

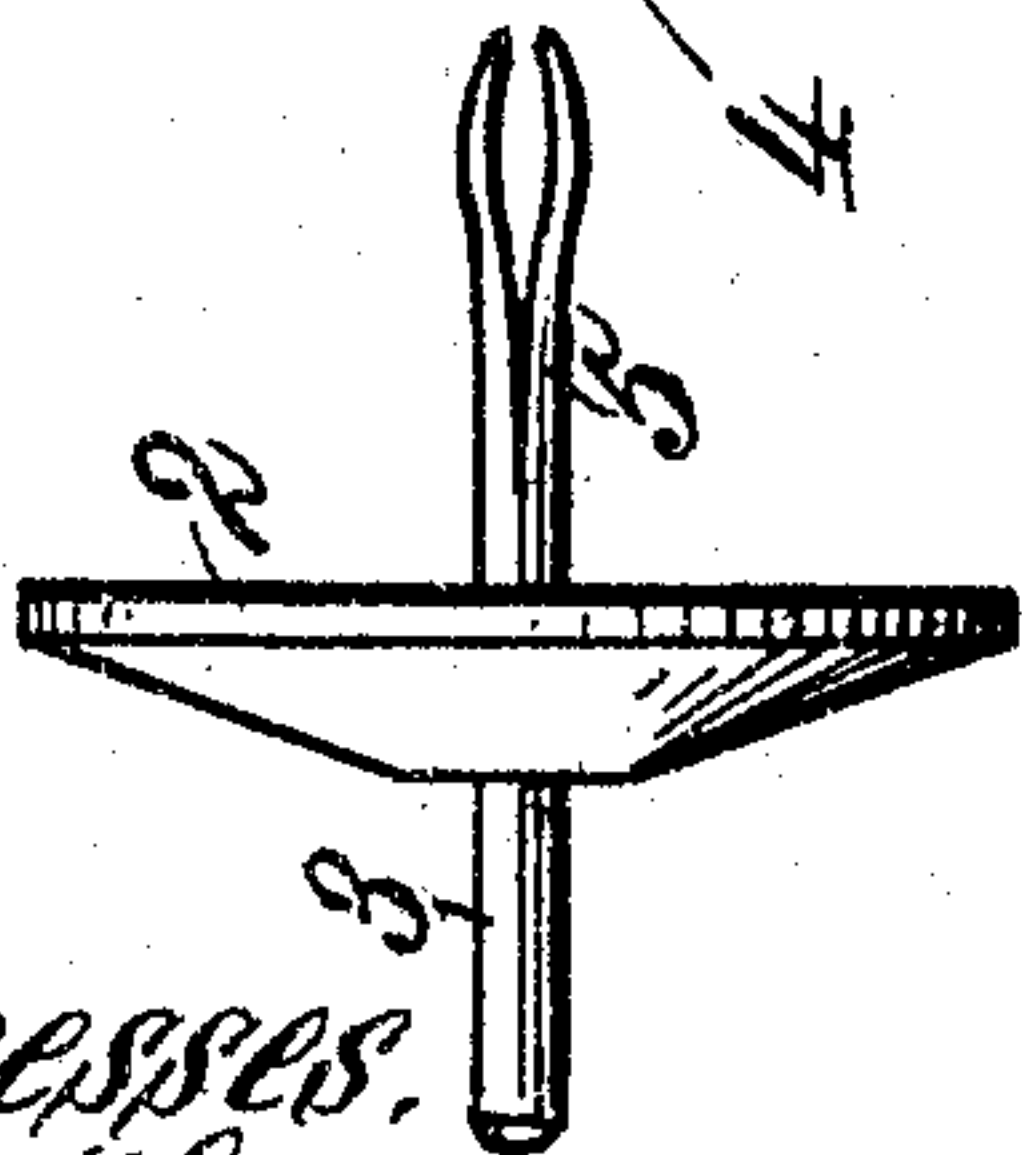
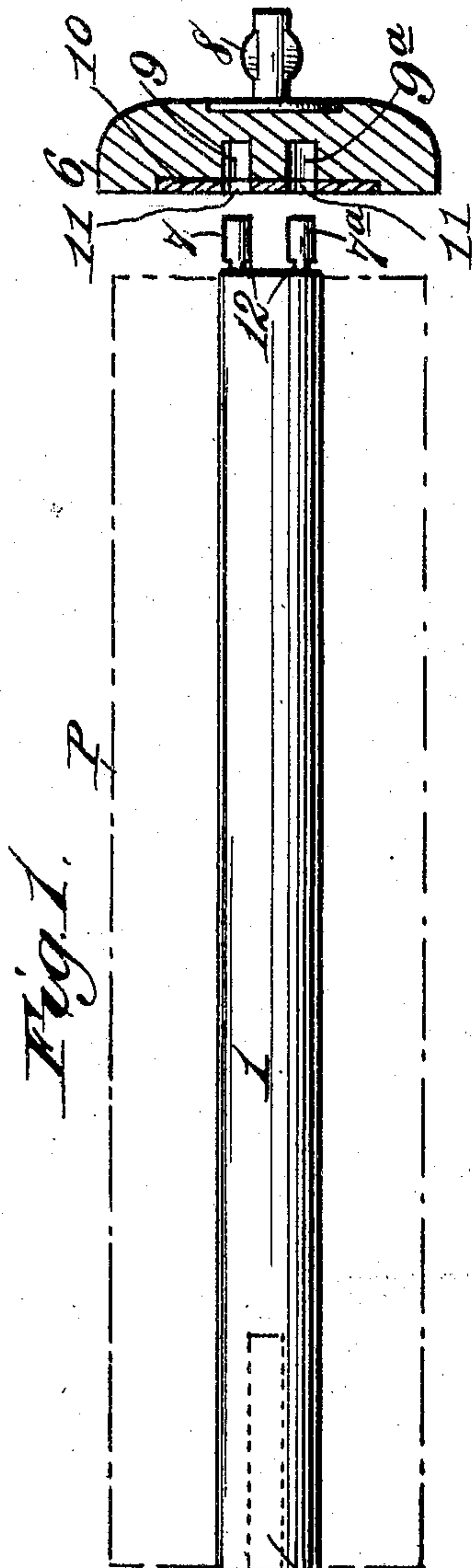
No. 780,460.

