H. C. DOBSON.
Banjos.

No. 200,900. Patented March 5, 1878.

Fig. 1.

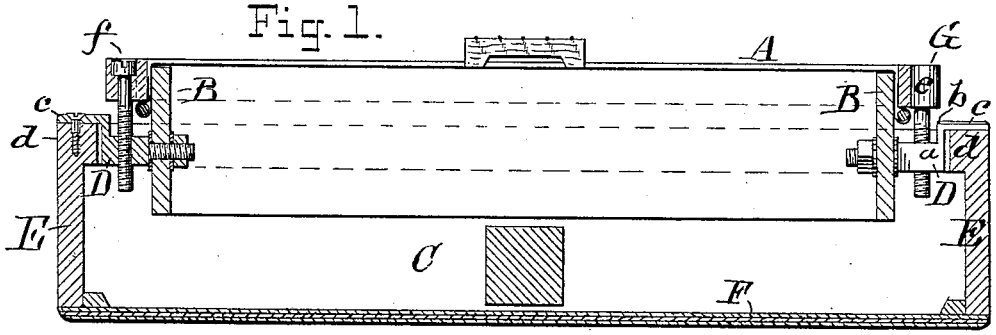

Fig. 2.

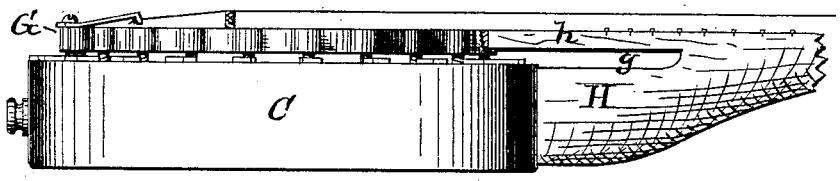

Fig. 3.

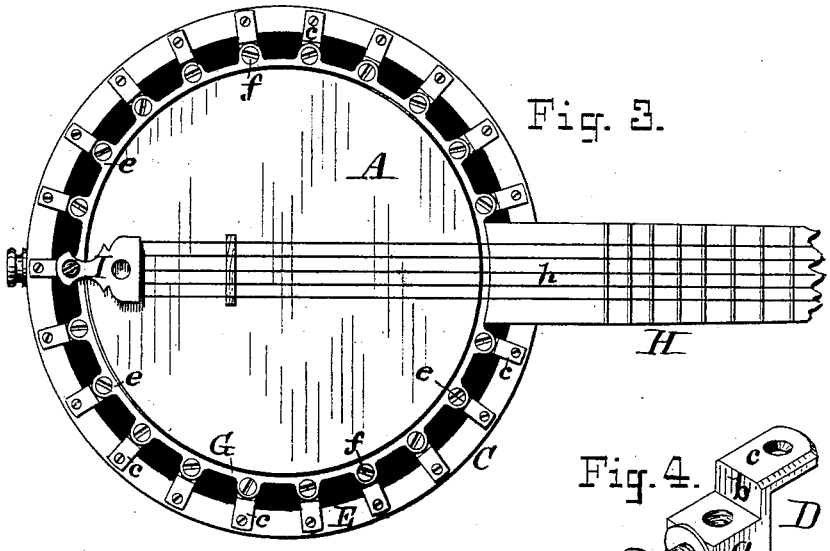

Fig. 4.

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UNITED STATES PATENT OFFICE.

HENRY C. DOBSON, OF NEW YORK, N. Y., ASSIGNOR TO CATHERINE L. DOBSON, OF SAME PLACE.

IMPROVEMENT IN BANJOS.

Specification forming part of Letters Patent No. **200,900**, dated March 5, 1878; application filed December 28, 1877.

To all whom it may concern:

Be it known that I, HENRY C. DOBSON, of the city, county, and State of New York, have invented certain Improvements in Banjos and similar instruments, of which the following is a specification:

This invention relates to improvements on the banjo patented by me July 16, 1867, No. 66,810; and consists in various details of construction, which will be hereinafter more particularly described.

In the drawings, Figure 1 is a vertical cross-section of the head of my improved banjo. Fig. 2 is a side elevation of the head and part of the handle on a smaller scale. Fig. 3 is a plan of Fig. 2, and Fig. 4 is an enlarged perspective view of the bracket.

A is the parchment head of the banjo, which is strained over the top of the hoop B. C is a cylindrical sounding-box, with closed bottom, which surrounds the hoop B concentrically, the latter being fixed and sustained within the former by metallic brackets D D. One of these brackets is shown detached in Fig. 4. These are preferably attached to the top of the sounding-box by common wood-screws, and to the hoop B by threaded shanks and nut, as shown, the hoop being protected from injury by interposed copper washers.

