

(No Model.)

P. C. NELSON.
VIOLIN BOW.

No. 564,448.

Patented July 21, 1896.

Fig: 1.

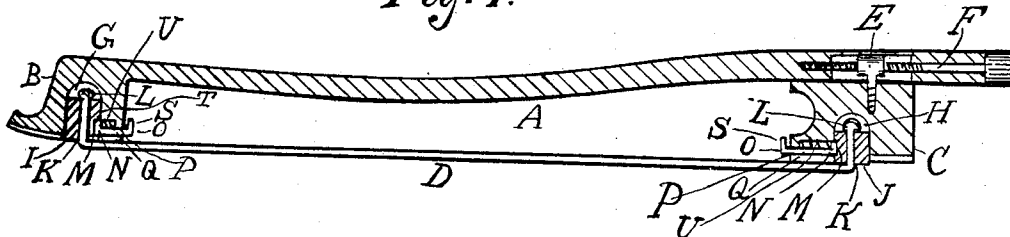


Fig: 2.

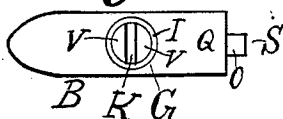


Fig: 3.

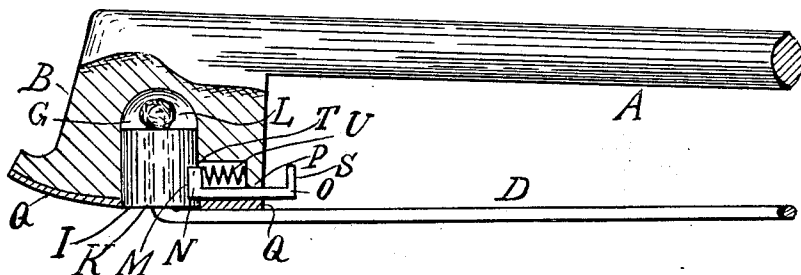
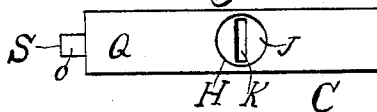


Fig: 4.

WITNESSES:

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UNITED STATES PATENT OFFICE.

PERCY C. NELSON, OF OURAY, COLORADO.

VIOLIN-BOW.

SPECIFICATION forming part of Letters Patent No. 564,448, dated July 21, 1896.

Application filed November 8, 1895. Serial No. 568,310. (No model.)

To all whom it may concern:

Be it known that I, PERCY C. NELSON, a subject of the King of Sweden and Norway, residing at Ouray, in the county of Ouray and State of Colorado, have invented certain new and useful Improvements in Violin-Bows; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in bows used in playing violins and similar stringed instruments.

The objects of my invention are, first, to provide a violin-bow in which the hairs may easily be detached for repair or exchanged for a set of new hairs; second, to provide a violin-bow in which several sets of hairs in succession may be firmly but detachably secured; third, to furnish the hairs for a violin-bow in ready-made sets as a market article, ready to be detachably fixed to the bow. I attain these objects by the novel construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a central sectional side elevation of my improved violin-bow. Fig. 2 is an enlarged face view of the head of the bow with the hairs omitted. Fig. 3 is an enlarged face view of the frog of the bow, also with the hairs omitted. Fig. 4 is an enlarged partly-sectional side view of the front portion of the bow.

Referring to the various parts in the drawings by reference-letters, A designates the bow, of which B is the head, C the frog, and D the hairs.

The frog C is adjustably secured to the bow by the screws E and F in the old and well-known manner. In the front sides or faces of the head B and the frog C, I provide the cavities or pockets G and H, respectively, which are preferably cylindrical. In these pockets I insert the two externally-cylindrical sockets I and J, which are provided with cen-

tral openings K, through which the hairs are inserted and secured by tying their ends into a knot, as L, or in any other suitable manner. The sockets I and J are detachably held in the pockets by being each provided with a notch, as M, in which engages the inner end N of a locking-slide O, which is slidably inserted in a groove P in the woodwork and retained therein by the face-plates Q of the head and the frog. The ends of the locking-slides O are formed with hooks S and T, of which the outer hooks S serve as thumb-catches for operating the slide, while the inner hooks T engage the coil-springs U, lodged in cavities in the woodwork and tending at all times to hold the slides in engagement with the notches in the sides of the sockets.

The sockets I and J may be made solid, as in Fig. 3, with only a slot or elongated hole for the insertion of the hair, or they may be, as in Fig. 2, made of a piece of tubing, the hairs placed in the middle thereof and wedged in by D-shaped wedges, as V V.

In operation the hairs are arranged in sets and secured with their ends in the sockets I and J, so when it is desired to exchange, repair, or replace the hairs with new ones the operator simply pulls on the hooks S of the locking-slides until the sockets are released and drop out, when he in similar manner inserts the sockets of the next set of hairs.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a violin-bow the combination with the bow A, having its head and frog provided with the pockets G, and H, and the spring-actuated, slides O, with the thumb-catches S, and their inner ends extending inward through the walls of the pockets, of the hairs D, prearranged in sets and having secured upon the ends of each set sockets as I, and J, adapted to fit in the pockets and having external side notches for engaging the ends of the locking-slides, substantially as shown and described and for the purpose set forth.

2. In a violin-bow the combination with the bow A, having its head and frog provided with the pockets G, and H, and the spring-

actuated, slides O, with the thumb-catches
S, and their inner ends extending inward
through the walls of the pockets, of the hairs
D, prearranged in sets and having secured
5 upon the ends of each set sockets as I, and J,
adapted to fit in the pockets and having ex-
ternal side notches for engaging the ends of
the locking-slides, said pockets and sockets

being cylindrical, so as to simplify the manu-
facture of the parts, substantially as set forth. 10

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

PERCY C. NELSON.

Witnesses:

FRED WALL,

CHAS. C. NELSON.