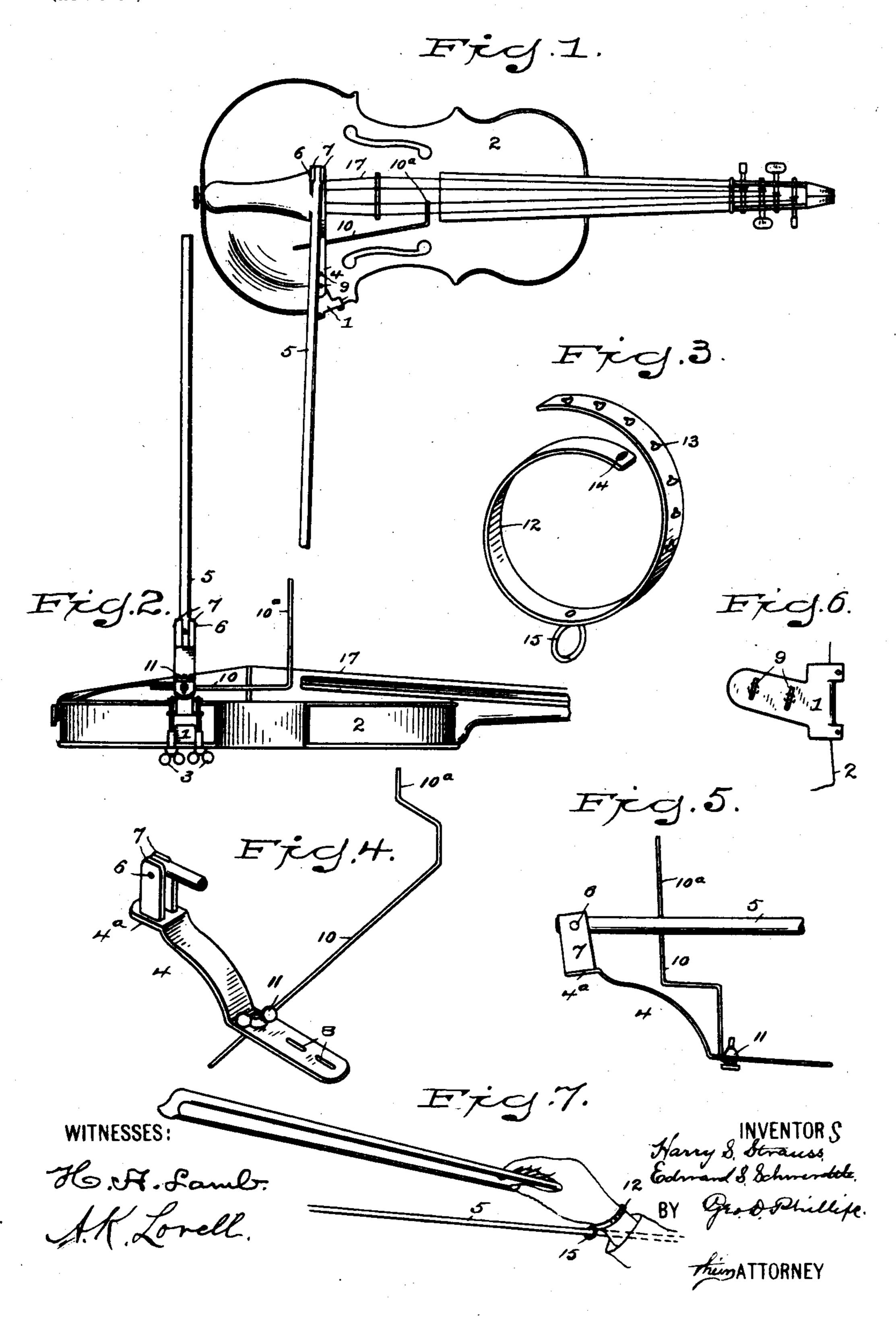
## H. S. STRAUSS & E. S. SCHWERDTLE. BOWING GUIDE FOR VIOLINS.

(Application filed Mar. 25, 1901.)

(No Model.)



## United States Patent Office.

HARRY S. STRAUSS AND EDWARD S. SCHWERDTLE, OF BRIDGEPORT, CONNECTICUT.

## BOWING-GUIDE FOR VIOLINS.

SPECIFICATION forming part of Letters Patent No. 713,171, dated November 11, 1902.

Application filed March 25, 1901. Serial No. 52,830. (No model.)

To all whom it may concern:

EDWARD S. SCHWERDTLE, citizens of the United States, and residents of Bridgeport, in 5 the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in a Bowing-Guide for Violins, of which the following is a specification.

Our invention relates to a bowing-guide for 10 violins. Heretofore the most difficult thing for beginners to acquire in the art of violinplaying is what is termed "bowing"—that is, to learn the art of carrying the bow squarely across the strings and at right angles thereto 15 and also at a certain distance from the bridge. This is absolutely necessary in order to get the proper tone and effect, which cannot be done if the proper position on the strings is not maintained together with the straight 20 travel of the bow. Until the pupil has acquired the art of proper bowing he cannot become an accomplished player. In some cases this requires years of constant practice to acquire. With our attachment the art of bow-25 ing is acquired without any effort on the part of the pupil, as with its use there is no chance

to go astray. To this end our invention consists of a rod pivotally supported in the rear of the bridge 30 and projecting laterally from the violin. In connection with this rod a guide-ring is secured to the arm of the operator and adapted to run on this rod, so that when the bow-hand moves to and from the violin the guide will 35 prevent the hand deviating from a straight line. In connection with this rod and ring a guide is arranged forward of the bridge to

keep the bow in its proper position. To enable others to understand our inven-40 tion, reference is had to the accompanying drawings, in which—

