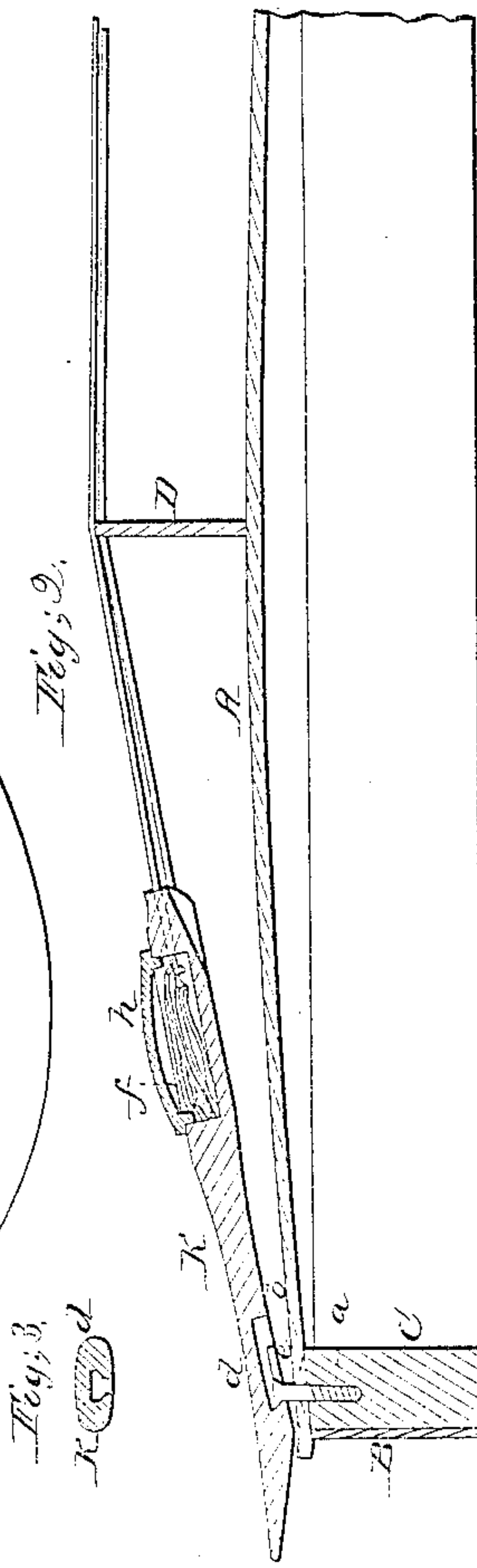
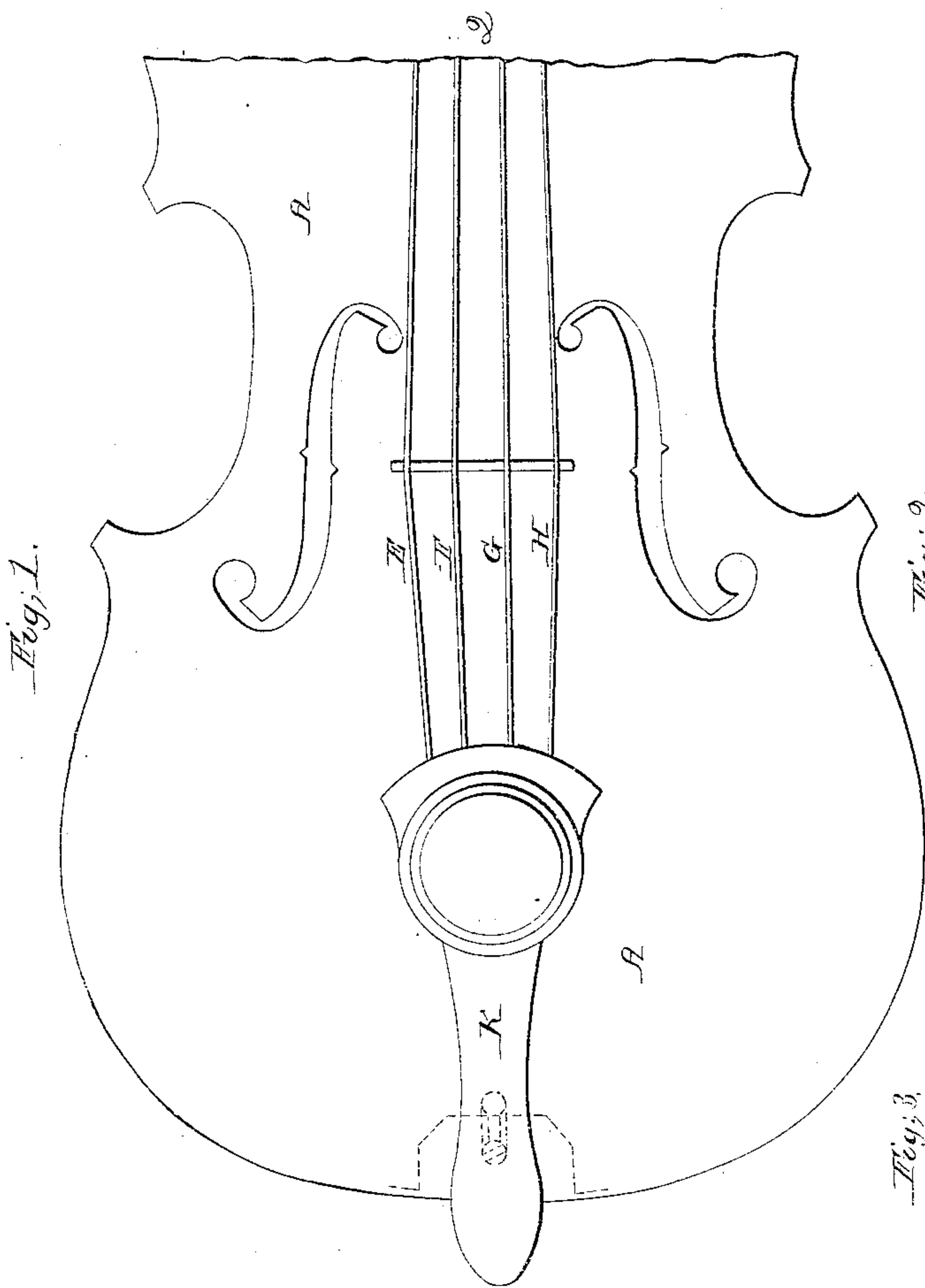
