

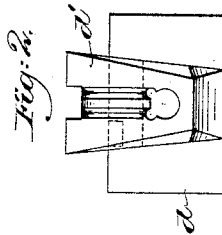
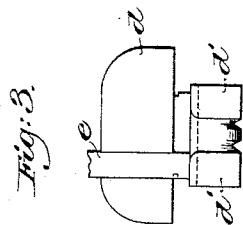
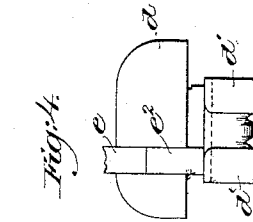
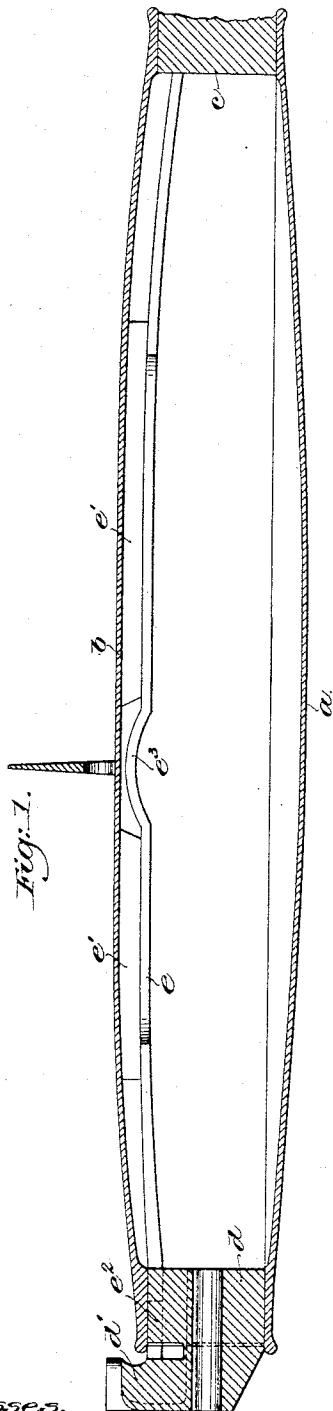
(No Model.)

2 Sheets—Sheet 1.

M. W. WHITE.  
BASE BAR FOR VIOLINS.

No. 436,963.

Patented Sept. 23, 1890.



Witnesses.

*Frederick L. Emery*  
*Howard F. Eaton.*

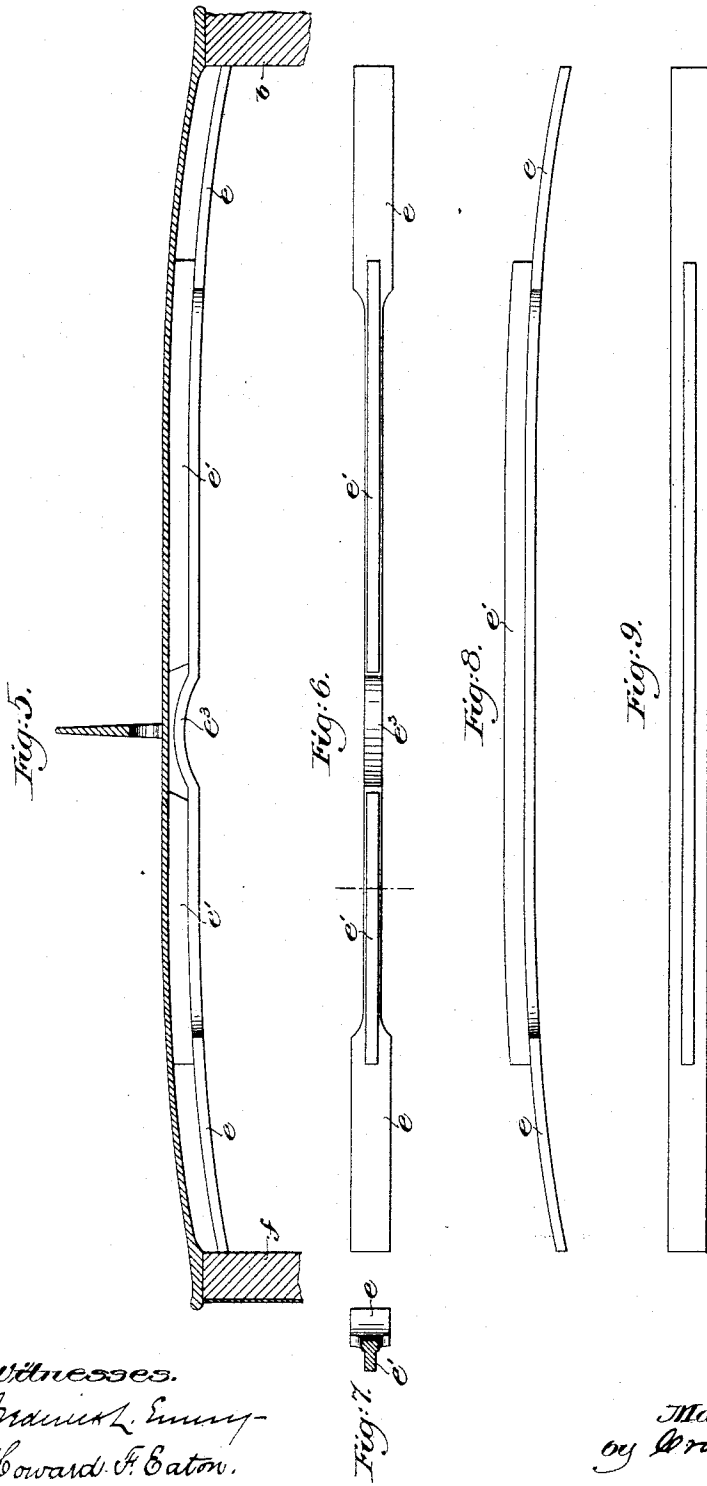
Inventor.

