

No. 755,946.

PATENTED MAR. 29, 1904.

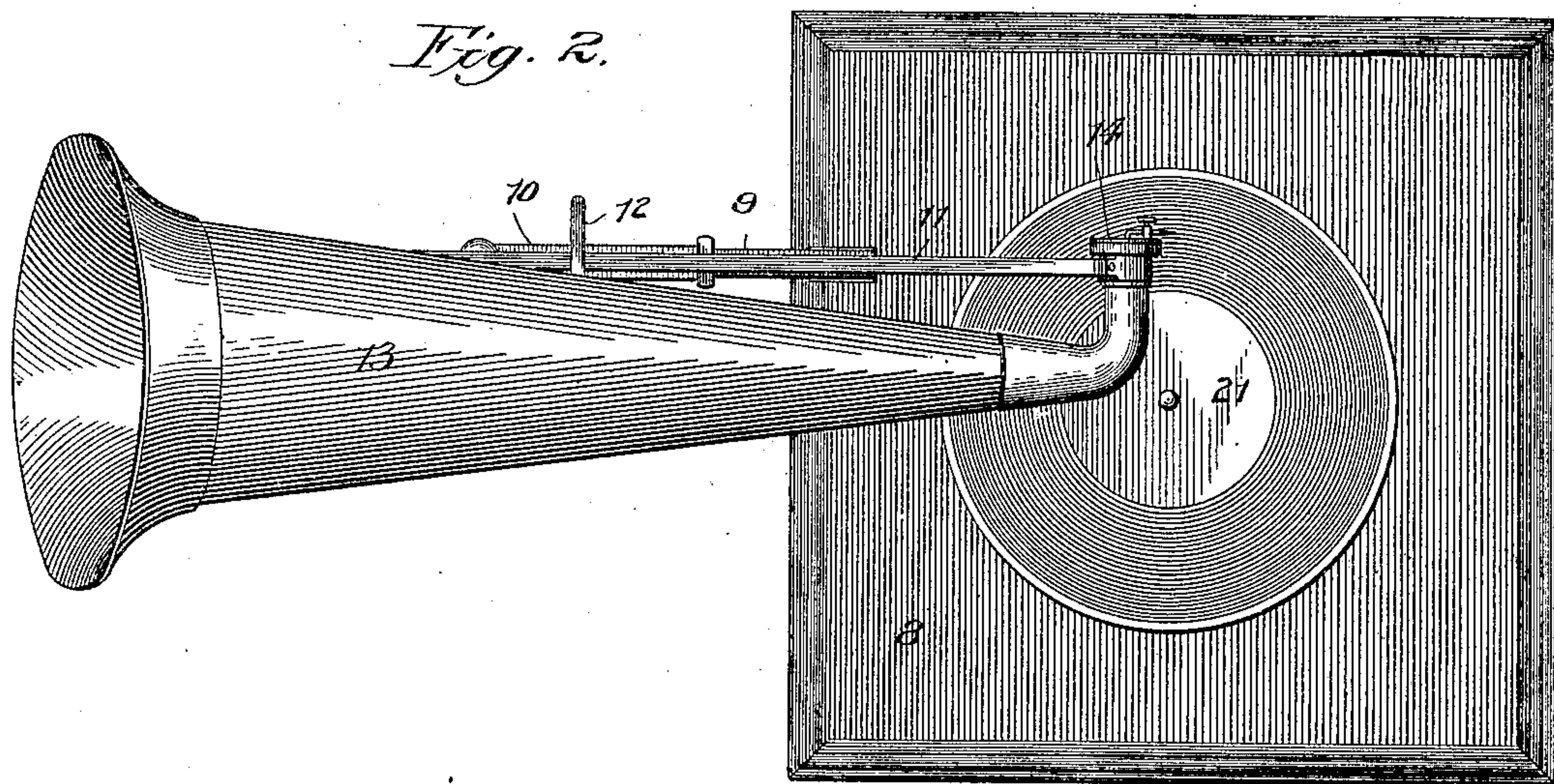
