

June 3, 1958

J. JACOBS III
PROMPTING APPARATUS

2,837,294

Filed Feb. 17. 1955

2 Sheets-Sheet 1

FIG. 1.

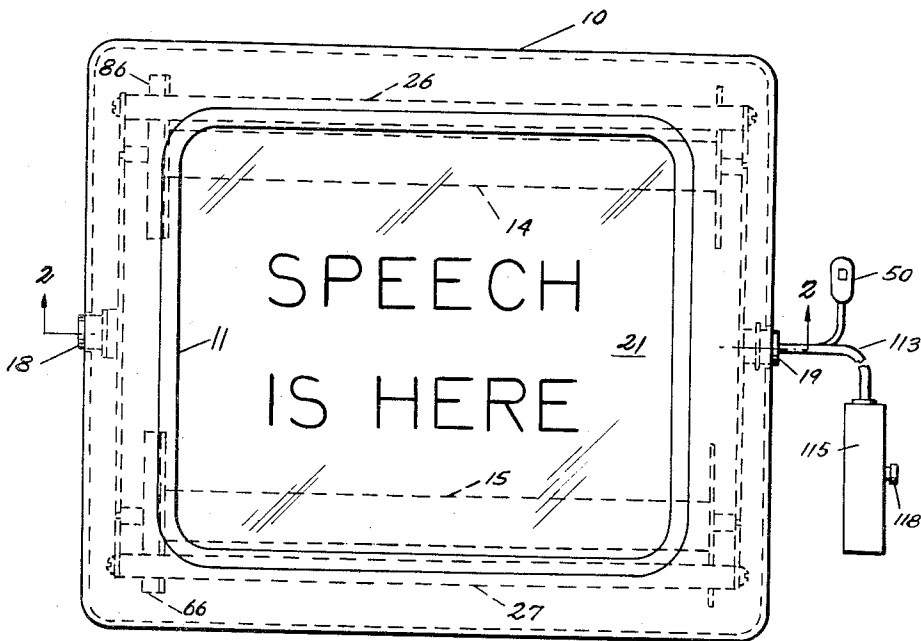


FIG. 2.

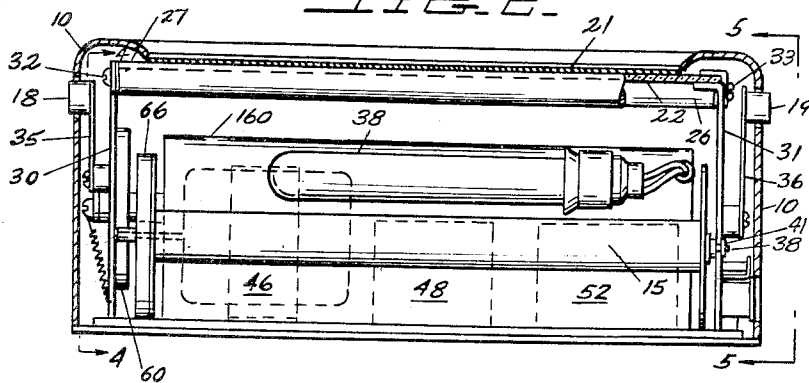
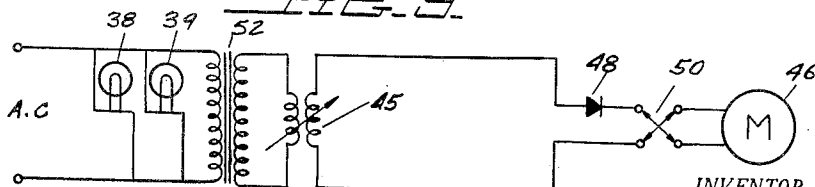


FIG. 3.



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FIG. 4.

