

(No Model.)

H. H. HESKETT.
VIOLIN KEY.

No. 466,347.

Patented Jan. 5, 1892.

Fig. 1.

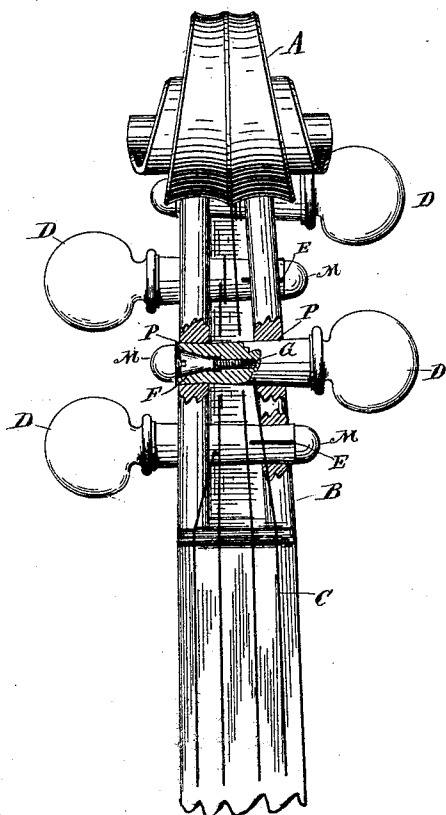


Fig. 2. Fig. 3.

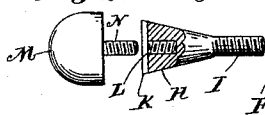


Fig. 4

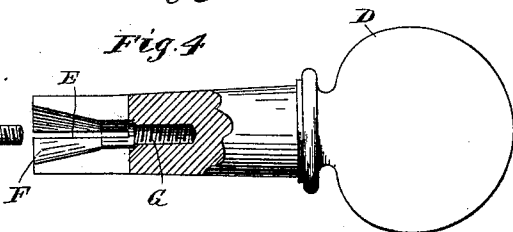
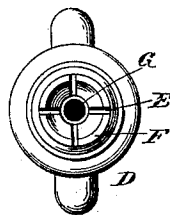


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

HARRISON H. HESKETT, OF MINNEAPOLIS, MINNESOTA.

VIOLIN-KEY.

SPECIFICATION forming part of Letters Patent No. 466,347, dated January 5, 1892.

Application filed April 21, 1891. Serial No. 389,758. (No model.)

To all whom it may concern:

Be it known that I, HARRISON H. HESKETT, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Violin-Keys; 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.

My invention relates to keys for stringed instruments, and is more particularly designed for instruments of the violin type.

As is well known, in instruments of this type the keys are turned tapering and engage conical key-seats in the head of the instrument, and the keys are given the friction which secures them in position against the strain of the strings by forcing the same to a greater or less degree of tightness into their seats. Although of long use, this means of securing the keys in their seats is not entirely satisfactory. It is often a difficult matter to force the key to the requisite degree of tightness synchronously with the drawing of the string to the proper pitch, and even when so set the key is liable to become loose and allow the string to unwind. Again, in the effort to secure the keys they are sometimes forced into their bearing with such pressure as to split the head of the instrument.

The object of my invention is to overcome these limitations. I accomplish this result by the employment of the device illustrated in the accompanying drawings, wherein, like letters referring to like parts throughout the several views—

Figure 1 is a plan view, some parts being broken away, showing the device applied to a violin-key. Figs. 2, 3, and 4 are details of constituent parts of the key separated, and Fig. 5 is an end view of Fig. 4.

A, B, C, and D are respectively the head, the neck, the keys, and the strings of a violin. These keys D are similar to the ordinary violin-key, except each has its smaller end slitted at E and provided with a conical-wedge seat F, terminating in an internal screw-thread G.

H is a conical wedge terminating in a screw-stem I, engaging, respectively, the conical-wedge seat and internal screw-thread and hav-

ing its head provided with a transverse groove K and internal screw-thread L. M is a semi-spherical cap having a projecting screw-stem N in engagement with the internal thread L in the wedge-head. The keys are secured in biconiform outwardly-flaring key-seats P in the violin-head. A key being inserted into its seat before being expanded, the conical wedge and screw-stem may, by means of a screw-driver engaging the transverse groove in the head of the wedge, be drawn into the wedge-seat and internal thread in the key to expand the end of the key into engagement with its portion of the biconiform key-seat. The engaging portion of the key will then taper in a reverse direction and be secured against endwise movement. By a fine adjustment of the wedge the key may be set to any desired degree of tightness, preferably such as to give a friction slightly in excess of that which would be required to resist the strain of the string when tuned to the desired pitch. When the friction of the key is once adjusted, the cap M may be screwed into position. The internal mechanism of the key will then be concealed and the key given the appearance of an ordinary violin-key. In tuning a string with this key no end force is required and no attention need be given to securing the key. The key is simply turned until the proper pitch of the string is reached. The regulated friction of the key in its seat will hold the same wherever set.

As is obvious, but little change is required in the ordinary violin-head for the application of this device. It is also evident that various changes might be made in the construction without departing from the principle of my invention. For example, the conical wedge and wedge-seat might have threaded engagement or the wedge might be secured by other means.

This device, although especially designed for the class of instruments described, is with slight changes adaptable for use in other instruments, such as guitars, banjos, and mandolins. In these instruments, the heads being solid and the bearings continuous, the strings would be secured to the key from without the bearing.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. In a stringed instrument, the combination, with a string-key slitted and provided with a wedge-seat at one end, of a wedge fitting said seat for expanding the same.
- 5 2. In a stringed instrument, the combination, with a string-key slitted and provided with a conical wedge-seat at one end, of a conical wedge fitting said seat adjustably securable therein by screw-threaded engagement.
- 10 3. In a stringed instrument, the combination, with a string-key slitted and provided with a key-seat at one end, of a wedge fitting said seat for expanding the same, and a cap securable to said end.

In testimony whereof I affix my signature in 15
presence of two witnesses.

HARRISON H. HESKETT.

Witnesses:

E. F. ELMORE,

JAS. F. WILLIAMSON.