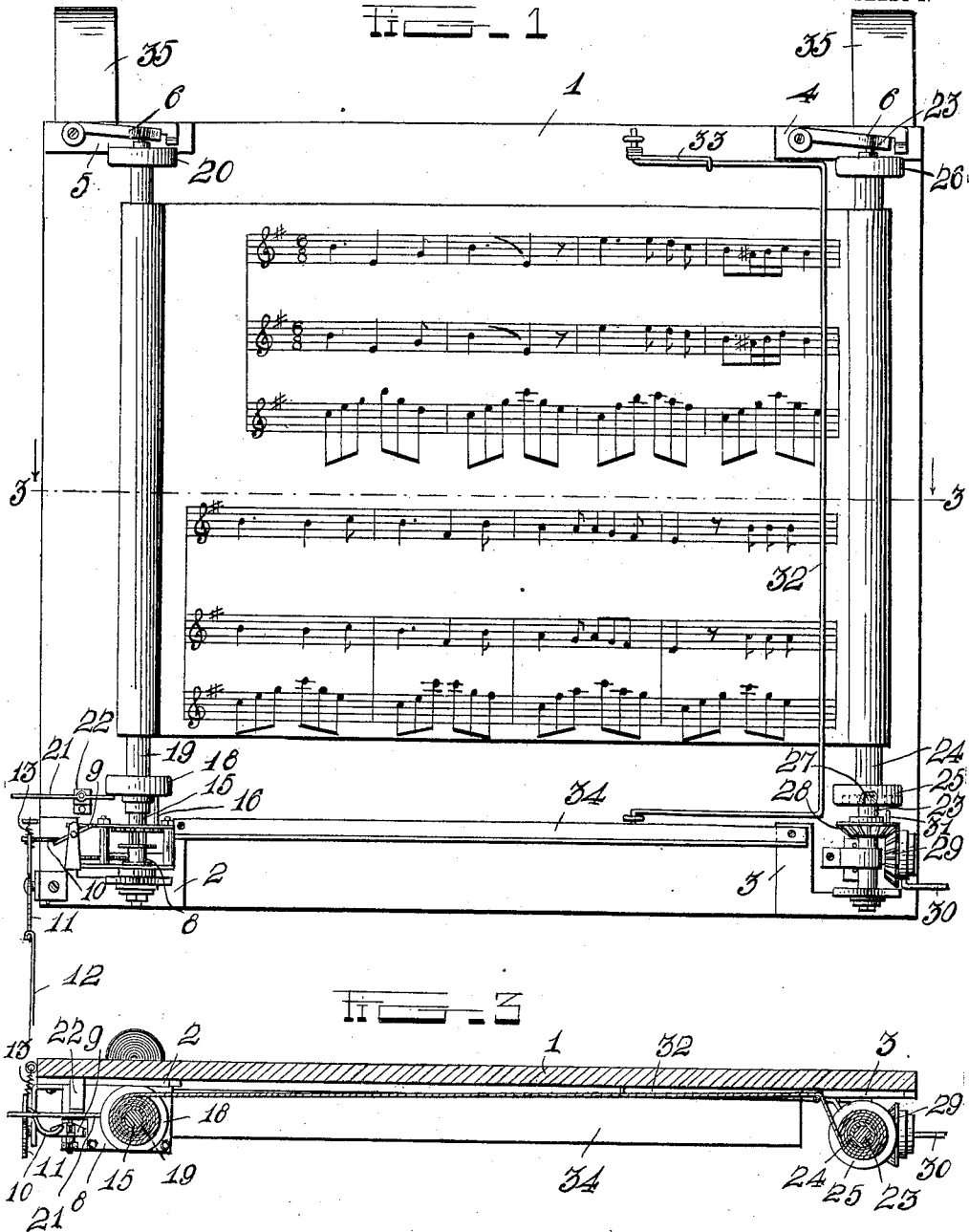


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 MUSIC WINDING MECHANISM.  
 APPLICATION FILED MAR. 10, 1910.

