No. 624,397.

Patented May 2, 1899.

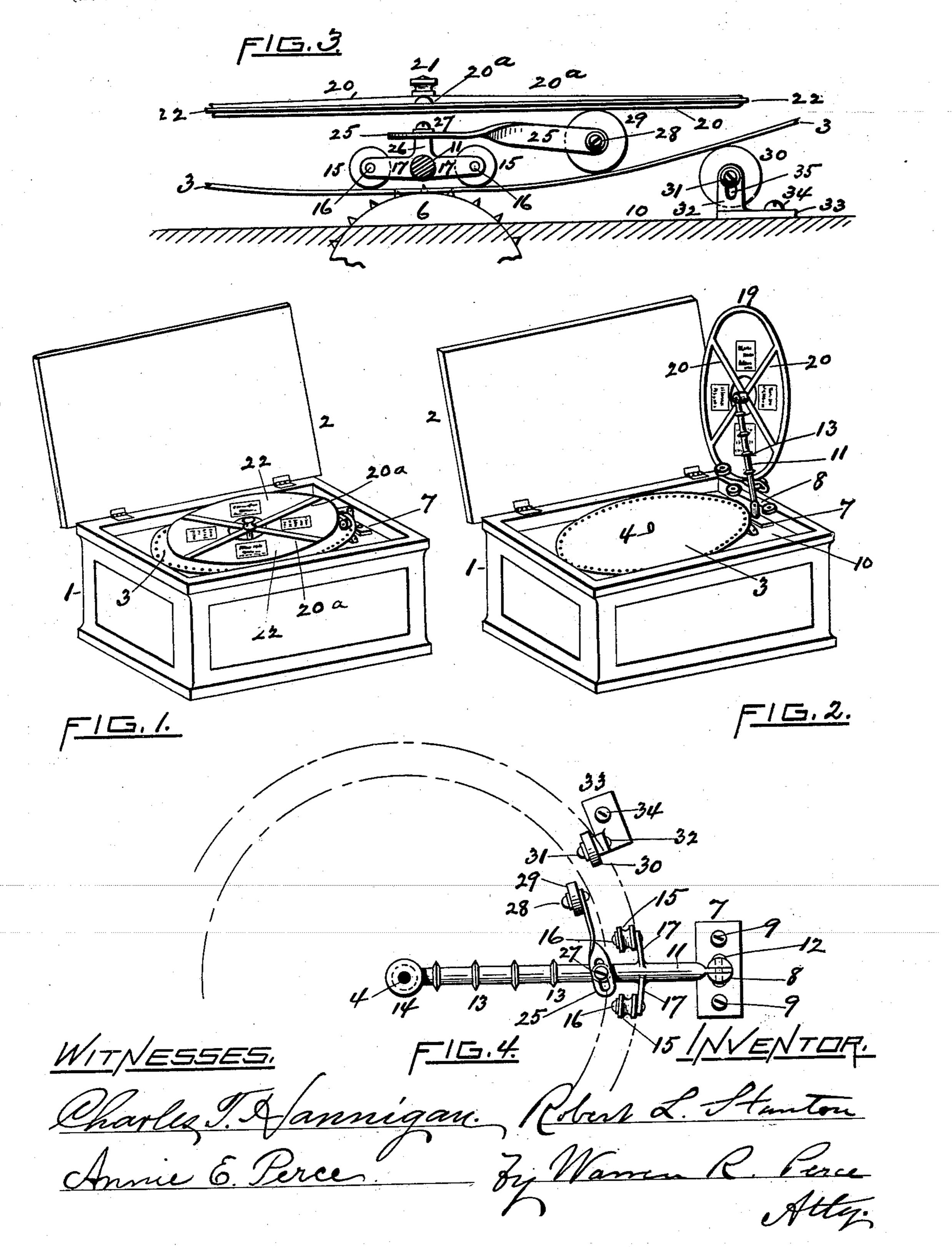
R. L. STANTON.

ADVERTISING ATTACHMENT FOR MUSIC BOXES.

(Application filed June 27, 1898.)

(No Model.)

2 Sheets—Sheet I.



R. L. STANTON.

ADVERTISING ATTACHMENT FOR MUSIC BOXES. (Application filed June 27, 1898.) 2 Sheets-Sheet 2. (No Model.) F_15.7.

