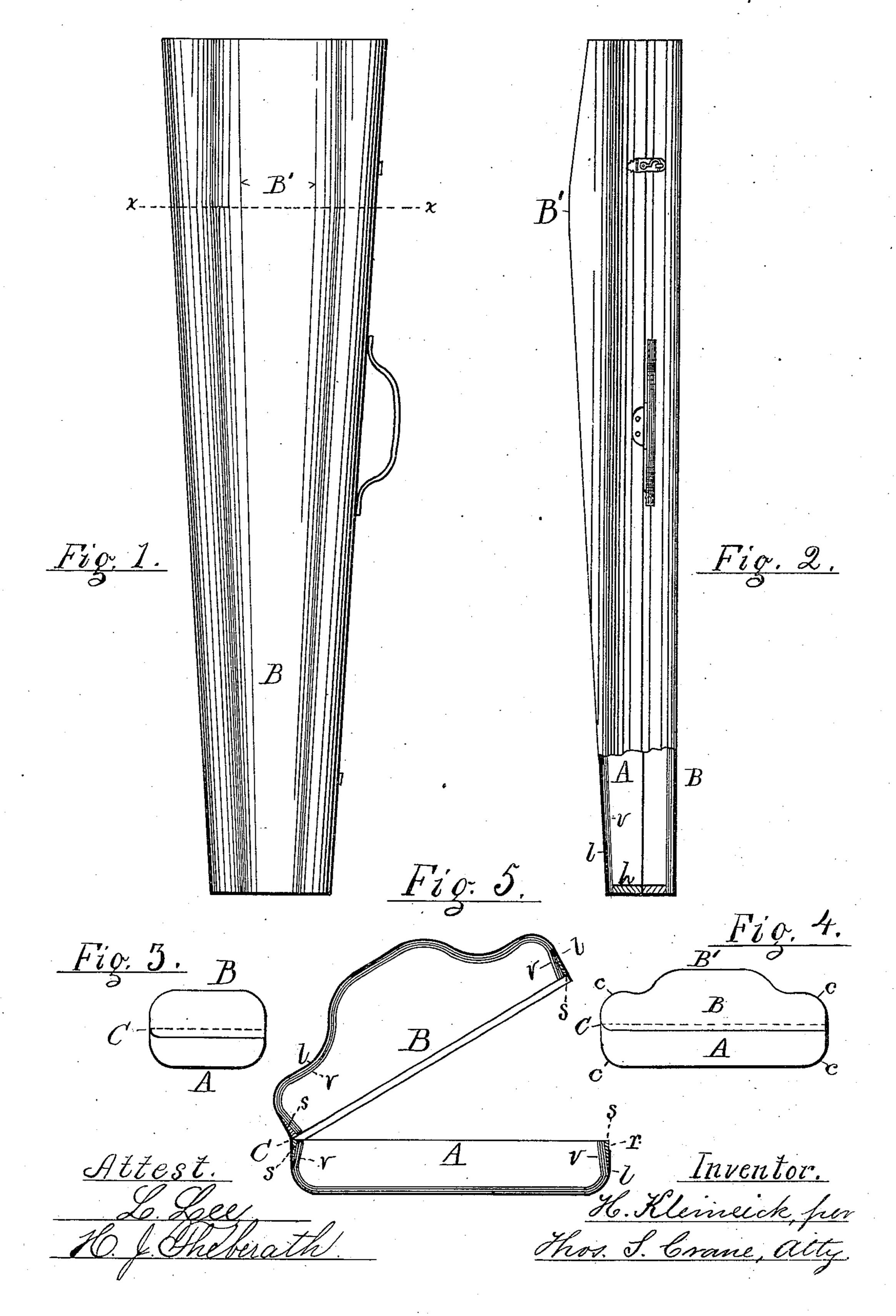
H. KLEINEICK.

VIOLIN CASE.

No. 308,077.

Patented Nov. 18, 1884.



UNITED STATES PATENT OFFICE.

HUGO KLEINEICK, OF NEWARK, NEW JERSEY.

VIOLIN-CASE.

SPECIFICATION forming part of Letters Patent No. 308,077, dated November 18, 1884.

