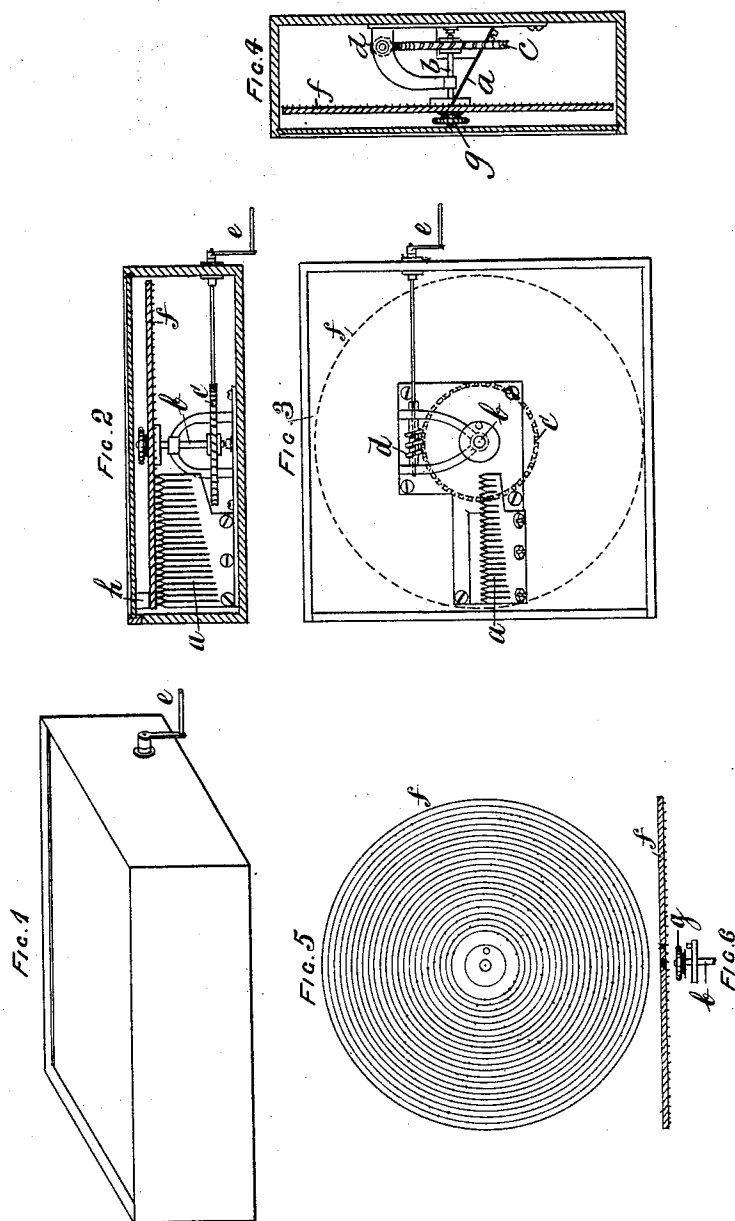


(No Model.)

E. PARR.  
MUSICAL BOX.

No. 359,278.

Patented Mar. 15, 1887.



Witnesses:  
Willard R. Haight  
A. Lichtl.

Witness:  
Ellis Parr,  
by W. H. Babcock  
Attorney.

# UNITED STATES PATENT OFFICE.

ELLIS PARR, OF LONDON, COUNTY OF MIDDLESEX, ENGLAND.

## MUSICAL BOX.

SPECIFICATION forming part of Letters Patent No. 359,278, dated March 15, 1887.

Application filed May 25, 1886. Serial No. 203,210. (No model.) Patented in Belgium February 6, 1885, No. 67,907; in France February 14, 1885, No. 167,038; in England September 15, 1885, No. 10,944; in Germany February 19, 1886, No. 8,270, and in Austria-Hungary March 2, 1886, No. 2,849.

### *To all whom it may concern:*

Be it known that I, ELLIS PARR, merchant, a subject of the Queen of Great Britain, residing at London, in the county of Middlesex, England, have invented certain new and useful Improvements in Musical Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the drawings accompanying the same.

This invention has been patented in Great Britain September 15, 1885, No. 10,944; France, February 14, 1885, No. 167,038; Belgium, February 6, 1885, No. 67,907; in Germany February 19, 1886, No. 8,270, and Austria-Hungary March 2, 1886, No. 2,849, and in no other countries.

My invention relates to musical boxes in which vibrating metal tongues are struck by pins suitably arranged upon a disk made to revolve at the proper speed; and the object of my improvement is to provide methods of readily and quickly changing the tunes played by substituting, as desired, a fresh set of pins for the purpose of striking the metal tongues, in order to produce the desired tune. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figures 2 and 4 are vertical sections through a musical box. Fig. 3 is a plan with the lid of the box removed, the comb being shown in perspective; Fig. 5, a detailed plan of a changeable disk, and Fig. 6 a section of the same and of the method of fixing it. Fig. 1 shows the box closed.

Similar letters refer to similar parts in the views.

In Figs. 2, 3, and 4, *a* is the row of metallic vibrating tongues, which are struck or vibrated in order to produce musical notes in the usual well-known way.

*b* is a spindle made to revolve at the proper speed by means of a toothed wheel, *c*, endless screw *d*, and handle *e*, as shown in the drawings, or by clock-work in the manner ordinarily used in musical boxes. The upper end of the spindle *b* is fitted to receive a movable disk, *f*, of wood, metal, or other suitable material, (shown separately in Figs. 5 and 6,) upon the lower surface of which are fixed projecting pins so arranged that when the disk *f* revolves the pins strike the metallic tongues *a* in the proper order and at the proper speed to produce the desired tune. The disk *f* may be held upon the spindle *b* by a nut, *g*, and it may also be held down by a spring or other guide, *h*, when the lid of the box is closed. When it is desired to change the tune, the disk *f* can be instantly and without any difficulty removed and a fresh one substituted, and in this way the musical box becomes capable of playing an infinite number of tunes.

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

In combination with the vibrating tongues *a*, the disk *f*, carrying pins for operating said tongues, the shaft *b*, on which said disk is mounted, the screw *g*, which holds said disk in place, but allows it to be removed for the insertion of another, and the spring *h*, arranged over tongues *a*, which holds said disk in position for acting on said tongues, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELLIS PARR.

Witnesses:

ARTHUR E. EDWARDS,  
EDWD. N. HOBBS.