

July 20, 1943.

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2,324,909

CONTROL DEVICE

Original Filed Nov. 12, 1940

2 Sheets-Sheet 1

Fig. 1.

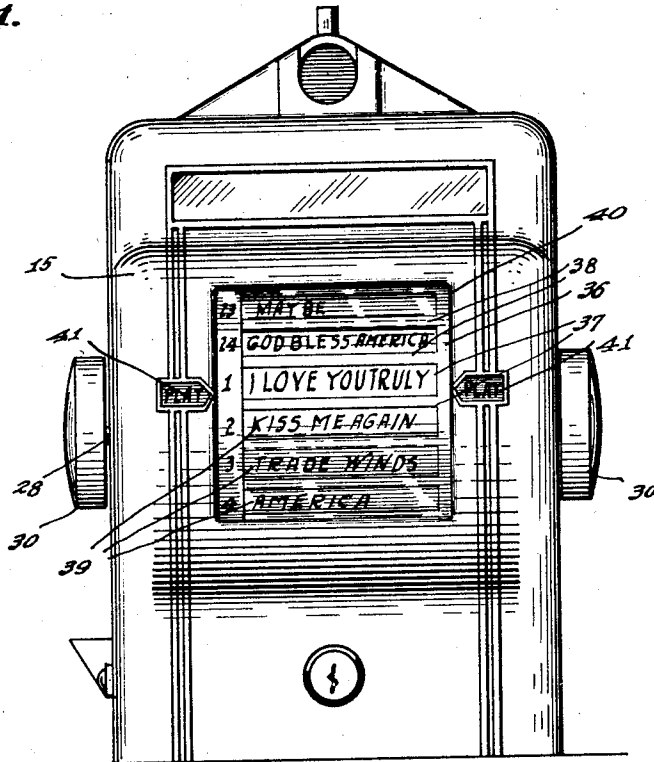
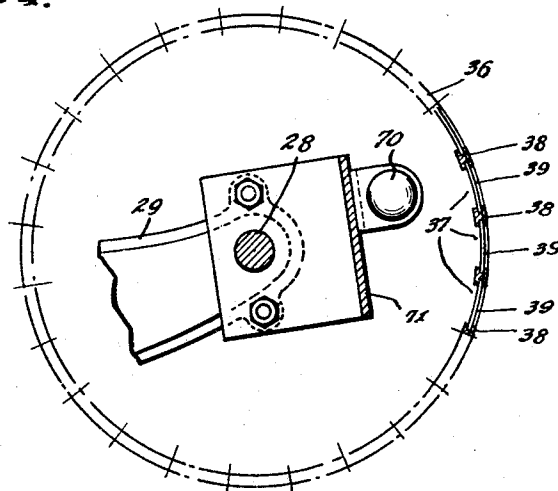


Fig. 4.



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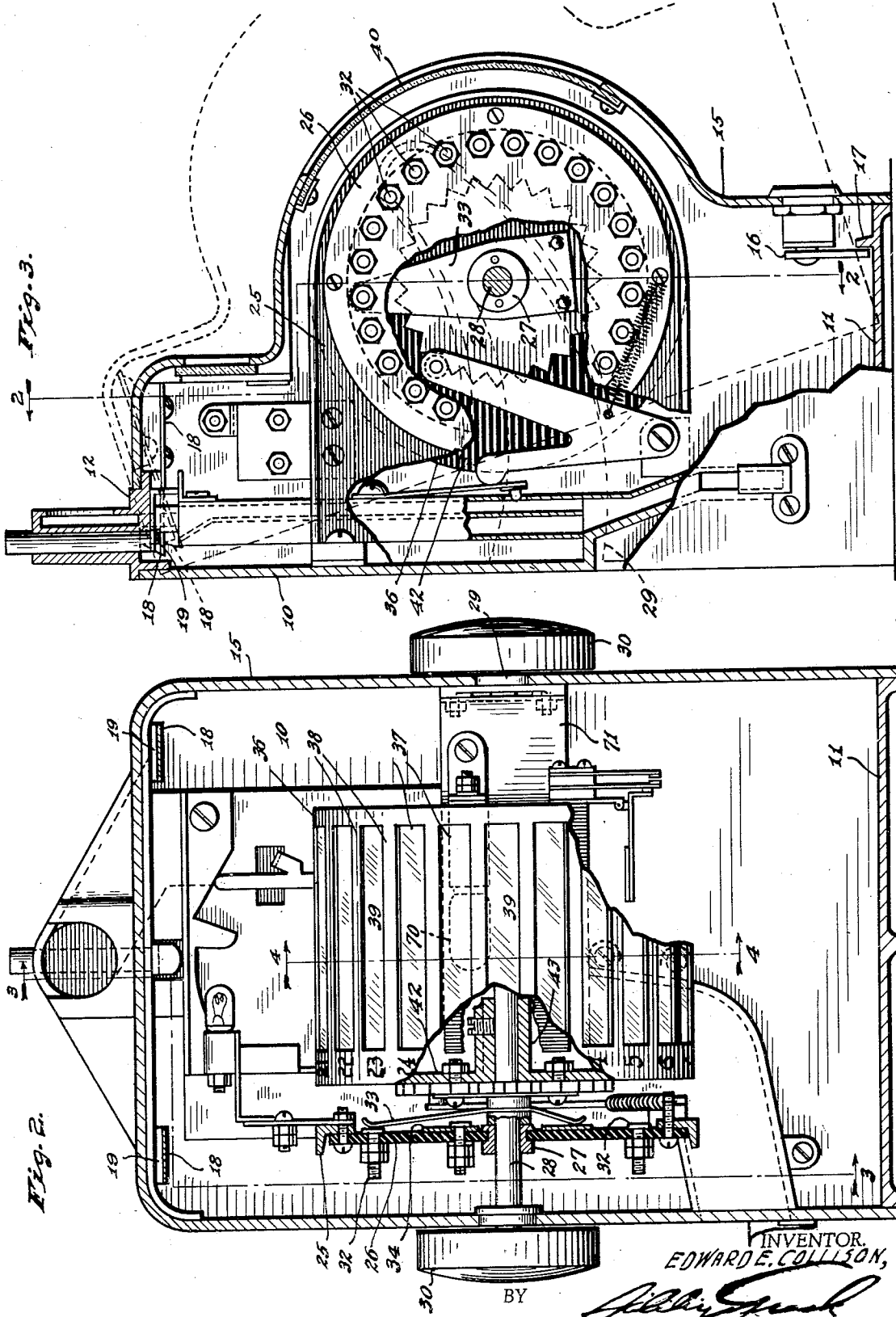
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CONTROL DEVICE