PATENTED JAN. 17, 1905.

H. B. TREMAINE.

MUSIC ROLL FOR MECHANICAL MUSICAL INSTRUMENTS.

APPLICATION FILED JULY 14, 1904.



Witnesses.
Robert Covert,
J. B. Keefe

Fig. 5.

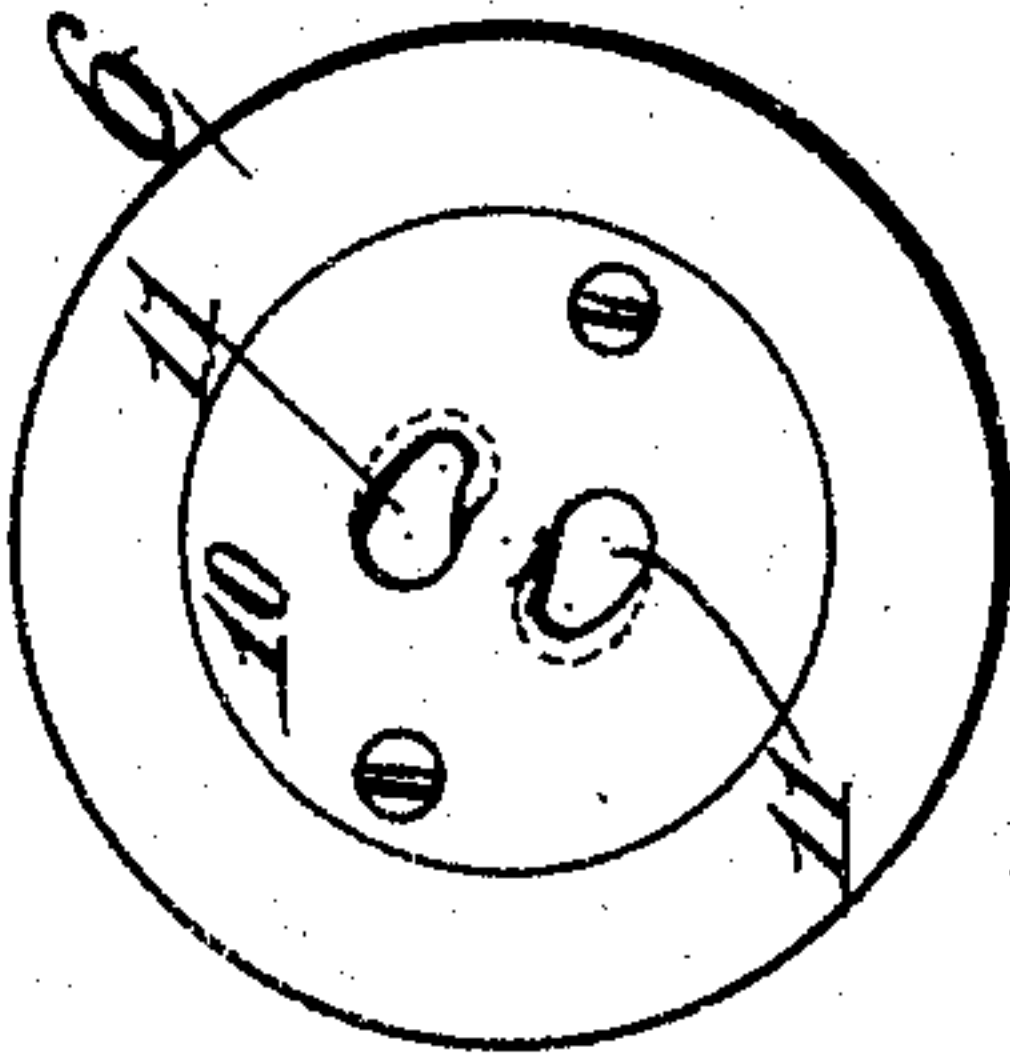


Fig. 4.

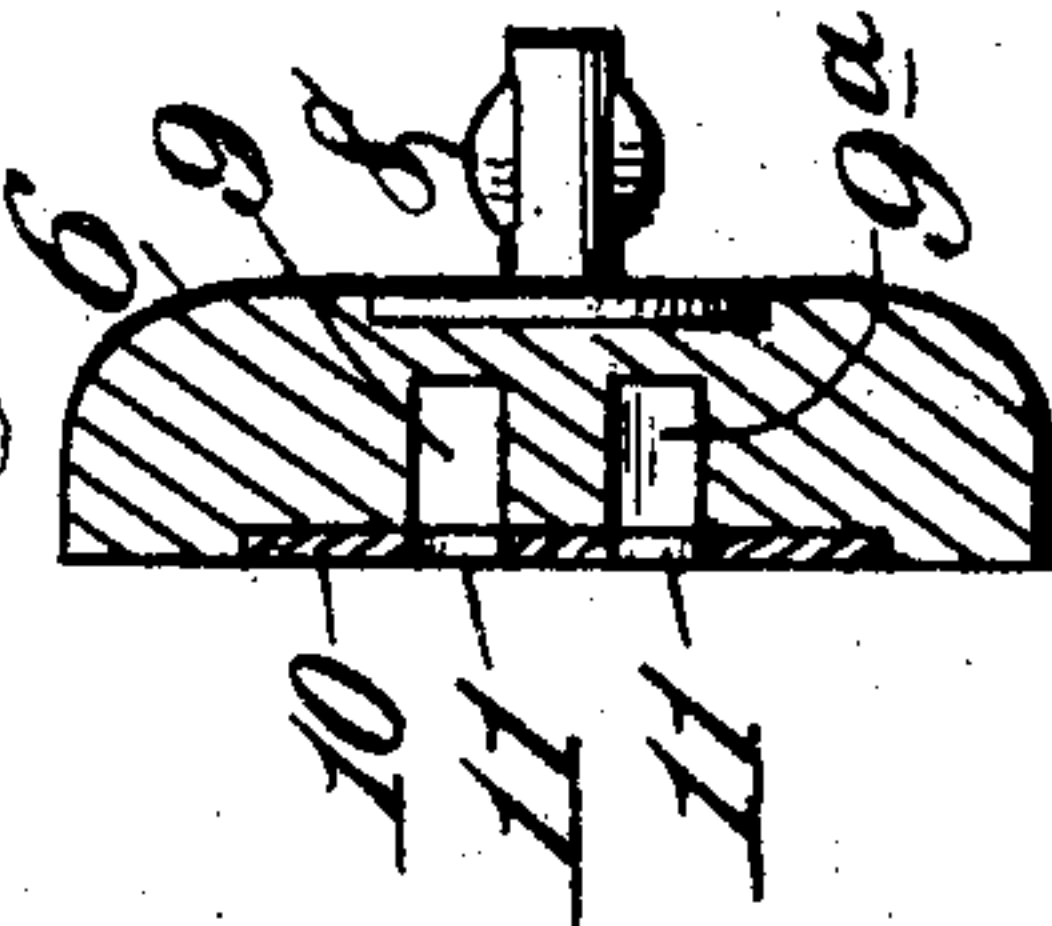


Fig. 3.