Application filed March 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, Hugo Kleineick, a subject of the Emperor of Germany, residing in Newark, Essex county, New Jersey, have 5 invented certain new and useful Improvements in Violin-Cases, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to an improved construction of leather and veneer combined with means for strengthening the edges of the case by inserting framing-strips between the veneer and leather.

In the drawings, Figure 1 is a plan of my improved case. Fig. 2 is an edge view of the same, with one end shown in section. Fig. 3 is a view of the narrow end of the case. Fig. 4 is a view of the wide end; and Fig. 5 is a 20 sectional view of the case at the deepest point,

indicated at x x in Fig. 1.

A is the bottom of the case, and B the top; C, the hinge for the two, and B' a swell upon the top to accommodate the bridge, the strings, 25 and the tail-piece of the violin. The shape of the case is indicated in Fig. 1, its peculiarity consisting in the sides being quite straight, as well as the ends, thus forming four corners, and concealing the shape of the violin as much 30 as it is possible to do in a case conforming to the shape of the instrument at all. This concealment of the shape is regarded by many musicians as a very desirable thing, as when traveling they do not always find it necessary 35 that their profession should be known; and

this case, having inclined sides and parallel ends, and resembling many other travelingboxes in its straight lines, does not directly suggest the use for which it is designed.

The cases heretofore have usually been made of leather alone, in which case they do not l well retain their form; or of wood, which is very liable to damage by accident, and very difficult to repair when broken, on account of 45 its thinness. Wooden cases have also been sometimes covered with leather, but such a construction not only involves a double expense, but results in a very inconvenient weight. To obviate these objections I form 50 my improved case with a lining of soft veneers, the straight lines of the case affording the means of bending such veneers with the

utmost facility, excepting at the swell B', which I form by pressing in a mold of suitable shape, as is commonly done with analogous articles. 55

The combination of the veneer and leather requires some peculiar constructive featuresas, for instance, the provision of a stiffening frame or strip along the edge of the parts, all of which is shown in Fig. 5. In this section 60 v are the veneers and l the leather, while s are the strips referred to, the latter being preferably inserted between the veneer and the leather, as shown in the figure, to secure a firm hold upon both by the mere use of glue. 65 The veneers are shown in three layers, but any number above two may be used, that they may have their grain crossed in the usual manner, and they are made to form a continuous lining for each of the parts A and B, ex- 70 cepting at the flat ends, which are formed by heads h of thicker wood. The leather l is continuous over the whole top and bottom of the case, especially at the rear, as shown in Fig. 5, thus forming a very strong and close- 75 jointed hinge, and to exclude the dust from the joint at the front and ends of the box I make the strips s project beyond the leather on the part A, and the leather project beyond the strips on the part B, thus forming a rabbet, r, 80 on the bottom, into which the leather of the cover neatly overlaps. Were the strips s secured to the inner surface of the veneer itself, they would project inconveniently into the box, and would be easily loosened, because at- 85 tached only by one side; but by making them of wedge shape, as shown in Fig. 5, and inserting them between the veneers and the leather, they are firmly held at both their flat sides by the glue employed, and may be fur- 90 ther secured by tacks or rivets, if desired. When thus constructed, strips of very small dimensions may be used, and the entire case is thus made very light and neat, while possessed of great strength by the composite char- 95 acter of its curved top and bottom.

In addition to the novel appearance my improved shape affords, it also secures very important advantages when using veneers to construct the body of the case, as the straight 100 sides may obviously be produced with less pressure and distortion of the material than any curved forms. I join the sides to the top and bottom of the case with a curve adapted

to form straight lines in the direction of the length of the case, thus securing a shape into which the material can be bent without the slightest distortion. This curve is shown in 5 Figs. 3 to 5, at c in Fig. 4, and may be made of any radius desired. The swell B' of course produces distortion of the top at certain points, but this is quite independent of the ease with which the corners c are bent, the material in the swell being distended by the dies employed from the material within a fixed area. Having thus set forth the nature of my in-

vention, what I claim is—

The violin-case constructed with veneers

inside and leather outside, the two materials 15 being glued together into the desired shape, the leather serving as a continuous hinge, and the strips s being secured between the edges of the veneers and leather, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing wit-

nesses.

HUGO KLEINEICK.

Witnesses:
A. VAN ARSDALE,
THOS. S. CRANE.