

(No Model.)

2 Sheets—Sheet 1.

L. CAMPICHE.

MUSICAL BOX.

No. 336,210.

Patented Feb. 16, 1886.

Fig. 2

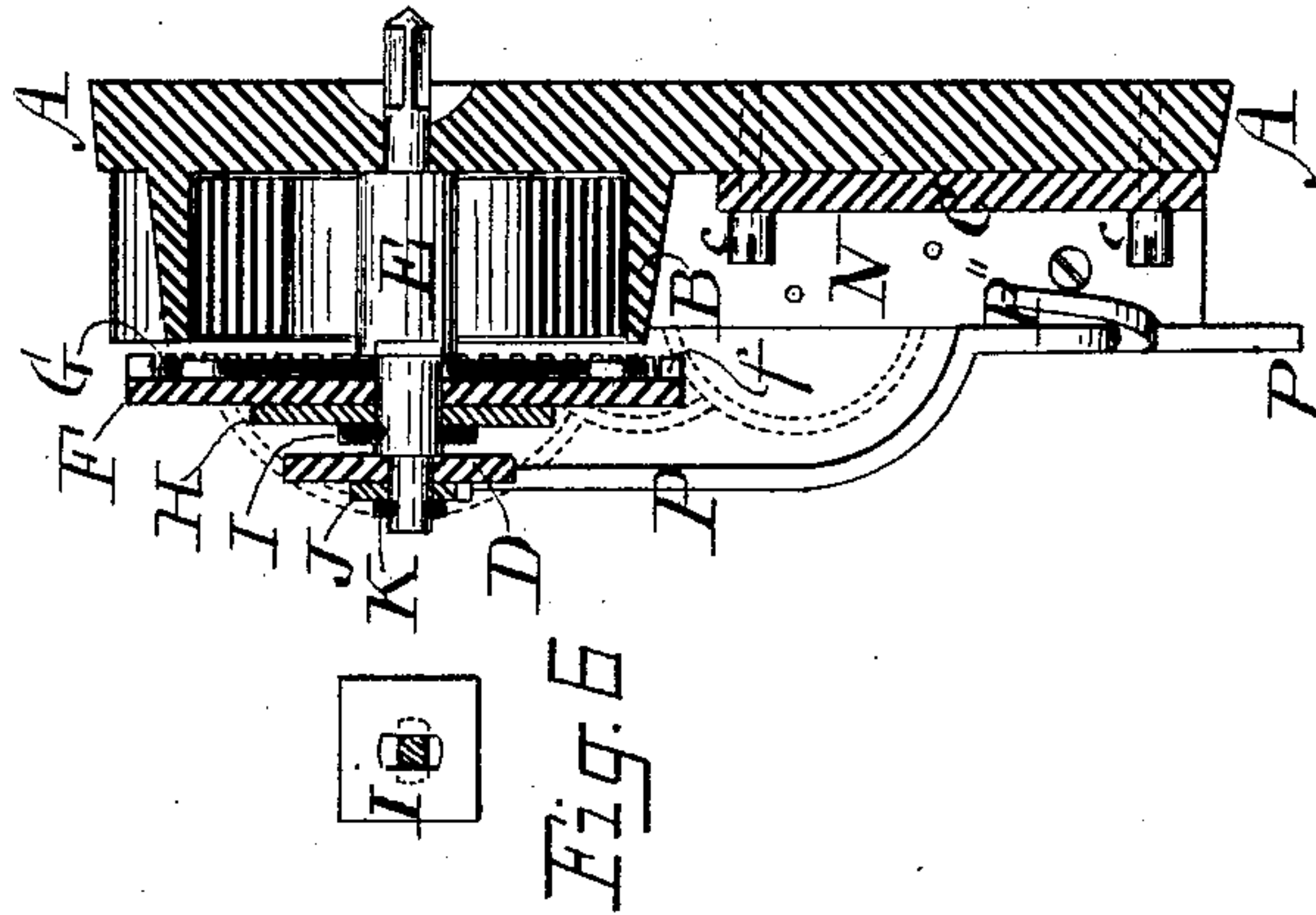
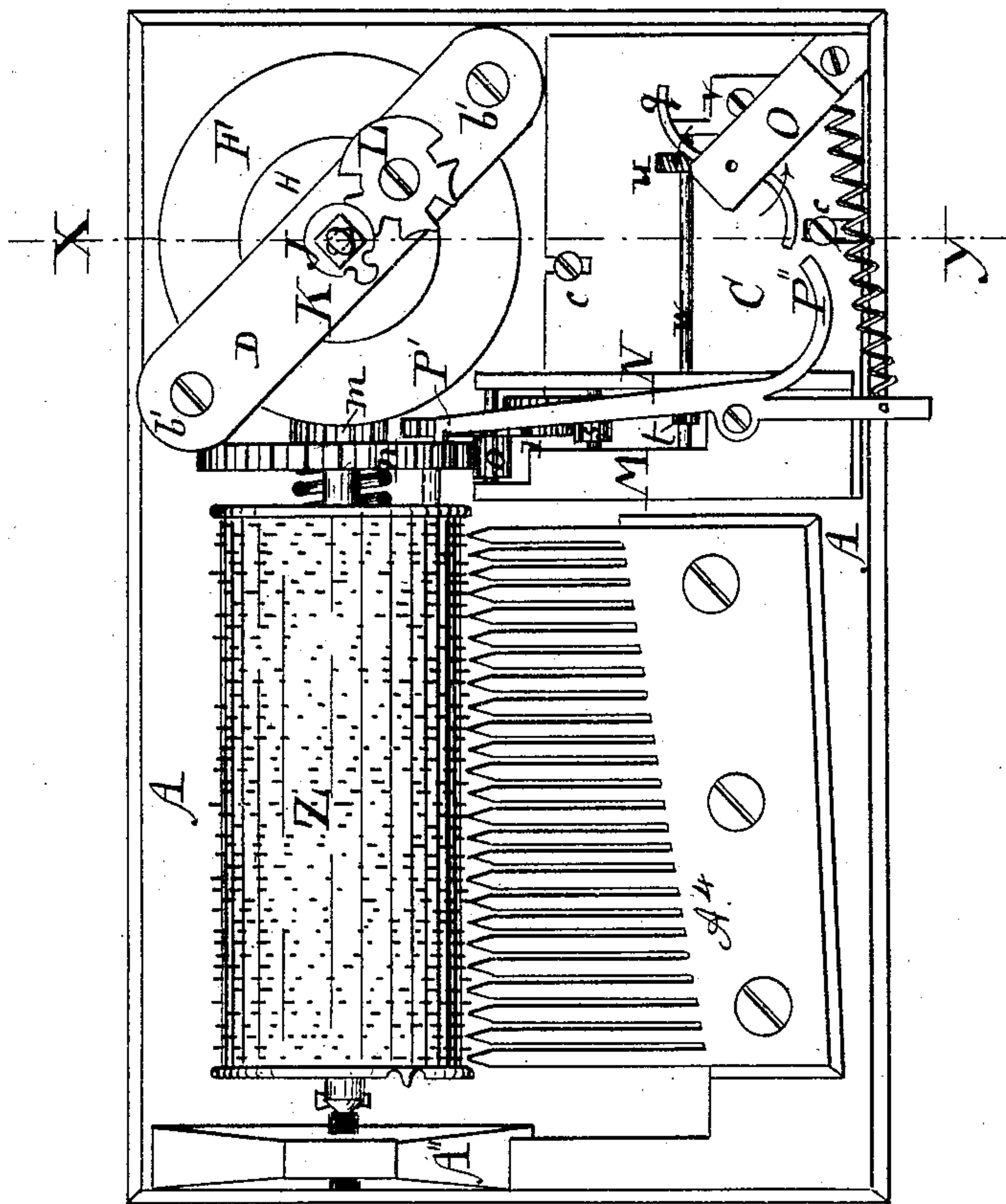


