

April 28, 1925.

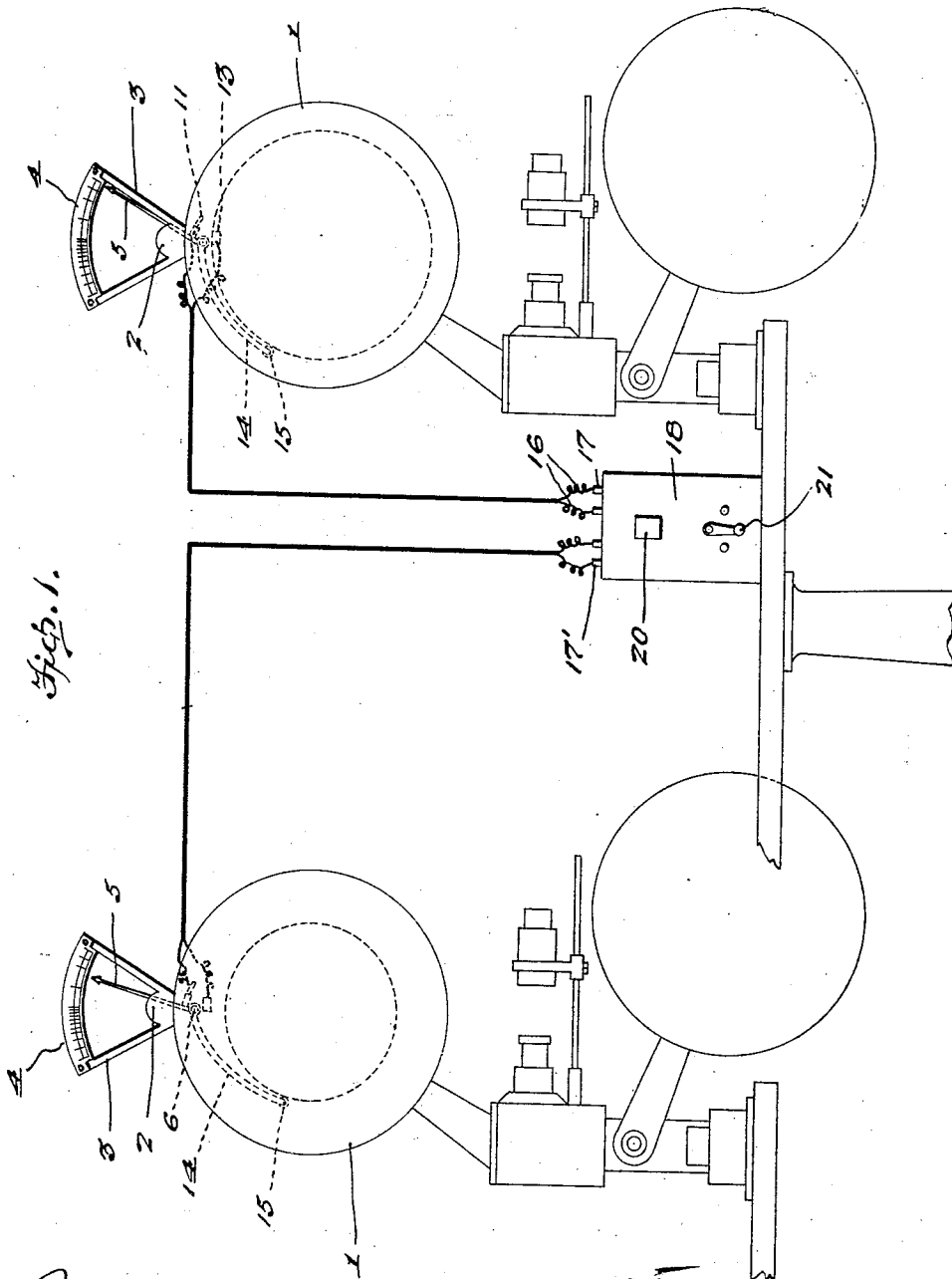
J. CVITKOVICH

1,535,520

AUTOMATIC FILM INDICATOR AND OPERATOR'S WARNER

Filed Feb. 21, 1922

2 Sheets-Sheet 1



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WITNESS:

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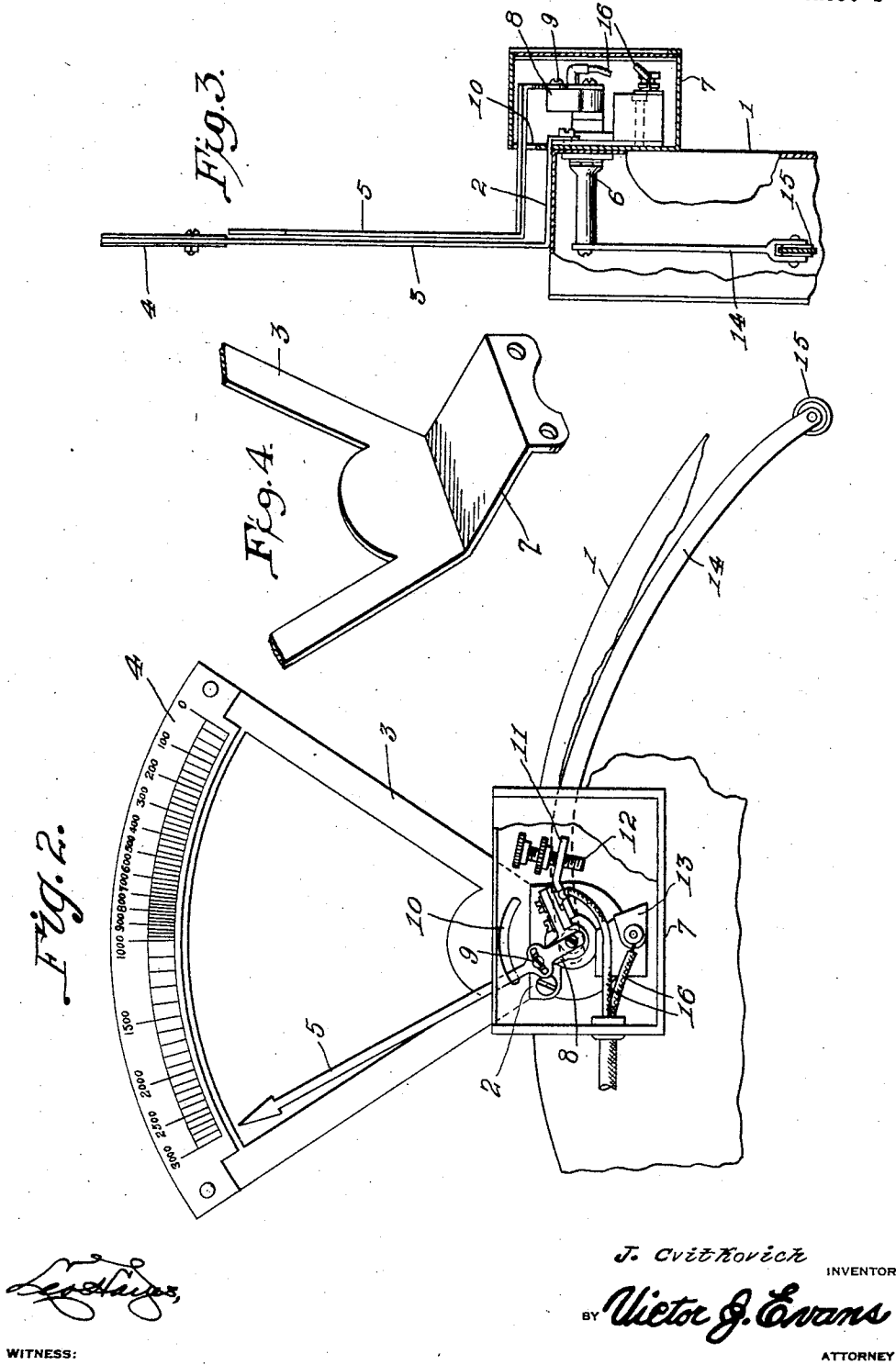
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UNITED STATES PATENT OFFICE.

JOHN CVITKOVICH, OF GARY, INDIANA.