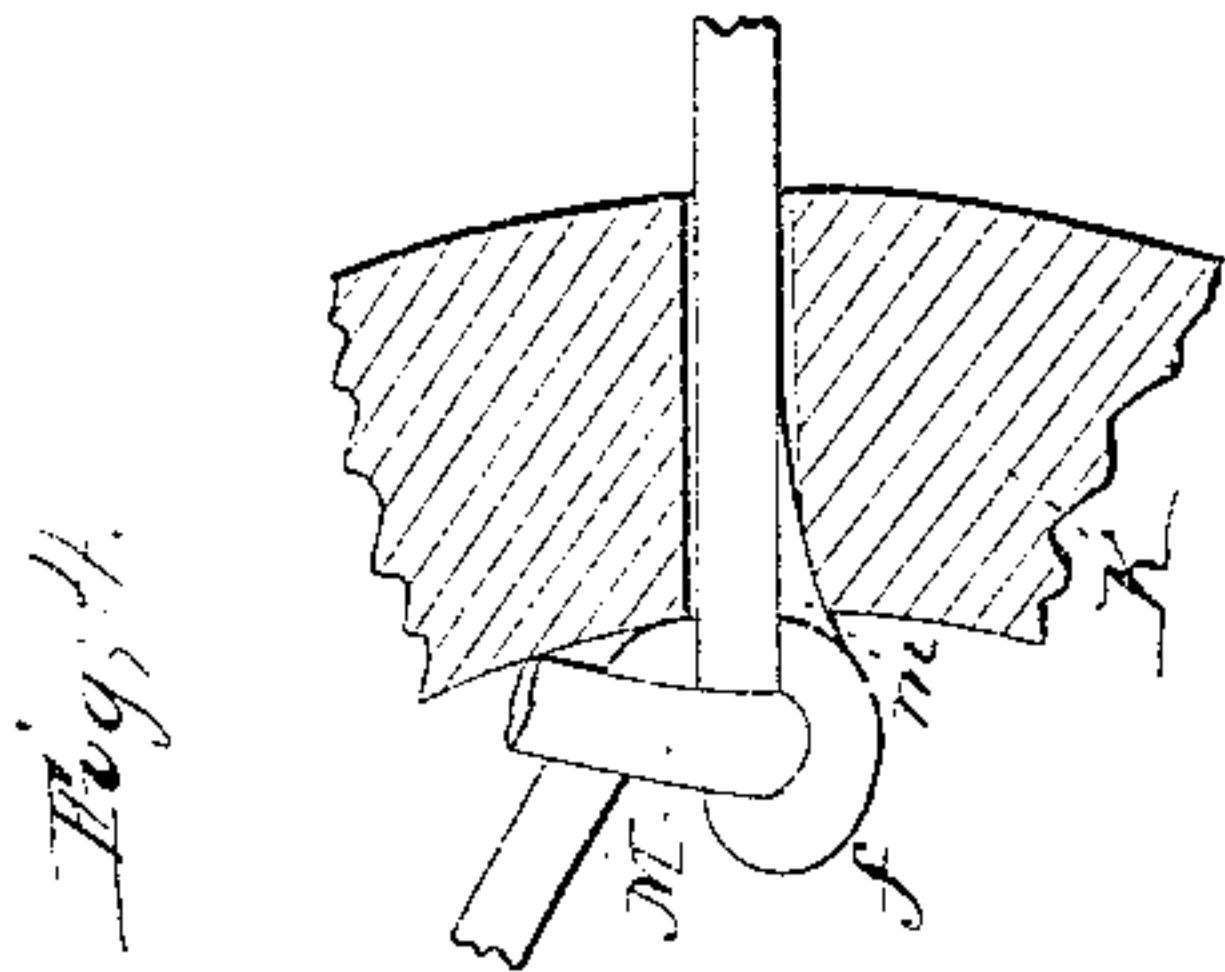


