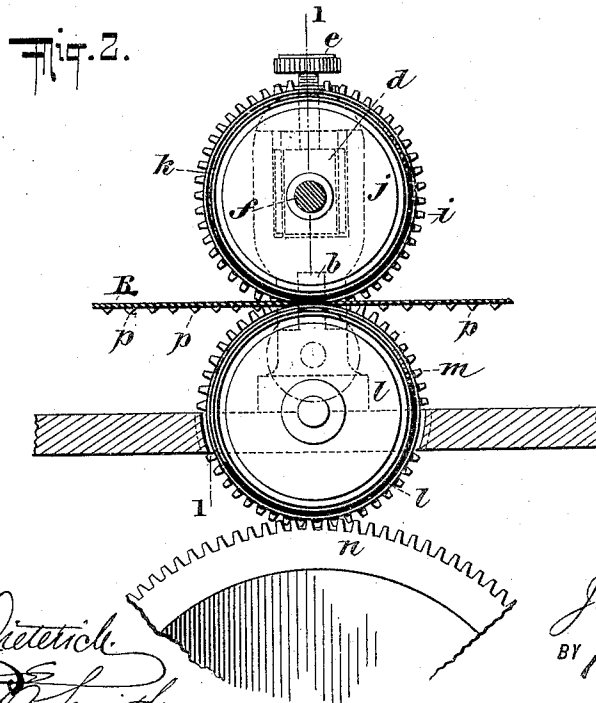
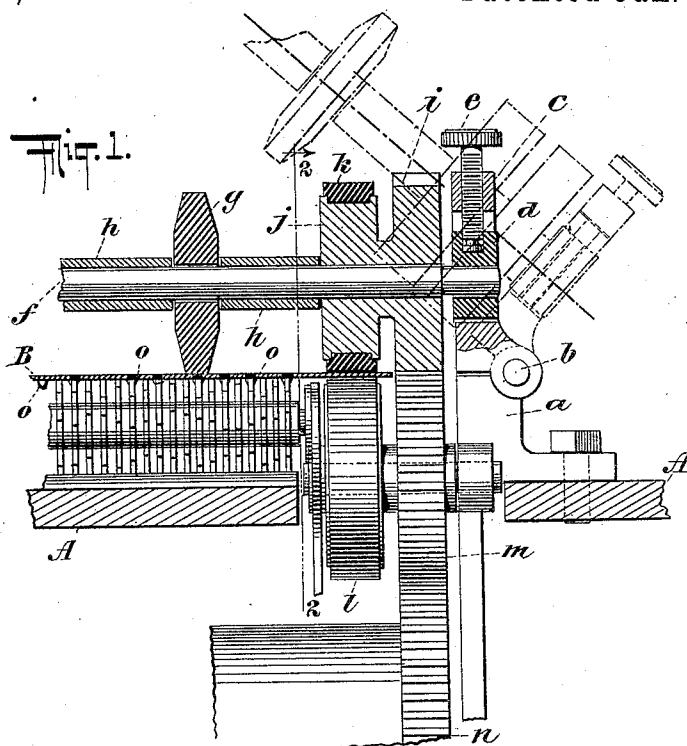


(No Model.)

J. PAOLI.
MUSIC BOX.

No. 574,758.

Patented Jan. 5, 1897.



WITNESSES:

Gustave Dietrich
Charles E. Smith

INVENTOR

John Paoli,
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UNITED STATES PATENT OFFICE.

JOHN PAOLI, OF RAHWAY, NEW JERSEY, ASSIGNOR TO THE REGINA
MUSIC BOX COMPANY, OF NEW JERSEY.

MUSIC-BOX.

SPECIFICATION forming part of Letters Patent No. 574,758, dated January 5, 1897.

Application filed February 8, 1896. Serial No. 578,474. (No model.)

To all whom it may concern:

Be it known that I, JOHN PAOLI, a resident of Rahway, Union county, State of New Jersey, have invented certain new and useful Improvements in Music-Boxes, of which the following is a specification.

My invention relates to music-boxes of that character which employ music-disks to directly or indirectly operate the sound-producing devices, and is an improvement upon the mechanism forming the subject-matter of the invention disclosed in the patent to Brachhausen and Riessner, No. 500,371, dated June 27, 1893.