Figure 1 represents an upper plan view of a violin, showing the hand-guide rod and bowguide in position, the former shown as broken. 45 Fig. 2 is a broken side elevation of a violin, also shown broken. Fig. 3 is a detail view of a bracelet adapted to embrace the arm or wrist, with a swiveled ring attached thereto 50 and adapted to engage the guide-rod of the violin. Fig. 4 is a detail perspective view of | impossible to deviate from the true line of

the attachment to which the guide-rod is piv-Be it known that we, HARRY S. STRAUSS and | oted, said rod shown as broken, also a broken view of the bow-guide adjustably secured to such attachment. Fig. 5 is a detail side ele- 55 vation of the attachment shown at Fig. 4. Fig. 6 is an upper plan view of the clamp attached to a broken section of the violin, to which clamp the guide-rod support is detachably secured. Fig. 7 is a perspective view of 60 a hand holding a bow in the act of playing, showing the bracelet secured to the wrist, also broken section of the guide-rod with the ring of said bracelet engaged therewith.

> Its construction and operation are as fol- 65 lows:

1 is a clamp secured to the violin 2 by means of the thumb-nuts 3.

4 is the guide-rod support, carrying the guide-rod 5, pivotally supported on the pin 6 70. and between the ears 7.

8 represents slots in the opposite end of this support to receive the swiveled buttons 9 of the clamp 1, whereby said support is detachably secured to said clamp.

10 is a small wire rod which is adjustably secured to the support 4 by means of the thumb-nut 11. The forward vertical end 10<sup>a</sup> is the bow-guide proper, and its exact position relative to the sounding-board and bridge 80. having been properly determined by the player it is firmly secured to said support 4.

12 is a spring-bracelet having the holes 13 adapted to be engaged by the swiveled button 14. There are several of these holes, so 85 that said bracelet can be reduced or expanded. In the drawings this bracelet is shown attached to the wrist, as that is the most convenient place whereby to attain the best results, although, if desired, it can be secured 90 to any part of the arm.

15 is a swiveled ring or runner secured to the lower part of said bracelet, which ring is adapted to slide freely over the guide-rod 5, as shown at Fig. 7.

The operation of the device is as follows: showing the hand-guide rod elevated, said rod | The bracelet 12 is attached to the wrist and the ring is slipped over the guide-rod 5. The bow being properly grasped by the hand is laid against the vertical wire guide 10a. Now 10d on moving the bow across the strings 17 it is

perfect bowing. The guide-rod 5 will prevent any faulty side movement of the hand, while the guide 10° will keep the bow in proper place and prevent its crawling down the in-5 clined strings toward the neck of the violin. The hand-guide rod 5 is so pivoted that it can only have a tilting motion varying all the way from the horizontal to the vertical. As the bow describes a curve, this tilting movement to is necessary to enable the operator to reach all of the strings without any cramping effect. The forward portion 4ª of the guiderod support is pitched downward, so that when the bow-hand is brought to its extreme 15 forward position it will not come in contact with the ears 7.

It will be observed that the hand-rod guide 5 is set at a slight angle, as shown at Fig. 1. This also assists materially in maintaining a 20 straight-line movement of the bow. When the bow is pushed forward, the bending of the elbow will of course bring the hand closer to the body; but when it is withdrawn the arm is comparatively straight and the hand 25 is then almost at right angles to the said rod. Now if the rod were straight the outer or hand end of the bow would be carried away from the same, and thus describe a lateral curve when the arm was straightened; but 30 by setting the rod at an angle this tendency to crowd or curve outward is counteracted and the bow will move in a straight line. Should there be any tendency of the runner on its guide-rod or the bow in contact with 35 its guide to produce any noise that would annoy the player, those parts could be covered with felt or other like material.

We do not wish to be confined to the exact means whereby the hand-guide rod is attached 40 to the violin nor to the means employed for securing the guide for the bow, as these can be It is, however, impor-

tant that the hand-guide rod should have a vertical tilting movement and means attached to some part of the arm to freely engage said 45 rod, which means may be a ring, as shown, or any other construction that would keep the arm loosely in contact with the guide.

Having thus described our invention, what we claim as new, and desire to secure by Let- 50

ters Patent, is—

1. The herein-described bowing device for violins, which consists of a support attached to the violin, a guide-rod pivotally connected thereto, said guide-rod adapted to have a ver- 55 tical movement in said support, combined with suitable means adapted to be secured to the bowing-arm of the operator to loosely embrace said guide-rod, for the purpose set forth.

2. The herein-described bowing device for 60 violins, consisting of a guide-rod pivotally supported on the violin, and adapted to have a vertical tilting movement, combined with a runner adapted to be secured to the bowingarm, and a bow-guide located forward of the 65 bridge of the violin, for the purpose set forth.

3. The herein-described bowing device for violins, consisting of a detachable support adapted to be secured to the violin, a guiderod pivoted in said support and adapted to 70 have a vertical movement, an adjustable bowguide secured to said support, a runner adapted to be secured to the bowing-arm to loosely engage said guide-rod, for the purpose set forth.

Signed at Bridgeport, in the county of Fairfield and State of Connecticut, this 23d day of March, A. D. 1901.

> HARRY S. STRAUSS. EDWARD S. SCHWERDTLE.

Witnesses:

A. K. LOVELL. JOHN B. CLAPP.