Jan. 11, 1944. J. M. GORDON 2,338,930

REEL CARRIER

Filed March 27, 1943 2 Sheets-Sheet 1

Fig. 1.

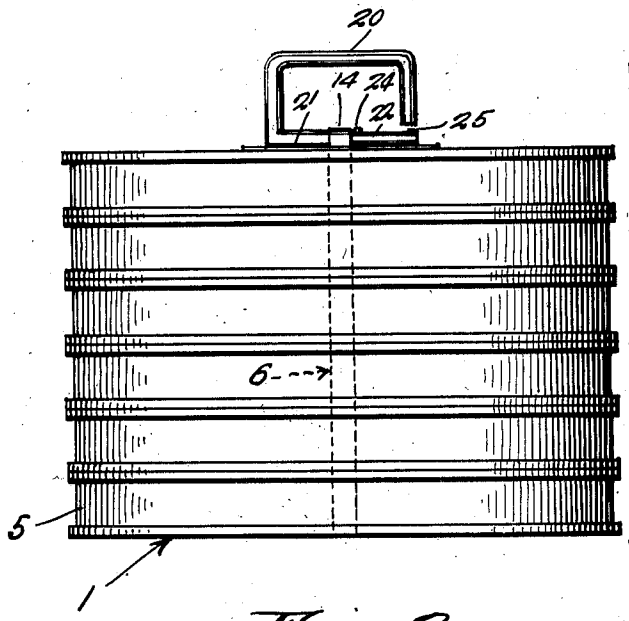


Fig. 2

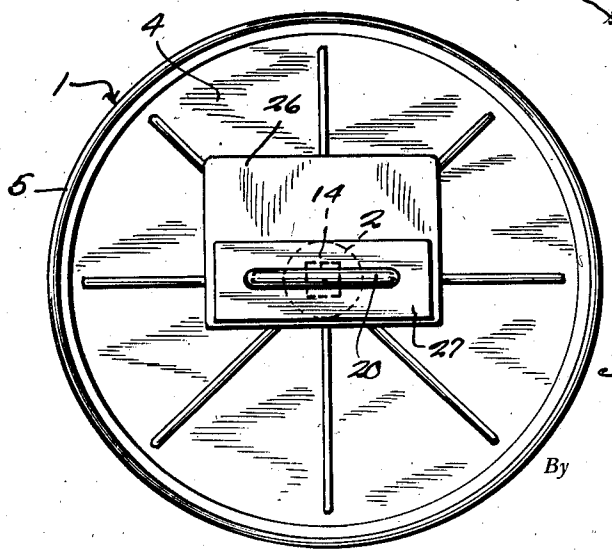
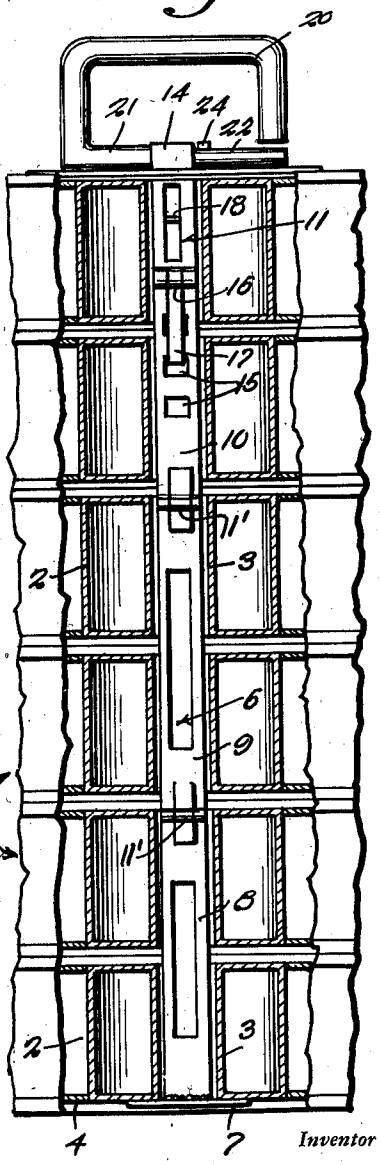


Fig. 3.



Inventor

Julius M. Gordon

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

Attorneys

Jan. 11, 1944. J. M. GORDON 2,338,930

REEL CARRIER

Filed March 27, 1943 2 Sheets-Sheet 2

Fig. 3.

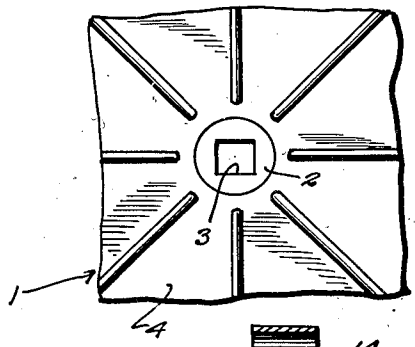


Fig. 7.