United States Patent Office.

ROBERT L. STANTON, OF PROVIDENCE, RHODE ISLAND.

ADVERTISING ATTACHMENT FOR MUSIC-BOXES.

SPECIFICATION forming part of Letters Patent No. 624,397, dated May 2, 1899.

Application filed June 27, 1898. Serial No. 684,606. (No model.)

To all whom it may concern:

Be it known that I, ROBERT L. STANTON, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Advertising Attachments for Music-Boxes, of which the following is a specification, reference being had therein to the accompanying drawings.

Like numerals indicate like parts.

Figure 1 is a perspective view of a musicbox provided with my improved advertising apparatus when all the parts are in operative position. Fig. 2 is a perspective view of the 15 same when the advertising device is not in operative position, but is elevated out of connection with the tune-sheet of the music-box. Fig. 3 is a view in side elevation of the tunesheet and means for rotating the same, to-20 gether with the advertising-disk, the frictionroller, and tension-roller of my device, all as seen on line y y of Fig. 5 in the direction of the arrows there. Fig. 4 is a top plan of the arm and its hinged support and the guide-25 rollers, together with the friction-roller and tension-roller of my device. Fig. 5 is a top plan of my improved advertising apparatus mounted in operative position within the case of a music-box above and parallel to the tune-30 sheet, the circumferential edge of which is also shown in said figure. Fig. 6 is a top plan of the advertising-disk with one of the detachable sections thereof removed. Fig. 7 is a perspective view of such removed section. 35 Fig. 8 is a view of portions of said advertising-disk and tune-sheet, together with a portion of the arm for said sheet, and illustrates how said advertising-disk and tune-sheet are mounted, the view being that on line x x of 40 Fig. 6.

My invention is a device for displaying advertisements, and is adapted to be used in connection with a music-box and to derive from the mechanism thereof a rotary movement, by which said advertisements are consecutively brought into position to be read.

In the drawings my invention is shown in the form best suited for use with that kind of a music-box in which a rotating tune-sheet or disk of circular form has radially-arranged slots or projections to vibrate the steel tongues which produce the musical tones.

With this in view my invention consists of a music-box having a revolving member, which is adapted to vibrate the sounding- 55 tongues, in combination with a disk or frame provided with means for holding advertising sheets or plates in position thereon and rotatable upon a fixed pivot and means to communicate motion from said revolving mem- 60 ber to said disk or frame to rotate the latter, as hereinafter particularly described.

The box or case of the music-box is shown at 1 and its cover at 2. The tune-sheet 3 is a metallic disk centrally mounted rotatably 65 upon the stud 4. It is circular in form and has near its edge, all around, the holes 5, which are engaged by the spurs of the sprocket-wheel 6. The revolution of this sprocket-wheel 6, caused, as usual, by the spring within the 70 box, results, by reason of the said engagement with the holes 5 of the tune-sheet 3, in the rotation of said sheet or disk, and such rotation causes the sheet or disk, which is made with radial slots or projections, to operate the 75 sounding-tongues in the well-known manner.

A plate 7, having a diametrically-slotted post 8, is fastened by screws 9 to the platform 10 of the music-box 1. An arm 11, having one end thinned and adapted to enter the slot 80 of the post 8, is there pivotally mounted by the pin 12 and is movable in a vertical plane from the horizontal position shown in Figs. 3, 4, and 8 to the elevated position illustrated in Fig. 2. Said arm 11 is provided with fric- 85 tion-rollers 13, and at its inner end it has a centrally-recessed head 14, which receives and rests upon the stud 4, as seen in Fig. 8. Said arm is secured in place upon the stud 4 by means of a catch, (shown in Fig. 8,) which is 90 movable through the head 14 into a slot in the stud 4.

Guide-rollers 15 15 are mounted rotatably upon the stud-pins 16 16 of spring-pressed levers 17 17, which extend from the arm 11. 95 These rollers 15 serve to press the sheet or disk 3 downward toward and upon the sprocket-wheel 6, as shown in Fig. 3, so as to enable the proper engagement of the sprockets with the holes 5 of said disk or sheet.

All the parts thus far described are in the well-known form and are placed as usual in music-boxes of this class.

