M. W. White,

Violin.

No. 109,696. Patented Nov. 29. 1870.

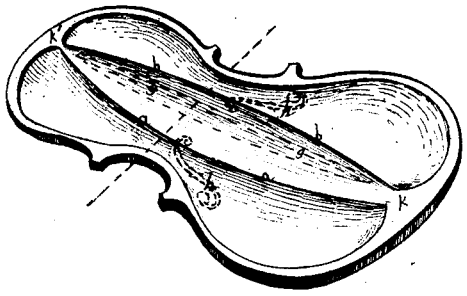

Fig. 1.

Fig. 3.

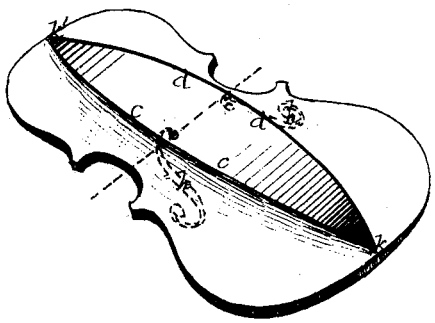

Fig. 2.

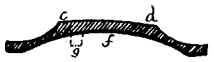

Fig. 4.

WITNESSES.

Edwin H. Titus

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MAURICE W. WHITE, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND EBENEZER P. CUTTER, OF SAME PLACE.

Letters Patent No. 109,696, dated November 29, 1870.

IMPROVEMENT IN VIOLINS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, MAURICE W. WHITE, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Violins, of which the following, when taken in connection with the accompanying drawing, is a full and complete specification.

The nature of my invention consists in the combination with and application to a violin, or similar instrument, of a device, described below, consisting of elliptic bars or their equivalent, placed upon either side of either belly or back of the instrument, the object being to strengthen and stiffen the violin against the enormous strain or tension of the strings.

In the accompanying drawing—

Figure 1 is an inside view of the top or belly of a violin embodying my invention.

Figure 2 is a view of my device placed upon the outsike of the said top of a violin.

Figure 3 is a sectional view of my invention when in the position shown in fig. 1.

Figure 4 is a cross sectional view of my invention placed as described in fig. 2.

a a b b is my device placed on the inside of a violin.

c c d d is its appearance when placed upon the outside.

e shows the shape and appearance of the outside of the top or belly of a violin as usually constructed.

f shows the shape and appearance of the inside of the said top of a violin as usually constructed.

The dotted lines *g* show the situation of the bass-bars as commonly constructed.

h h show the *f*-holes in the top.

k k' show the positions of the blocks.

In fig. 1 my invention is shown by the elliptic bars *a a* and *b b*, running from the block *k* to the block *k'*, upon the inside of the belly of the violin.

These elliptic bars do not interfere with the bass-bar *g*, which remains in its usual place.

In fig. 2 my device is on the outside of the belly of the violin, and involves the same principle as shown in fig. 1, the only difference being that there is no concavity in the device shown in fig. 2, it being, more properly, a solid ellipse extending from block to block.

This invention can be placed either upon the belly or back of the instrument, outside or in, and may consist in an extra piece or pieces glued or otherwise fastened upon the instrument, or it may be formed in the material of the instrument itself and of the same piece.

Having thus fully described my invention,

What I claim, and desire to secure by Letters Patent, is—

A violin or kindred instrument, having the elliptical bracing *a b* or its equivalent applied in the manner and for the purposes hereinbefore set forth.

MAURICE W. WHITE.

Witnesses:

HENRY W. WILLIAMS.

J. GREENE JONES.