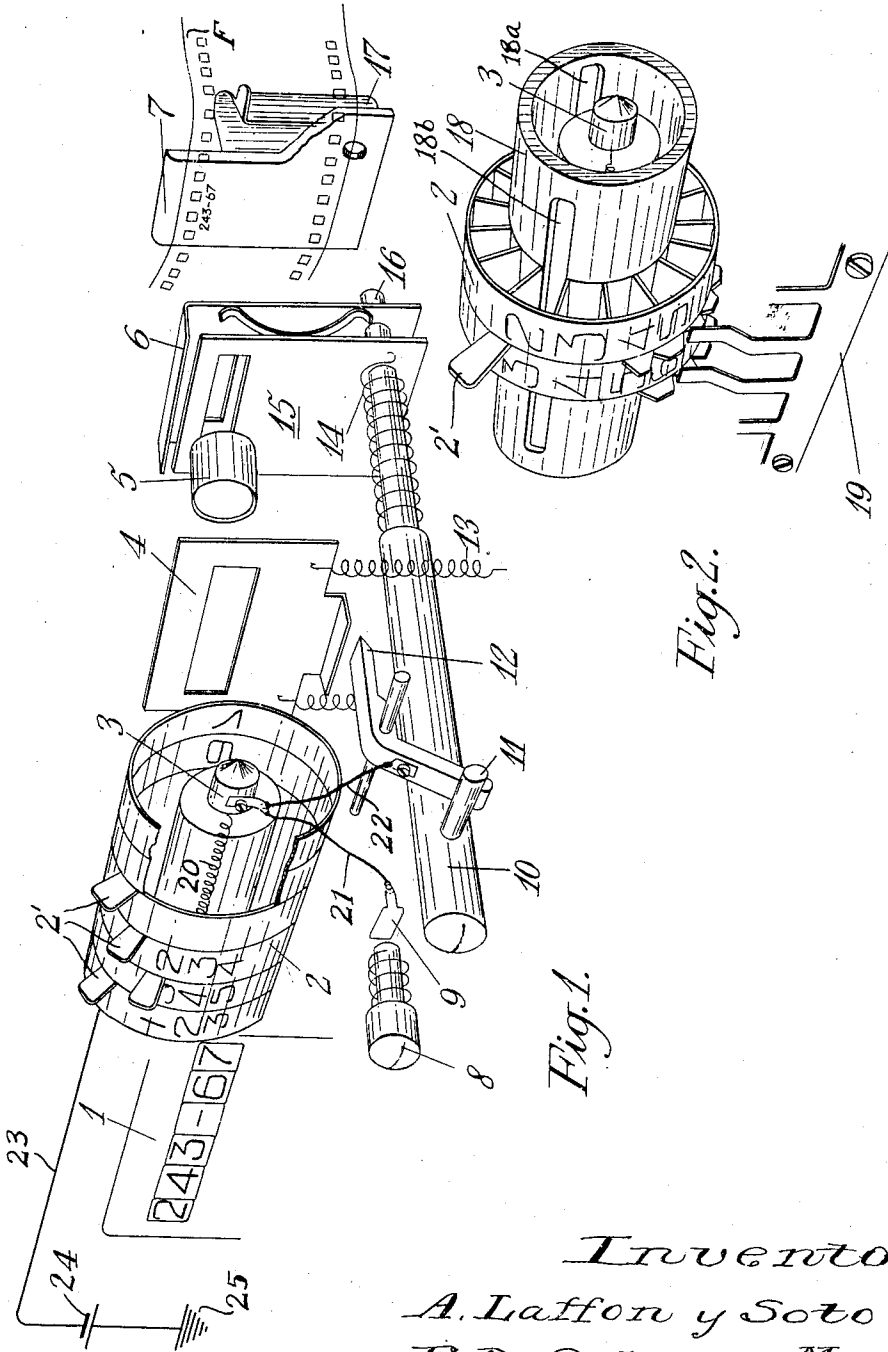


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 PHOTOGRAPHIC NUMBERING APPLIANCE FOR SCENES, FOR
 USE IN THE PHOTOELECTRIC RECORDING OF SOUNDS
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PHOTOGRAPHIC NUMBERING APPLIANCE
FOR SCENES, FOR USE IN THE PHOTO-
ELECTRIC RECORDING OF SOUNDSEzequiel de Selgas y Marin and Alberto Laffon y
Soto, Madrid, SpainApplication May 23, 1946, Serial No. 671,670
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2 Claims. (Cl. 95-1.1)

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This invention relates to means for marking the music or speech sections which are recorded photo-electrically on cinematograph film with a number or indication of their contents for identification purposes when developed. The processes used at present consist in marking a number on the film in pencil, or perforating it by means of a punch, before recording the piece. For this purpose it is necessary to open the sound-recording camera, with the result that the piece of film that has been marked is exposed to the surrounding light. This system therefore cannot be used if it is desired to utilise the other edge of the film likewise for recording. Another method is for an announcer to pronounce before the microphone the number of the scene, or an indication for its identification, which will be heard in the reproducer and recognised after development, with consequent loss of time and material, for, however short the indication, two or three meters of film are always used for its recording.