Original Filed Nov. 12, 1940

2 Sheets-Sheet 2



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## UNITED STATES PATENT OFFICE

2,324,909

## CONTROL DEVICE

Edward E. Cellison, Indianapolis, Ind., assignor  
to Homer E. Capehart, Washington, Ind.Original application November 12, 1940, Serial No.  
365,174. Divided and this application January  
7, 1942, Serial No. 425,364

6 Claims. (Cl. 179--6)

My invention relates to sound-reproducing systems of the type in which a sound reproducing mechanism selectively operable to reproduce any of a number of available sound-recordings is controlled by one or more coin-operated remote control devices. In such systems as commonly arranged, the sound-reproducing mechanism is electrically operated and controlled, and the remote control unit includes a manually operated selector switch, the setting of which determines the recording to be reproduced, and a coin-operated actuating switch which initiates operation of the sound reproducing mechanism to cause it to reproduce the recording selected. This invention is directed to remote control devices suitable for use in sound reproducing systems of the type referred to.

The principal object of the present invention is to provide a direct association between the manually operated selector and the list of selections available for reproduction, and to provide a remote control unit which will be attractive in appearance and which will invite operation.

In carrying out my invention in its preferred form, I employ a casing through opposite sides of which there project the ends of an operating shaft which, within the casing, carries a cylindrical drum upon which are displayed the titles of recordings available for reproduction. The front of the casing is provided with a window through which a portion of the drum is visible; and by rotating the shaft, through the medium of knobs provided on its ends, any of the titles displayed on the drum may be brought into alignment with a stationary index associated with the window. The selector mechanism within the casing includes a selector switch operated by rotation of the shaft and operating to predispose the sound reproducing mechanism for reproduction of the recording whose title is displayed opposite the index. The remote control device includes a coin receiver operating to reject defective coins and slugs and to pass good coins to a coin-operated control switch which serves to initiate the reproduction of the recording selected as above indicated.

The accompanying drawings illustrate my invention: Fig. 1 is a front elevation of the remote control unit; Fig. 2 is a vertical section on the line 2—2 of Fig. 3; Fig. 3 is a vertical section on the line 3—3 of Fig. 2; and Fig. 4 is a fragmental vertical section on the line 4—4 of Fig. 2.

A casing of the type in which my device is enclosed may take any desired form, the form shown in the drawings being that shown in the

co-pending application of myself and Paul U. Lannerd, Serial No. 365,174, filed November 12, 1940, of which this application is a division.

The particular casing illustrated in the drawings comprises a frame having a back wall 10, a bottom wall 11, and a top wall 12. Associated with the frame we provide a cover 15 removably pivoted to the front edge of the top wall 12 and provided with a lock-controlled latch 16 engageable with an ear 17 on the bottom wall 11 of the frame to hold the cover in place. As will be clear from Fig. 2, the front edge of the top wall 12 of the frame is provided with a rabbet groove adapted to receive the rear edge of the top wall of the cover, and the cover is provided with one or more rearwardly projecting fingers 18 having up-turned rear ends adapted to engage behind a flange 19 on the top wall 12 to hold the rear edge of the top wall of the cover seated in association with the top wall 12 when the cover is closed. By releasing the latch 16, the cover may be swung about the rear edge of its top wall as an axis until the fingers 18 clear the flange 19, as indicated by the dotted-line position in Fig. 3, whereupon the cover may be completely removed from the frame 10—11—12 to expose the mechanism mounted thereon.

