

(No Model.)

D. FITLER.
MUSICAL INSTRUMENT.

No. 534,502.

Patented Feb. 19, 1895.

FIG. 1.

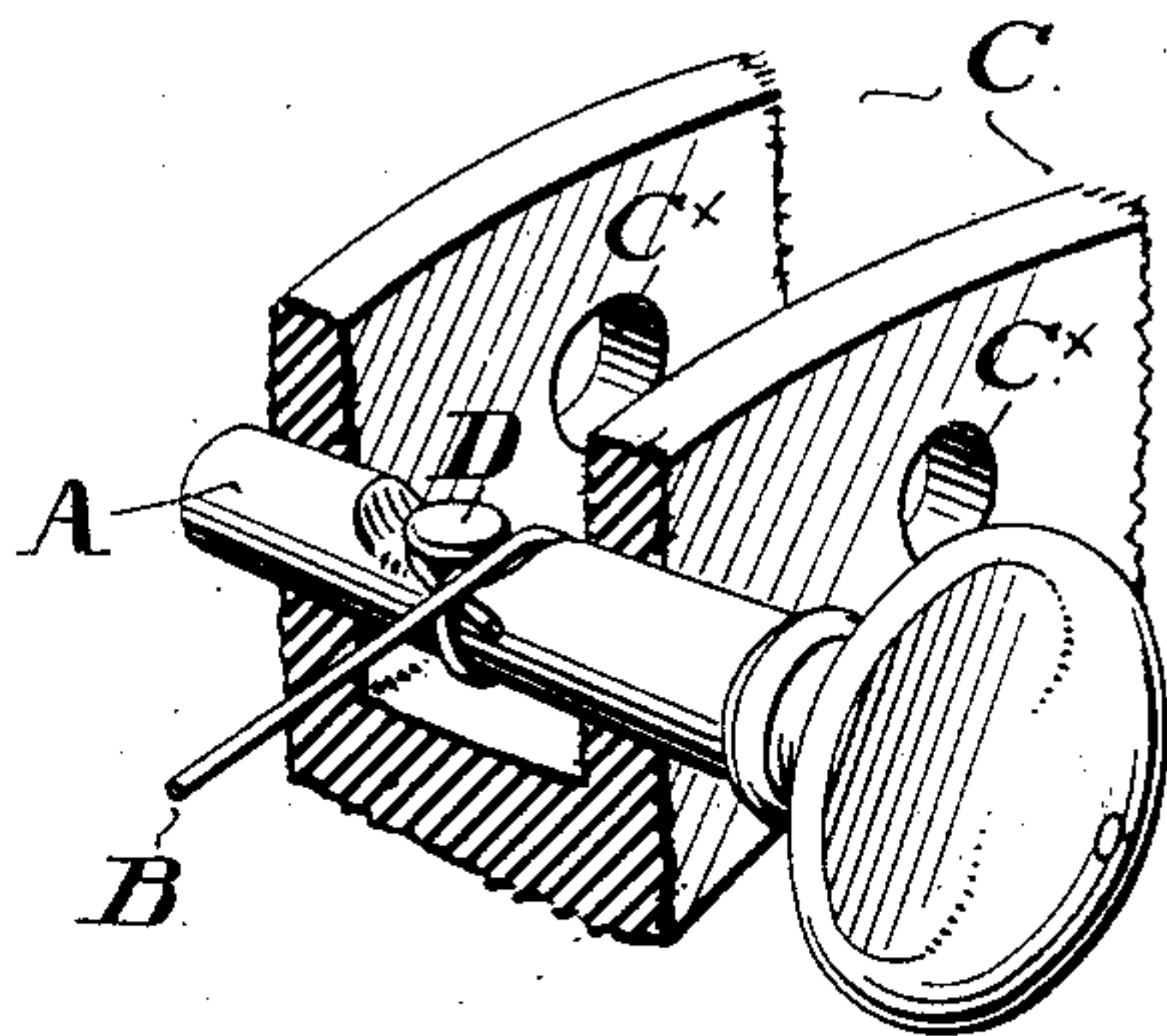
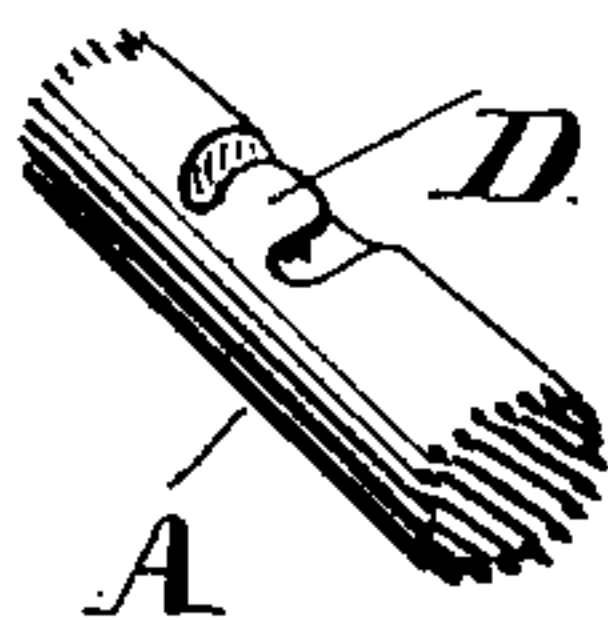


FIG. 2.