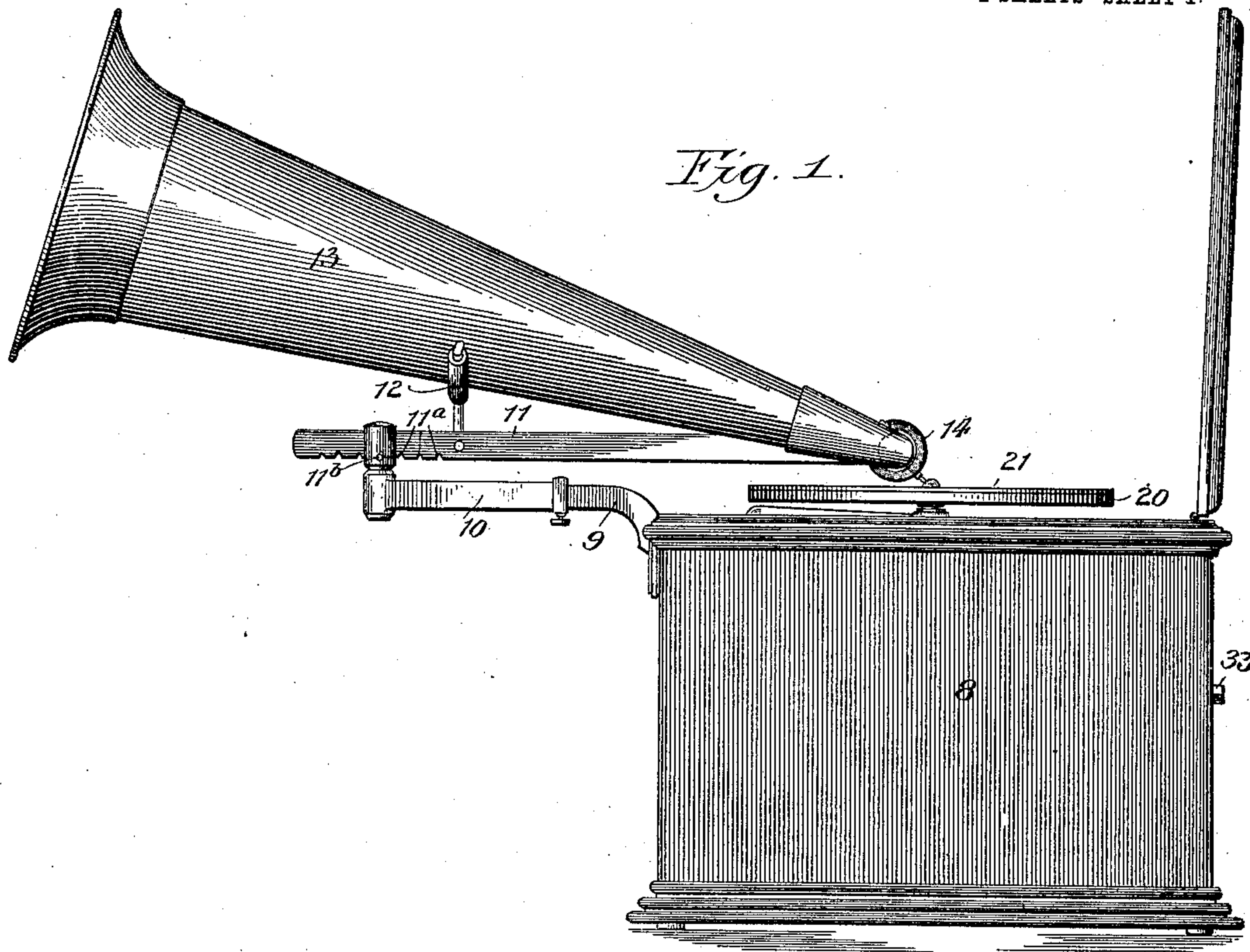
J. L. SCHUREMAN, JR.