Within the casing formed by the frame and cover there is mounted on the back wall 10 near one side thereof a forwardly projecting bracket 25 having a large circular opening covered by a disk 26 of insulating material. A sleeve 27 secured at the center of the disk 26 provides a bearing for supporting one end of a shaft 28, the opposite end of such shaft being rotatably supported in a bracket 29 projecting forwardly from the rear wall 10 near the opposite side thereof. The shaft 28 is long enough so that its ends project beyond the side walls of the cover 15, where they are provided with operating knobs 30 by means of which the shaft may be rotated.

The disk 26 of insulating material carries an annular series of fixed switch-contacts 32 the inner ends of which are adapted to be successively engaged by the outer end of a movable contact 33 mounted on the shaft 28 for rotation therewith, but insulated from such shaft. Within the annular ring of contacts 32, we mount on the inner face of the disk 26 a continuous annular contact 34 engaged by the inner end of the movable contact 33. The contacts 32, 33, and 34 constitute the selector switch. By rotation of the shaft 28, the outer end of the movable contact 33 may be brought into engagement with any of the fixed contacts 32 to predispose the sound reproducing

mechanism, by means hereinafter described, for reproduction of any of the available recordings.

To indicate to the operator the title of the recording which the sound reproducing mechanism is predisposed to reproduce, there is mounted upon the shaft 28 a cylindrical drum 36 which carries, arranged in an annular series, the titles of available recordings. As shown in the drawings, the drum 36 is provided with an annular series of axially extending slots 37 and with guides 38 which hold in respective association with the slots 37 cards 39 bearing the titles of available recordings. The cover 15 is provided in its front wall with a window 40 exposing to view a limited number of the titles on the drum 36; and associated with such window there is an index 41 (Fig. 1) indicating the title of the recording which the sound reproducing mechanism is predisposed to reproduce. As will be clear from Fig. 4, the drum 36 has a closed end 42 provided with a hub 43 which receives the shaft 28 and is rigidly secured thereto as by means of a set screw. The opposite end of the drum 36 is open to permit insertion and withdrawal of the cards 39.

For the purpose of illuminating the titles of available recordings on the circumference of the drum 36, the cards 39 bearing such titles may be of translucent material and the lamp 70 may be mounted within the drum in line with the window 40. Conveniently, the lamp 70 is mounted upon a support 71 having in rear of the lamp an extended, polished surface to reflect light through the translucent cards and the window 40.

The mounting of the list of available recordings upon the drum and the direct association of that drum with the selector switch and the index has a distinct advantage. Only a portion of the list of available recordings is visible through the window, and any prospective operator is impelled by curiosity to rotate the drum and discover the titles of the remaining recordings. The direct association of the title-bearing drum with the selector-switch facilitates operation; for, when the selector switch is set to reproduce any recording, the title of that recording appears in line with the index.

I claim as my invention:

1. In a remote control device for a selective sound-reproducing mechanism selectively oper-

able to reproduce any of a number of recordings, a casing, a horizontal shaft extending through said casing and projecting through at least one side wall thereof, a control knob on said shaft for rotating it, a drum secured to said shaft within said casing, said drum bearing an annular series of titles of the available recordings, said casing having in its front wall a window through which a limited number of said titles are visible, and selecting mechanism operated by said shaft for controlling the operation of said selective sound-reproducing mechanism.

2. In a remote control device for a selective sound-reproducing mechanism selectively operable to reproduce any of a number of recordings, a movable control member, a list of the titles of available recordings movable jointly with said control member, a stationary index past which the titles successively progress as the control member is moved, and selecting mechanism operated by said control member for controlling the operation of said selective sound-reproducing mechanism.

3. In a remote control device for a selective sound-reproducing mechanism selectively operable to reproduce any of a number of recordings, a rotatable shaft, a cylindrical drum secured to said shaft and co-axial therewith, said drum bearing an annular series of titles of available recordings, a stationary index past which said titles successively move as said shaft is rotated, and selecting mechanism operated by said shaft for controlling the operation of said selective-sound reproducing mechanism.

4. The invention set forth in claim 3 with the addition of a casing enclosing said drum, said casing being provided with a window through which a limited number of said titles are visible, and said index being associated with said window.

5. The invention set forth in claim 2 with the addition that said control member is rotatable, said list of titles being supported from and rotatable with said control member and being arranged in a circumferentially extending series.

6. The invention set forth in claim 3 with the addition that said titles are removable from association with said drum for replacement with a different series of titles.

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