Fig. 1



Witnesses.

Chas. H. Smith
Geo. T. Pinckney

Inventor

Louis Campiche
per Lemuel W. Serrell atty

(No Model.)

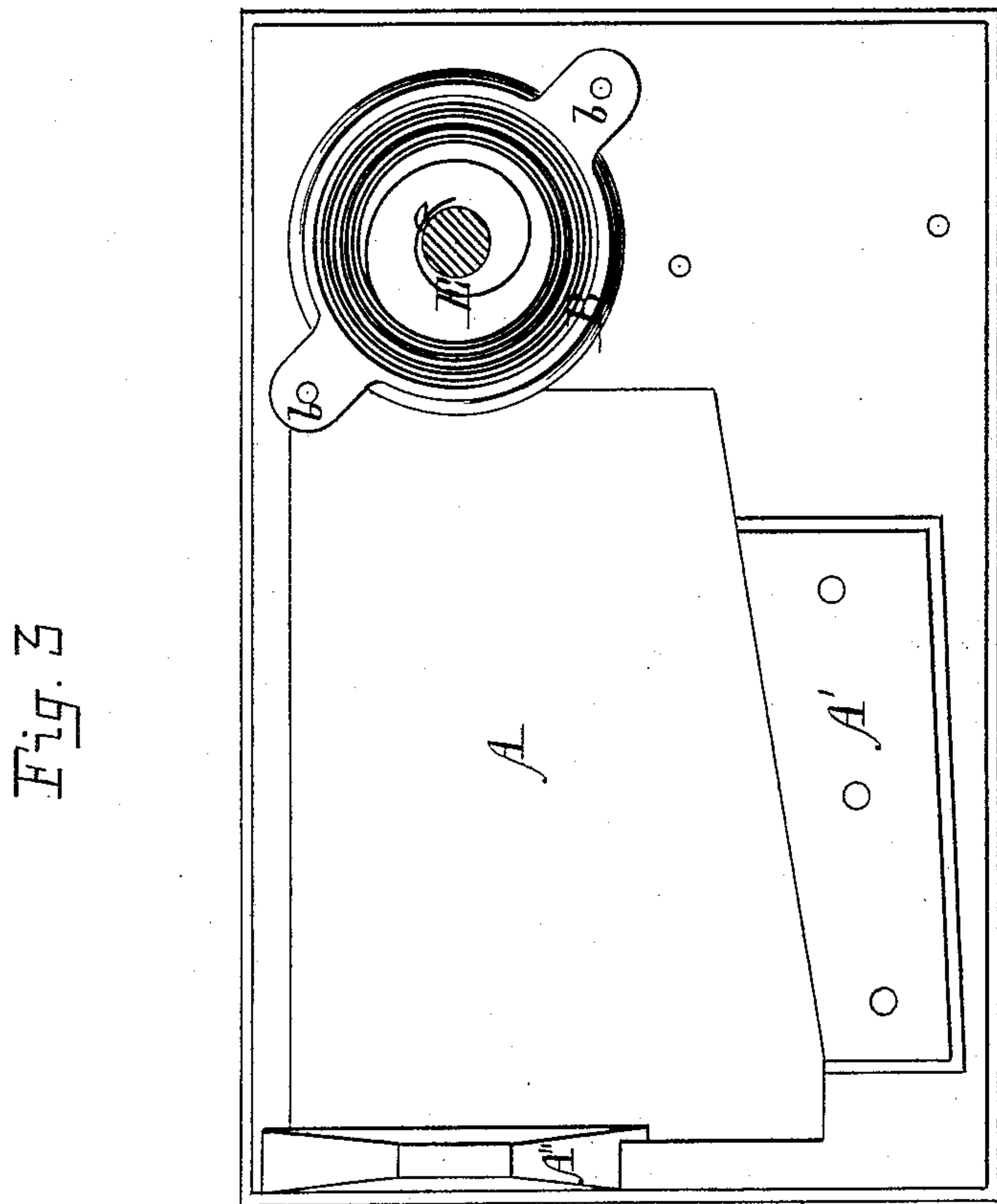
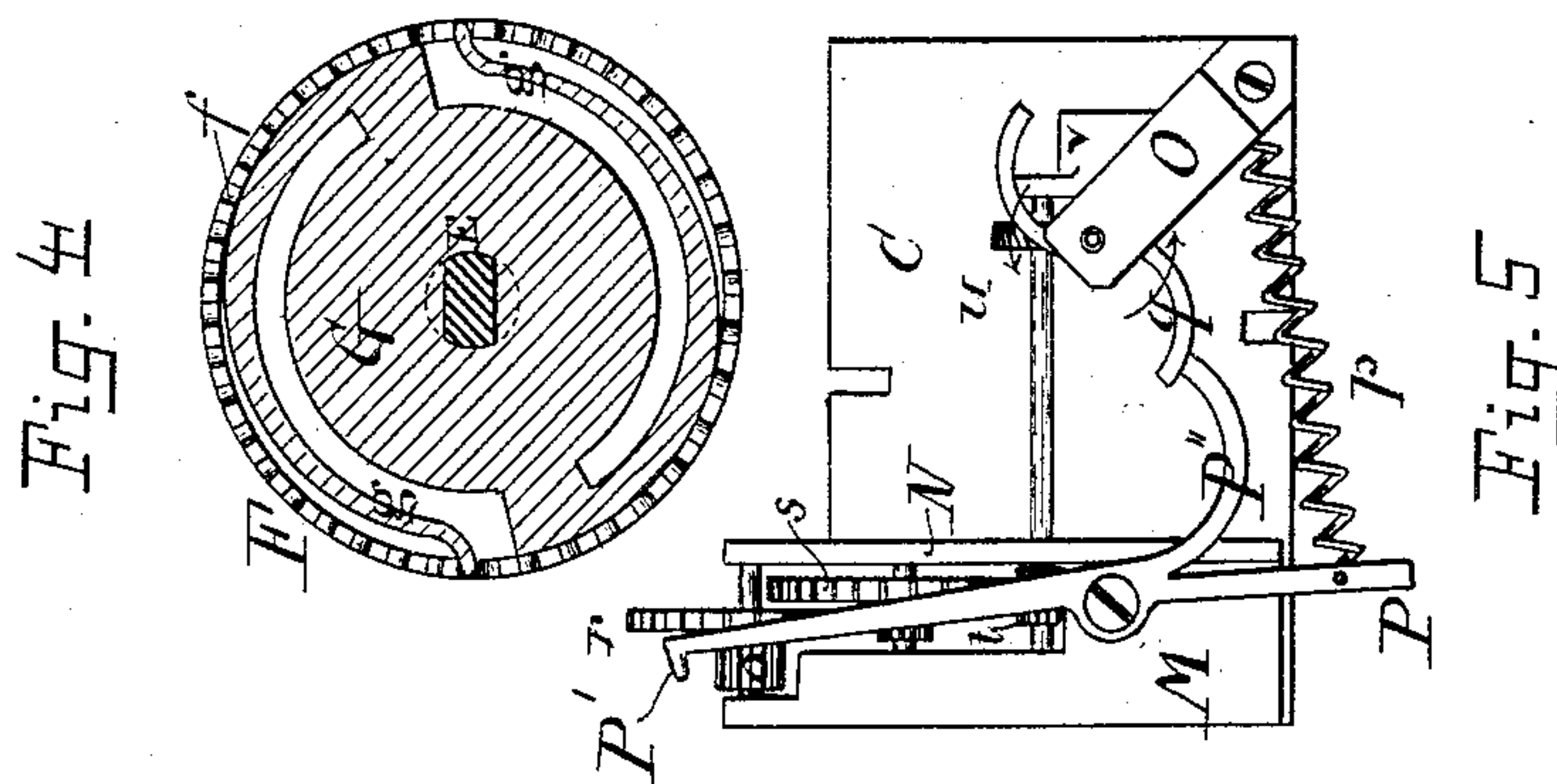
2 Sheets—Sheet 2.