GRAMOPHONE ATTACHMENT FOR MUSIC BOXES.

APPLICATION FILED MAR. 17, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:  
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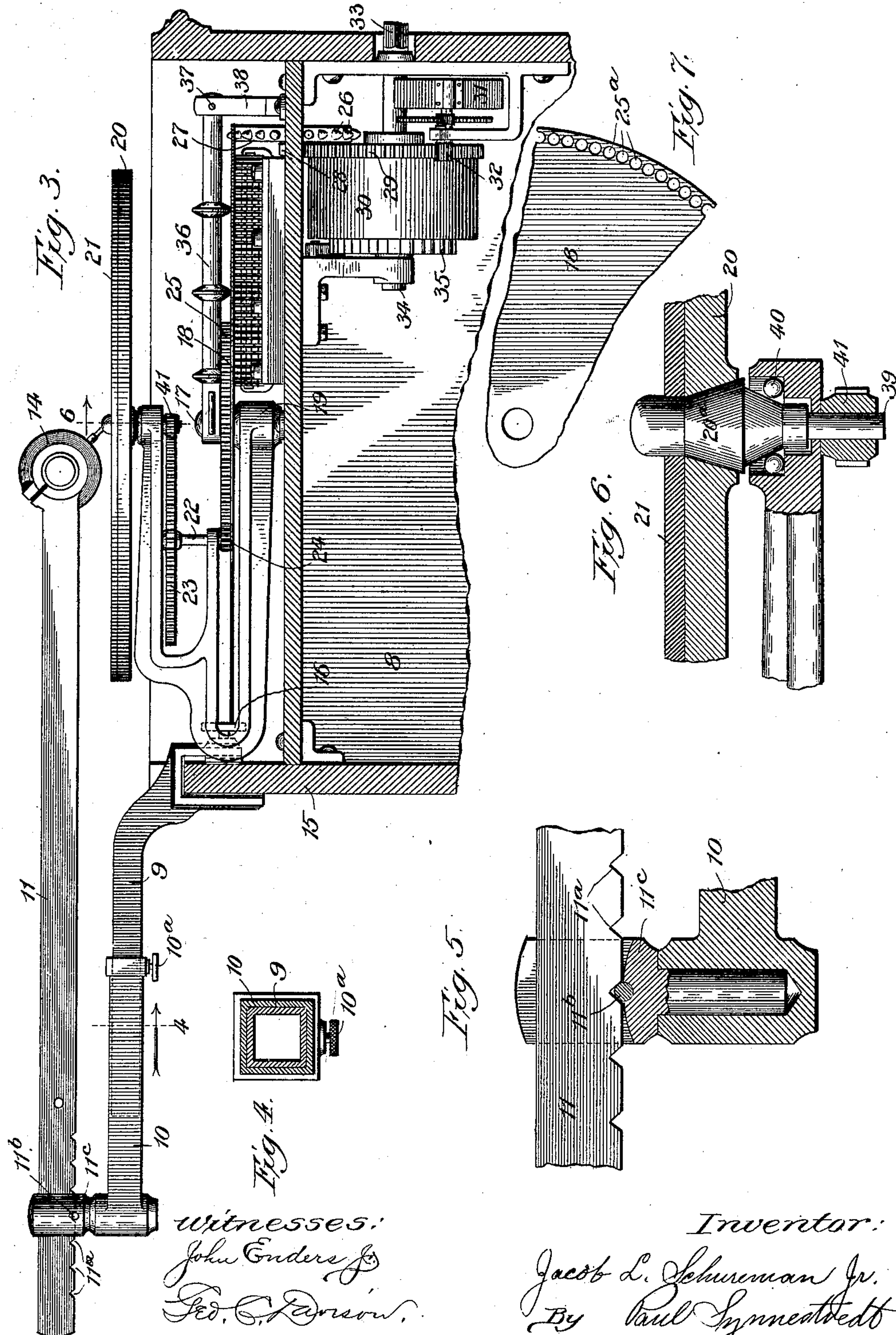
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2 SHEETS—SHEET 2.



Witnesses:  
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## UNITED STATES PATENT OFFICE.

JACOB L. SCHUREMAN, JR., OF CHICAGO, ILLINOIS.

## GRAMOPHONE ATTACHMENT FOR MUSIC-BOXES.

SPECIFICATION forming part of Letters Patent No. 755,946, dated March 29, 1904.

Application filed March 17, 1902. Serial No. 98,617. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB L. SCHUREMAN, Jr., a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Gramophone Attachments for Music-Boxes, of which the following, taken in connection with the accompanying drawings, is a specification.