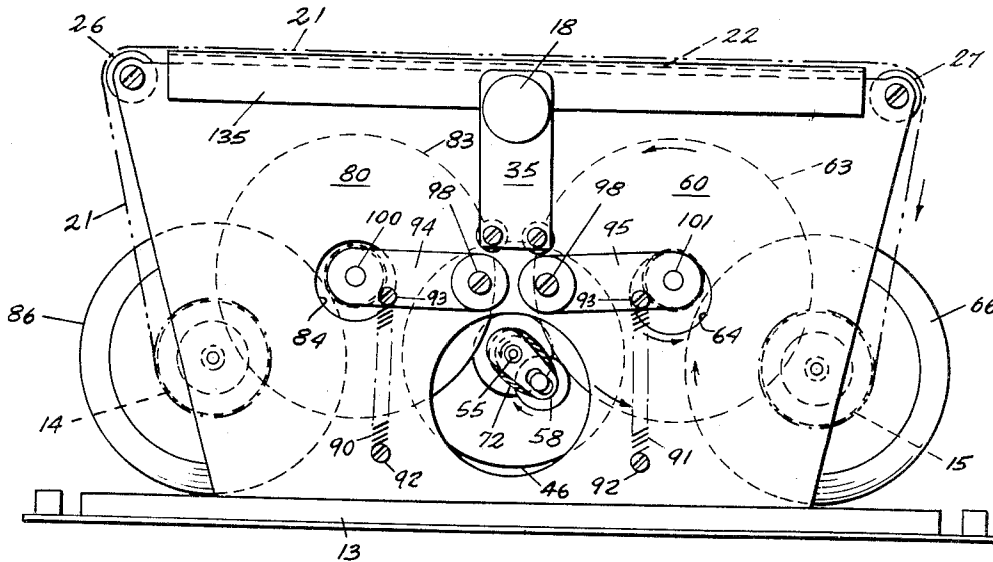


FIG. 5.

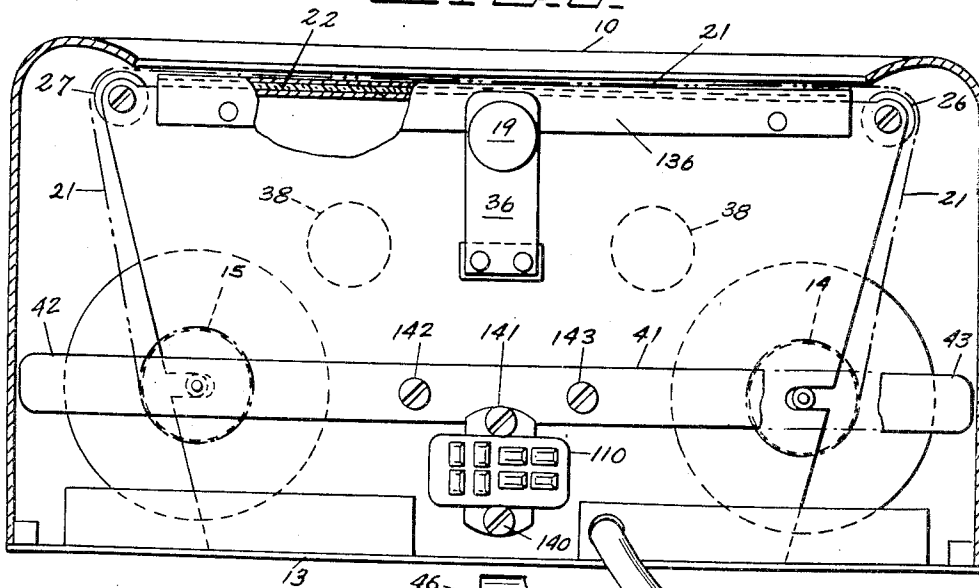
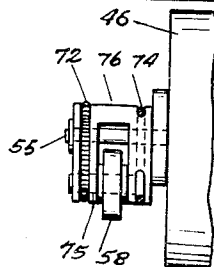


FIG. 6.



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2,837,294

PROMPTING APPARATUS

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2 Claims. (Cl. 242—67.4)

My invention relates to a novel prompting apparatus for speakers and performers wherein the script is continuously presented to the speaker's view at a desired rate and in a location not apparent to the general audience.

