C. R. UEBELMESSER.

REEL FOR MOVING PICTURE MACHINES.

APPLICATION FILED MAR. 31, 1908.

913,328. Patented Feb. 23, 1909.

Fig. 1.

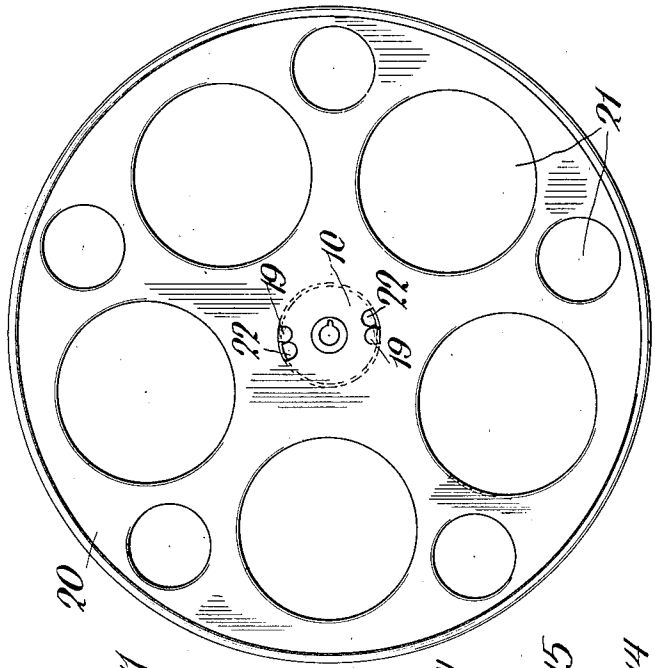


Fig. 2.

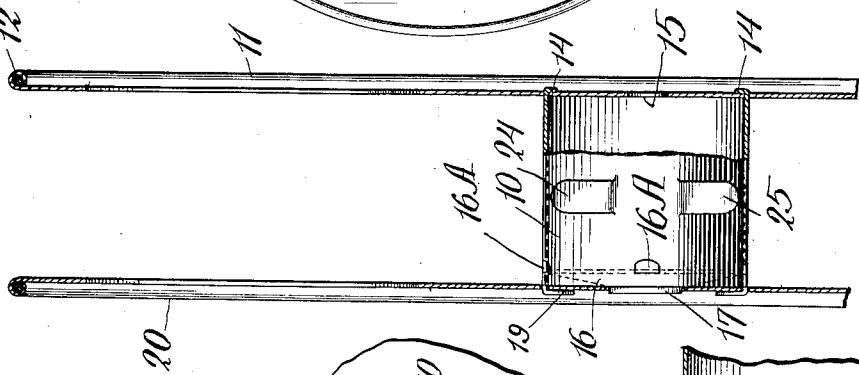


Fig. 3.

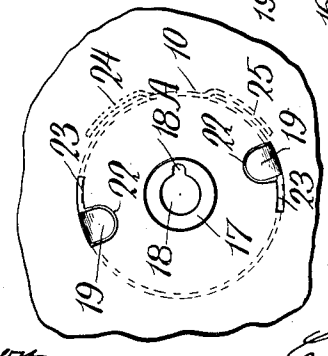
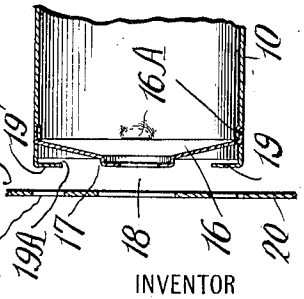


Fig. 4.



WITNESSES:

Lyman R. Bacon

Edward Lucas

INVENTOR

Charles R. Uebelmesser

BY

E. W. Marshall

ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES R. UEBELMESSER, OF NEW YORK, N. Y.

REEL FOR MOVING-PICTURE MACHINES.

No. 913,328. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed March 31, 1908. Serial No. 424,312.

To all whom it may concern:

Be it known that I, CHARLES R. UEBELMESSER, a subject of the Emperor of Germany, and a resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Reels for Moving-Picture Machines, of which the following is a specification.

My invention relates to reels which are used in moving picture machines for winding and unwinding the films in such machines, and its object is to improve upon structures of this kind and to provide a simple and efficient construction which shall have certain advantages over those heretofore in use.

To this end my invention consists in the construction and arrangement of parts hereinafter set forth and described, the novel features of which are set forth in the appended claims.

Referring to the drawings, Figure 1 is a side elevation of an improved reel made according to my invention. Fig. 2 is a sectional side elevation, on an enlarged scale, of a portion of the reel showing the manner in which it is constructed. Fig. 3 is a side elevation, on an enlarged scale, of certain parts of the reel illustrating a lock arrangement for holding one side or flange of the reel in place. Fig. 4 is a sectional side elevation of the portions of the reel which are shown in Fig. 3. This figure shows a detail of construction.

Like characters of reference designate corresponding parts in all of the figures.