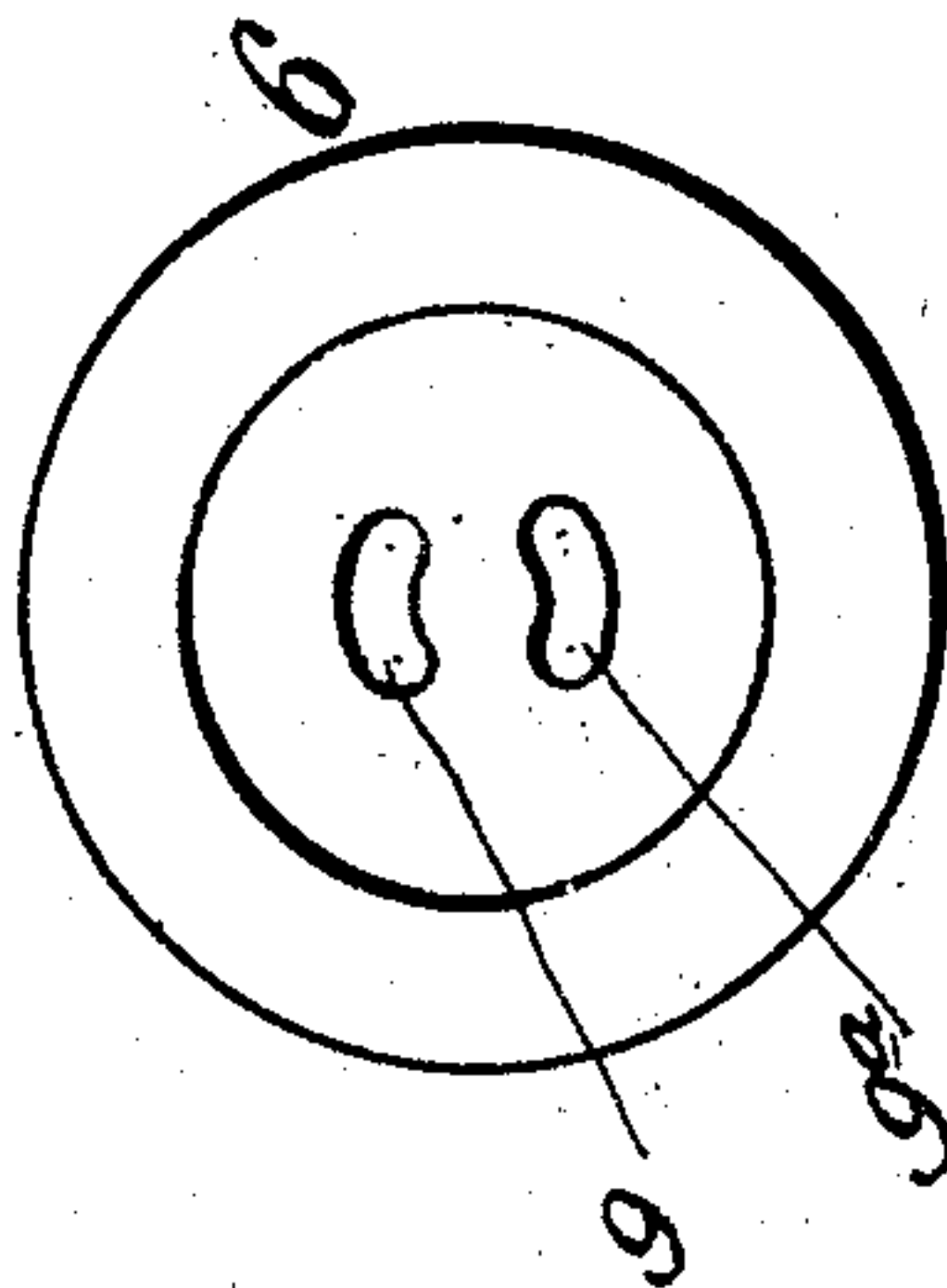
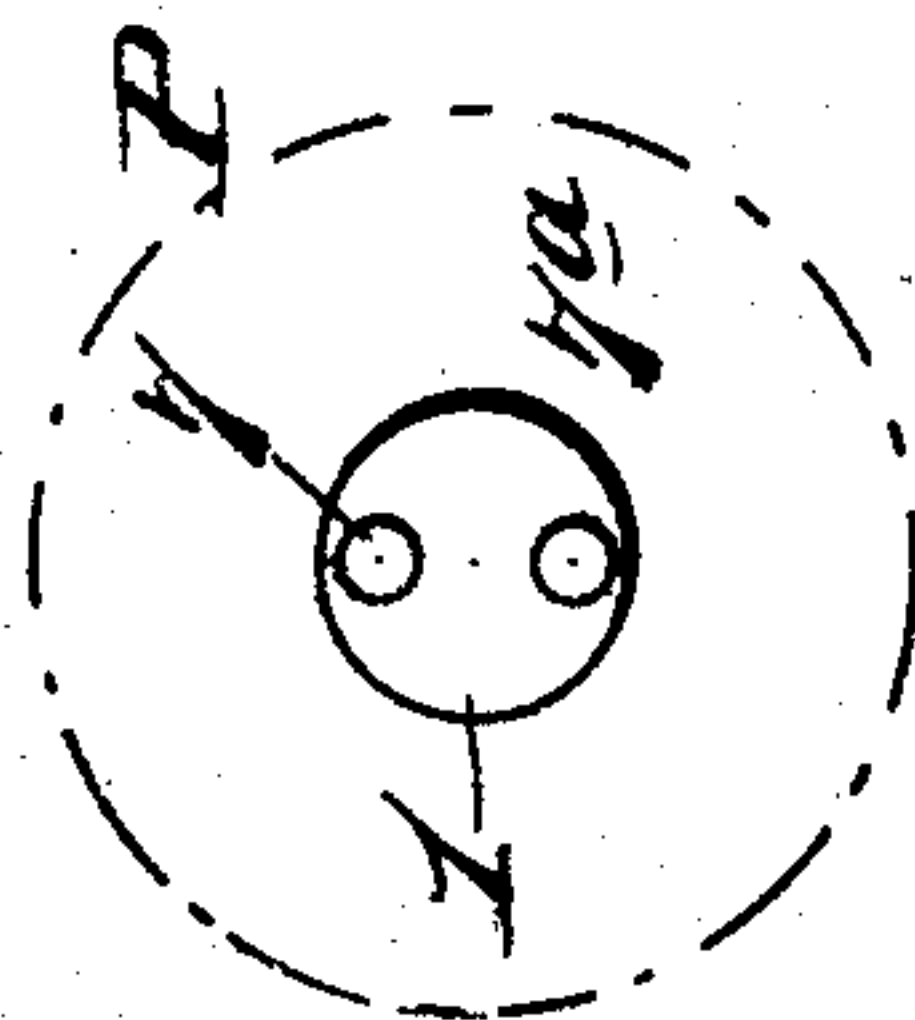


