April 9, 1946. C. M. HOLLAND 2,398,226

TIMED READING DEVICE

Filed June 19, 1944 2 Sheets-Sheet 1

Fig. 1.

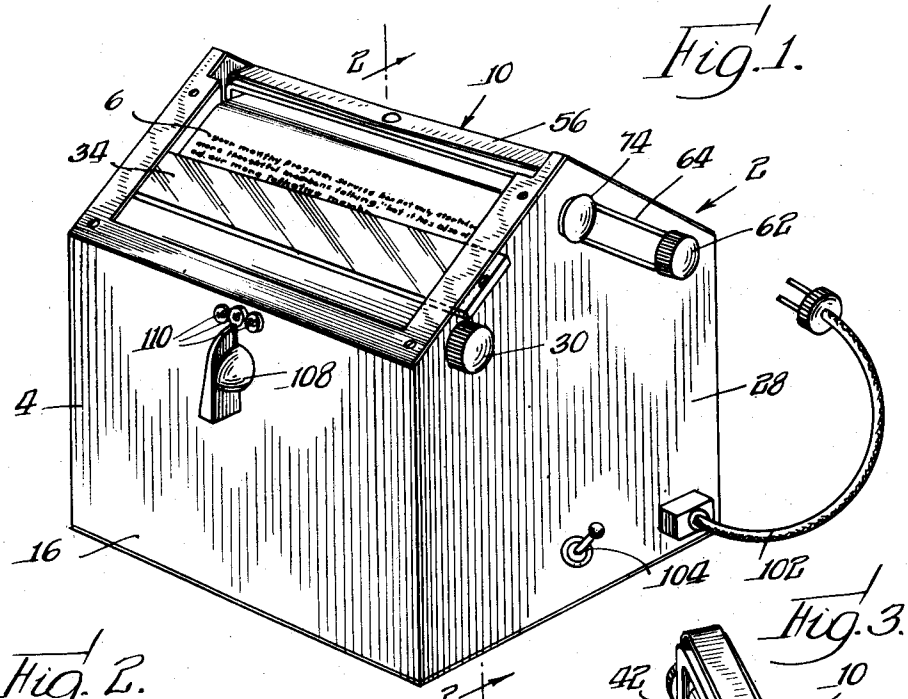


Fig. 2.

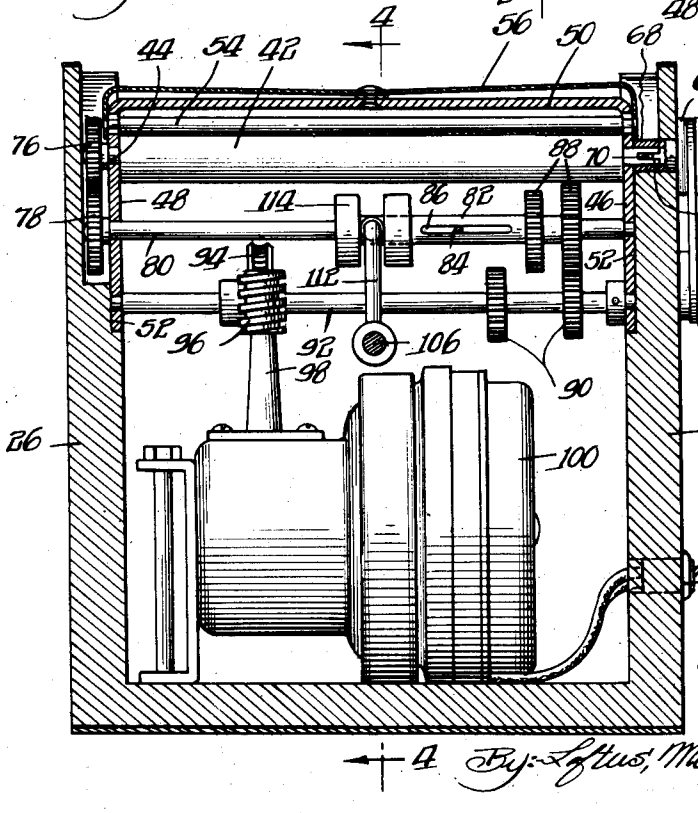
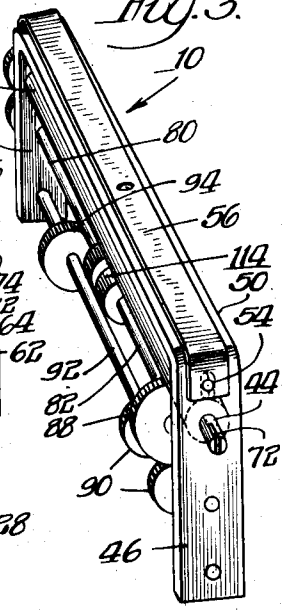


