

(No Model.)

C. PAILLARD & L. RECORDON-SULLIGER.
COMB FOR MUSIC BOXES.

No. 369,258.

Patented Aug. 30, 1887.

Fig. 1.

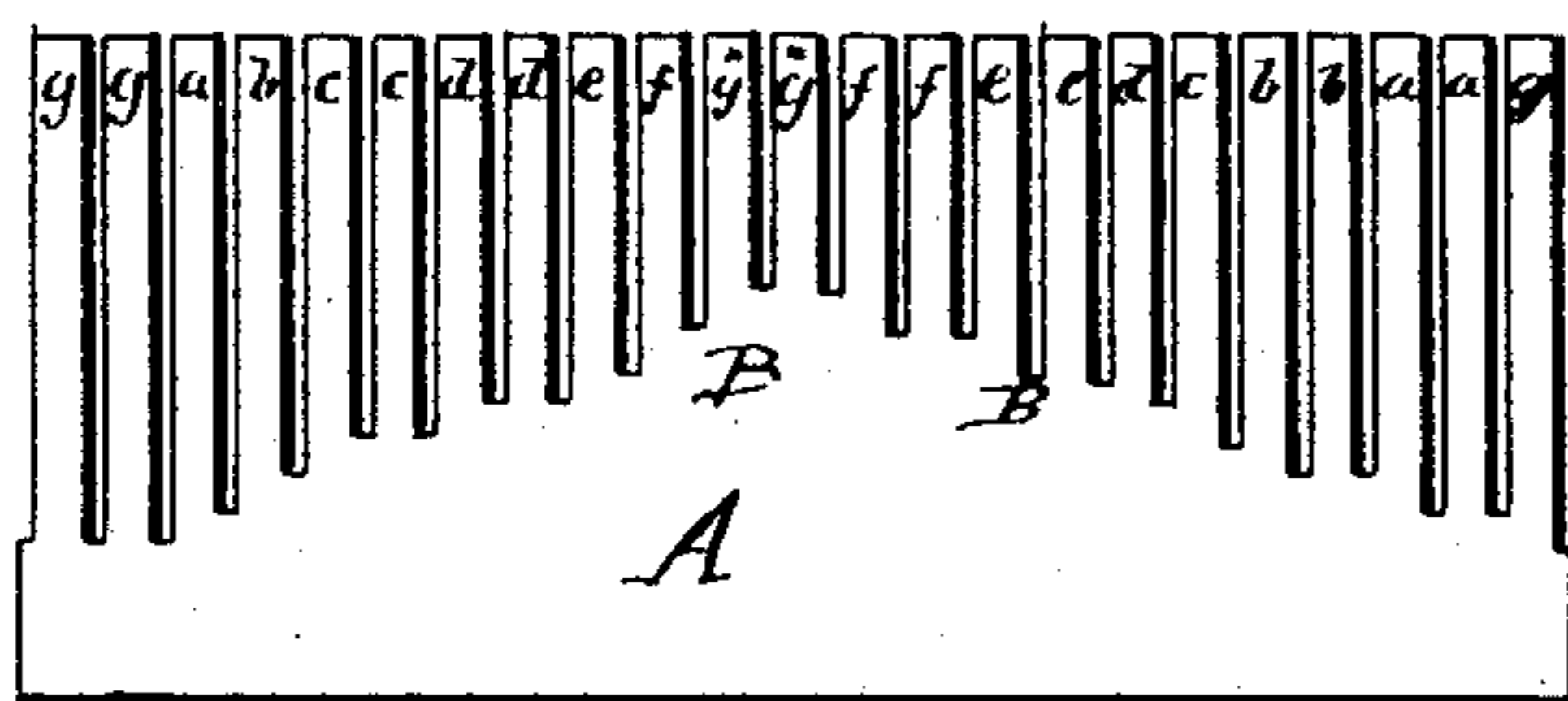
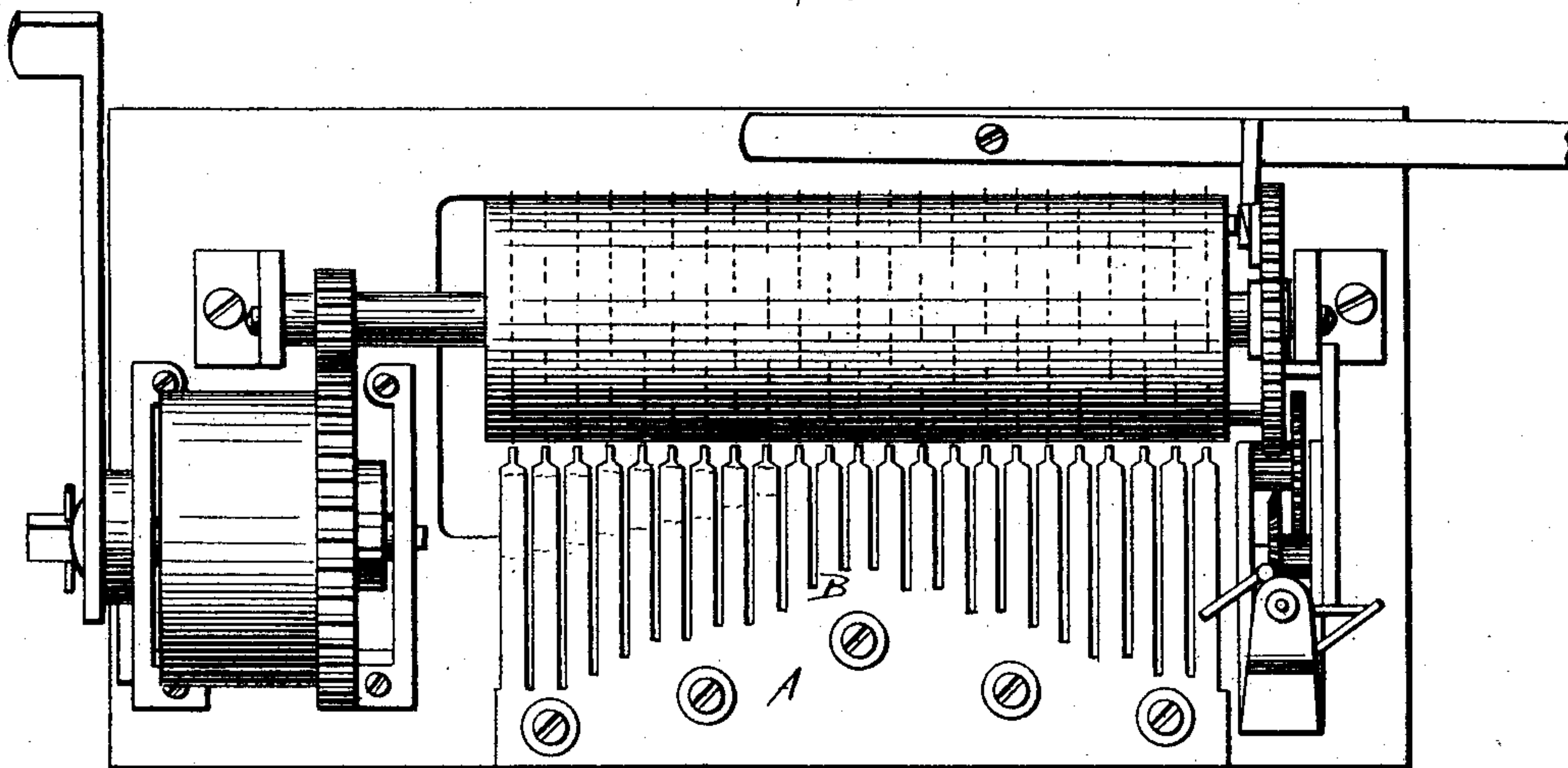


