C. V. FOOTE.

ELECTRIC SIGNALING DEVICE FOR MOVING PICTURE REWINDING MECHANISMS.

APPLICATION FILED DEC. 9, 1910.

1,068,119.

Patented July 22, 1913.

2 SHEETS—SHEET 1.

Fig. 1

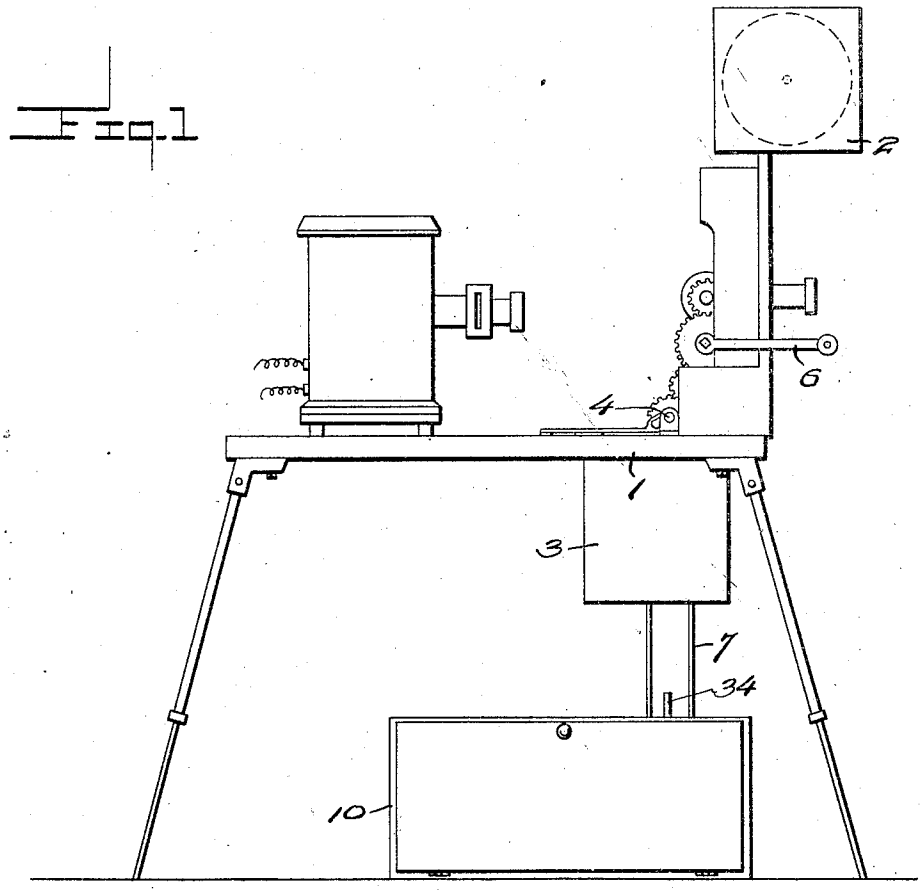
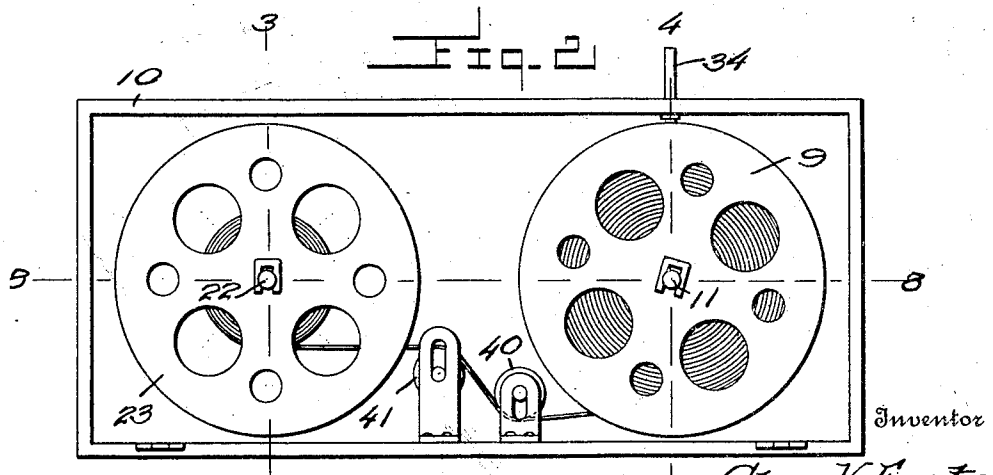