Fig. 3.



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Fig. 4.

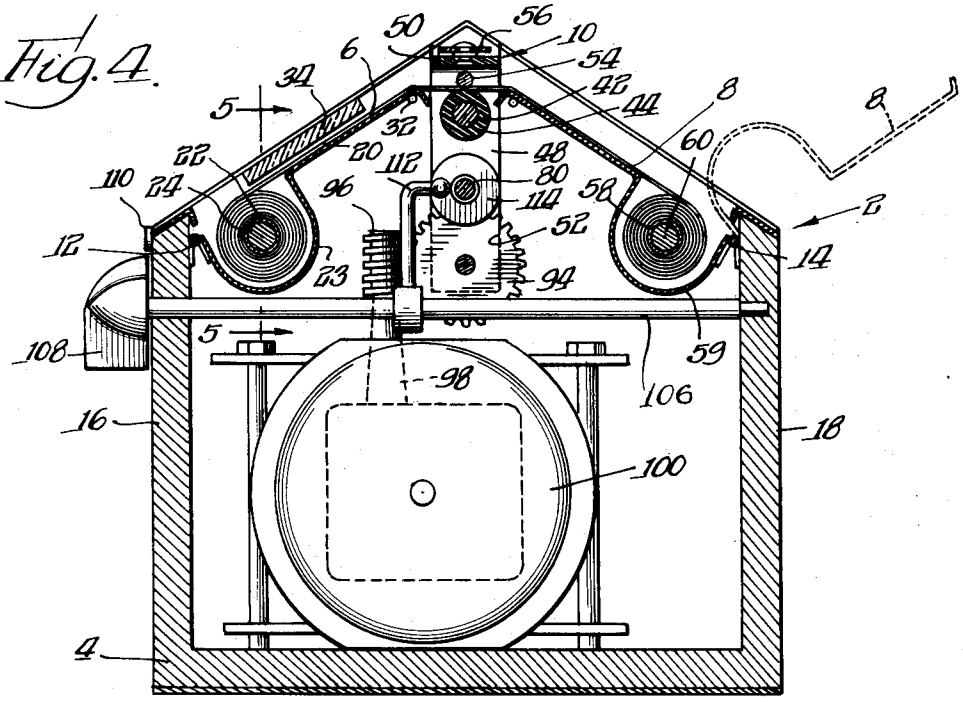


Fig. 5.

