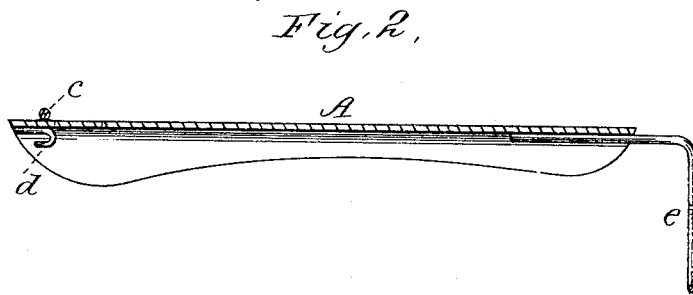
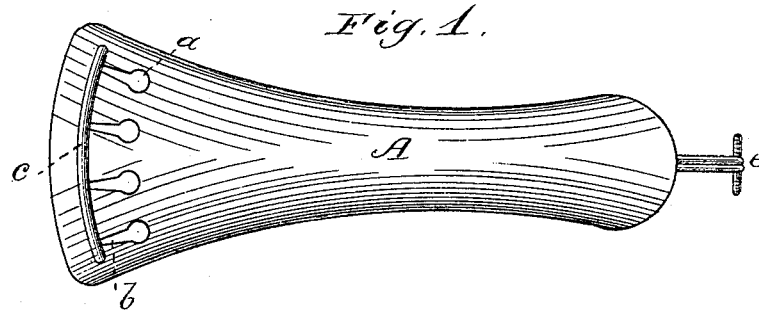


M. A. PERRIGO.
Tail-Piece for Violins.

No. 213,345

Patented Mar. 18, 1879.



WITNESSES
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UNITED STATES PATENT OFFICE.

MORGAN A. PERRIGO, OF GROTON, NEW YORK.

IMPROVEMENT IN TAIL-PIECES FOR VIOLINS.

Specification forming part of Letters Patent No. 213,345, dated March 18, 1879; application filed January 28, 1879.

To all whom it may concern:

Be it known that I, MORGAN A. PERRIGO, of Groton, in the county of Tompkins and State of New York, have invented a new and valuable Improvement in Tail-Pieces for String-Instruments; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of top-plan view of my invention, and Fig. 2 is a longitudinal vertical section of the same.

This invention has relation to tail-pieces for string-instruments.

Previous to my invention the tail-pieces ordinarily used for violins, violoncellos, and bass-viols were constructed of wood, necessitating their being of considerable thickness, so that they would not warp, split, or crack, and also to stand the strain of the strings.

The care required to manufacture tail-pieces of wood greatly increases the cost. It is therefore the object or purpose of the present invention to reduce the cost in the manufacture of tail-pieces, and at the same time render them strong and durable; and it therefore consists of a concavo-convex metal tail-piece stamped or struck up from suitable dies, and having secured to its under side hooks for fastening the ends of the strings to, as will be hereinafter more fully set forth, and subsequently pointed out in the claims.

In the accompanying drawings, A represents a tail-piece for string-instruments, such as violins, violoncellos, and bass-viols, and may be composed of any suitable sheet metal and of any size required, and may, if desired, be nickel, silver, or gold plated.

The tail-piece A is formed by suitable dies into a concavo-convex shape, and is formed with holes *a* and narrow slots *b*, common in the ordinary tail-pieces, through which the strings are inserted.

The tail-piece at its widest end would be liable to spring and cut or tear the strings. To avoid this a wire, *c*, is secured over the

top of the tail-piece and near the edge thereof, or between the end and the holes *a*, which strengthens the tail-piece and prevents it from springing.

In place of the wire, a rib or bead may be formed on the upper surface of the tail-piece, in length and size similar to the wire *c*, which would also prevent the end of the tail-piece from springing; but I prefer the wire, as a more certain means of accomplishing said object.

The wire *c* is secured to the tail-piece by bending the ends of the wire down or at right angles, and inserting them through holes made in the tail-piece for their reception, after which the wire is soldered in place.

The wire not only serves the purpose of preventing the tail-piece from springing, but serves the purpose of a bearing for the strings, similar to the ordinary wooden tail-piece.

Upon the under side of the tail-piece A, in front of the narrow slots *b*, are secured hooks *d*, over which the ends of the strings are looped or otherwise fastened previously to being passed through the holes *a*; or they may be inserted through said holes, and afterward secured to the hooks. These hooks aid in preventing the strings from being cut by the edges of the slots *b*.

To the smaller or opposite end of the tail-piece A is secured a wire eye, *e*, which goes over the peg at the end of the instrument, to hold the tail-piece in position.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The sheet-metal tail-piece A for musical instruments, provided with hooks *d*, holes *a*, and slots *b*, as and for the purpose set forth.

2. The sheet-metal tail-piece A, with holes *a*, slots *b*, and having hooks *d*, eye *e*, and strengthening rib, bead, or wire *c*, as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MORGAN A. PERRIGO.

Witnesses:

M. B. WILLIAMS,
OLIVER AVERY, Jr.