Fig. 2



Witnesses

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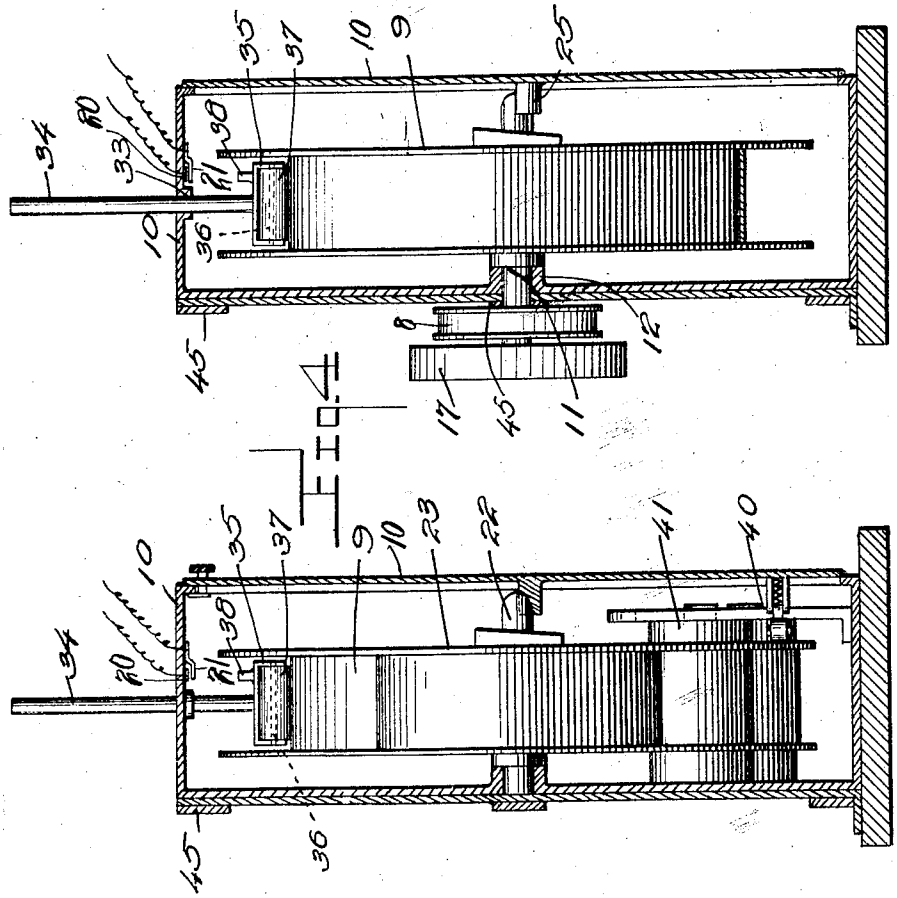


FIG. 1.

Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES V. FOOTE, OF NEPHI, UTAH.

ELECTRIC SIGNALING DEVICE FOR MOVING-PICTURE REWINDING MECHANISMS.

1,068,119. Specification of Letters Patent. Patented July 22, 1913.

Application filed December 9, 1910. Serial No. 596,492.

To all whom it may concern:

Be it known that I, CHARLES V. FOOTE, a citizen of the United States, residing at Nephi city, in the county of Juab and State of Utah, have invented certain new and useful Improvements in Electric Signaling Devices for Moving-Picture Rewinding Mechanisms, of which the following is a specification.

