

No. 865,344.

PATENTED SEPT. 3, 1907.

A. T. MOORE.  
MULTIPLE GRAMOPHONE.  
APPLICATION FILED SEPT. 11, 1903.

Fig. 1

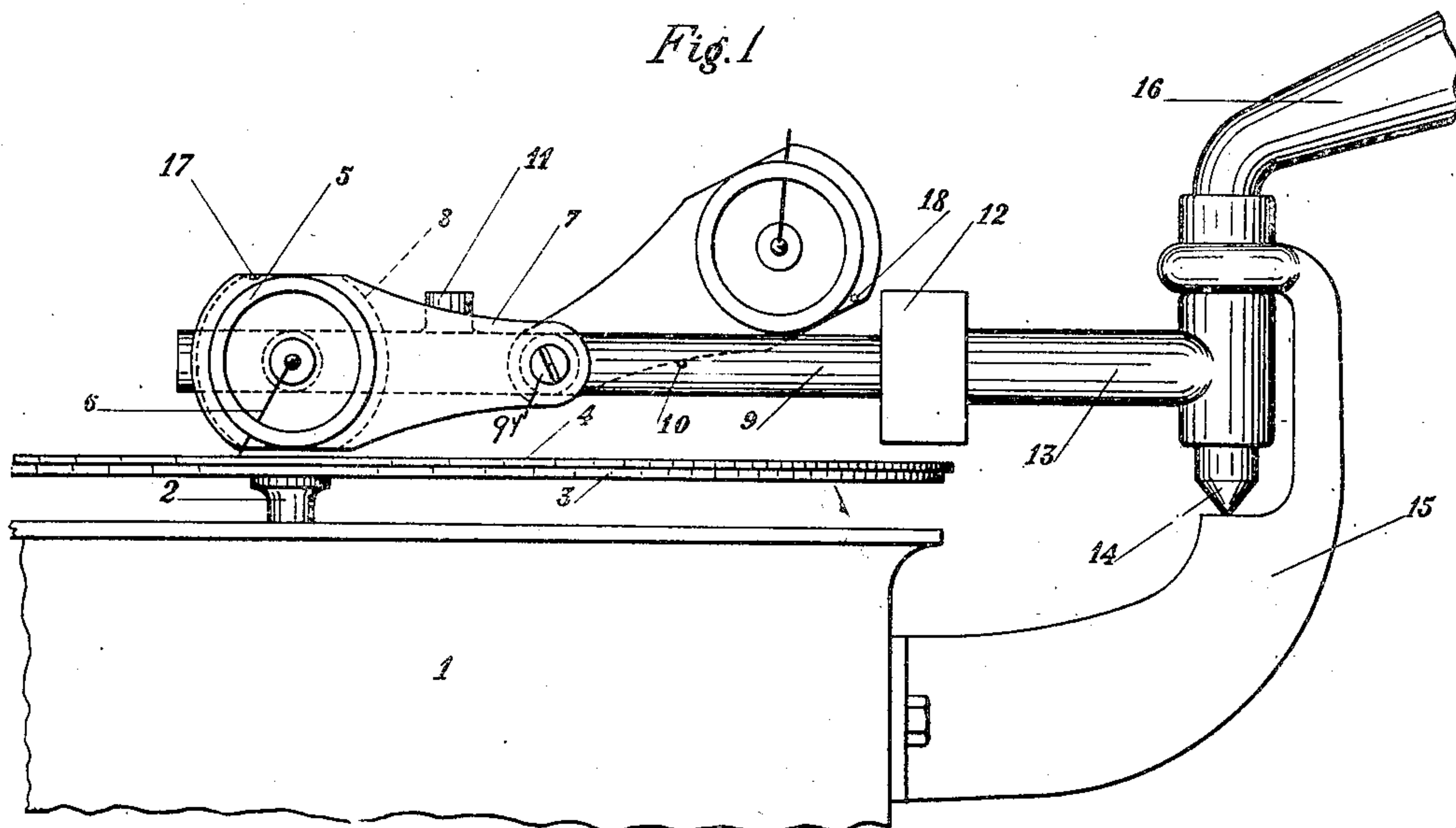
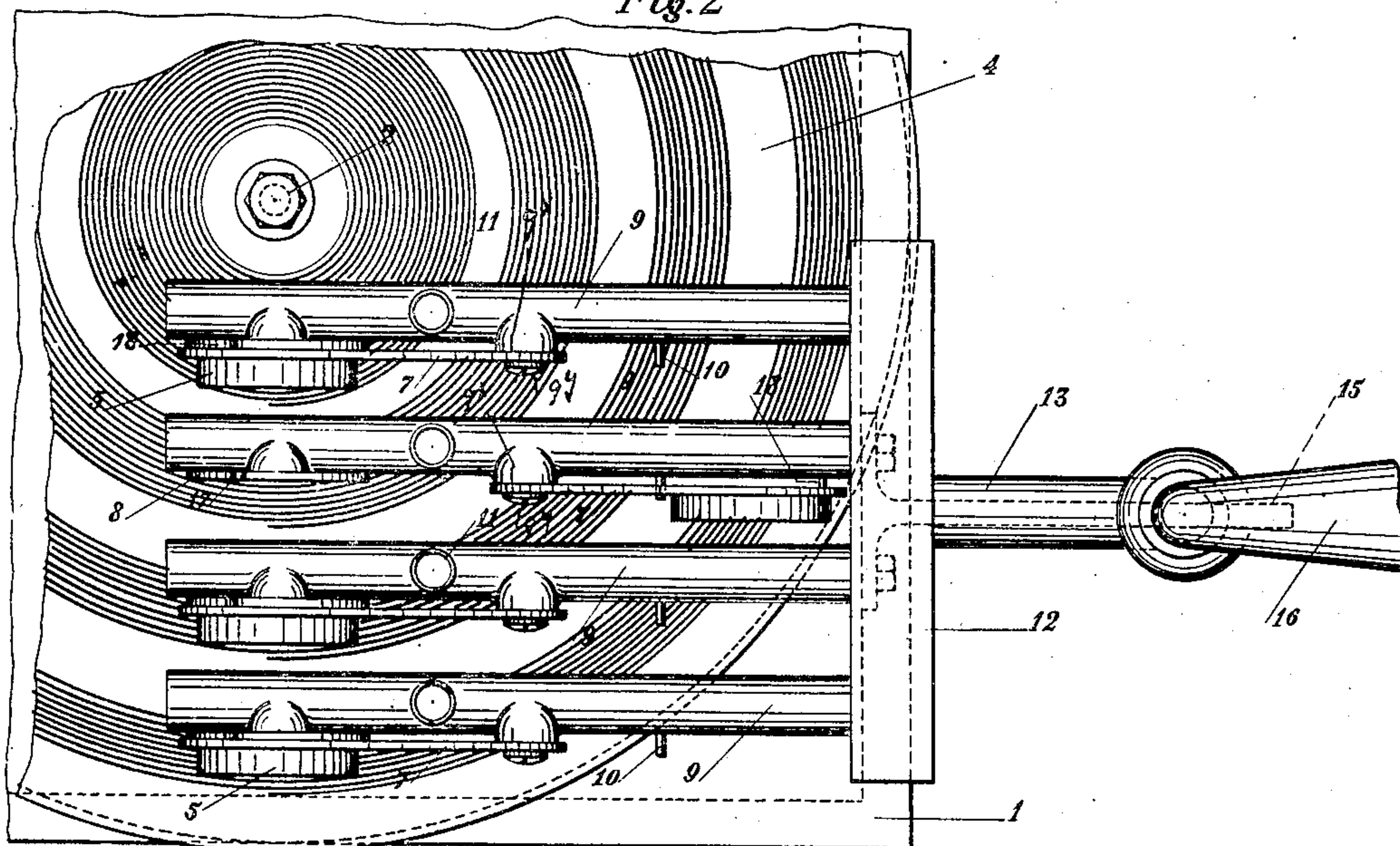