L. CAMPICHE.

MUSICAL BOX.

No. 336,210.

Patented Feb. 16, 1886.



Witnesses

Chas. H. Smith
Geo. T. Prickney

Inventor

Louis Campiche
per Lemuel W. Serrell atty

UNITED STATES PATENT OFFICE.

LOUIS CAMPICHE, OF ST. CROIX, SWITZERLAND, ASSIGNOR TO MERMOD FRERES, OF SAME PLACE.

MUSICAL BOX.

SPECIFICATION forming part of Letters Patent No. 336,210, dated February 16, 1886.

Application filed May 18, 1885. Serial No. 165,790. (No model.)

To all whom it may concern:

Be it known that I, LOUIS CAMPICHE, of St. Croix, in Switzerland, have invented a new and useful Improvement in Musical Boxes, of which the following is a specification.

The object of my invention is to cheapen and to facilitate the manufacturing of musical boxes by combining the different parts composing the same in such a manner as to allow the workmen to manufacture the respective parts entirely independently of one another.

The repair of such musical boxes is much facilitated by the interchangeable character of the parts.

In the accompanying drawings, Figure 1 is a plan view of the complete mechanism of a musical box of my improved construction. Fig. 2 is a vertical section through xy , and shows the parts that particularly relate to the present claim for a patent. Fig. 3 is a plan view of the large plate bearing the whole work and of the barrel which forms part of the same. In this figure the cap of the barrel is supposed to be removed. Fig. 4 is a view of the under part of said cap. Fig. 5 is a plan view of the regulating mechanism. Fig. 6 shows the way in which the cap of the barrel is affixed on the arbor of the same.

In all the figures the same letters refer to the same pieces.

The plate A bears the prominences A' and A'', the first one intended to fasten the plate of musical tongues A¹, the second one to bear the axis of the cylinder Z. The plate of musical tongues and the cylinder are of the usual construction, and may be made of any desired character or dimensions, according to the more or less complicated system of the mechanism. The plate A bears also the barrel B, forming a part of the same, and with its opening turned upward. The barrel B is provided with two studs, b , which are intended to bear the bridge D of the axis E of mainspring. The latter is pivoted on one end in the plate A, and on the other in the bridge D, and bears a cap, F, provided with a lower range of teeth, Figs. 2 and 4, engaging directly with the pinion m of the cylinder. The said disposition allows for the removal of the main-

spring without having to remove at the same time the cylinder, the removing of which is a very delicate operation. The inside of the cap F is provided with a steel disk, G, cut out so as to form a click mechanism. The springs $g g$, forming part of it, lean against the lower teeth-range of F, but not upon that part of those teeth which forms the gearing. This construction gives a very smooth click-work of great solidity. The disk G is provided with a lengthened hole, which is adjusted upon an elliptic part of the axis of the mainspring. A second disk, H, which has the purpose of maintaining the cap F in place, is also maintained by means of a lengthened hole, corresponding to an elliptic part of the axis, Fig. 6. The stop-finger J is fixed in the same way by means of a disk, K, with lengthened hole. The cross L is of the usual disposition. A second plate, C, fastened upon A by means of two or more screws, c , bears the whole train of the regulator—that is to say, the wheels transmitting the rotation of the cylinder to the regulating-flier q , from the said flier to the stop-lever P. Two bridges, M and N, which might form a part of the plate C, bear the wheels $o r s t$. The bridge v bears one end of the axis w , which bears the helicoidal wheel u , engaging with the helix of the flier q , the axis of which is supported by the bridge O. The stop-lever P is pivoted upon a screw, which is affixed in the bridge M, and is acted upon by a spring, p , to press it against the side of the wheel n of the cylinder. When the lever P is in the position shown in Fig. 1, the flier q turns freely, and the music plays until the hook P' of the lever engages itself in a hole provided for that purpose in wheel n . The lever P takes then the position shown in Fig. 5, and the arm P' stops the flier q .

Having thus described my invention, what I claim is—

1. In a musical box, the combination of the plate A, the cylinder Z and the musical tongues, and a barrel, B, forming part of the plate, with an opening turned upward and provided with two pillars, b , and the mainspring, the whole constructed so as to allow

of the removal of the mainspring without removing the cylinder.

2. The cap F of the barrel with a lower range of teeth engaging directly with the pinion of the cylinder, in combination with the axis and the mainspring, and a click-spring, G, substantially as described and shown.

3. The bridge D for the mainspring axis,

affixed on the pillars *b b*, in combination with the stationary barrel, the spring, and the gear-
ing, substantially as specified. 10

LOUIS CAMPICHE.

Witnesses:

JULES JUNOD GONTHIER,
A. M. JEANVENAUD-LEBET.