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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COMB FOR MUSIC-BOXES.

SPECIFICATION forming part of Letters Patent No. 369,258, dated August 30, 1887.

Application filed July 22, 1887. Serial No. 244,970. (No model.)

To all whom it may concern:

Be it known that we, CHARLES PAILLARD and LOUIS RECORDON-SULLIGER, of Ste. Croix, in the Republic of Switzerland, have invented certain new and useful Improvements in Combs for Musical Boxes, of which the following is a specification.

Heretofore the musical boxes known as "sublime harmony" boxes have been constructed with two or more combs so tuned and arranged that teeth of the same pitch or having a slight dissonance were provided in the several combs, whereby a greater volume of the same tone could be produced without having the sound-waves interfere with each other.

The object of my invention is to provide a new and improved comb for musical boxes provided with two or more teeth of the same pitch or having a slight dissonance, the teeth being separated sufficiently to prevent interference of sound.

The invention consists in a comb for musical boxes in which the teeth decrease in length and increase in pitch from the ends to the middle.

In the accompanying drawings, Figure 1 is a top view of my improved comb for musical boxes. Fig. 2 is a plan view of a musical box provided with my improved comb.

Similar letters of reference indicate corresponding parts.

The steel plate A is slitted or cut to form a series of teeth, B, which produce sounds when vibrated, some of which teeth are to be provided with the usual leads on the under side. The teeth decrease in length from the ends to the middle—that is, they are longest at the ends and shortest at or near the middle—and thus the pitch of the sounds produced by the teeth increase from the ends to the middle of the comb. There will be teeth of the same pitch or having a slight dissonance in each half or section of the comb, and, as the said teeth are separated a greater or less distance, their sounds will not interfere and deaden each other when both teeth are sounded simultaneously. There may be two or more teeth tuned to the same pitch adjacent to each other in each half of the comb, which teeth are used in produc-

ing tremolo and like sounds, the adjacent teeth of the same pitch being vibrated in rapid succession; but for producing a volume of sound the two like teeth in the two sections are to be sounded together. In the drawings the teeth are marked by letters to designate their tones. It may happen that in one section there are three or more teeth of the same pitch adjacent to each other and but a single tooth of the same pitch in the other section. In all cases the lengths of the teeth decrease toward the middle. It is not absolutely necessary that the shortest tooth is precisely at the middle of the comb, as it may sometimes happen that it is more or less to one side of the middle, on account of a greater number of teeth in one section of the comb.

A single comb can be adjusted more easily and nicely than two combs, there is less liability of the parts rattling, all parts can be fitted more accurately, and one comb costs less than two.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A comb for musical boxes, having teeth decreasing in length from the ends of the comb toward the middle, as set forth.

2. In a musical box, a comb having teeth increasing in length from the ends to the middle, whereby the comb is divided into two sections, the similar notes in the two sections having the same pitch, or nearly so, substantially as shown and described.

3. In a musical box, the combination, with a movable object having projections for vibrating teeth, of mechanism for actuating said objects, and of a comb having teeth decreasing in length from the ends to the middle, substantially as herein shown and described.

In testimony that we claim the foregoing as our invention we have signed our names in presence of two subscribing witnesses.

CHARLES PAILLARD.
LOUIS RECORDON-SULLIGER.

Witnesses:

PH. GENTON,
GEORGES BORNAUD.