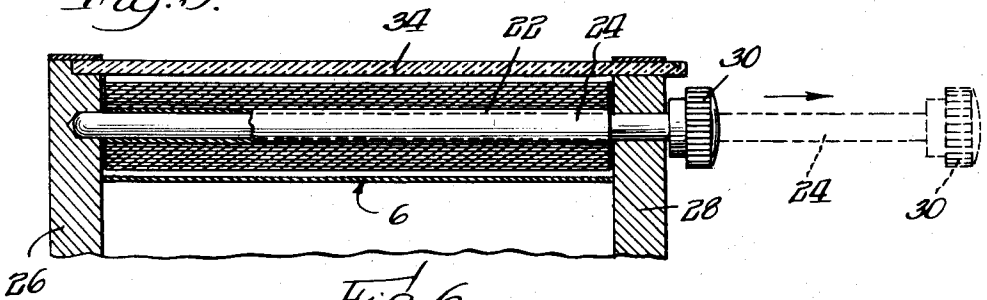
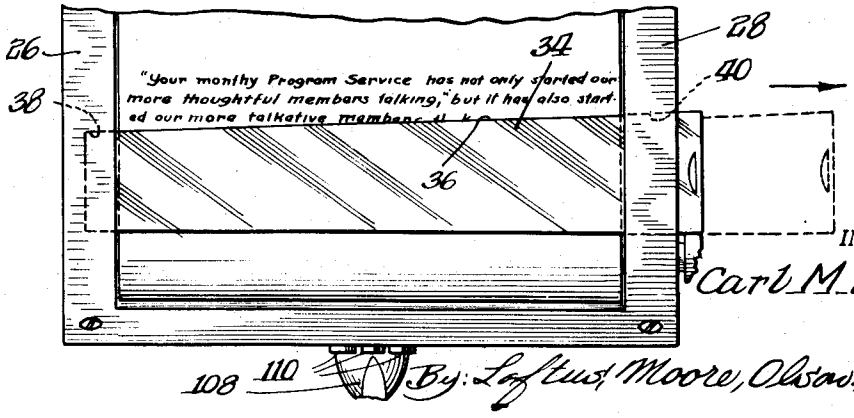


Fig. 6.



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Patented Apr. 9, 1946 2,398,226

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2,398,226

TIMED READING DEVICE

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Application June 19, 1944, Serial No. 541,013

2 Claims. (Cl. 40—31)

This invention relates to a timed reading or program device, and more particularly to a speech or program aid for insuring the delivery of the speech or the performance of the program in a given or set time.

The object of the invention is to provide means for insuring the delivery of a speech or the performance of a program at the rate set by the time allotted thereto.

In delivering a speech it often happens that the speaker lags at one or another time during his presentation so that he runs over the time allotted to him or it becomes necessary to cut off the end of the speech at the end of the allotted time.

For many years silent motion pictures depicting a multiplicity of scenes have been produced on an extensive scale by amateurs for home projection. Generally when they are projected a speaker attempts to describe concurrently the scenes as they are projected or make a speech relating to the scenes as they are unfolded. It is difficult, if not impossible, for the speaker to synchronize his spoken words with the scenes as they are projected. Generally, the speaker's narrative lags behind the scene or scenes to which his comments relate. This becomes very annoying and disconcerting to the audience as the scene to which the speaker refers is frequently different from the scene being observed at the moment by the audience. Such objections in this field have existed for many years without solution. It is, therefore, an object of my invention to provide a device for solving this problem, the device being adapted to guide or aid the speaker in maintaining his spoken words in synchronized relation to the projection of the different scenes or pictures. Utilizing my invention for this purpose, the picture is first projected and the times required for the projection of different scenes or parts of the film are clocked and recorded. Thereafter, the narrative or descriptive record from which the speaker reads is fed by my device at a reading time-rate to conform to the speech-rate of the speaker and the length of the narrative adjusted, by cancelling or adding reading matter, to the time required to project that portion of the picture to which the narrative relates, thereby guiding or aiding the speaker in maintaining his spoken words in step with the picture film. My device is so constructed that, if the length of the essential reading matter requires it, or the speed of travel of the film is varied or changed, the speed of travel of the record from which the speaker reads can be readily adjusted to compel the speaker to adjust his speech-rate accordingly. Thus, I obviate the present objection of the speaker lagging behind, or advancing beyond, the scenes or pictures to which the spoken words relate.

Further, in broadcasting programs by radio many rehearsals are required in order to obtain the proper timing so that it can be delivered in the allotted time. It often happens that a program lags and the program must be cut off before it is completed.

A device which automatically regulates the actions of the different persons involved in the program and synchronizes their actions at the rate required to complete the program in the allotted time would be, therefore, of great value in assuring the completion of the program on schedule and eliminate much of the need for prior rehearsals. It is an object of this invention to provide such a device.