*C. M. Zimmermann,*

*Violin Attachment*

*No 16,102,*

*Patented Nov. 18, 1856.*



*Witness*  
*Henry Howson —*

*Inventor;*  
*C. M. Zimmermann*

# UNITED STATES PATENT OFFICE.

C. M. ZIMMERMANN, OF PHILADELPHIA, PENNSYLVANIA.

## TAILPIECE FOR VIOLINS, &c.

Specification of Letters Patent No. 16,102, dated November 18, 1856.

*To all whom it may concern:*

Be it known that I, CHARLES M. ZIMMERMANN, of the city of Philadelphia and State of Pennsylvania, have invented a new and  
5 Improved Tailpiece for Violins; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked  
10 thereon.

My invention relates to improvements in (what are technically termed) tail pieces for violins and other similar string instruments, and consists in a ready mode of connecting  
15 and disconnecting said tail pieces, also in constructing the latter with a circular recess, wherein the portion of the strings, not required for immediate use, may be coiled and confined free from exposure to the atmosphere; also in the mode of so connecting the  
20 strings to the tail piece that the usual knots, so apt to deteriorate the fibers of the strings, are avoided.

In order to enable others skilled in the art to make and use my invention I will now proceed to describe its construction and operation.

On reference to the drawing which forms a part of this specification, Figure 1 is a  
30 plan view of sufficient of a violin to show my improvements; Fig. 2, a longitudinal section on the line 1—2 (Fig. 1); Fig. 3, a transverse section on the line 3—4; Fig. 4, an enlarged view of a portion of the tail  
35 piece showing the manner of connecting the strings to the same.

The same letters of reference allude to similar parts throughout the several views.

A is the front or belly of the violin; B, the  
40 edge, and C a small block of wood, glued or otherwise secured to the belly edge and back. This block is common to all violins.

D is the bridge, and E, F, G, and H the strings.

45 Through the front A, and into the block C, is screwed the pin *a*, the head of which projects a short distance above the violin.

K is the tail piece on the underside of which is an opening *b* large enough to admit the head of the pin *a*. The opening  
50 communicates with a longitudinal T shaped slot *d* (Fig. 3), which terminates at a short distance from the end of the tail piece. The upper part of the slot is wide enough to admit the head, and the lower part the body  
55 of the pin *a*. On the top of the tail piece K is a circular recess into which fits or screws the edge of the circular cover *h*. From the

front edge of the tail piece, and into the recess *f* are bored holes, each hole being enlarged toward the recess. 60

In connecting each string to the tail piece, it is passed through one of the holes, and wrapped around a bent pin M with a single turn. The point *m* of the pin is then forced  
65 into the enlarged portion of the hole alongside of the strings, thus connecting the latter to the tail piece as securely as if it was fastened by the ordinary knots. The portion of each string not required for immediate use, instead of being wrapped around the stem and scroll of the violin, is contained in  
70 the recess *f*, so that should a string break all that is necessary is to remove the cover *h* and pin M, when the portion of the string hitherto coiled in the recess is passed  
75 through the hole to the length required, again turned around the pin M, and the point of the latter placed in its original position. By thus confining the portions of  
80 the strings not in immediate use, in the recess, not only is the inconvenience resulting from coiling them in the neighborhood of the finger board and tuning keys avoided, but the injurious effects caused by exposure  
85 to the atmosphere obviated. The necessity in securing the strings to the tail piece of using knots, which strain the fibers of the strings, is dispensed with by using pins M in conjunction with a single fold of each  
90 string.

The pin *a* with the T shaped slot in the underside of the tail piece affords a ready means of connecting and disconnecting the  
95 latter.

Although I have shown and described my improvements as applied to violins only, it is easy to perceive that the same are applicable to guitars, violoncellos, and other  
100 string instruments.

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

1. The tail piece K with its recess *f*, and loose cover *h* constructed substantially as described and for the purpose specified. 105

2. The employment of the pins M for securing the strings by a single fold to the tail piece in the manner set forth.

In testimony whereof I have signed my name to this specification before two  
110 scribing witnesses.

C. M. ZIMMERMANN.

Witnesses:

HENRY HOWSON,

WILLIAM E. WALTON.