Myinvention is an attachment for such mu-

sic-boxes and is described as follows: An advertising-disk (which I designate comprehensively as 18) is composed of two parts arranged one upon the other, the lower part 5 consisting of a circular ring 19 and two diametrical cross bars or ribs 20, placed at right angles with each other, as seen in Figs. 5 and 6. The upper portion consists of two crossbars 20° at right angles with each other, as ro shown in Figs. 5, 6, and 7. At the meeting place, at the middle of these cross-bars, are central apertures through which a pivot 21 passes, having a knurled head and a cylindrical shank and a screw-threaded end of less 15 diameter than said shank, the screw-threaded end engaging in a screw-threaded hole tapped in the head 14 of the arm 11, all as plainly illustrated in Fig. 8. The advertising-disk is thus rotatable upon the cylindrical shank 20 of the pivot 21. The cross-bars 20 20° are somewhat cut away on their inner or contiguous surfaces, as seen in Fig. 8, to allow the insertion there of advertising sheets or sections 22, and said arms are secured together 25 by the screws 23. These screws also serve to hold the advertising sheets or sections firmly by compression between said crossarms. Each advertising sheet or section 22 is in the form of a quarter-circle, (see Fig. 7,) 30 except that, preferably, the inner edge is concave or cut concentric or parallel with the outer edge. The two straight edges thereof are received between and held by the upper and lower cross-bars, respectively, as shown. 35 On each advertising piece or section 22 is displayed an advertisement 24. These advertising-sheets are preferably of pasteboard or other suitable opaque material, but may be of glass, if desired, as indicated in Fig. 2, in 40 which case their transparency allows a view of the tune-disk, which is moving beneath them. A slotted bar 25 is mounted on a post 26 of the arm 11 and held adjustably thereon by a

screw 27. Said bar 25 is twisted a quarter-45 turn and at its outer end has a stud 28, on which is mounted a feed-roller 29.

A tension-roller 30 is mounted on a screwpivot 31 upon a post 32 of a base or plate 33

upon the platform 10 of the music-box 1. Said base-plate 33 is secured in position by a screw 34.

The post 32 is slotted, as indicated at 35 in

Fig. 3, so that the tension-roller 30 may be adjusted in height by means of the screw55 pivot 31.

The advertising-disk is caused to rotate in a horizontal plane in a direction opposite to that of the rotation of the tune sheet or disk 3 by means of the friction-roller 29, Fig. 3.

60 When the tune sheet or disk 3 is rotated by the sprocket-wheel 6 in the usual manner, such rotation revolves the friction-roller 29, which rests upon the tune sheet or disk 3. The ring portion 19 of the advertising-disk 65 rests upon the top of said friction-roller 29 and the revolution of the latter, caused, as aforesaid, by the rotation of the tune-sheet 3,

turns the advertising-disk in a direction opposite to that of the movement of the tune-sheet 3. This rotary movement of the adver-70 tising-disk brings consecutively to the front and into reading position the several advertisements 24 thereon.

As the tune-sheets 3 when made, as usual, of sheet metal are not perfectly flat, but are 75 liable to be sprung or bent somewhat out of true plane, it is desirable to provide a tension-roller, as 30, which, being properly adjusted in height, presses up the disk or sheet 3 and insures a firmer frictional hold thereon 80 by the roller 29 and a more uniform movement of the advertising-disk in relation to that of the music-disk 3.

This advertising device is most useful when used in connection with a coin-controlled 85 music-box. The person who has deposited the coin in the music-box to operate the same gives attention not only to the tune which is played, but also to the advertisements, which are moving at the same time, and the novelty 90 of the device and the opposite direction of travel of the two disks, as well as his curiosity to ascertain the cause of such diverse movements, serve to attract his attention to the advertisements themselves, and thus the de- 95 vice is a valuable means of advertising to him and the bystanders, who generally gather about to listen to the music, the various kinds of business or merchandise which may be set forth on the advertising-sections. 100

In case it is desired to have the advertising-disk rotate in a vertical plane the mechanism should be modified to impart rotation to a vertically-revolving disk from the horizon-tally-revolving tune-sheet by any of the 105 methods well known to mechanics; but such modification would be within the scope of my invention and the mechanical principle thereof.

