(No Model.) 2 Sheets—Sheet 1.

B. B. BRADBURY.

BANJO.

No. 443,159. Patented Dec. 23, 1890.

Fig. 1.

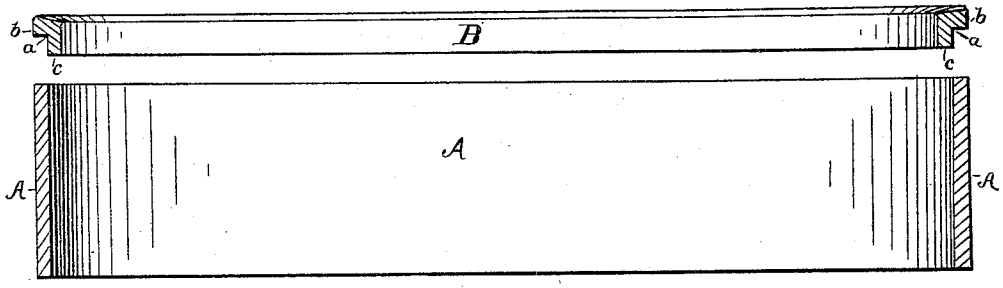
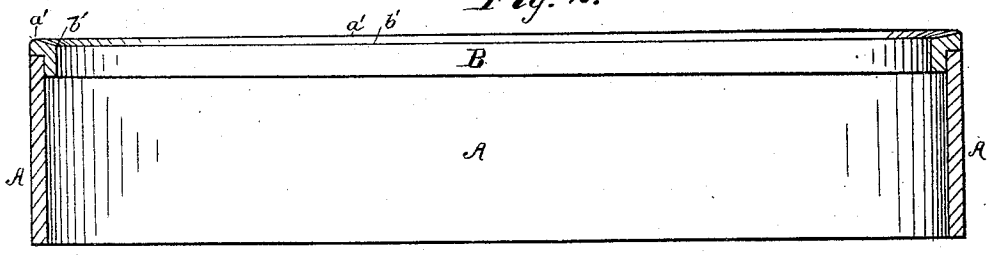


Fig. 2.



WITNESSES:
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George H. Sackett

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(No Model.) 2 Sheets—Sheet 2.

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BANJO.

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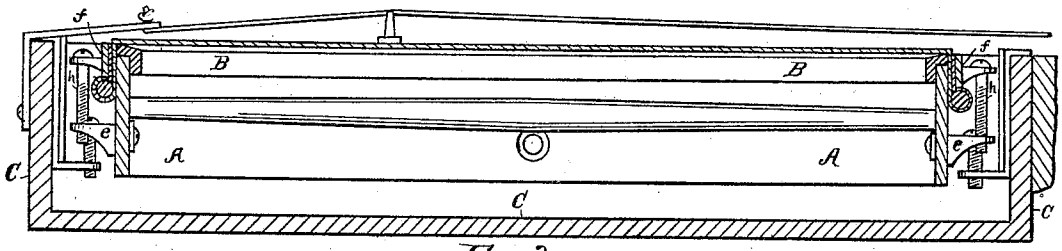

Fig. 3.

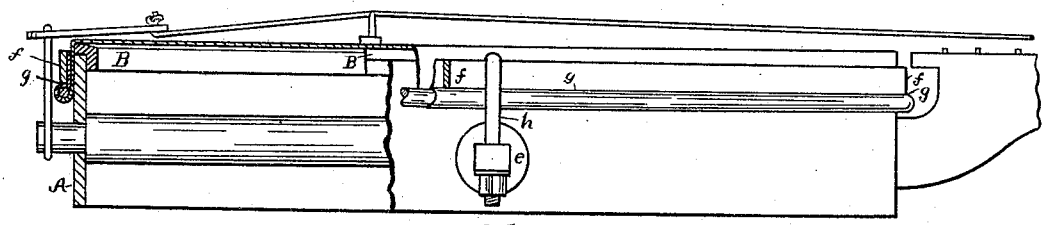

Fig. 4.

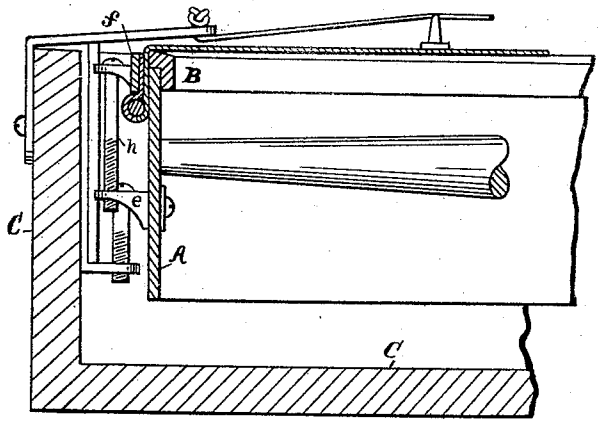

Fig. 5.

