E. M. WOODEN.

REEL FOR MOVING PICTURE MACHINES.

APPLICATION FILED DEC. 19, 1913.

1,130,126. Patented Mar. 2, 1915.

Fig. 1.

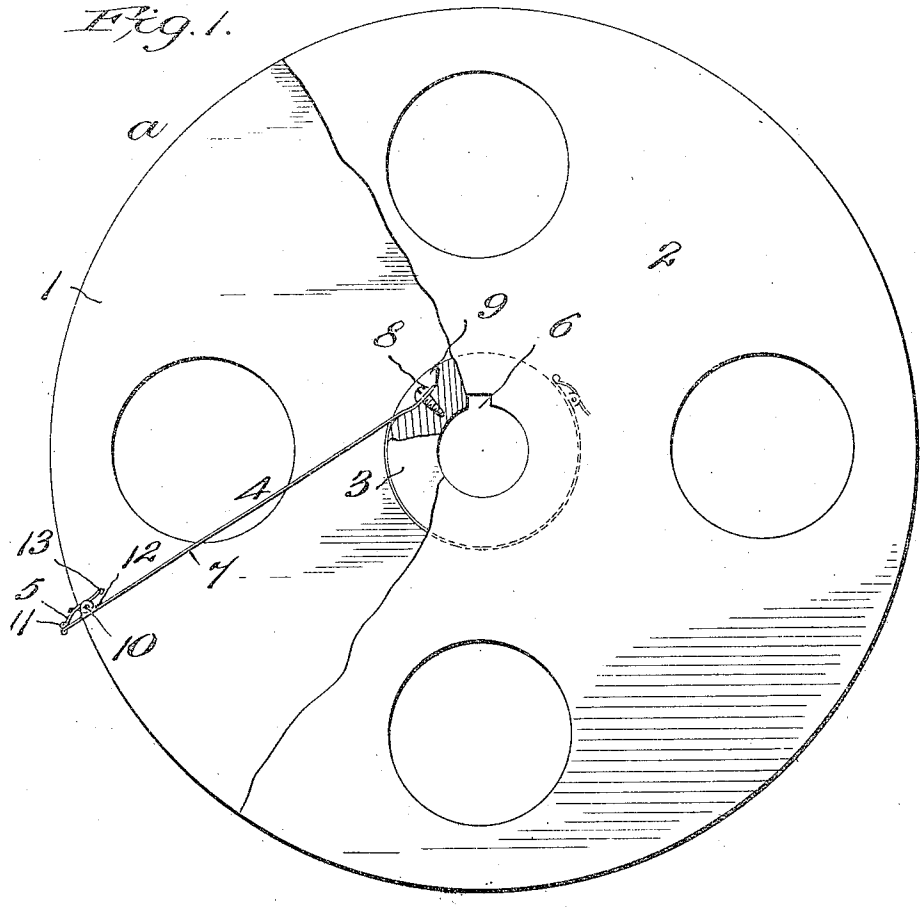
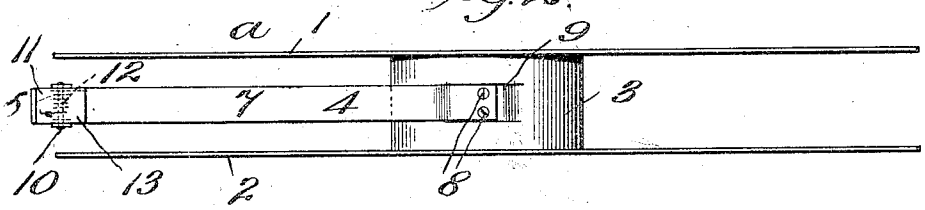


Fig. 2.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

EARLE M. WOODEN, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO ANTHONY B. CAVANAGH, OF NEW YORK, N. Y.

REEL FOR MOVING-PICTURE MACHINES.

1,130,126. Specification of Letters Patent. Patented Mar. 2, 1915.

Application filed December 19, 1913. Serial No. 807,738.