I claim as a novel and useful invention and 110 desire to secure by Letters Patent—

1. In a music-box having sounding-tongues, a revolving tune-sheet properly mounted and means to turn the same, the combination therewith of a rotatable advertising-disk, mounted in a plane parallel with said tune-sheet, and an arm having a roller thereon, which is in frictional contact with both the tune-sheet and advertising-disk for the purpose of communicating motion from the former to the 120 latter, substantially as specified.

2. In a music-box having sounding-tongues, the combination of a tune-sheet adapted to operate said tongues and mounted rotatably by its head upon a stud or pivot, an advertising-disk mounted rotatably upon said head, an arm fixed in position to extend between said tune-sheet and advertising-disk and a friction-roller upon said arm in contact with said tune-sheet and advertising-sheet for the 130 purpose of communicating motion from the former to the latter, substantially as shown.

3. In a music-box having sounding-tongues, the combination of a tune-sheet adapted to

operate said tongues and mounted rotatably by its head upon a stud or pivot, an advertising-disk mounted rotatably upon said head, an arm fixed in position to extend between 5 said tune-sheet and advertising-disk, a friction-roller upon said arm in contact with said tune-sheet and advertising-disk for the purpose of communicating motion from the former to the latter, and a tension-roller mounted to upon a post and in contact with the tune-

sheet, substantially as set forth.

4. In a music-box having sounding-tongues, the combination of a tune-sheet adapted to - operate said tongues and mounted rotatably 15 by its head upon a stud or pivot, an advertising-disk mounted rotatably upon said head, an arm fixed in position to extend between said tune-sheet and advertising-disk, a friction-roller upon said arm in contact with said 20 tune-sheet and advertising-disk for the purpose of communicating motion from the former to the latter, a vertically-slotted post and a tension-roller mounted adjustably in the slot of the post by means of a screw, substan-25 tially as described.

5. In a music-box having sounding-tongues, the combination of a tune-sheet adapted to operate said tongues, rotatably mounted by its head upon a stud or pivot, a series of holes in the circumferential margin of said sheet, a sprocket-wheel turned by power and engageable with said tune-sheet in the marginal holes thereof, an arm hinged at its outer end upon a post or support and vertically mov-35 able by means of said hinge, a head upon the inner end of said arm, friction-rollers upon said arm in contact with said tune-sheet, an arm extending from the first-mentioned arm, and having a roller movable by its contact 40 with said tune-sheet and an advertising-disk mounted rotatably on the head of the firstmentioned arm and resting on and movable by said roller, substantially as specified.

6. In a music-box having sounding-tongues, 45 the combination of a tune-sheet adapted to operate said tongues, rotatably mounted by its head upon a stud or pivot, a series of holes in the circumferential margin of said sheet, a sprocket-wheel turned by power and en-50 gageable with said tune-sheet in the marginal holes thereof, an arm hinged at its outer end

upon a post or support and vertically movable by means of said hinge, a head upon the inner end of said arm, friction-rollers upon said arm in contact with said tune-sheet, an 55 arm extending from the first-mentioned arm and having a roller movable by its contact with said tune-sheet, guide-rollers upon levers extending from the arm first mentioned, an advertising-disk mounted rotatably on the 60 head of the first-mentioned arm and resting on and movable by the roller last aforesaid and a tension-roller mounted upon a support and frictionally engageable with the tunesheet, substantially as shown.

7. A rotatable advertising-disk consisting of a plurality of detachable advertising-sections and two sets of cross-arms, centrally pivoted upon a proper support and having longitudinal openings between them along 70 their contiguous surfaces, adapted to receive said advertising-sections and screws passing through said cross-arms for the purpose of holding them in clamping contact with said

advertising-sections, substantially as de-75 scribed.

8. The combination of an advertising-disk comprising an upper and lower frame and detachable advertising-sections between the same, said upper frame consisting of cross- 80 arms arranged at an angle with each other and having a central aperture and also a longitudinal recess on each side, and the lower frame consisting of an equal number of crossarms similarly bored and recessed and corre- 85 sponding with the upper arms in size and position, together with a ring portion connecting the ends of the said lower arms, screws passing through said upper and lower arms, respectively, and adapted to clamp said ad- 90 vertising-sections by said arms and a rotating roller properly mounted and supporting said advertising-disk upon said ring portion of the lower frame and adapted to rotate said disk by its frictional contact therewith, sub- 95 stantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT L. STANTON.

Witnesses:

EDWARD F. LOVEJOY, WARREN R. PERCE.