Fig. 2.



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UNITED STATES PATENT OFFICE.

HARRY B. TREMAINE, OF WESTFIELD, NEW JERSEY.

MUSIC-ROLL FOR MECHANICAL MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 780,460, dated January 17, 1905.

Application filed July 14, 1904. Serial No. 216,538.

To all whom it may concern:

Be it known that I, HARRY B. TREMAINE, a citizen of the United States, residing at Westfield, in the county of Union and State of New Jersey, have invented new and useful Improvements in Music-Rolls for Mechanical Musical Instruments, of which the following is a specification.

My invention relates to music-rolls for mechanical musical instruments.

The provision of music-rolls for mechanical musical instruments by reason of the fact that they have been generally provided with end flanges appropriated to each individual roll, making the construction thereof expensive, and by reason of the cost of shipment thereof, which has usually been by mail, has been a very material item of expense.

It is the object of my invention to provide a music-roll of novel construction having new means of connection with an end flange provided as a part of the permanent equipment of a mechanical musical instrument and properly fashioned to receive such music-roll.

To the end stated my invention consists in a novel construction of music-roll and in such music-roll in combination with an appropriate end flange provided with means for connection with mechanism for rotating the flange and music-roll attached thereto as required.

That which I regard as new is set forth in the following clauses of claim.