To all whom it may concern:

Be it known that I, EARLE M. WOODEN, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented new and useful Improvements in Reels for Moving-Picture Machines, of which the following is a specification.

The general object of the invention is to improve the construction of reels for moving picture machines, whereby the film may be quickly and securely connected to the reel without removing the reel from the machine.

To these ends the invention consists in providing the reel with a flexible connection adapted to connect one end of the film with the reel and adapted to be wound on the reel with the film.

Other objects will appear and be better understood from that embodiment of my invention of which the following is a specification, reference being had to the accompanying drawings forming part hereof, in which:—

Figure 1 is a side elevational view of my improved film reel for moving picture machines, with parts broken away for the sake of clearness. Fig. 2 is a plan view thereof.

Broadly stated, the reel *a* is formed of the sides 1 and 2 connected together in relatively spaced relation by means of the hub 3 to which is secured one end of a flexible connection 4, the other end of which is extended adjacent to the periphery of the reel and is provided with a clip 5 for the purpose of connecting to the reel, one end of the usual moving picture film. The hub is centrally bored and provided with the key-way opening 6 for mounting and keying the same upon a shaft of the machine for the purpose of giving the drum the desired rotation when the machine is operated. The flexible connection here shown is formed of a thin metallic steel strip 7 and is securely connected to the drum at its inner end by means of the screws 8. It will be noted that the inner end of the spring is secured to the hub within a depression or cutaway portion 9, this being for the purpose of nesting the screw heads and inner end of the spring, as shown. Normally the flexible connection extends substantially radially from the hub of the drum when the film is not wound thereon, but when the film is connected to the end of the flexible connection and the drum is revolved to the right, it will be noted that the connection, due to its extreme flexibility, will be wound around the reel with the film as indicated by dotted lines in Fig. 1.

The clip 5 which is secured to the outer end of the flexible connection, is provided for the purpose of conveniently and quickly attaching the end of the film to the reel. As shown the clip is pivotally connected near the end of the strip as at 10 and has its outer end extended and bent to provide one member of a jaw 11 the other member of which is formed of the extended end portion of the strip as shown. To normally hold these jaws in their closed position and to firmly grip the film when placed therebetween, the clip is provided with a spring 12. The rear portion of the clip is extended as at 13 to provide a convenient gripping portion for the fingers of an operator, whereby the jaws of the clip may be separated when it is desired to secure the end of a film therebetween. It will also be noted that I have curved the ends of both the jaw members upon themselves as indicated, so that no sharp edges will be present to contact with the surface of the film and thereby damage the same.

By virtue of extending the flexible connection from the hub and locating the clip adjacent the periphery of the reel, it will be seen that I have provided a very convenient method of attaching the film to the reel and that the necessity of an operator directing his hands between the side plate of the reel to secure the end of the film to the hub will be eliminated, and furthermore, the usual method of first removing the reel from the machine to secure the end of the film to the reel, will be done away with. By the use of my device it is necessary only, after the end of the film has been first threaded through the machine, to connect the end of the film to the end of the flexible connection without the necessity of removing the reel from the machine at all.

What is claimed as new is:

1. A film reel for moving picture machines having a resilient flexible member provided at one end with means to engage the film and adapted to connect one end of the film with the reel and adapted to be wound around the reel with the film.

2. A film reel for moving picture ma-

chines having a resilient flexible member provided at one end with a clip and adapted to connect one end of the film with the reel and adapted to be wound around the reel with the film.

3. A film reel for moving picture machines having a resilient flexible member secured at one end to the reel and having its other end provided with a clip adapted to connect one end of the film with the reel, said flexible member also adapted to be wound around the reel with the film.

4. A film reel for moving picture machines having a resilient flexible member secured at its inner end to the hub of the reel and having its outer end extended adjacent to the periphery of the reel, and a spring clip mounted on said outer end for connecting one end of the film with the reel, said flexible member adapted to be wound around the reel with the film.

In testimony whereof I affix my signature in presence of two witnesses.

EARLE M. WOODEN.

Witnesses:
M. E. LAUGHLIN,
GEO. A. BYRNE.