10 designates the core or body portion of a reel which is constructed of sheet metal and is preferably made in the form of a hollow cylinder.

11 is the rear flange of the reel which is also made of sheet metal. The edge of this flange is rolled over outwardly and reinforced at 12, leaving its inner surface smooth. This flange is permanently affixed to the core 10 by portions 14, 14 of the latter protruding through the openings in the flange and bent down against the flange as is shown in Fig. 2. In the center of the flange 11 a circular hole 15 is provided which also has a keyway cut in one side thereof.

At the front end of the core or body 10 of the reel an end-piece 16 is affixed. This is attached to the core by means of lugs 16^A which pass through the surface of the core 10 and are bent down and depressed into the surface of the core so that the outer surface of the core is left smooth. The forward part of this end-piece is constructed to form a hub 17 in which a circular hole 18 is provided and on one side of which a keyway 18^A is cut. This hole and keyway in the hub register with those in the flange 11 previously mentioned and are for the purpose of supporting the reel upon a part of a moving picture machine which is arranged for this purpose.

19, 19 are a pair of oppositely disposed lugs which project inwardly from the outer surface of the core toward its axis. These lugs are preferably constructed of the same metal which forms the core and are an integral part thereof. They are so formed that a space 19^A is left between their inner surface and the outer end of the core 10.

20 designates the front flange of the reel which is similar in construction, size and form to the flange 11. Both of these flanges may be made of a solid sheet of metal if desired, but I prefer to cut them away as is shown at 21 as this construction makes them lighter, adds to their appearance, and the openings through the flanges provide means whereby the material which is wound upon the reel may be inspected. In the center of this front flange a circular hole is cut which is adapted to fit over the hub 17 on the end-piece 16 of the core. Instead of this front flange being permanently affixed to the core or body of the reel it is but temporarily locked thereto and may readily be removed at will. This result may be accomplished in a variety of ways and I have illustrated the construction which I prefer for accomplishing this result.

22, 22 designates a pair of openings cut in the surface of the flange 20 in the same general shape of and registering with the lugs 19, 19 when the front flange is placed upon the hub 17. 23, 23 are a pair of slits extending from the openings 22 on the periphery of a circle and are in length approximately equal to the width of the lugs 19. The space 19^A which is left between the lugs 19 and the end of the core 10 is approximately equal to the thickness of the flange 20.

It may be seen that when the flange 20 is placed upon the reel in the manner above described and in the position illustrated in Fig. 3, that the lugs 19 will pass through the openings 22. The flange 20 may then be

rotated relative to the remainder of the reel and this movement will cause the shoulders of the lugs 19 to pass into the slits 23 and the lugs themselves will then be over solid portions of the flange 20 as is shown in Fig. 1. This simple operation securely locks the flange 20 onto the core and completes the reel. The same simple manipulation reversed will unlock the flange 20 from the core so that it may readily be removed.

At 24, 25 a pair of tongues are shown projecting from the surface of the core 10. These are adapted to engage with tabs upon the ends of a moving picture film to secure the latter to the reel. In operating this device a film is attached to the reel by means of one of these tabs and the rotation of the reel will cause the film to be wound up upon it. After this operation has been completed the flange 20 may be removed and the entire film taken off from the reel without the necessity of unwinding it. Similarly, a film which has already been wound up may be placed upon a reel of this construction by first removing the flange 20, attaching the inner end of the film to one of the tongues 24, 25, if desired, and then placing and locking the loose flange 20 to the reel. This invention, therefore, greatly facilitates the operation of moving picture machines in a very simple manner. The reel itself is preferably constructed as I have stated of sheet metal, and in practice I stamp all the parts of the reel of sheet steel, thus forming an inexpensive and efficient construction.

What I claim is.—

1. A reel for moving picture machines comprising a hollow core, a flange affixed to one end thereof, a hub affixed to the other end of the core, lugs projecting from the core and a loose flange fitting over the hub, said flange being provided with openings into which the lugs are adapted to fit to lock said loose flange to the core.

2. A reel for moving picture machines comprising a hollow core of sheet metal, a flange of sheet metal affixed to one end thereof, a hub of sheet metal on the other end of the core, a pair of lugs projecting from the core toward the hub, and a loose flange fitting over the hub, said loose flange being constructed of sheet metal and provided with openings and slits; the lugs being adapted to be passed through the openings and turned into the slits to thereby lock the loose flange to the core.

3. A reel for moving picture machines comprising a hollow core of sheet metal, a flange of sheet metal affixed to one end thereof, said flange being circular in form and having a reinforced edge, a hub of sheet metal on the other end of the core, a pair of oppositely disposed lugs projecting from the core toward the hub, and a circular loose flange fitting over the hub, said loose flange being constructed of sheet metal and provided with openings and slits; the lugs being adapted to be passed through the openings and turned into the slits to thereby lock the loose flange to the core, the fixed flange and the hub being provided with registering openings; and means for attaching a film to the core.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES R. UEBELMESSER.

Witnesses:

ELLA TUCH,

HENRY C. DATER.