10 This invention has reference to the provision of a novel combination of sound record supporting devices, with a reproducer therefor, means for supporting the said mechanism and devices in proximity to a music box or other  
15 equivalent apparatus having a suitable driving spring mechanism, and driving means for imparting movement to the sound record supporting mechanism from the driving mechanism of the music box.

20 Another object of my present invention is the provision of an apparatus of the type described, which can be manufactured and put on the market at a low price, because it is not necessary in conjunction with the same to  
25 supply any driving mechanism, the whole device being adapted for attachment to some ordinary form of music box or other like apparatus, which is already provided with driving mechanism, and thereby make it possible to  
30 use the driving mechanism of the music box for actuating or furnishing requisite power to the gramophone attachment.

The above, as well as such other objects as may hereinafter appear, I attain by means of a  
35 construction which I have illustrated in preferred form in the accompanying drawings, in which

Figure 1 is a side elevation of an apparatus embodying my improvements,

40 Figure 2 is a plan view thereof,

Figure 3 is a view in section, showing certain of the interior parts of the device in elevation,

Figure 4 is a transverse section on the line  
45 4 of Figure 3,

Figure 5 is a detail, showing the method of mounting the lever that carries the reproducing or sound box,

50 Figure 6 is a section on the line 6 of Figure 3, and

Figure 7 is a partial plan view of the driving disk of the music box.

Referring now more particularly to Figures 1 and 2 it will be seen that upon a music box 8, by means of a bracket 9, which has an ex- 55 tensible arm 10 having tubular engagement with the arm 9, I support a lever 11, which, by means of the device 12, carries a horn 13, the smaller end of which is mounted on a sound or reproducing box 14, which is also 60 supported by the lever 11. By referring now to Figures 3 to 7 inclusive, it will be seen how I have arranged the details of the mechanism already referred to. The bracket 9 is secured to the side 15 of the box 8 by means of the 65 clamp device having the thumb-screw 16, and upon the shaft 17, which is the shaft of the music box that carries the rotating disks which occupy the position indicated at 18, there is 70 mounted a bracket 19 which extends around the disk 18 and upwardly, and supports the record carrying device 20, the record in this case being of the flat disk type, as indicated at 21.

The bracket 19 carries a spindle 22, on the 75 upper end of which is a gear 23, of relatively large diameter, and on the lower end of which is a small gear or pinion 24, the latter being constructed to mate with a gearing 25, which is constructed to be rotated by the disk 18 on 80 the shaft 17 of the music box, the device as shown having the ring 25 firmly secured to the disk 18, which may take the place of the record disk of the music box, and is substantially like the same, save that the projections, 85 or devices which produce the sound in the music box may be omitted the disk 18 being a plain disk, save for the apertures arranged around its edge, which I have marked 25<sup>a</sup> (see Figure 7), which apertures engage the 90 teeth 26 of the wheel 27, which latter in turn is driven from the gear 28 through the gear 29, and spring mechanism 30. The spring mechanism 30 has the usual, or any preferred form of governing mechanism, as for example the 95 fan 31 driven by the gear 32, which mechanism serves to control the speed of the device. At 33 is indicated a squared end on the shaft 34, which carries the spring mechanism, the squared end serving for the purpose of appli- 100



cation of a key or other winding device, the shaft 34 being also provided with the usual form of ratchet wheel 35, to hold the spring when wound.

5 In order to put the bracket 19 in place on the shaft 17, the spindle 36 which is mounted pivotally at 37, as is usual in devices of this character, upon a bracket 38, is disengaged from the shaft 17 and raised up out of the  
10 way, so that the parts 19 and 18, with the gearing 25 attached to 18, can be put in place as shown.

Referring now to Figure 6 it will be seen that the record supporting plate 20 is carried  
15 on a conical part 20<sup>a</sup> so that it can be lifted off readily when desired, the conical part 20<sup>a</sup> being formed on the shaft 39, which is supported by a ball-bearing 40, and on its lower end has a pinion 41, which is driven from the  
20 gear 23.