Other and further objects and advantages of the invention will be apparent from the following description when taken in connection with the accompanying drawings, wherein:

Figure 1 is a view in perspective of a device embodying the invention;

Figure 2 is a view in vertical section taken substantially along the line 2—2 of Figure 1;

Figure 3 is a view in perspective of a paper feed unit forming part of the device;

Figure 4 is a view in vertical section taken substantially along the line 4—4 of Figure 2;

Figure 5 is a fragmentary view in vertical section taken substantially along the line 5—5 of Figure 4;

Figure 6 is a fragmentary plan view of the device, illustrating the speaker guide plate.

As shown in Figure 1, the timed reading device or program aid comprises a portable unit 2 consisting of a boxlike housing 4 having cover plates 6 and 8 on opposite sides of a detachable paper feed unit 10, the plates being secured by hinges 12 and 14 to the opposite walls 16 and 18 of the housing. Each plate may be swung outwardly, as indicated by the dash-line position of the plate 8 in Figure 4.

The speech, narrative, play, program or program instructions are typed or printed upon a sheet or web 20 wound as a roll on a supply roller 22, which may be similar in construction to the ordinary film supply roller for box cameras, but is preferably of greater length in order to accommodate a wider sheet. The plate 6 is formed with a trough 23, adjacent the hinge 12 to receive the paper roll on roller 22. The roller 22 may be keyed, or frictionally fitted, on an endwise

detachable rod 24 journaled in the end walls 26 and 28. The rod is provided with a knob 30 externally of the end wall 28 so that it can be pulled out of the roller 22, as indicated in dash lines in Figure 5, to permit substitution or replacement of the roller.

From the feed roller the speech or program sheet passes over the paper supporting surface of plate 6, this surface being preferably inclined to facilitate reading of the sheet. This plate rests at its upper end on pins 32 (one only being shown in Figure 4) fastened to the end walls. In passing over this guide surface the speech or program sheet passes beneath a reading guide 34 which preferably consists of a transparent plate having its inner edge 36 (Figure 6) inclined inwardly from left to right relative to the lines of reading matter upon the sheet so that the words of each line are successively uncovered from left to right. This plate 34 is parallel to the paper guide surface of plate 6 and is supported in a notch 38 (Figure 6) in the end wall 26 and a slot 40 in the end wall 28. The reading guide plate 34 is slidably fitted in the notch 38 and slot 40 to permit its detachment by endwise sliding movement, as indicated by the dash lines in Figure 6, in order to place or remove the paper web and supply roller.

The sheet passes from the guide and reading plates over a guiding and friction feeding roller 42 of the paper feed unit 10. The roller 42 is secured to a rod 44 journaled in depending straps 46 and 48 of a bracket 50, the straps 46 and 48 being slidably fitted in grooves 52 in the end walls 26 and 28. A rod 54 engages the sheet as it passes over the friction feed roll 42 and assists in the feeding of the sheet. This rod 54 passes through enlarged holes in the straps 46 and 48 and is journaled in the depending ends of a suitable spring bracket 56 which constantly urges the rod 54 toward the feed roller 42 so that the sheet is clamped between the feed roller 42 and the rod 54.

The sheet passes from the feed roll 42 to a take-up roll 58 similar to the feed roll 22 and similarly received in a trough 59 in the plate 8. The take-up roll 58 is keyed or frictionally fitted on an endwise detachable rod 60. The rod 60 is journaled in the end walls 26 and 28, similarly to the rod 24, and is provided at its outer end with an operating knob 62 so that it can be withdrawn from the roll 58 to permit extraction of the roll and so that it can be rotated to rotate the roll by hand whenever it may be desired. The rod 60 is interconnected with the rod 44 by means of a resilient belt or band 64 passing over the shank of the knob 62 and a friction pulley 66 secured to a sleeve 68 journaled in the end wall 28 and having a cross pin 70 detachably receivable in a cross slot 72 in the end of the rod 44. A knob 74 is also secured to the sleeve 68. The slip connection between rods 60 and 44 assures winding of the paper on the take-up roll and readily yields, when necessary, to conform to the speed of the feed roll.