996,071.

Patented June 27, 1911.

2 SHEETS—SHEET 1.



Witnesses  
*C. R. Hardy*  
*C. H. Grishauer*

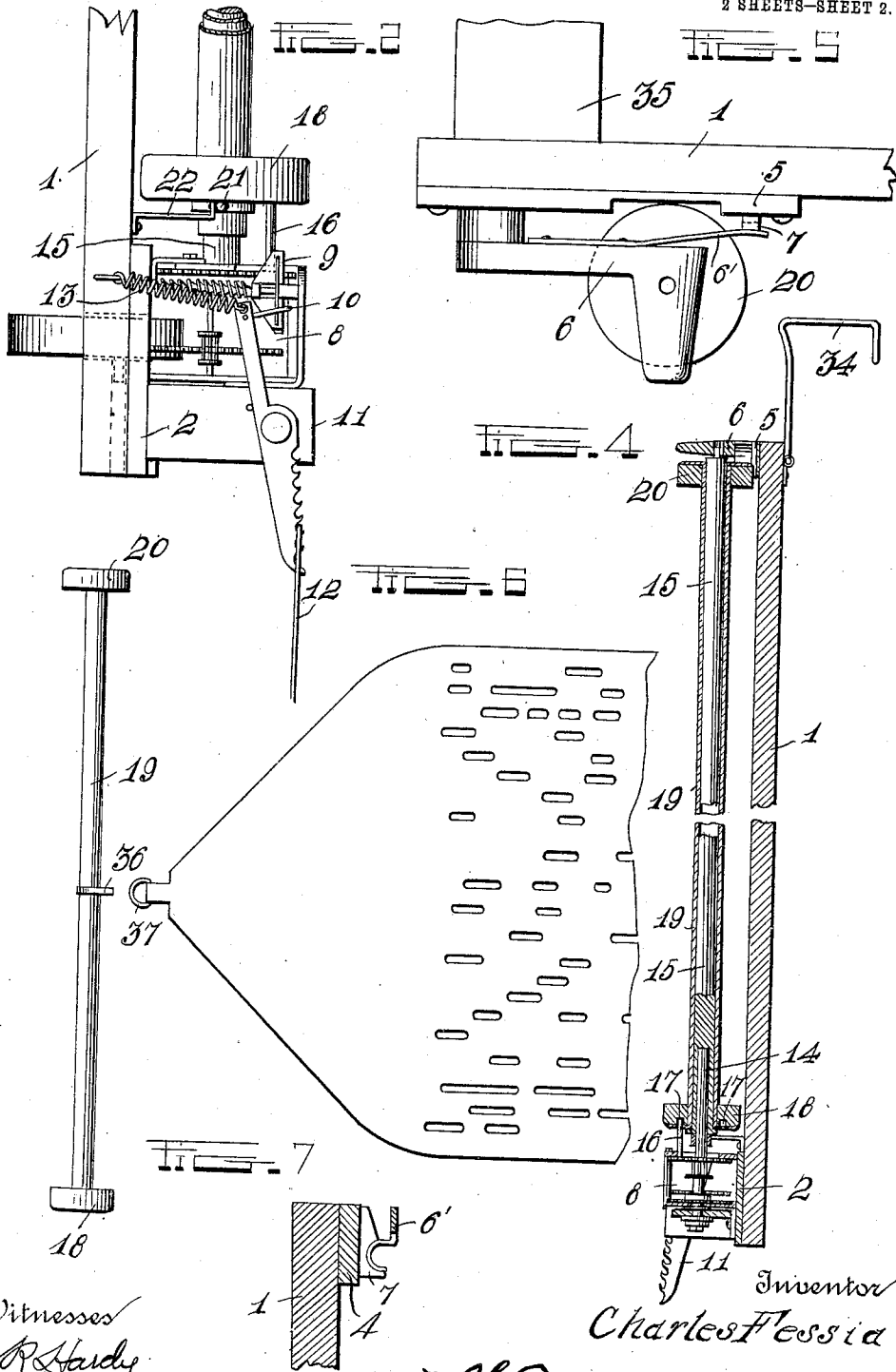
Inventor  
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 Attorneys

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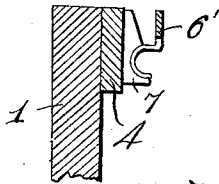
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2 SHEETS-SHEET 2.



