

(No Model.)

P. C. JACCARD.
MUSICAL BOX.

No. 587,831.

Patented Aug. 10, 1897.

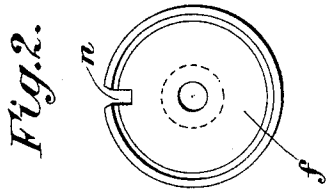
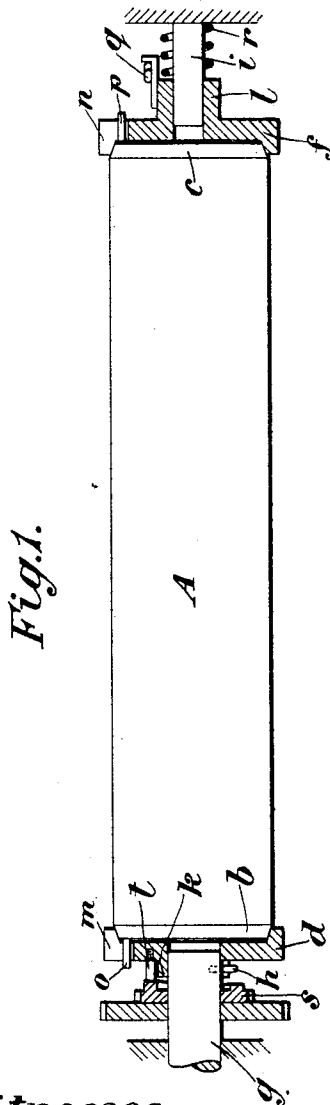
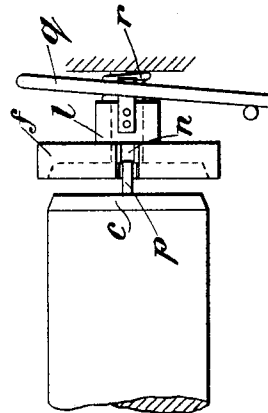


Fig. 4.



Witnesses.

Albert Jones.
Samuel Percival

Inventor.
Paul Calame Jaccard
By his Attorneys.
Wheatley Mackenzie

UNITED STATES PATENT OFFICE.

PAUL CALAME JACCARD, OF ST. CROIX, SWITZERLAND.

MUSICAL BOX.

SPECIFICATION forming part of Letters Patent No. 587,831, dated August 10, 1897.

Application filed May 18, 1896. Serial No. 592,040. (No model.) Patented in Switzerland July 16, 1895, No. 10,507.

To all whom it may concern:

Be it known that I, PAUL CALAME JACCARD, a citizen of the Republic of Switzerland, residing at St. Croix, Canton de Vaud, in the Republic of Switzerland, have invented certain new and useful Improvements in Musical Boxes, (for which I have obtained a patent in Switzerland, No. 10,507, dated July 16, 1895;) and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention for improved means for supporting and fixing the cylinders of musical boxes has for its object an arrangement enabling the interchangeable cylinders to be fixed in a simple and practical manner in musical boxes of any dimensions.

In the accompanying sheet of illustrative drawings, Figure 1 is a longitudinal section of the cylinder fixed in the supporting-brackets. Fig. 2 is a view of the bracket on the right side. Fig. 3 shows part of the cylinder ready to be removed, and Fig. 4 shows a view and section of the central cam for changing the tune adapted for the new arrangement.

The cylinder *A* is provided with two heads *b* and *c*, having conical edges, and which rest in brackets *d* and *f*, having correspondingly conical edges. The bracket *d* is fixed to the driving-shaft *g* by the screw *h*. The bracket *f* is placed with friction loosely upon the fixed shaft *i*, and it can be displaced axially. The two brackets are provided with sleeves *k* and *l* and also corresponding recesses *m* and *n* to receive the pins *o* and *p* on the cylinder.

In order to insert a cylinder, the bracket *f* is withdrawn by means of the lever *q*, Fig. 3. The cylinder is then inserted and the lever *q* released. The spring *r* then pushes the bracket *f* to its normal position, and the conical edges of the cylinder corresponding exactly to the conical edges of the two brackets the cylinder will be firmly fixed in the latter.

In order to remove a cylinder, it is only necessary to withdraw the bracket *f* by means of the lever *q*. The movement of the driving-shaft *g* is transmitted to the bracket *d* and

communicated by the latter to the cylinder, 50 which in its turn will operate the bracket *f*.

In musical boxes provided with this arrangement use is advantageously made of a central cam for changing the tune. The central cam *s*, Figs. 4 and 1, is placed with friction loose upon the driving-shaft *g*, while the pin *t* is fixed to the bracket *d*. 55

The construction of the cylinder and of the brackets is susceptible of modifications not affecting the principle of the invention. 60 Thus, for example, the conical edges of the brackets might be placed at the heads of the cylinder, while the brackets might take the conical form of the heads, or the heads and brackets, instead of being solid, might be 65 formed of claws having conical edges. By this arrangement the interchangeable cylinder is rendered independent of all the other parts of the musical box. The cylinder may be removed alone without removing either the 70 central cam or any other part of the box. The shaft of the cylinder is dispensed with, thereby considerably reducing the cost of the latter.

What I claim, and desire to secure by Letters Patent, is— 75

In a musical box, the combination of an interchangeable cylinder having conical edges, supporting-brackets having conical edges or seats in which the said cylinder ends rest, one bracket being fixed to the driving-shaft while the other is loosely mounted on a fixed shaft and capable of axial displacement, recesses formed in the said brackets in which the cylinder-driving pins engage, a spring on the fixed shaft normally compressing the cylinder 85 firmly between the supporting-brackets, and a lever connected to the displaceable bracket and by means of which it may be axially displaced to permit of the changing of the cylinder, substantially as described and for the purpose set forth. 90

In testimony whereof I have affixed my signature in presence of two witnesses.

PAUL CALAME JACCARD.

Witnesses:

PAUL HEINRICH SCHNEIDER,
FRITZ YAGGI.