This invention relates to film rewinding or reversing mechanism for moving picture machines, and particularly to signals therefor.

One object of the invention is to so construct a mechanism of this character that the film may be rewound or reversed at the same time that another film is being exhibited, and notice of the completion of rewinding given to the operator.

Other objects and advantages will be apparent from the following description when taken in connection with the accompanying drawings.

In the drawings: Figure 1 is a side elevation showing the apparatus as used in connection with the usual motion picture machine. Fig. 2 is a front elevation of the rewinding mechanism. Fig. 3 is a vertical sectional view on the line 3—3 of Fig. 2, and Fig. 4 is a vertical sectional view on the line 4—4 of Fig. 2.

Referring to the drawings, the numeral 1 designates a supporting table having mounted thereon the usual apparatus for exhibiting motion pictures which includes upper and lower film magazines 2 and 3, and a takeup shaft 4. Leading from a pulley (not shown) on the shaft 4 is a belt 7, said belt being trained around a pulley 8 mounted on the shaft 11 which is mounted in a casing 10. One end of this shaft carries a reel 9 on which the film is rewound. This shaft is suitably supported in bearings 12 and 25 carried by the casing 10. Suitably mounted in the casing 10 and parallel with the shaft 11 is a stub shaft 22, said stub shaft carrying the reel 23 on which is wound the film that has been previously exhibited and which is to be wound on the reel 9.

A guide-way 33 is formed in the top of the casing 10 directly over the shaft 11, and adapted to move vertically through this guide-way is a rod 34. To the lower end of this rod is secured a yoke 35 having journaled in its ends a shaft 36, and rotatably mounted on this shaft is a rubber roller 37, this roller bearing on the film of the reel 9, as the film is being wound thereon. Carried upon a portion of the yoke 35 is a projection 38, said projection being for the purpose of closing a circuit through suitable contacting devices 20 and 21 carried by the top of the casing when the film is being wound from the reel and said film reaches, in its wound position, a point on the plane of the side of the usual flanges of reels of this type. The former, 20, of these contacts is rigid, while the contact 21 is secured at one end and extends below the other contact, and being resilient is adapted to be pushed against the contact 20, when the projection 38 engages thereagainst. This indicator or circuit closure is adapted to travel vertically when the film is being rewound or reversed until the said yoke 35 reaches such position that the projection 38 will move the contact 21 into engagement with the contact 20 to complete an electric circuit, in which is included a suitable alarm. Arranged intermediate the reels 9 and 23 are guide rollers 40 and 41, said rollers guiding the film from one reel to the other.

In operation, the film having been wound by the exhibiting machine, this reel or film is placed in the casing 10 upon the shaft 22. The end of the film is then passed over the roller 41 and under the roller 40 and secured to the hub of the reel 9 by a suitable clip. The proper clutch (not shown) is thrown into locking position, and upon the operation of the usual projecting mechanism, motion is imparted from the pulley, carried by the takeup shaft 4, through the belt, which in turns rotates the shaft 11, thereby rewinding or reversing the film at the same time that another film is being exhibited. As the film winds upon the reel 9, the circuit closer will be moved upwardly by the film on the reel 9, until the projection 38 forces the contact 21 into engagement with the contact 20. The circuit will then be closed and the signal sounded so that the operator will know that the film reel 23 has been transferred to the reel 9, whereupon he disengages the mechanism from the exhibiting machine.

What is claimed is:

An electric signaling device for a winding reel consisting of a casing, a vertical gravity bar slidably mounted in the casing over the reel and engaging the material on the reel, a stationary electric contact within the

casing and over the winding reel, a spring contact finger in the casing adjacent the stationary contact, and a lug on the sliding bar for engagement with the movable contact to force the same into engagement with the stationary contact to close an electric circuit.

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

CHARLES V. FOOTE.

Witnesses:
A. M. MADSEN,
ABE GIBSON.