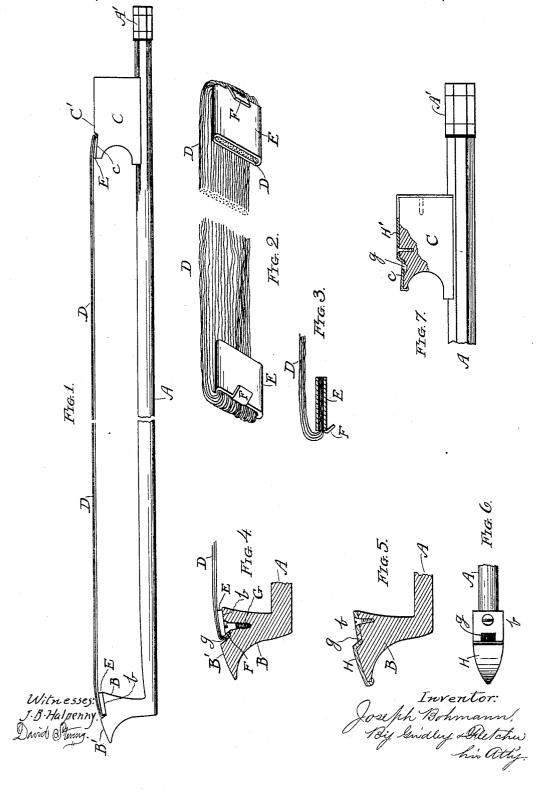
J. BOHMANN. violin bow.

No. 390,279.

Patented Oct. 2, 1888.



N. PETERS, Photo-Lithographer, Washington, D. C.

# UNITED STATES PATENT OFFICE

## JOSEPH BOHMANN, OF CHICAGO, ILLINOIS.

## VIOLIN-BOW.

# SPECIFICATION forming part of Letters Patent No. 390,279, dated October 2, 1888.

Application filed November 25, 1887. Serial No. 256,049. (No model.)

### To all whom it may concern:

Be it known that I, JOSEPH BOHMANN, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Im-

- provements in Means for Attaching Hair to Violin-Bows, of which the following is a description, reference being had to the accompanying drawings, forming a part of this specification, in which-
- Figure 1 is a side view of a bow, showing my IO improvement applied thereto. Fig. 2 is an enlarged view in detail showing the manner of attaching the hair to the detachable clasps, as well as a perspective view of the clasps them-
- 15 selves. Fig.  $\hat{3}$  is a longitudinal sectional view in detail of one of said clasps, showing the hair therein. Fig. 4 is a longitudinal sectional view in detail of the bow-head, showing one mode of attaching the clasp thereto. Fig. 5 is a like
- 20 view showing a modification thereof. Fig. 6 is a face view of said modification; and Fig. 7 is a detail view of a portion of the bow-handle, partly in section, showing said modified construction applied thereto for the reception of 25 the removable clasp.
  - Like letters of reference in the different figures designate corresponding parts.

Heretofore in the construction of violinbows it has been customary to either attach

- 30 the hair permanently to the bow; or, when removable clasps have been employed, they have been so constructed as to attach the hair in a straight line, which caused it to be overlapped by a portion of the clasp which was exposed
- 35 upon the outside, thus interfering with the "bowing" by catching upon the strings of the instrument, while the hairs were liable to pull out of the sockets or clasps. Such construction is less desirable than the old form, in which
- 40 the hair is permanently attached to the bow. This does not interfere with a satisfactory use of the bow, but is open to the objection that when the hair becomes broken or worn out it cannot be replaced except at unneces-45 sary expense and trouble.
- The purpose of my invention is to overcome these objections and to provide means whereby the hair may be removably attached to the bow, so that it cannot pull out, while at the 50 same time the hair itself and not the clasp by

bow may be brought directly into contact with the violin-strings, all of which is hereinafter more particularly described and claimed.

A in the drawings represents the rod of a 55 violin-bow, of which B is the head and C the movable block, forming a part of the handle to which the hair is attached and by means of which its tension is regulated.

D represents the hair, the respective ends of 60 which are secured by means of wax, cement, or shellac within flat hollow metal clasps E E. (Better shown in Figs. 2 and 3.) The clasp E is provided with a short outwardly-bent flange or hook, F, Figs. 2, 3, and 4, for attaching the 65 same to the bow, as hereinafter stated. The inner ends of the parts B and C, respectively, are cut away at bc to an extent corresponding substantially to the thickness of the clasp E in addition to that of the hair attached thereto. 70 An ordinary flat-headed screw, G, Fig. 4, is then preferably inserted into each of the cutaway portions of the parts B and C, the head of said screw being flush with the sunken surface of the cut-away portion. A notch, g, suf- 75 ficiently large to receive the hook F is then cut into the wood next to the screw-head and between that and the raised portion B' or C', as the case may be.

In order to attach the hair to the bow, said 80 hair is lapped over upon the clasp E, so as to lie parallel therewith, as in Fig. 2, and the hook F inserted in the notch g and in engagement with the screw-head, as clearly shown in Fig. 4. The duplicate clasp is attached in like 85 manner at the other end, and the hair is tightened by means of the usual thumb-screw, A', upon the end of the bow-handle.

Figs. 5, 6, and 7 show modifications of the construction above described. In lieu of the 90 screw G, plates H H', Figs. 6 and 7, may be screwed or otherwise fastened to the parts B C, said plates being bent to fit the depressions b c and provided with slots g, formed therein to serve in lieu and as equivalents of the notch 95 g, Fig. 4, and the screw-head there shown.

It will be observed that by doubling the hair over the clasp it is much less likely to pull out, while at the same time it presents a smooth surface to be brought into contact with the 100 same time the hair itself and not the clasp by strings, thus avoiding so-called "breaks" in which it is held at the respective ends of the bowing. By simply loosening the thumbscrew A' the hair may be detached at will and replaced with new, the cost of the clasps E being merely nominal. Both the clasps and the plates H H' may be formed in dies with great 5 rapidity.

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

The combination, with the hair and bow of 10 a violin, of clasps having sockets to receive the ends of the hair, said hair being bent over

upon or parallel with the clasps, hooks upon the outer ends of said clasps respectively, and upon the side thereof next to the bow, and sockets in the respective ends of the bow for 15 the reception of said hooks, substantially as shown and described.

#### JOSEPH BOHMANN.

Witnesses:

D. H. FLETCHER, J. B. HALPENNY.