As shown in Figure 4, the arm 10 is square and tubular, and has within it a square tubular extension of the bracket 9, the two parts being capable of telescopic movement relative  
25 to each other, and provided with locking means in the shape of a screw 10<sup>a</sup>, this provision being for the purpose of getting proper adjustment of the sound box and the lever 11 which carries it relative to the record 21.

30 The lever 11 is carried upon a notch 11<sup>a</sup> formed in the lower face thereof, there being a plurality of such notches to permit the position of the lever to be shifted, so that either one or the other of said notches, as preferred,  
35 may be caused to engage the supporting pin 11<sup>b</sup>, carried upon the pivotal supporting device 11<sup>c</sup>, mounted in the end of the arm 10.

Briefly described, the operation of my invention is as follows:

40 The spindle 36 having been raised out of the way, the bracket 19 with the disk 18 and attached gear ring 25 are put in place as shown in Figure 3, and the bracket 9 is secured as also shown in Figure 3 to the side 15 of the  
45 music box, and the sound box 14 having been properly adjusted, the device is started, when the spring mechanism 30 will drive through the train of gears shown, the disk 18 and this in turn the gear ring 25, and this through the  
50 train of gears shown, the record plate 20, carrying the record around, as is usual in mechanism of this class. By merely removing the brackets 9 and 19 with their connected parts, the gramophone attachment is taken off the  
55 music box, which can then be used as before, simply as a music box, by the substitution of a music record in place of the disk 18, which comes off when the bracket 19 is removed.

60 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a music box, a driving mechanism therefor, a disk driven by said driving mechanism, a shaft upon which said disk

is mounted, a bracket carrying a gramophone  
65 record, means for driving said gramophone record from said disk, and sound reproducing mechanism mounted adjacent to said record, substantially as described.

2. The combination with a music box pro-  
70 vided with a horizontal revolving disk driven by a motor in the box, of a bracket arm surrounding said disk, a gear wheel fixed upon said disk and gear wheels supported by said  
75 bracket arm driving a revolving horizontal table, and a swinging arm carrying a sound box, in co-operation with a record placed upon said revolving table, substantially as described.

3. The combination with a box containing a  
80 motor, of an extensible arm attached to the side of the box carrying pivoted thereto an adjustable arm bearing a reproducer, a detachable bracket carrying gearing to mesh with the mechanism of the motor and supporting  
85 a revolving table for operating a gramophone record.

4. In a music box attachment, the combination of a bracket attachable to the spindle of  
90 the disk of a music box, supporting a disk and carrying gear wheels, and a rotating table above the disk, said gears being moved by the disk, by which the rotation of the disk rotates said table above the same, substantially  
95 as described.

5. The combination of a receptacle containing a motor and revolving disk, of a detach-  
100 able arm secured to the receptacle bearing an adjustable arm which carries a reproducer, and a detachable bracket provided with gear wheels and adapted to embrace said revolving disk and revolve a gramophone record through the agency of said gear wheels, substantially  
as described.

6. The combination with a motor and a re-  
105 volving disk driven thereby, of a gear wheel fixed upon said revolving disk, a bracket arm carrying said disk and bearing above the center thereof a revolving table, gear wheels en-  
110 gaging the first named gear and attached to the table for rotating the latter, a rigid arm carrying a pivoted lever and the end of the pivoted lever provided with a sound reproducing device for gramophones, substantially  
115 as described.

7. The combination with a music box pro-  
120 vided with a horizontal revolving disk driven by a motor in the box, of a bracket arm supporting said disk, a gear wheel fixed upon said disk and gear wheels supported by said bracket arm driving a revolving horizontal  
table, and a swinging arm carrying a sound box, in co-operation with a record placed upon said revolving table, substantially as described.

8. The combination of a music box having  
a driving mechanism, and a spindle for supporting the note sheet, a carrier adapted for

detachable connection with said spindle, a record holder mounted to rotate upon said carrier, and a driving connection mounted upon said carrier to transmit movement from the  
5 driving mechanism of the music box to the said record holder.

In testimony whereof I have hereunto set

my hand in the presence of two subscribing witnesses.

JACOB L. SCHUREMAN, JR.

Witnesses:

PAUL SYNNESTVEDT,

PAUL CARPENTER.