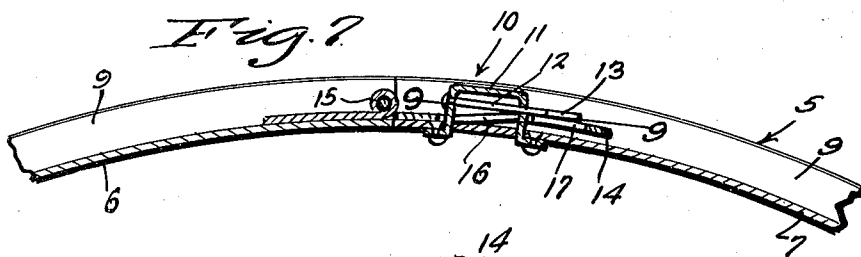


Fig. 12.
J. M. Gordon

By

Clarence A. O'Brien
and Harvey B. Jacobson
Attorneys

UNITED STATES PATENT OFFICE

2,330,278

REEL

Julius M. Gordon, Beaumont, Tex.

Application March 27, 1943, Serial No. 480,807

1 Claim. (Cl. 206—59)

The present invention relates to new and useful improvements in reels, particularly for moving picture films, and has for its primary object to provide, in a manner as hereinafter set forth, a device of this character comprising a novel construction and arrangement whereby a full or loaded reel may be shipped without danger of damaging the film.

Another very important object of the invention is to provide, in a shipping film reel or container including a protective band, novel means for locking said band in position.

Other objects of the invention are to provide a combination motion picture film reel and shipping container which will be comparatively simple in construction, strong, durable, compact, light in weight, and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a view in side elevation of a reel constructed in accordance with the present invention.

Figure 2 is a view in edge elevation of the invention looking at the locked portion of the band.

Figure 3 is a view substantially similar to Figure 2 but looking at the hingedly connected ends of the band sections.

Figure 4 is a view in horizontal section, taken substantially on the line 4—4 of Figure 1.

Figure 5 is an enlarged fragmentary sectional view, taken substantially on the line 5—5 of Figure 1.

Figure 6 is an edge view of the reel with the band omitted.

Figure 7 is an enlarged view in vertical section, taken substantially on the line 7—7 of Figure 2.

Figure 8 is a vertical sectional view substantially similar to Figure 7, but showing the band lock in released position.

Figure 9 is a fragmentary view in horizontal section, taken substantially on the line 9—9 of Figure 7.

Figure 10 is a vertical sectional view through the hub or drum portion of the reel, taken substantially on the line 10—10 of Figure 6.

Figure 11 is a fragmentary view in section through the hingedly connected end portions of

the band sections, taken substantially on the line 11—11 of Figure 3.

Figure 12 is a detail view in perspective of the hasp retaining key.

Referring now to the drawings in detail, it will be seen that the embodiment of the invention which has been illustrated comprised a hub structure which is designated generally by reference numeral 1. Circular metallic heads 2 are mounted on the ends of the hub 1. The metallic heads 2 have pressed therein radial stiffening ribs 3. The periphery of each of the heads 2 is rolled in a manner to form an external bead 4.

When the reel is to be shipped or transported, a protective band 5 of suitable metal is mounted on the periphery of said reel in a manner to completely enclose the film. The metallic band 5 includes complementary half-sections 6 and 7 having one end hingedly connected at 8. The band 5 further includes, on its edges, radially projecting, circumferential channels 9 for the reception of the beaded peripheral portions 4 of the heads 2. This is shown to advantage in Figure 5 of the drawings.

A latch 10 on the free end portions of the sections 6 and 7 releasably clamps the band 5 in position about the reel. The latch 10 includes a loop or the like 11 which is mounted radially on the free end portion of the band section 7. A shaft 12 is journaled in the leg portions of the substantially U-shaped loop 11 and has one end projecting therefrom. A button 13 is fixed on the projecting end of the shaft 12.

The latch 10 further includes a hasp 14 which is hinged at 15 on the free end portion of the band section 6. The hasp 14, which is of resilient metal, is longitudinally curved. An opening 16 is provided in the hasp 14 for the reception of the loop 11. A longitudinal slot 17 in the forward end portion of the hasp 14 communicates with the opening 16 and is for the passage of the button 13.

It is thought that the manner of using the device will be readily apparent from a consideration of the foregoing. Briefly, when the reel is loaded or full, it may be used, without the band 5, in the usual manner in a motion picture projecting machine, the hub structure 1 being engageable on the shafts in either of the film magazines of said machine. When the reel with the film therein is to be shipped, the protective band 5 is applied. This is done by closing the hinged sections 6 and 7 on the heads 2 and engaging the channel portions 9 over the peripheral portions

of said heads, thereby bringing the free ends of the sections together. With the button 13 in a vertical position, as seen in Figure 8 of the drawings, the hasp 14 is swung downwardly over the loop 11 to a point below the button 13, said button passing upwardly through the slot 17. The resilient hasp 14, when forced downwardly, is flexed and placed under tension. The button 13 is then turned to a horizontal position across the slot 17 for securing the hasp 14 in operative position under tension, thus firmly connecting the free ends of the band sections 6 and 7.

It is believed that the many advantages of a moving picture film reel and shipping container constructed in accordance with the present invention will be readily understood, and although a preferred embodiment of the device is as illustrated and described, it is to be understood that changes in the details of construction and in the combination and arrangement of parts may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

A reel of the character described comprising a pair of circular heads for the reception of a film therebetween, a protective band for the film removably mounted on the heads, said band including complemental half-sections hingedly connected at one end, and means for detachably securing the free ends of the band sections together, said means comprising a substantially U-shaped, radially projecting loop on one of the sections, a shaft journaled in the leg portions of said loop, a button on one end of said shaft, and a longitudinally curved, resilient hasp hingedly mounted on the other section and engageable with the loop, said hasp having an opening therein for the reception of the loop and further having a slot therein communicating with the opening for the passage of the button, said button being engageable on the hasp for securing said hasp in position on the loop.

JULIUS M. GORDON.