Witnesses  
*C. R. Hardy*  
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Inventor  
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# UNITED STATES PATENT OFFICE.

CHARLES FESSIA, OF HURLEY, WISCONSIN, ASSIGNOR OF ONE-THIRD TO BERNARD VERCELLI AND ONE-THIRD TO JOSEPH MOLINO, OF HURLEY, WISCONSIN.

## MUSIC-WINDING MECHANISM.

996,071.

Specification of Letters Patent. Patented June 27, 1911.

Application filed March 10, 1910. Serial No. 548,458.

To all whom it may concern:

Be it known that I, CHARLES FESSIA, a citizen of the United States, residing at Hurley, in the county of Iron and State of Wisconsin, have invented certain new and useful Improvements in Music-Winding Mechanism; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in music winding attachments for pianos, music stands and the like.

One object of the invention is to provide a music winding attachment or mechanism of this character having means whereby a printed or perforated roll of music may be automatically unwound from one roller and wound onto another at the desired speed.

Another object is to provide means for throwing the main music winding roller out of gear to permit the music to be unwound therefrom and rewound upon the first roller.

A further object is to provide means whereby the automatic winding mechanism is controlled.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a front view of a music winding attachment constructed in accordance with my invention; Fig. 2 is an end view of a portion of one end of the same; Fig. 3 is a horizontal sectional view; Fig. 4 is a detail vertical section through one of the winding rolls and shafts; Fig. 5 is a top plan view of one end of the attachment, showing the bearing bracket and spring catch for the upper ends of the winding shafts; Fig. 6 is a detail view of one of the winding rollers and the end of the music sheet, showing the manner in which the sheet is connected to the roller and showing a different form of music sheet from that shown in the first figures of the drawings. Fig. 7 is a detail horizontal sectional view of the spring catch and its keeper.

In the embodiment of the invention, I provide a supporting member which is preferably in the form of a light wooden board 1,

to the front side of which, adjacent to its opposite lower corners are secured brackets 2 and 3. To the upper opposite corners of the board are secured bracket plates 4 and 5. On the bracket plates 4 and 5 are pivotally mounted brackets 6, in which are formed bearing apertures to receive the upper end of music supporting shafts hereinafter described. The brackets 6 are provided with spring catches 6' which are adapted to engage keepers which are here shown and are preferably in the form of notched or recessed lugs 7 formed on the bracket plates 4 and 5, as shown in Fig. 7. By hingedly mounting the brackets 6 and providing spring catches for holding the same in operative position, said brackets may be readily swung back to permit the application and removal of the music winding rollers hereinafter described.

On the bracket 2 is arranged a spring motor 8 which may be of any suitable construction and which is here shown as being provided with an escapement 9 which is adapted to be engaged by a stop finger 10 secured to a pivoted controlling lever 11 having on one end a rack or series of notches, with one of which is adapted to be engaged the upper end of an operating rod or wire 12, the lower end of which extends downwardly and is connected with one of the pedals of the piano, (not shown) when the device is employed in connection with a piano, or with a suitable pedal provided for the purpose when the device is used in connection with a music stand. By a depression of the pedal a downward pull is exerted on the operating rod, and the stop finger 10 is thereby disengaged from the escapement 9 thus allowing the motor to start and operate the music winding roller, as will be hereinafter more fully described. To the upper end of the operating lever 11 is connected a light spring 13 which when the pressure on the pedal is released will retract said lever and thus engage the stop finger 10 with the escapement, thereby stopping the motor.