FIG. 3.



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WITNESSES:

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UNITED STATES PATENT OFFICE.

DANIEL FITLER, OF PHILADELPHIA, PENNSYLVANIA.

MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 534,502, dated February 19, 1895.

Application filed October 10, 1894. Serial No. 525,451. (No model.)

To all whom it may concern:

Be it known that I, DANIEL FITLER, a citizen of the United States, residing in the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Musical Instruments, of which the following is a specification.

My invention relates to the tuning keys of violins and similar stringed instruments, and especially to the means by which strings are attached to such keys.

In violins as ordinarily constructed the keys are formed or provided with openings extending transversely through their bodies, and the strings are attached to the keys by being threaded through said openings after which the keys are rotated to wind or wrap the strings around them, the engagement of the strings within the openings affording the keys the initial hold upon the strings required to secure them pending the further operation of winding upon the keys. In practice, however, the threading of the strings through the openings of the keys is a matter of difficulty, and, moreover, the strings when finally engaged with the keys, tend, by their pressure upon the corner formed by the edge of the mouth of the opening, when drawn taut, to cut or weaken themselves, and thereby impair their durability.

It is the object of my invention to provide an improved violin key to which a string may be readily, easily and securely attached, and which will not operate to abrade or weaken the string.

Generally stated, my invention comprehends the provision of a key for a string-provided musical instrument, provided with a boss made as an integral part of the key, around which boss the string may be bent, looped or hitched to effect an initial attachment to the key, and otherwise of the character hereinafter described, which latter may then be rotated to wind the string upon its body to draw it to the required degree of tension, in the usual manner.

In the drawings I show, and herein I describe, a good form of a convenient embodiment of my invention, the particular subject

matter claimed as novel being hereinafter 50 definitely specified.

In the drawings, Figure 1 is a fragmentary view, in perspective, of a portion of the head of a violin, illustrating in connection therewith a violin key embodying a good form of my invention. Fig. 2 is a fragmentary, central, vertical, longitudinal, sectional elevation of a portion of the key shown in Fig. 1. Fig. 3 is a fragmentary view, in perspective, of a portion of a violin key, embodying a form of my invention somewhat different from that illustrated in Figs. 1 and 2.

Similar letters of reference indicate corresponding parts.

In the drawings, A is the violin key, B a violin string applied thereto, and C the head of a violin, provided with the usual key openings or seats, C^x.

The violin key is, in accordance with my invention, provided with a boss D, around which the string is to be looped as described, the same being formed integral with the body of the key, and conveniently developed or formed by cutting in the side of the key a depression which may either be an annular channel as in Figs. 1 and 2,—or a semi-annular channel as in Fig. 3. The wood or other material of the key at the central portion of the depression, is of course not cut away, but remains to be fashioned to any desired shape to constitute said boss. The violin key thus provided with a boss integral with its own body, possesses the advantages, first, that the crest or top of the boss, being flush with the surface of the key, the latter may be inserted in and removed from its seat in the violin head with the same ease and freedom as keys of ordinary construction; second, that it is inexpensive in construction; and, third, that the boss, being permanent, is not liable to become temporarily detached and thus throw the instrument out of service for the time being. The boss is preferably provided with a head or enlargement at its outer end, with the result that a circumferential groove is formed in the side of the boss in which groove the string finds a seat and is retained securely in position.

In the construction shown in Fig. 3, the rounded side face of the boss of course faces away from the tail piece of the instrument when the key is in such position that the boss
5 is upon its upper surface.

Having thus described my invention, I claim—

1. A tuning key for a violin or other string-provided musical instrument, provided with
10 a lateral boss integral with its own substance, and situated in a depression in the surface of the key, substantially as set forth.

2. A tuning key for a violin or other string-provided instrument, provided with a lateral

boss integral with its own substance, equipped 15 with a head the top of which is approximately flush with the surface of the key, and surrounded by an annular channel or depression in the face of the key, substantially as set forth.

In testimony that I claim the foregoing as
my invention I have hereunto signed my name
this 29th day of September, A. D. 1894. 20

DANIEL FITLER.

In presence of—

F. NORMAN DIXON,
THOMAS K. LANCASTER.