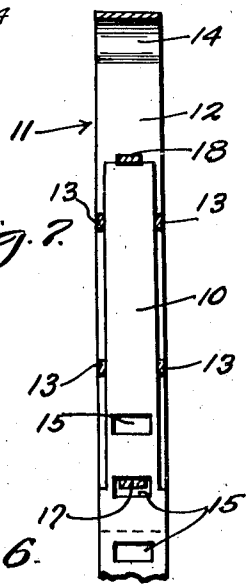


Fig. 6.

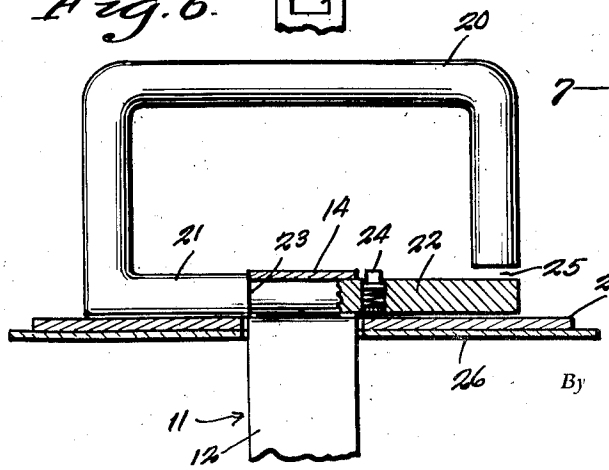


Fig. 5.

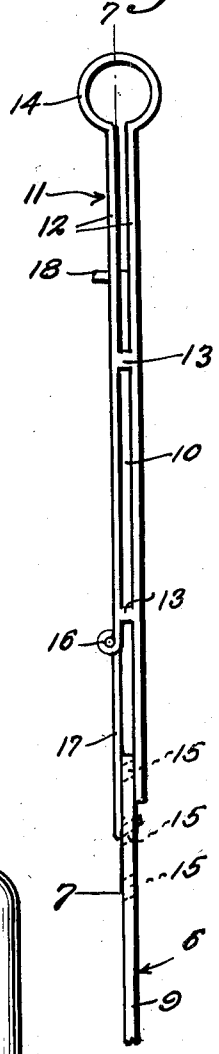
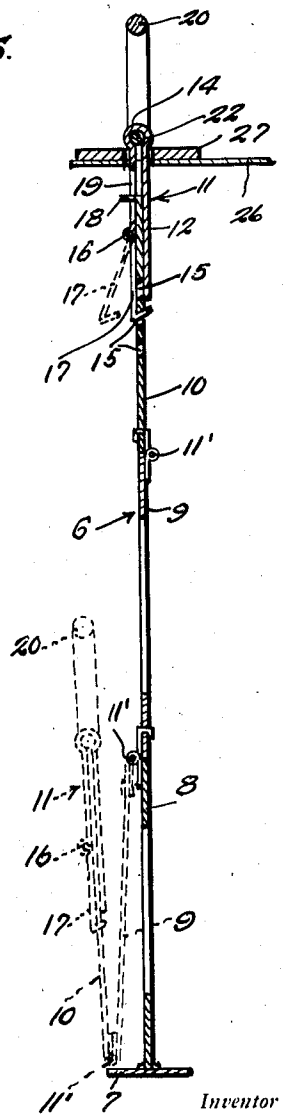


Fig. 4.



Inventor

Julius M. Gordon

By Clarence O'Brien and Harvey B. Jacobson

Attorneys

Patented Jan. 11, 1944

2,338,930

UNITED STATES PATENT OFFICE

2,338,930

REEL CARRIER

Julius M. Gordon, Beaumont, Tex.

Application March 27, 1943, Serial No. 480,808

2 Claims. (Cl. 224—45)

This invention relates to new and useful improvements in carriers for motion picture film reels, and is particularly intended for use in conjunction with combination reels and shipping containers of the type constituting the subject matter of one of my copending applications, filed on even date.

The primary object of the present invention is to provide a hand carrier comprising a unique construction and arrangement whereby a stack of film reels and shipping containers may be conveniently handled and transported.

Another very important object of the invention is to provide a carrier of the character described which is adapted to be expeditiously adjusted to accommodate different numbers of reels.

Still another very important object of the invention is to provide a carrier of the character set forth which embodies unique means for receiving and retaining a shipping label.

Other objects of the invention are to provide a carrier of the character set forth which will be simple in construction, strong, durable, highly efficient and reliable in use and which may be produced at reasonable cost.

The foregoing and other 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, showing a carrier constructed in accordance with the present invention in use.

Figure 2 is a top plan view thereof.

Figure 3 is a view in side elevation of the carrier, showing a stack of combined film reels and shipping containers thereon, said containers being shown principally in vertical section.

Figure 4 is a view in vertical section through the carrier.

Figure 5 is a view in edge elevation of the upper portion of the carrier with parts omitted.