In the accompanying drawings, illustrating my invention, Figure 1 is a sectional elevation of a music-roll, showing two appropriate end flanges. Fig. 2 is an end elevation of a music-roll. Fig. 3 is an inner face view of the driving end flange, the keyhole-slotted plate being removed. Fig. 4 is a sectional view of end flange, and Fig. 5 is an elevation of the inner face thereof.

In the said drawings is shown a music-roll which consists of a core or mandrel 1, upon which the appropriate music-sheet P is wound. This core or mandrel at one end is formed with suitable means to receive an end flange 2, which flange is provided with a stud or journal 3 to support that end of the music-roll in an appropriate manner for rotation in the musical instrument. The means of con-

nection of this end flange may be any suitable connection in so far as the other aspects of my invention are concerned. As shown, it consists of a socket 4, extending inwardly from the end of the core or mandrel and adapted to receive a split spindle 5, constituting spring-fingers with which the end flange is provided, which spindle is adapted to enter the socket and by reason of the frictional engagement of its split extremity be retained in said socket with the flange in coöperative relation to the core or mandrel and the sheet of music wound thereon. The opposite extremity of the core or mandrel is provided with means for connection with a driving end flange 6, such means projecting from and extending beyond the end of the core or mandrel and the sheet of music wound thereon and is adapted to engage with the driving-flange at points opposite the longitudinal axis of the core or mandrel. As shown in the drawings, this means consists of two pins 7 7^a, projecting from the end of the core or mandrel at opposite sides of the longitudinal axis thereof. These pins may be secured to the core or mandrel in any suitable way, as by being driven into the same.

The driving end flange 6 is provided with a clutch 8, suitably secured to or formed therewith and adapted for connection with roll-driving mechanism. The inner face of the said flange is fashioned to receive the music-roll connection, in the example of the invention shown in the drawings said flange being formed with two arc-shaped sockets 9 9^a, which when the parts are assembled will coincide with and receive the pins 7 7^a, the connection being such that the music-roll may be readily detached or removed from the driving-flange and another roll substituted therefor and whereby such music-roll when connected to the flange will be driven in unison therewith. The connection of the driving end flange with the core or mandrel after the sockets of the former have been fitted over the pins of the latter is maintained by a locking-plate 10.

In Figs. 4 and 5 of the drawings is shown a plate 10, fitting over the sockets in the driving-flange, said plate being suitably secured to said flange, as by means of screws, and being provided with keyhole-slots 11, reversely

arranged, as shown, and the pins 7 7^a are undercut or keyed, as shown at 12 in Fig. 1 of the drawings, and in use the pins 7 7^a, projecting from the music-roll, will be inserted
5 through the keyhole-slots of the plate 10 into the sockets in the driving-flange and the latter given a partial rotation, whereby the music-roll will be locked, as it were, to the driving-flange.

10 By my invention I provide a novel and very simple construction of music-roll and simple and convenient means of connecting said roll to a driving end flange, all of which results in great economy in the furnishing of music-
15 rolls for use in connection with mechanical musical instruments.

Having thus described my invention, what I claim is—

1. A music-roll consisting of a core or mandrel provided with a plurality of keyed or undercut pins projecting from an end of said
20 core or mandrel at opposite sides of the longitudinal axis thereof.

2. The combination with a music-roll consisting of a core or mandrel provided with connecting means consisting of a plurality of
25 keyed or undercut pins projecting from the end thereof and at opposite sides of the lon-

gitudinal axis thereof, of a driving end flange having sockets to receive said pins and key- 30
hole-slots to engage with the undercut or keyed portions of said pins, said flange being provided with means for connection with driving mechanism.

3. A music-roll consisting of a core or mandrel provided with connecting means consisting of a plurality of keyed or undercut pins projecting from one end and at opposite sides of the longitudinal axis thereof, a driving end
flange having sockets to receive said pins and 40
keyhole-slots to engage with the undercut or keyed portions of said pins, said flange being provided with means for connection with driving mechanism, the core or mandrel having a
socket at its other end, and an end flange hav- 45
ing a split spindle projecting from the inner side thereof adapted to enter said socket and a journal projecting from the side of said flange, substantially as described.

In testimony whereof I have hereunto set 50
my hand in presence of two subscribing witnesses.

HARRY B. TREMAINE.

Witnesses:

E. C. THOMPSON,
W. C. MANSFIELD.