To the bracket 2 and motor frame, is secured an upwardly projecting stub shaft 14, with which is engaged a tubular roll supporting shaft 15, on the upper end of which is formed a pintle which is engaged with the bearing aperture in the hinged bracket 6 at the upper end of the board 1. On one of the wheels of the motor is fixedly mount-

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ed an upwardly projecting operating finger 16 which revolves with said gear and is adapted to be engaged by one of an annular series of sockets 17 formed in a disk 18 secured to the lower end of a tubular music winding roller 19 on the upper end of which is arranged a disk 20.

The tubular winding roller 19 is of less length than the shaft 15 and is adapted to be slipped up and down thereon by means of a shifting lever 21 which is pivoted in a suitable bracket 22 secured to the board 1. The winding roller 19 and disk 18 normally drop by gravity into position to engage the sockets 17 in said disk with the finger 16 of the motor, whereby said roller is operatively connected with the motor and driven thereby in the proper direction for winding the music sheet thereon. When it is desired to unwind the music sheet from the roller 19, the lever 21 is depressed, thus shifting or raising the roller upwardly and disengaging the sockets 17 in the disk 18 from the finger 16 thereby throwing said roller out of gear and permitting the music to be unwound therefrom.

In the brackets 3 and 4 at the opposite end of the board 1 is secured a supporting shaft 23 on which is loosely mounted a tubular music supporting and winding roller 24 having on its opposite ends, disks 25 and 26. In the lower side of the disk 26, is formed an annular series of sockets 27. On the shaft 23 adjacent to its lower end is fixedly mounted a bevel gear 28, with which is engaged a bevel operating gear 29 mounted on a suitable bearing bracket and having attached thereto a crank handle 30. On the bevel gear 28 is fixedly mounted a roller operating finger 31, with which is adapted to be engaged one of the sockets 27 of the disk 25 whereby said roller may be revolved by the crank handle 30 to rewind the music thereon, after the same has been automatically unwound therefrom onto the roller 19 by the motor 8, as hereinbefore described.

Pivotally connected to the board 1, adjacent to the roller 24, is a bail-shaped wire music holder 32, with one end of which is engaged a spring 33, whereby said holder is held in operative engagement with the sheet of music adjacent to the roller 24, thus holding this end of the sheet down in close engagement with the board 1. On the board 1, adjacent to its lower edge, is secured a shelf 34 which is adapted to contain the rolls of music for use on the attachment. To the up-

per rear side of the board are secured hooks 35 which are preferably constructed of flat metal and are covered with a suitable fabric to prevent the same from marring the piano frame with which they are engaged to support the attachment in proper position. The music holding rollers are preferably provided midway between their ends with spring hooks or catches 36 with which are engaged attaching rings 37 secured to the opposite ends of the music sheet, whereby said ends are connected with the rollers.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined in the appended claim.

Having thus described my invention, what I claim is:

In a music winding attachment of the character described, a supporting board, stationary brackets secured to the lower portion thereof, hinged brackets arranged on the upper portion of said board, roller supporting shafts mounted in said brackets, tubular winding rollers revolubly mounted on said shafts, a spring motor arranged at the lower end of one of said shafts, a disk secured to the lower end of one of said winding rollers, said disk having formed therein an annular series of sockets, an operating pin connected to said motor and adapted to be engaged with one of said sockets, whereby said roller is operatively connected to the motor, a shifting lever adapted to disengage said disk and roller from said pin, a reverse winding mechanism arranged on the shaft at the opposite end of the device, means to connect said mechanism with the winding roller on this shaft, whereby the music sheet may be rewound on said roller, and means whereby the opposite ends of the music sheet are connected to said winding rollers.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES FESSIA.

Witnesses:

HERB. M. NORRIS,  
GEORGIE ETHIER.