My said invention consists in the arrangement and combination of parts hereinafter described and claimed for feeding or operating a music-disk from the outer edge.

In the accompanying drawings, Figure 1 is a longitudinal sectional view, on line 1 1 of Fig. 2, of sufficient number of parts of a music-box to illustrate one form of my invention. Fig. 2 is a transverse section of the same on line 2 2 of Fig. 1.

In the drawings, A represents the bed-plate of the music-box, to which is secured a bracket *a*, pivoted at its upper portion, as indicated at *b*, to a section *c*. In this pivoted section *c* is carried a block *d*, which is rendered adjustable by any suitable means, as a thumb-screw *e*. Within this block is rigidly fixed one end of a retaining-rod *f*. Loosely carried upon this retaining-rod is a series of friction-rolls *g*, suitably spaced upon the rod, as by sleeves *h*, and near one end is carried a gear-wheel *i*, which is connected with a feed-roll *j*, which is preferably provided on its periphery with a rubber ring *k*. The periphery of this roll bears upon the note disk or sheet B at its outer edge, as indicated in Fig. 1. Beneath the upper feed-roll *j* is loosely mounted a feed-roll *l*, which is preferably constructed like the roll *k* and is connected in a like manner with a gear-wheel *m*, which is positively driven by any suitable means, such as from a ring-gear *n* of the mainspring-drum. The feed-rolls *k l*, together with their respective gear-wheels, are preferably of the same size, so that the surface speed of both feed-rolls will be the same. The note-disk B is provided, in the construction illustrated in the

drawings, with pins *o*, which may directly or indirectly operate the sound-producing devices.

It will be understood that suitable means are provided to retain the free end of the rod *f* against movement when the same is in operative position, so that the friction-rolls *g* will bear upon the plate and hold the same in contact with the devices to be moved thereby. At the same time the edge of the disk is retained between the feed-rolls *k l* and is moved forward thereby when the device is put in operation.

It will be observed that by my invention I am enabled to provide a device wherein the feed-rolls exert pressure upon the sheet at diametrically opposite points and that both of such feed-rolls are positively driven at the same rate of speed. Furthermore, it will be observed that by the adjusting means for the rod *f* I am enabled to increase or decrease the amount of pressure exerted by the feed-rolls upon the sheet to compensate for wear upon their peripheries and such other circumstances as the occasions may require.

By driving the disk from the outer edge thereof I am enabled to operate the disk with the exertion of less power and in a steadier and more even manner than could possibly be had when the disk is driven from at or near the center thereof.

In Fig. 2 I have shown a note disk or sheet wherein projections *p* are provided near the edge of the sheet that a better hold may be afforded the feed-rolls. It is obvious that any suitable means may be provided upon the sheet for this purpose. It will be seen, further, that a swinging of the retaining-rod *f* around its pivot, as indicated in dotted lines in Fig. 1, will not only throw the upper feed-roll out of operation, but will also throw the gear-wheel *i* out of operation.

What I claim, and desire to secure by Letters Patent, is—

In a music-box, the combination of a music-disk, a lower positively-driven feed-roll with the periphery thereof bearing upon the disk only at or near the outer edge thereof, a gear-wheel formed integral with the feed-roll, means to rotate said gear, a second feed-roll of the same diameter as the first-mentioned

feed-roll and with the periphery thereof bearing upon the upper side of the disk only at or near the outer edge thereof, a second gear-wheel formed integral with the upper feed-roll and adapted to mesh with the first-named
5 gear-wheel and be operated thereby, a shaft for said upper feed-roll and gear-wheel pivoted at one end, friction-rollers loosely carried by said shaft and means for adjusting
10 said shaft at the pivoted end and retaining it in the adjusted position, said feed-rolls and

their gear-wheels being maintained against movement away from each other, whereby when the shaft is turned upon its pivot the upper feed-roll and gear therefor are thrown
15 out of operation and whereby the pressure of the rolls upon the disk or sheet can be regulated.

JOHN PAOLI.

Witnesses:

CHAS. E. SMITH,
GEO. E. MORSE.