*Maurice W. White.*  
*by Crosby & Angoff*

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Frank L. Emery  
Howard F. Baton.

Inventor.  
Maurice W. White,  
by Crosby & Salomon  
Attys.

# UNITED STATES PATENT OFFICE.

MAURICE W. WHITE, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO GEORGE W. ROSS, OF SAME PLACE.

## BASE-BAR FOR VIOLINS.

SPECIFICATION forming part of Letters Patent No. 436,963, dated September 23, 1890.

Application filed November 18, 1889. Serial No. 330,670. (No model.)

To all whom it may concern:

Be it known that I, MAURICE W. WHITE, of Somerville, county of Middlesex, State of Massachusetts, have invented an Improvement in Base-Bars for Violins and the Like, of which

the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to construct a base-bar for violins and the like, by which the quality of the tone may be increased and the instrument strengthened.

In accordance with this invention the base-bar is made substantially the same length as the body of the instrument, so as to bear firmly in contact with the supporting-blocks at each end, which support the neck and tail pieces. The bar comprises a back and a flange, the latter contacting with the under side of the face of the instrument, but terminating a short distance from the neck and tail blocks, respectively, while the former is made quite wide, extends the length of the instrument, and bears against the end blocks. At a point beneath the bridge the bar is preferably slightly curved, and also at this point the part which contacts with the under side of the face is preferably removed.

Figure 1 shows in side elevation a base-bar embodying this invention; Figs. 2, 3, and 4, details of the tail-block; Fig. 5, a side view of a modified form of base-bar to be described; Fig. 6, a plan view of the bar shown in Fig. 5; Fig. 7, a cross-sectional detail to be referred to; Figs. 8 and 9, side and plan views of another modification to be referred to.

Referring to Fig. 1, the back *a* and the face *b* of the instrument are as usual, so, also, the neck-block *c*.

The tail-block *d* is made substantially as shown in United States Patent No. 402,118, granted to me April 23, 1889, it being arranged to receive the peg and hold the cord or string by which the tail-piece is held free from contact with the face of the instrument.

The base-bar comprises the back part *e* and flange *e'*, the former extending the entire length of the instrument, bearing at one end against the neck-block *c* and at its other end

against the tail-block *d*. As herein shown, that part of the tail-block *d* located between the face and back of the instrument is recessed to permit the base-bar to pass through and bear against the exterior part *d'* of the block. I preferably complete the base-bar *e* at the tail-block end by a small block *e<sup>2</sup>*, (see dotted lines, Fig. 1, and full lines, Fig. 4,) so that, if desired to ever vary the length of the bar, a new and larger block may be substituted or a part removed from the one already in use.

In Fig. 3 I have shown the block *e<sup>2</sup>* as formed as a part of the bar *e* or all in one piece. The back part *e* of the bar is made as wide as possible and not deteriorate the quality of tone to insure good and sufficient strength. The flange *e'* is made narrow and contacts with the face of the instrument the entire length, except at a short distance beneath the bridge and also a short distance at each end adjoining the neck and tail blocks. (See Fig. 1.) The base-bar thus presents in cross-section a T-shaped bar. (See Fig. 7.)

In lieu of employing a tail-block—such as shown in Fig. 1—an ordinary form of tail-block—such as shown at *f*, Fig. 5—may be used, the end of the base-bar bearing against the said block.

Owing to the direction of strain on the instrument when the strings are drawn taut, I have curved the base-bar at a point beneath the bridge, as at *e<sup>3</sup>*, although this is not of particular importance.

I may continue the flange *e'* beneath the bridge, as shown in Figs. 8 and 9.

The back part *e*, for flexibility, is reduced in width for a portion of its length, as shown in Figs. 1, 5, 6, 7, and 8—that is, along the part of greatest vibration—although good results are produced with a base-bar having a back part of substantially the same width, as shown in Fig. 9.

It will be seen that, as the tendency of the instrument is to yield or spring when the strings are drawn taut, the bar made to firmly bear against the neck and tail blocks materially assists in strengthening it.

I claim—

1. A base-bar for violins and the like, hav-

- ing a narrow flange contacting with the face of the instrument and having a back part supporting it, substantially as described.
2. A base-bar for violins and the like, having a flange contacting with the face of the instrument at each side of the bridge and the back part *e*, substantially as described.
3. A base-bar for violins and the like, having a flange contacting with the face of the instrument and a broadened back part, the latter being curved, as at *e*<sup>3</sup>, at a point beneath the bridge, substantially as described.
4. A base-bar for violins and the like, having a flange contacting with the face of the instrument and having a back part reduced in width for a portion of its length, substantially as described.
5. A T-shaped base-bar for violins and the like, substantially as described.
6. A base-bar for violins and the like, extending the entire length of the instrument and completed by the block *e*<sup>2</sup>, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MAURICE W. WHITE.

Witnesses:

BERNICE J. NOYES,  
E. J. BENNETT.