

(No Model.)

G. S. BOND.

VIOLIN CASE AND METHOD OF MAKING THE SAME.

No. 361,123.

Patented Apr. 12, 1887.

Fig. 1,

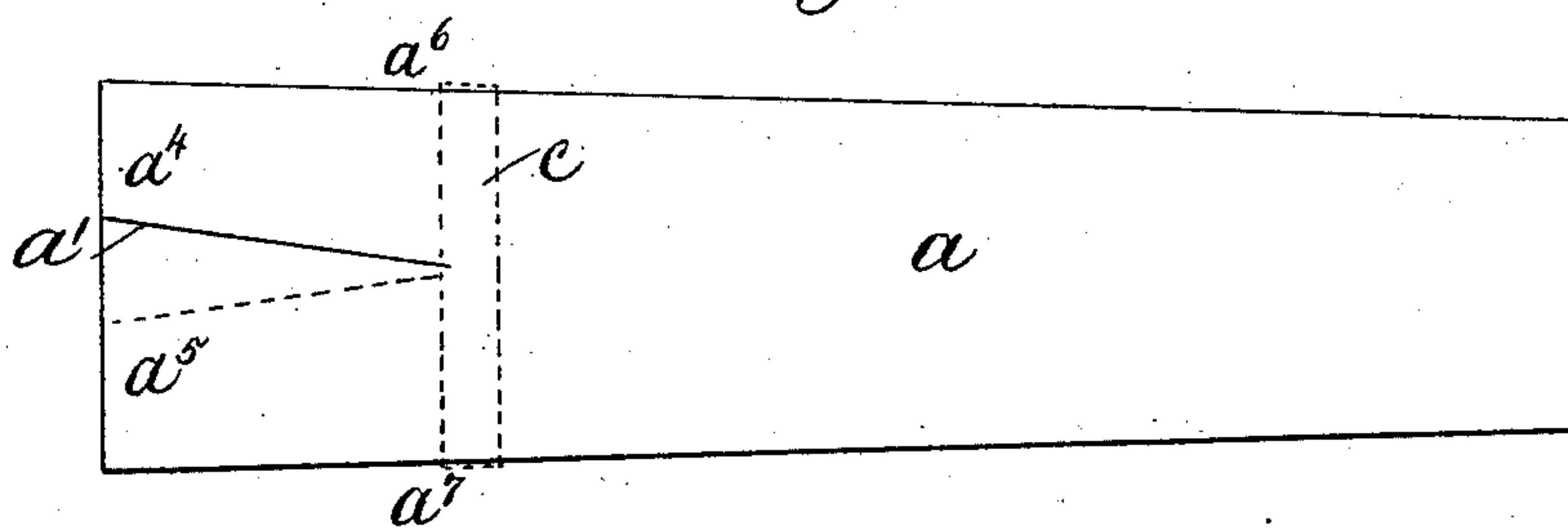


Fig. 2,

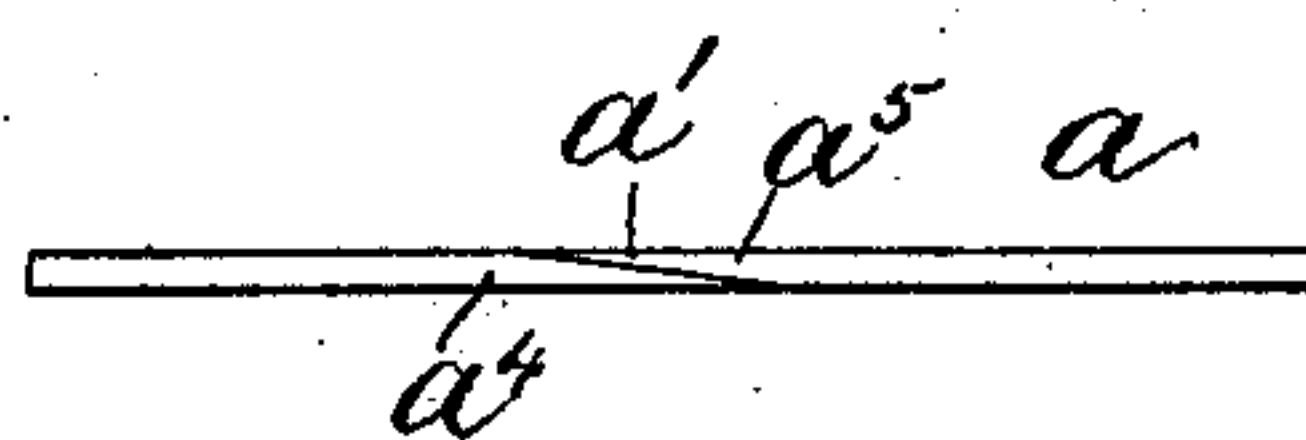


Fig. 3,

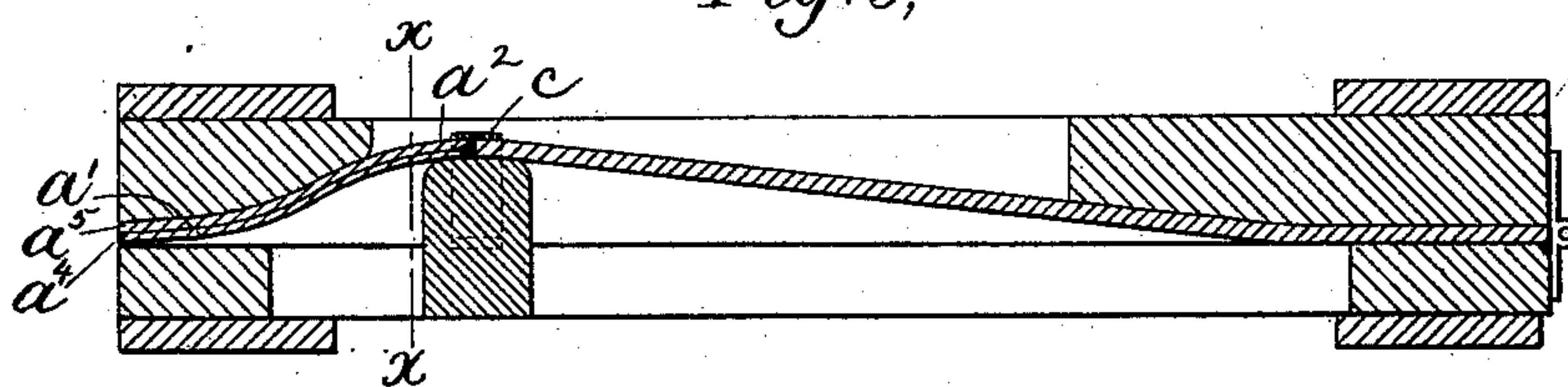
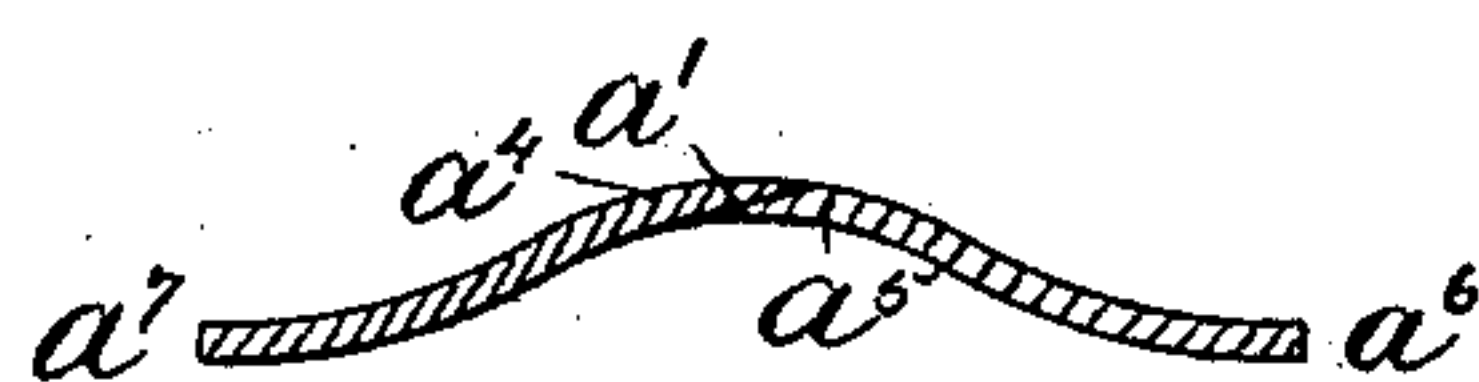


Fig. 4,



Witnesses

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Inventor

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UNITED STATES PATENT OFFICE.

GEORGE S. BOND, OF CHARLESTOWN, NEW HAMPSHIRE.

VIOLIN-CASE AND METHOD OF MAKING THE SAME.

SPECIFICATION forming part of Letters Patent No. 361,123, dated April 12, 1887.