It is always preferable, in giving a speech, for the speaker or performer, in situations where it is not possible to memorize his lines, to have before him a prompting means which he may refer to as the speech is given. It is also highly desirable that such prompting means be one which is not readily apparent to the audience but which adequately prompts the speaker and which presents his speech or notes to him in such a manner so that he need not be distracted from his speech.

I have provided a unit for satisfying these requirements and which in addition has many more advantages. The novel construction of my unit allows it to be placed inobtrusively on the speaker's table or podium, and at the same time provides the speaker with a constant movement of his script printed in any desirable size.

Moreover, it can also be used as a rehearsing device as it allows the speaker to move the script in either direction and at any desired speed so that he may, by a simple control, repeat the passage of the speech or any portion thereof across the viewing screen of the device any number of times.

Accordingly, it is an object of my invention to provide an improved novel type of prompting device particularly adapted for use by public speakers either for preparing a speech or for use on delivery of a speech.

Another object of my invention is to provide a novel prompting apparatus which is compact and readily controlled by the speaker.

Still another object of my invention is to provide a novel prompting apparatus in which the written material is printed upon a semi-transparent or translucent paper and which may be unrolled from one spool and rolled on to another spool while passing before a light source which will illuminate the paper and any images imprinted thereon.

These and other objects of my invention will become more apparent when taken in connection with the description of the drawings in which:

Figure 1 is a top view of my apparatus as it would appear to the speaker or other user.

Figure 2 is a section taken along the lines 2—2 of Figure 1 and looking in the direction of the arrows.

Figure 3 shows a schematic diagram of the electrical wiring connections which control the apparatus.

Figure 4 is a cross sectional view taken along the line 4—4 of Figure 2 and shows, in detail, the reversing mechanism of my apparatus.

Figure 5 is a side elevational view taken along the lines 5—5 of Figure 2 and looking in the direction of the arrow.

Figure 6 is a side elevational view of the reversing mechanism shown in Figure 4.

Essentially my invention involves a pair of rotatable

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reels carrying a script roll of semi-transparent or translucent paper, the said paper, as it travels between the reels, being passed in front of a light source which illuminates the paper and any images imprinted thereon.

My apparatus also provides means for reversing the travel of the said paper, by the speaker or operator, wherein only the spool drawing the paper toward it is driven and the other spool is provided with a suitable brake means. Provisions are also made for the stopping, starting or reversal of the mechanism and for the easy adjustment of the speed of the script as it passes in front of the light source. The apparatus is also provided with a suitable light source and is simply and economically constructed so as to be compact and readily portable. Further details of construction will be discussed in connection with the description of the drawings which follows.

Referring first to Figures 1 and 2, the apparatus is enclosed in a suitable casing 10 having an opening or window 11 through which the roll carrying the script, speech or other printed matter is viewed. The script is wound or unwound from spools 14 and 15, respectively, which spools are located near the bottom of the unit. Depressable buttons 18 and 19 allow the cover to be readily removed from the unit.

The paper 21 is transported in either direction between spools 15 and 14 and is guided by rollers 26 and 27 before passing over translucent glass 22. These guide rollers are internally threaded and are screwed to end pieces 30 and 31 by means of screws 32 and 33. The end pieces are also used to support flexible copper members 35 and 36 which allow the depressable buttons 18 and 19 to return to position after pressure has been relieved.

There are two elongated light bulbs 38 which may be conventional 25 watt, 120 volt bulbs and which provide a suitable light source. The light emanating from these bulbs is diffused through translucent glass 22 so that there is an evenly lighted background supplied for the script or speech.

The spools 14 and 15 are secured to end pieces 30 and 31 by having their extended shafts 38 and 39 journaled within a cylindrical opening in each end piece. In order that the spools may be readily removable a flexible copper or brass member 41 is provided. This piece can be lifted upwardly at ends 42 and 43 (see Figure 5) and the spools are then easily removed.