From the body portion *a* of each bracket projects a vertical portion, *b*, provided with a flange, *c*, which rests upon and is screwed to the upper edge of the side E of the sounding-box. I prefer to leave a space between the vertical part *b* of the bracket and the sounding-box, the bracket touching the box only at the top, (see Fig. 1,) as by this construction the bracket cannot obstruct or deaden the vibrations of the box.

The sounding-box C is constructed with a closed bottom, F, and cylindrical side E. I make the side E thin below to give resonance, and thickened at the top *d* to receive the screws by which the brackets are attached. The bottom F is preferably made of two or more sheets of wood-veneer, glued together with their grains crossed.

The parchment head A has a wire in its edge, and is strained over the hoop B by a straining-ring, G, which rests upon the wire in the edge of the head, and is pressed down against it. This construction is common, the straining-ring being made of wood. In my invention the straining-ring G is of cast metal, and is provided with numerous projections, *e e*, which are perforated to receive straining or tightening screws *f f*. It is preferable to countersink the holes, so as to sink the heads of the screws below the surface of the ring.

The straining-screws engage female screws in the brackets D D, and are turned with a screw-driver when it is desired to tighten the ring. The body portions *a a* of the brackets are sunk below the level of their flanges *c c*, to provide sufficient room for the ring G to descend in consequence of the natural expansion of the parchment under strain. It also gives to the instrument a more workmanlike and finished appearance to have the main portion of the brackets sunk out of sight.

The handle H of the instrument is attached to the sounding-box, and is cut away at *g*, the upper portion *h* passing over the cavity and touching the band or ring G, as shown in Fig. 2. The roof portion *h* abuts against the ring G when the strings are keyed up, thus serving to resist the strain of the strings in a direct line with their strain. This construction prevents the handle from springing, which would alter the tone of the instrument by slacking the strings, and it also imparts to the instrument greater rigidity and strength.

The tail-piece I is of metal, and is attached to the top of the straining-ring G, being held in place by one of the screws *f*, thus utilizing the latter for a double purpose. As the parchment head stretches in use, and the straining-ring is drawn down, the head may appear above the ring, in which case, were the tail-piece fixed rigidly to the straining-ring, it would be liable to break or injure the head, or to be itself bent or broken. By my method of fastening, however, any such strain upon the tail-piece can be instantly released by slightly unscrewing the screw which holds it.

By my arrangement of the screws and brackets, in combination with the straining-ring, the screws are driven downward and the heads are convenient of access, while at the same time they are sunk flush with the surface, and

are not in the way of the player nor liable to catch the clothing.

I claim as my invention—

1. The straining-ring G, of cast metal, provided with perforated projections, to receive the screws *f f*, substantially as set forth.

2. The bracket D, having the vertical part *b* and flange *c*, and a screw-shank, by which it is attached to the hoop B, as set forth.

3. In a banjo having an outside sounding-box, C, and an inside fixed hoop, B, the brackets D D, secured at one end to the said hoop, and at the other to the box side E, and provided with female screws for engaging straining-screws *f f*, substantially as described.

4. The combination of the cast-metal straining-ring G, fixed hoop B, machine-screws *f f*, and brackets D D, supporting said hoop and engaging said machine-screws, when all are constructed and arranged to operate substantially as set forth.

5. In a banjo having an outside sounding-box, C, and an inside hoop, B, fixed within the same by brackets, a sustaining-bracket, D, the body portion *a* of which is depressed to a plane below that of the upper edge of the sounding-box side, for the purposes set forth.

6. The bracket D, for sustaining the hoop B within the sounding-box C, its body portion being below the upper edge of said sounding-box, and provided with a vertically-projecting wall, *b*, and a flange, *c*, the latter resting upon and secured to the top edge of the sounding-box side E, no other part of said bracket touching said sounding-box, substantially as represented.

7. The sounding-box C of a banjo composed of the bottom piece F and thin side or wall E, the said wall having a thickened top part, *d*, as and for the purposes set forth.

8. In a banjo having an inner hoop, B, on which the parchment head is stretched, and an outer sounding-box, C, the handle H secured to the latter, cut away at *g*, and its upper portion *h* extending over the top edge of said sounding-box and abutting against the ring G, so as to resist the strain of the strings nearly in the line of the top surface of the handle, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HENRY C. DOBSON.

Witnesses:

HENRY CONNETT,

WALTER W. SCOTT.