Fig. 2



WITNESSES:

S. M. Jones  
C. W. Kimbaster

Alexander T. Moore INVENTOR



# UNITED STATES PATENT OFFICE.

ALEXANDER T. MOORE, OF NEW ORLEANS, LOUISIANA.

## MULTIPLE GRAMOPHONE.

No. 865,344.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed September 11, 1903. Serial No. 172,811.

*To all whom it may concern:*

Be it known that I, ALEXANDER THOMAS MOORE, a citizen of the United States of America, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Multiple Gramophones, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a multiple gramophone and particularly to a structure employing a plurality of sound boxes in connection with a single reproducing disk.

The invention has for an object to provide means whereby a plurality of sound boxes may be used either independently, or conjointly in connection with a single horn.

A further object is to provide means whereby the sound boxes may be thrown in or out of operative position relative to the conducting tubes upon which they are supported.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawing Figure 1 is a side elevation of the invention, and Fig. 2 a top plan thereof.

Like numerals of reference indicate like parts in the several figures of the drawing.

The numeral 1 designates a casing or box provided with a driving shaft 2 carrying a disk 3 upon which the record 4 is placed. This casing is also provided with a bracket arm 15 having a suitable bearing for a conducting tube 13 which is connected at its end next the disk with a collecting chamber 12. The outer end of the tube 13 is formed with a vertical extension having a bearing portion 14 at its lower end, while at its upper end a horn 16 may be applied as shown in Fig. 2. Projecting laterally from the chamber 12 is a series of tubes 9 each provided with a face plate 8 conforming to the outline of a sound box 5 with which it contacts when the latter is lowered to bring the needle 6 carried thereby into contact with the record 4 upon the disk. These tubes 9 also carry a stop pin 10 to limit the backward travel of the plates 7 carrying the boxes 5 when the latter are moved out of operative position. The plate 7 is pivotally mounted upon each tube 9 by the screw 9<sup>a</sup> entering the boss 9<sup>a</sup> upon the tube. Upon the inner face of each plate 7 a pin 18 is provided and adapted to seat in a slot 17 provided in the face plate 8. Each tube 9 is also formed with an apertured nipple 11 to which a horn similar to that shown at 16 may be applied if desired.

It will be observed from the foregoing that a series of needles and their sounding boxes may be employed for engagement with a single record for the purpose of causing the simultaneous reproduction of the various parts of the music thus securing a clearer, more accurate and efficient reproduction of the recorded sounds than can be secured by a single sound box. The construction also permits the conduction of the sounds from the separate boxes through the chamber into a single horn.

It will be obvious that changes may be made in the details of construction and configuration without departing from the spirit of the invention as defined by the appended claims.

The sound boxes are adapted to engage independent grooves of the record tablet at different distances from the center thereof and do not follow each other in the same groove. This adapts the device for use in connection with a tablet having a series of circumferentially disposed records thereon which may be thus simultaneously reproduced.

What I claim is:—

1. A device of the class described comprising a disk record tablet provided with independent record grooves thereon, a plurality of sound conveying tubes mounted upon a single pivot, and sound boxes carried by said tubes at different distances radially to the axial center of the tablet to engage independent record grooves on said tablet.

2. A device of the class described comprising a disk record tablet, a plurality of parallel sound conveying tubes mounted upon a single pivot, and sound boxes carried by said tubes at different distances radially to the axial center of the tablet to engage independent record grooves on said tablet and be thereby simultaneously fed across the tablet.

3. A device of the class described comprising a disk record tablet, a plurality of sound conveying tubes of equal length, and sound boxes carried by said tubes to engage said record tablet at points on a radial line at different distances from its center.

4. In a device of the class described, a plurality of tubes, plates pivotally mounted thereon, sound boxes carried by the free ends of said plates, and a chamber connecting said tubes at one end.

5. In a device of the class described, a plurality of sound boxes mounted opposite apertures in said tubes, a chamber connecting said tubes, and a connection nipple thereon.

6. In a device of the class described, a plurality of tubes, a sound box mounted opposite an aperture in each tube, a chamber connecting said tubes at one end, a casing and driving disk, a bracket from said casing, a horn supported by said bracket, and a connecting tube from the horn to said chamber.

7. In a device of the class described, a casing, a bracket secured thereto, a pivoted tube mounted upon said bracket, a chamber secured to the end of said tube, parallel con-

ducting tubes projecting from said chamber, plates pivoted to said conducting tubes, a sounding box carried by each plate, a stop upon each conducting tube to limit the travel of said plate in one direction, and means to support a record adjacent to said box.

8. The combination with a sound record disk provided with independent duplicate records disposed concentric and relative to each other, of means mounted upon a single pivot and provided with a plurality of sound boxes dis-

posed at different distances from the center of the disk to independently engage said records and be simultaneously fed thereby across said tablet.

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

ALEXANDER T. MOORE

Witnesses:

J. B. ROSSER, Jr.,

ALPHONSE J. CUNEO.