In order to avoid this loss of material and time, we have invented and constructed a photographic numbering apparatus for scenes, which makes it possible, without opening the photo-electric sound-recording camera to record photographically on the film itself, and exactly in the same place where the sound band is recorded, a series of numerals or indicating letters, which will appear clearly on the negative when developed, and which, by their position, will be copied automatically on to the positives printed therefrom, rendering immediate identification possible without the necessity of any reproduction of sound.

This apparatus moreover, while photographically recording the number or like indication, may also make a small perforation or notch on the edge of the film immediately in front of the place where the number has been recorded, so that even before developing the film in the dark room it is possible by the sense of touch to find the exact place where a fresh scene begins, so that the film can be cut at these points and the scenes separated from one another.

This apparatus is shown in the accompanying drawings, in which:

Figure 1 shows the whole device in perspective, with the parts widely separated from one another for the sake of clearness; and

Figure 2 is a perspective view of a detail on a somewhat larger scale.

The apparatus comprises a series of transparent rings or drums 2, bearing numerals or like indications, which are illuminated by a lamp

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3, and which are rotatable on the body of a lantern 18 enclosing the lamp. The filament 20 of the lamp is connected at one end to two parallel leads 21 and 22, of which the lead 21 is connected to a plate 9 and the lead 22 to an insulated conducting lever 12. The other end of the filament is connected by a lead 23 to one terminal of a source of electrical energy 24, the other terminal of which is connected to earth or to the mass of the apparatus at 25. The rings 2 are illuminated through two slots 18a, and 18b parallel to the axis of the lantern and substantially diametrically opposite to one another, as shown clearly in Figure 2, in the cylindrical body of the lantern. The image of these numbers is projected through the slot 18a by means of a lens 5 on to the film F, which is held between a movable side 6 and a fixed side 7 of a gate through which the film passes. When the film is pressed against the stationary side 7 by the moving side 6, a punch 16 cuts a notch or perforation in the edge of the film, a receptacle 17 receiving the part punched out of the film.

Between the drums 2 bearing the numbers and the lens 5 is situated a photographic shutter 4, which is actuated by means of the bent lever 12 when a button 10 is pressed. The actuating button 10 is provided with an abutment 11, which engages one end of the lever 12 and rocks this lever when the button 10 is pressed. The other end of this lever engages underneath the shutter 4. The actuating button 10, on being depressed, effects in succession the following operations: it lights the lamp 3 by connecting the lead 22 to earth or to the mass of the apparatus through the lever 12, the abutment 11 and the actuating button 10; this lever thrusts the photographic shutter 4 to the exposure point, after which it is returned to its former position by means of springs 13; and finally the actuating button pushes the movable side 6 of the gate towards the fixed side 7, thus holding the film still, while the punch 16 cuts the notch or perforation on the edge of the film. The punch is returned to its idle position, when released, by a spring 14 bearing against a stationary abutment 15.

A button 8 connected to earth or to the mass of the apparatus, makes contact, when pressed, with the plate 9, and thus lights the lamp without actuating the remainder of the mechanism, so as to enable the operator to see through a small window 1, arranged in the cover of the apparatus the indicating number which it is desired to form, which is illuminated through

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the slot 18b. The number drums 2 are manipulated by means of lugs 2'. As will be gathered from the drawing, the numerals from 0 to 9 extend only half way round each drum. They are repeated on the other half, in such a way that an observer looking through the window 1 sees, illuminated through the slot 18b, a number identical with the number that is at the same time illuminated through the slot 18a.

We claim:

1. For use in conjunction with photo-electric sound-recording apparatus, means for applying identifying signs such as numbers to scenes photographed on films in the said apparatus, comprising: a substantially cylindrical lantern, formed with a slot along a line parallel to the axis, a source of light disposed substantially along the axis of the cylindrical lantern, a series of translucent drums, bearing signs such as numbers on their peripheries, rotatably surrounding the lantern and substantially co-axial therewith, the breadth of the slot being so related to the dimensions of the signs that on each drum one sign at a time is illuminated by the lamp through the said slot, optical means for projecting an image comprising the one illuminated sign from each drum on to a film in the photo-electric sound-recording apparatus, a shutter for exposing a selected spot on the film to the said pro-

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jected image, the lantern also being formed with a second slot, likewise parallel to its axis, on the side thereof remote from the shutter, the signs borne by each drum being so repeated that for each operative position of the drums the two slots in the lantern register with two identical signs on the drums, and the second slot being so located as to illuminate a sign in a position in which it can be readily seen by an operator.

2. Means for applying identifying signs to scenes photographed on films as claimed in claim 1, further comprising means for rotating the drums individually by hand to vary the sign to be applied to the film, and a push button switch for lighting the lamp in the lantern without actuating the shutter.

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