Figure 6 is a view partially in side elevation and partially in section of the upper portion of the device, taken at right angles to Figure 4.

Figure 7 is a vertical sectional view, taken substantially on the line 7—7 of Figure 5.

Figure 8 is a plan view of the central portion of one of the reels.

In the drawings, reference numeral 1 designates a plurality of motion picture film reels and shipping containers. Each reel 1 includes a hub structure 2 comprising a tube 3 of square cross-section extending transversely therethrough. Heads 4 are mounted on the hub 2. A protective band 5 is mounted on the heads 4 for enclosing the film on the reel and for supporting or strengthening said heads.

The carrier constituting the present invention comprises a metallic bar 6 having a foot 7 fixed on its lower end, said bar being insertable upwardly through the square tubes 3 in the hubs 2 of the reels 1. As illustrated to advantage in Figure 3 of the drawings, the foot 7 functions as a head which is engageable beneath the lowermost reel for supporting the stack of reels on the carrier.

The bar 6 includes a plurality of sections 8, 9 and 10 which are hingedly connected at 11' whereby said bar may be readily folded for compactness and for varying the length thereof, as suggested in dotted lines in Figure 4 of the drawings. Of course, the bar 6 may comprise any desired number of the hingedly connected sections.

The uppermost section 10 of the bar 6 comprises an upper portion of reduced width (see Fig. 7) and slidable thereon for adjustment in a substantially U-shaped hanger 11. The legs 12 of the hanger 11, which are joined at spaced points by connections 13, are slidable on the opposite sides of the bar section 10. The bight portion of the hanger 11 is formed to provide a loop or eye 14.

The bar section 10 has formed therein a series of spaced openings 15. Pivotally suspended, as at 16, from the lower end of one of the legs 12 of the hanger 11 is a hook 17 which is engageable selectively in the openings 15 for releasably securing said hanger in adjusted position on the bar 6. A stop 18 projects laterally from the upper end of the bar section 10 for preventing detachment of the eye 14 from said bar, said stop being operable in a slot 19 which is provided therefor in the section 10.

A removable handle 20 is mounted for swinging movement on the upper end of the hanger 11. The handle 20 is substantially U-shaped and projecting inwardly from the end portion of one of its legs to a point in spaced relation to the free end of the other leg is a horizontal shaft 21 comprising a reduced portion 22 which is journaled in the eye 14. The reduced portion 22 of the shaft 21 provides a shoulder 23 for abutting engagement with one end of the eye 14. A spring-projected lug 24 is mounted in the reduced shaft portion 22 adjacent the other end of the eye 14

for securing the shaft 21 against sliding movement in said eye in conjunction with the shoulder 23. It will be seen that by depressing the lug 24, the shaft 21 may be withdrawn from the eye 14 for removing the handle 20, said eye passing through the gap 25 between the free end portion of said shaft 21 and the free end of the adjacent leg of said handle.

The eye 14 is of a size to pass through the tubes 3 in the film hubs 2. After the stack of reels has been mounted on the carrier and before the handle 20 is mounted on the hanger 11, a shipping label 26 is slipped on the upper portion of the hanger 11 over the eye 14 and rests on the uppermost reel of the stack. A retaining plate 27 is then mounted in a similar manner on the device and rests on the shipping label 26, after which the handle 20 is applied.

It will thus be seen that a carrier has been provided which may be readily adjusted to accommodate stacks of reels of different numbers. If but two reels, for example, comprise the stack, the bar 6 is folded substantially as seen in dotted lines in Figure 4 of the drawings. The adjustability of the hanger 11 on the bar section 10 also facilitates adapting the device for different numbers of reels. Of course, the hanger 11 is adjusted by disengaging the hook 17 from the openings 15 and raising or lowering said hanger on the bar section 10. The stack of reels is positively retained on the bar 6 between the head 7 and the plate 27, with which plate the shaft 21 of the handle 20 is engaged. To remove the reels from the carrier, the handle 20 and the elements 26 and 27 are removed from the hanger 11, after which said reels may be lifted off said bar.

It is believed that the many advantages of a reel carrier 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 may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

1. A reel carrier comprising a bar insertible through the hubs of a stack of reels, said bar including a plurality of hingedly connected sections, a retaining member on one end of the bar, a hanger slidably adjustable on the other end portion of the bar, said hanger including an eye, a plate mounted on the hanger and resting on the uppermost reel, and a substantially D-shaped removable handle mounted for swinging movement on the hanger, said handle including a shaft engageable in the eye.

2. A reel carrier comprising a bar insertible through the hubs of a stack of reels, a head on one end of the bar engageable beneath the lowermost reel of the stack, the other end portion of the bar having a series of openings therein, a substantially U-shaped hanger mounted for sliding adjustment on said other end portion of the bar, a hook on the hanger engageable selectively in the openings for securing the hanger in adjusted position, and a removable handle on the hanger.

JULIUS M. GORDON.