The electrical circuitry for this apparatus is diagramed in Figure 3. Either an A. C. or D. C. source of voltage may be used, but for convenience A. C. is usually preferable. Therefore, the embodiment shown in Figure 3 represents a circuit diagram where the source voltage is A. C. Across the A. C. line are the illuminating lamps 38 and 39, a variable transformer 45 which controls the voltage applied to a D. C. motor 46, and transformer 52. In order to convert the A. C. to D. C. a selenium rectifier 48 is provided. The motor 46 may be a permanent magnet motor, a shunt motor, or any type of variable speed A. C. or D. C. motor.

The double pole switch 50 is used to reverse the motor and thereby wind the script roll in an opposite direction. The motor, rectifier, and transformer are located within the unit in any suitable fashion, the location being herein illustrated by blocks 46, 48 and 52, respectively.

An important feature of my invention involves the means by which the direction of the script is reversed upon the reversal of the direction of the rotation of the motor shaft 55. The mode of operation of this reversal mechanism is pointed out in Figures 4 and 6. As the shaft 55 rotates in one direction, shown by the arrow in Figure 4 as counterclockwise, it contacts a rubberized friction wheel or puck 58 which is then made to

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rotate in the opposite direction. The wheel 58 in turn drives idler wheel 60 which is made to rotate in the opposite direction. The wheel 60 carries two circumferential surfaces 63 and 64. The smaller circumferential surface 64 then drives rubberized friction wheel 66 in an opposite direction.

As can be seen in Figure 4, the wheel 66 is located on one end of the shaft carrying spool 15. Note that spool 15 is driven as the take-up spool only when the motor shaft is rotated in one direction (counterclockwise as seen in Figure 4). The rotation of the motor shaft in this fashion throws the rotatable rubber friction wheel 58 mounted on shaft 75 against the outer circumference 63 of wheel 60. This is done by having a common housing 76 for shaft 55 and wheel 58. The extension of motor shaft 55 is held in intimate contact with shaft 75 by springs 72 and 74 (see Figure 6).

Actually it need not be the motor shaft, itself, which drives friction wheel 58 but any sleeve or other cylindrical member rigidly secured to the same may be used as the drive. In any event as shaft 55 rotates it tends to swing the housing over to one direction or the other, depending upon the direction of rotation of the motor shaft. Thus, in the embodiment shown in Figure 4, the counterclockwise rotation of shaft 55 swings the wheel 58 and the member supporting it to the right against the outer circumference of the wheel 60.

Upon reversal of the motor which may be done by the operator through switch 50, the opposite thrust is obtained and the wheel 58 is thrown against the outer circumference 83 of wheel 80. Thus, the inner circumference 84 drives friction wheel 86 which is attached to spool 14 which then acts as the take up spool for the script roll.

No matter which spool is the take up reel it is necessary that the supply reel be provided with a certain amount of tension so that the paper does not unravel. At the same time it is necessary not to have too much tension or else the paper might tear. The appropriate tension is provided by spring members 90 and 91 which are attached to end piece 30 by means of screws 92 and to arms 94 and 95 by means of screws 93. The arms which are mounted to the end piece by screws 98, are then pulled downwardly by the spring so that the opposite end of the arm, which is provided with cylindrical openings 100 and 101 and which carries journaled therein the shaft about which wheels 60 and 80 revolve, tend to displace the shaft and pull the inner circumferential surfaces 64, 84 thereof against the circumference of friction wheels 66 and 86, respectively, depending on which spindle is the supply reel.

The ease of rotation of this spool is necessarily limited by the pressure exerted against it by circumferential surface 64 or 84. This same pressure is used as a means for driving the take-up reel when the motor is reversed.

In Figure 5 a jack 110 is shown, through which appropriate cords may be inserted so as to make the reversing mechanism and/or the speed rheostat readily controllable by the operator through a portable unit.

My preferred embodiment is shown in Figure 1, wherein a manually operable variable transformer 115 is connected to the unit through cord 113. The operator changes the speed of travel of the script merely by the appropriate adjustment of button 118.