Application filed September 28, 1886. Serial No. 214,756. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. BOND, of Charlestown, county of Sullivan, State of New Hampshire, have invented an Improvement in Violin-Cases and Method of Making the Same, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention relating to a violin-case and method of making the same has special reference to the production of the top of the case from a piece of thin flat board by molding the same to the desired shape or providing it with a bulge or concavity at the inside that receives the bridge of the violin. When a case-top of this kind is molded from an integral piece of board by the usual process, the flat portion of the board near the bulge is stretched laterally, so as to produce an extra fullness, which causes it to pucker or become corrugated, and in some cases this puckering or corrugation is obviated by removing a gore or wedge-shaped piece from the blank before molding the same, the edges of the gore-opening being closed in the process of molding, and being glued together.

The object of the present invention is to obviate the fulling or puckering without removing a gore from the material, thus forming a stronger top than the gored molded tops. This is effected in accordance with this invention by producing a diagonal saw-cut in the end of the board extending from the end of the board to about the point that is to form the crown of the bulged portion, and then when the board is molded the portions at either side of the saw-cut overlap one another more than in the original blank, and the said saw-cut may be filled with glue, causing the portions at either side thereof to unite firmly, and, owing to the greater extent of surface, forming a much stronger joint than when a gore is removed from the board and the sides of the gore-opening glued together.

Figure 1 is a plan view of a blank for a top of a violin-case embodying this invention; Fig. 2, an end view thereof; Fig. 3, a longitudinal section of a finished top as it appears in the molding-dies or formers; and Fig. 4, a transverse section thereof on line *xx*, Fig. 3.

The blank or board *a*, Fig. 1, which is to be

molded to proper shape for the top of a violin-case, has a diagonal saw-cut (represented at *a'*, Figs. 1 and 2) extending inward from its end to about the point that is to form the crown or highest part of the bulged portion *a*², Fig. 3, of the finished case. The saw-cut removes a small portion of the material, and at the same time renders it possible for the portions *a*⁴ *a*⁵ at either side of the cut to be sprung or bent slightly toward or from one another. The inclination of the saw-cut to the faces of the board or blank is least at the end of the board, as shown in Fig. 3, and gradually increases toward the point *a*² that is to be raised into highest relief, as will be understood from Fig. 1. A cut of this kind may be made by using a band-saw and applying the end of the board to the saw with the board nearly parallel or but slightly inclined to the line of action of the saw, and then gradually turning the board on the line of action of the saw as an axis as the board is pressed against or fed to the saw making about a quarter-turn of the board on its longitudinal axis in the entire length of the saw-cut. The blank thus cut is steamed or moistened in the usual manner, to render it pliable, and is then pressed in dies or molded to the proper shape in the usual manner. The forcing up of the bulge *a*², Fig. 3, tends to draw the edges *a*⁶ *a*⁷ of the blank toward one another, and this tendency extends to the part at the end of the blank that is to remain flat, and, were it not for the saw-cut *a'*, would cause the portions *a*⁴ *a*⁵ to full or become wrinkled or corrugated lengthwise of the board. When, however, the board is cut as shown, the tendency of the edges *a*⁶ *a*⁷ to approach one another merely springs the portions *a*⁴ *a*⁵ toward one another, closing the space caused by the saw-cut and overlapping the said portions upon one another. The surfaces of the portions *a*⁴ *a*⁵ at either side of the saw-cut are then coated with glue or cement that unites them firmly with one another, and, owing to the fact that a large surface is acted upon by the glue, and that the grain of the two portions *a*⁴ *a*⁵ is slightly inclined, or that of the one portion intersects that of the other, the joint is fully as strong or stronger than the natural wood, thus making a more durable article than the gored tops heretofore made.

In another application, Serial No. 214,757,

filed herewith, September 28, 1886, I have described a method and appliances for making a case-top without cutting or removing any of the material, and in the said process I employ
5 an elastic former which may be employed with equal advantage in making a top in accordance with the herein-described process, and I have shown such a former at *c* in Fig. 3, in connection with the dies, which are of usual
10 construction, and I do not herein claim the said appliances.

I claim—

1. A molded top for a violin-case or similar article made of a board having a diagonal cut
15 and a bulged or raised portion, the portions of the board at either side of the said cut being overlapped and glued together, substantially as and for the purpose described.

2. The herein-described process of making tops of violin-cases or similar articles, which
20 consists in forming a blank of thin board and providing the same with a diagonal saw-cut, the inclination of which to the faces of the blank is greatest at the point of the blank that is raised into highest relief and gradually de-
25 creases toward the point that is not to be raised, and then molding the blank and uniting the material at either side of the saw-cut by glue or cement, substantially as described.

In testimony whereof I have signed my name
30 to this specification in the presence of two subscribing witnesses.

GEORGE S. BOND.

Witnesses:

GEORGE OLCOTT,
HERBERT W. BOND.