The rod 44 extends beyond the strap 48 and a gear 76 is secured thereto. This gear meshes with a driving gear 78 secured to a shaft 80 also journaled in the straps 46 and 48. The shaft 80 carries a sliding sleeve 82 which is splined thereto by a pin 84, carried by the shaft, and a slot 86, in the sleeve. In order that the sleeve may drive the shaft at selected speeds, the sleeve is provided with a series of stepped gears 88 adapted to be selectively engaged, by endwise adjustment of the sleeve, with a series of stepped gears 90 secured to a shaft 92 also journaled in the straps 46 and 48. The shaft 92 is provided with a worm wheel 94 meshing with a worm 96 mounted on a shaft 98 geared in any appropriate manner, not shown, to the shaft of a synchronous motor 100 mounted in the housing 4.

The plug carrying cord 102 is connected to the motor in the usual manner through the control switch 104.

A speed selector or presetter comprises a rod 106 journaled in the front and rear walls 16 and 18 and provided with an operating knob 108 cooperating with speech-rate indicia 110. An adjusting rod or lever 112 is secured, within the housing, to the rod 106 and engages a yoke 114, carried by the sleeve, for presetting the speed control sleeve.

In operation, the speech or program sheet is placed on the roller 22 and then inserted in the trough 23 of the plate 6. The rod 24 is then inserted in the roll. The sheet is then threaded between the guide surface and the reading plate 34, over the friction feed roller 42 and to the take-up roll 58.

The sheet is then run through the unit in order to determine the time required for the passage of the typed or printed matter past the reading device from the beginning to the end of the speech, narrative or program. In the case of a speech or narrative, the speed of driving will, of course, be related to the personal characteristics of the speaker in respect to his rate of delivery, and if the speech at that rate will not pass the reading guide in the allotted time, then portions of the speech are cut out to come within the allotted time. The speech or narrative may then be retyped so as to leave no spaces between the parts retained, or the deleted parts may simply be blacked out and as such parts reach the reading guide the speaker may turn the knob 62 on the take-up roll so as to quickly move the blacked out part past the guide until the next retained part begins to be uncovered by the guide.

In any event, the speech or program sheet may be completely processed by the program manager or the speaker prior to the time the speech or program is to be delivered, and being properly processed, the device assures that the complete speech or program will be delivered or performed within the allotted time as long as the speaker or each person involved in the program reads each word or sentence as it is uncovered by the edge 36 of the reading guide.

Since the reading guide 34 is transparent, each line of type will be visible before it passes the edge 36 so that there need be no lag in delivery caused by a slight speeding up in the rate of delivery or performance of the program.

This also permits those who must perform some action, such as the sound man involved in radio programs, to anticipate the action required of them.

It will be apparent that this unit provides means for assuring the delivery of a speech or narrative, or the performance of a program within the preset allotted time or in synchronism with a series of pictures to which the narrative relates and therefore removes the fear of failure to deliver or perform the program within the allotted time, maintains the spoken words of the narrator in synchronism with the scenes or action described, and greatly minimizes the need for preliminary rehearsals by the persons involved in a radio program.

It is apparent that many widely different embodiments of this invention may be made without departing from the spirit and scope thereof and, therefore, it is not intended to be limited except as indicated in the appended claims, in which the word "program" is used as signifying a speech, a play or other performance, a set of program directions, or any other matter to be orally presented or performed within a limited time.

I claim:

1. A timed reading device for aiding a speaker in synchronizing his narrative with the projection of pictures to which the narrative relates, said device comprising means for feeding a predetermined-length copy of the narrative to be read, means providing an indexing line past which the copy is fed by the feeding means, said indexing line being inclined from left to right in the direction of movement of the copy whereby the words of the copy consecutively pass said line, and means including a timer connected to said feeding means to drive the sheet at a preselected rate conforming to the speech-rate of the speaker.

2. In a timed reading device, comprising a supply roll adapted to receive a web of material carrying a copy of the program to be read, means for feeding the web from the supply roll and including a take-up roll receiving the web, a timer, adjustable speed means connecting the timer to said feeding means to predetermine the rate of feed of said copy web, a reading guide extending transversely of the web as it passes from the supply roll to the take-up roll, said guide providing an indexing marker inclined from left to right in the direction of the feeding of the web, whereby successive parts of the copy are consecutively indexed.

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