The path of the paper or other script bearing material is best seen by referring to Figures 4 and 5. The paper 21 travels between spools 14 and 15 in either direction, depending upon the position of switch 50, and the direction of rotation of the variable speed driving motor. The paper is held against the spools 14 and 15 thereby providing appropriate slots in the spools or by means of tape or other adhesive material.

Thus, as pointed out previously whether the spool 14 or 15 is acting as a take up or supply spool depends

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upon the direction of rotation of the driving motor. The paper after leaving the supply spool (assuming this to be spool 15 in this case) travels over guide roller 27 and then over the translucent glass 22, guide roller 26 and finally to the take up reel 14. The translucent glass is held against end piece 30 by means of an angular bracket 135 and 136. The illuminating lamps 38 are located below the translucent glass and in order that the light be evenly distributed elongated lamps of the type illustrated in Figure 2 are preferred. These lamps may be 120 volt incandescent bulbs of any desired wattage.

The jack 110 is held against end piece 31 by means of screws 140 and 141. The function of screws 142 and 143 is to allow the flexible copper band 41 to be rigidly secured to the center portion of end piece 31.

The entire apparatus with the exception of openings for electrical leads and the opening 11 through which the script material is read, is enclosed in a suitable casing 10 and supported on metallic base 13. The motor, transformer and rectifier are encased in an insulated housing 160 which acts as a sound-absorber medium, thereby eliminating or substantially reducing any A. C. hum which may be present. The exterior of this housing should preferably be painted white in order that a maximum amount of light is reflected upwardly through the translucent glass.

The unit, because of its simple construction and compactness, provides a convenient portable prompting apparatus which the speaker or performer may rehearse or use in the delivery of his speech.

The interchangeable paper spools 14 and 15 may hold up to about two hours of continuous script and thereby allow for the printing or typing of several speeches on a single roll of paper. As the unit is readily reversible and may be made to run at any desired speed, it provides a flexibility of operation heretofore not realized in prompting devices.

In the foregoing, I have described my invention only in connection with preferred embodiments thereof. Many variations and modifications of the principles of my invention within the scope of the description herein are obvious. Accordingly, I prefer to be bound not by the specific disclosure herein, but only by the appending claims.

I claim:

1. In prompting apparatus including two rotatable spools between which a script sheet may be wound, means to drive one or the other of said spools, said driving means comprising a reversible motor, a shaft coupled to said motor, a housing journaled coaxially of said shaft, said housing being rotatable about said shaft, a driving puck journaled in said housing eccentrically of said shaft and parallel thereto, resilient means stressing said puck into engagement with said shaft, and two driving wheels each coupled to one of said spools, said driving wheels being supported with respect to said shaft to present their circumferences within the circle described by said puck upon rotation of said housing about said shaft, whereby upon rotation of said shaft in one direction said housing is rotated about said shaft in said one direction to engage said puck with one of said driving wheels and upon rotation of said shaft in the opposite direction said housing is rotated about said shaft in the opposite direction to engage said puck with the other of said driving wheels.

2. Prompting apparatus comprising a frame, two rotatable spools journaled in the frame in spaced parallel relation for passage of a script sheet therebetween, and means to drive one or the other of said spools in opposite directions, said driving means comprising a reversible motor, a shaft coupled to said motor, a housing journaled on said shaft, said housing being susceptible of rotation about said shaft, a wheel journaled in said housing eccentrically of said shaft for rotation about an axis parallel to said shaft, means effecting frictional engagement of said

wheel and shaft, two driving wheels each journaled on a lever arm pivoted in said frame, and means stressing each of said driving wheels into engagement with one of said spools, said driving wheels being supported, with respect to said shaft, by said lever arms and last named means to present their circumferences within the circle described by said first named wheel upon rotation of said housing about said shaft, whereby upon rotation of said shaft in one direction said housing is rotated about said shaft in said one direction to engage said first named wheel with one of said driving wheels and upon rotation of said shaft in the opposite direction said housing is rotated about said shaft in said opposite direction to

engage said first named wheel with the other of said driving wheels.

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