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UNITED STATES PATENT OFFICE.

BENJAMIN B. BRADBURY, OF BROOKLYN, NEW YORK.

BANJO.

SPECIFICATION forming part of Letters Patent No. 443,159, dated December 23, 1890.

Application filed February 26, 1890. Serial No. 341,879. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN B. BRADBURY, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Banjos, &c.; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to that class of stringed instruments which includes the banjo, and is designed to insure improved tone in the instrument, greater permanence of tone, and greater stability of structure than has heretofore been common in this class of instruments.

It comprises a novel combination, with the wooden rim of an instrument of this class, of a rabbeted metallic annulus fitted snugly upon and within that edge of said wooden rim which is adjacent or contiguous to the parchment head, said annulus serving the purposes of giving a more uniform, secure, and permanent tension to the parchment head, of strengthening the wooden rim so that its original shape is retained under the vicissitudes of use, of strengthening the wooden rim so that it shall remain substantially uniform, and of increasing the resonance of said wooden rim by reason of a certain metallic quality imparted to or in connection with the qualities of sound to said wooden rim itself, by which means instruments of the banjo class may be very greatly improved in tone and quality and in the uniformity and preservation thereof.

Figure 1 is a sectional view illustrating the essential parts of my said invention, showing them separated from each other. Fig. 2 is a similar view showing said parts placed in due relation to each other for use. Figs. 3 and 5, the latter on a larger scale than the former, illustrate my invention as placed in a "box-banjo," so called. Fig. 4 illustrates my said invention as embodied in a common or single-shell banjo.

My said invention is applicable to banjos of any known or suitable kind.

A is the rim of the banjo. This rim is of wood of any suitable kind, character, or variety. As wooden rims are well known in the art, no specific description of the rim is necessary. Any suitable wooden rim may be used for the purposes of my said invention.

B is a metallic ring or annulus, which may be of any suitable metal, but is preferably of bell-metal. To secure the best results, metal of a good resonant quality should be employed. This rim B is rabbeted, as shown at *a*, so that the rim has a laterally-extending part *b* and an inwardly-extending part *c*. The annulus is pressed down upon that edge of the rim A which is next or adjacent to the parchment head of the instrument, the lateral part *b* resting upon the top or edge of the rim and the inward part *c* passing within the adjacent portion of the rim, as represented in Fig. 2. The parts *c* should fit snugly within the inner circumference of the rim in such manner as to brace and sustain the same and hold the same under a more or less degree of tension from within. The wooden rim A being thus provided with the rabbeted annulus B, placed thereon in the same general relation with the rim as in the ordinary banjo, the circumferential portion of the parchment head is strained over the circumference of the annulus B, as represented in Figs. 3 to 5, inclusive. The said annulus B is beveled at its outer surface, as shown at *a'* and *b'*, in order that the bearing of the parchment head may be along a narrow line or space when said head is strained in place, as hereinbefore mentioned. The rim A is provided with the usual lugs *e*, (shown in Fig. 4,) and in like manner there is provided around the circumferential portion of the parchment head the usual straining-rim *f*, the inner edge of which bears against the usual circumferential shoulder *g*, provided to the parchment head, with the screws *h* arranged in the usual way to tighten or strain to the requisite degree the parchment head in its relation to the rim. The banjo may of course be provided with any usual or suitable adjuncts— as, for example, the usual strings, bridge, tailpiece, &c.

My said invention may be embodied in banjos of any suitable kind or character—as, for example, in box-banjos, as shown in Figs. 3 and 5, in which the rim or shell A of the banjo proper is suspended or supported within an external box or shell C, or it may be applied to an ordinary banjo, as shown in Fig. 4.

When desired, the wooden rim may have an external cover, in a manner well known in the art of sheet metal. Said external cover of such sheet metal will not interfere with my invention so long as the rim comprises wood as a substantial or essential part thereof.

What I claim as my invention is—

1. The combination, with the wooden rim of a banjo or like instrument, of a metallic annulus having the part *b* resting upon the edge of said rim and the part *c* placed within and bearing against the inner circumference of said rim, substantially as and for the purpose herein set forth.

2. The combination, with the wooden rim of a banjo or like instrument, of a metallic annulus having the bevel *a' b'* and parts *b c* and fitted upon and within that edge of said rim adjacent to the parchment head, substantially as and for the purpose herein set forth.

BENJAMIN B. BRADBURY.

Witnesses:

CHARLES A. HERBERT,

ALBERT C. AUBERY.