AUTOMATIC FILM INDICATOR AND OPERATOR'S WARNER.

Application filed February 21, 1922. Serial No. 538,401.

To all whom it may concern:

Be it known that I, JOHN CVITKOVICH, a citizen of the United States, residing at Gary, in the county of Lake and State of Indiana, have invented new and useful Improvements in Automatic Film Indicators and Operators' Warners, of which the following is a specification.

An object of this invention is to provide means for indicating the amount of film in the magazine of a moving picture apparatus.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a diagrammatic view showing the invention in use and applied to a number of machines.

Figure 2 is an enlarged front view of the invention with parts broken away.

Figure 3 is an edge view of Figure 2 with parts broken away.

Figure 4 is a detail view showing the bracket 2 and the lower part of the frame 3.

In these views 1 indicates the upper magazine of a moving picture machine and 2 indicates a bracket which is suitably attached to said magazine. A frame 3 is formed with said bracket, said frame carrying the dial 4 with which is associated the finger 5 which is secured to a shaft 6 which is journaled in the bracket. A casing 7 is secured between the front part of the magazine and the bracket and the shaft projects into said casing. Said casing is provided with a slot through which a part of the bracket extends. A member 8 is secured to the extended end of the shaft and the finger is adjustably secured to said member by means of a slot and screw connection 9. The finger is bent twice at right angles and passes through a curved slot 10 in the casing. By this means the finger can be adjustably connected with the shaft so that it can be properly set in relation to the dial. A projecting arm on member 8 carries a contact plate 11 which

is insulated from said arm and this plate carries a set screw 12 which is adapted to engage a stationary contact 13 located in the casing and insulated from the other parts therein. The outer end of the shaft has connected therewith a curved arm 14, which at its outer end carries a roller 15 which is adapted to engage the reel in the upper magazine. The contacts 12 and 13

are connected by the conductors 16 with the terminals 17 on a casing 18 which contains the batteries 19, said terminals being electrically connected with said batteries. A buzzer 20 is carried by the casing and thus is electrically connected with the batteries, a switch 21 being arranged on the case to control the flow of current to the buzzer.

When a number of devices are used they may be connected with the one case, as shown in Figure 1, the devices on one side being connected with the terminals 17 and those on the other side being connected with the terminals 17'. In this case the switch 21 would be a double switch so that it can be moved from one side to the other to connect the terminals 17 with the buzzer or the terminals 17' with the buzzer.

From the above it will be seen that as the film is being reeled off the roll in the upper magazine the arm 14 will move inwardly towards the hub of the wheel and this will cause the finger to move towards zero on the dial. Thus the finger and dial will indicate the amount of film left on the reel in the upper magazine. When the film is almost removed from the upper magazine the contact 12 will strike the contact 13 so as to complete the circuit to the buzzer and thereby warn the operator that the reel is almost empty. By having the finger adjustable it may be adjusted to suit different sizes of reels as it is a well known fact that the hubs of reels differ in size so that it is necessary for a device of this nature to be adjustable to make it usable with the different sizes of reels.

This instrument meets nearly all the demands of the operator as it gives him notice when to prepare to change the reels or to another machine by the buzzer ringing. This avoids showing white screen, punch marks, and the ends of the film. It shows the sizes of each reel and automatically indicates how many more feet there are to be run. It enables the operator in case of rehearsals to check up any particular scene by

marking the numbers where the arrow points when the scene starts and ends. This is done so as to adapt music to that particular scene. The orchestra may then be informed in advance to be on the alert.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:—

15 A device of the class described comprising a bracket, a casing supported thereby and

having a curved slot therein, a shaft journaled in the bracket and having a part located in the casing, an arm connected at the outer end of the shaft, a roller on the arm 20 for engaging a roll of film in the upper magazine of a moving picture machine, an arm connected with the end of the shaft which is located in the casing, a finger pivoted to the end of the shaft and having a 25 slot therein, a set screw passing through the slot and engaging the arm, said finger being bent to extend through the slot in the casing and a dial carried by the bracket and associated with the finger. 30

In testimony whereof I affix my signature.

JOHN CVITKOVICH.