

A. G. RENGERT & R. S. SCHWANDT.

BANJO.

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977,127.

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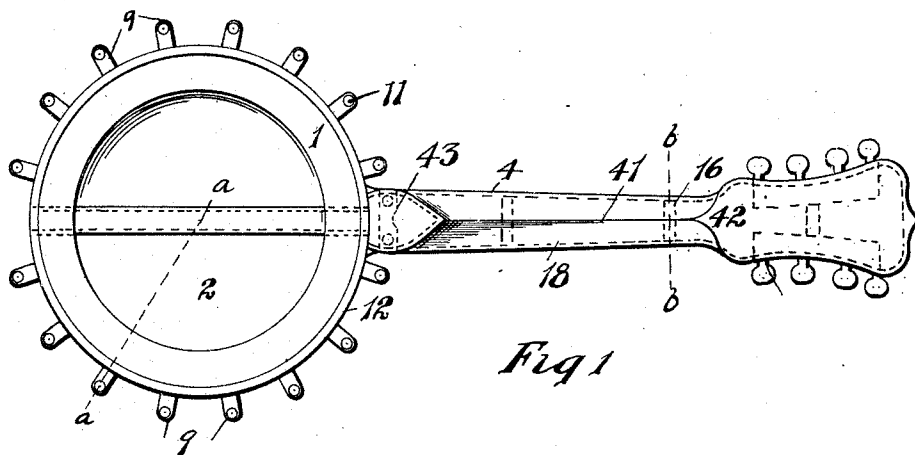


Fig 1

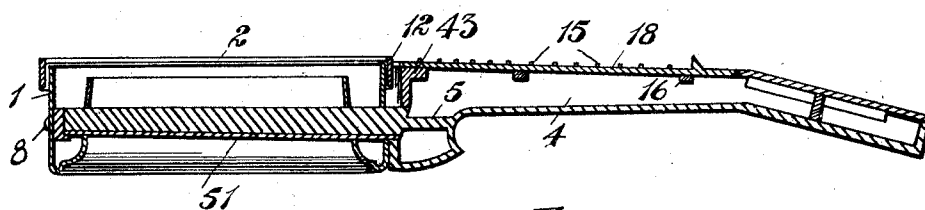


Fig 2

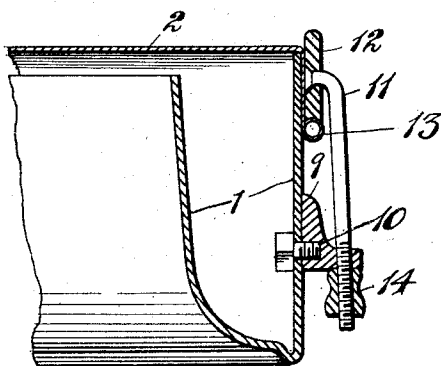


Fig 3

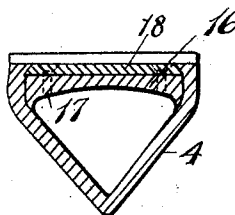


Fig 4

Witnesses

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ARTHUR G. RENGERT AND RICHARD S. SCHWANDT, OF DETROIT, MICHIGAN.

BANJO.

977,127.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, ARTHUR G. RENGERT and RICHARD S. SCHWANDT, both citizens of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Banjos, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to musical instruments.

It has for its object an improved banjo having in combination a body, over which there is stretched a membrane, and a neck over which are stretched strings that extend across the body and along the neck and over a finger board secured to the neck. The main body of the instrument and the neck are made of aluminum castings, and the main body of the instrument is made as a deeply grooved ring with a brace extending across it under the membrane. The neck is made as a hollow casting which may be open along its top or triangularly tubular strongly braced against the body and secured thereto, provided with a head adapted to hold the pins by means of which the strings are stretched and with a finger board to which are secured the frets. The finger board is made of a thin piece of wood marked or made with insets to indicate the places where the strings are to be pressed.

In the drawings:—Figure 1, is a plan view of the back of the instrument. Fig. 2, is a section across the body and lengthwise of the neck. Fig. 3, is a cross section at the line *a—b* of Fig. 1. The portions shown in this figure are on a larger scale than the showing of these parts in Figs. 1 and 2 and in its extent, as fragmentarily shown, it is not fully radial, extending perhaps half of the distance from the periphery to the center. Fig. 4, is a cross section at the line *b—b*, Fig. 1. Fig. 3, shows the means of attaching the membrane and stretching it. Fig. 4, shows the means of securing the finger board to the face of the metal neck.

The body of the instrument 1 is made as a deeply grooved ring with the mouth of the groove toward the membrane 2 that is stretched over the hoop 12. The outer walls

of the ring are substantially cylindrical. The inner walls may diverge somewhat or be slightly conical. The neck 4 is a hollow casting preferably of light metal like aluminum made in the proper shape, comprising the neck proper 41, a head 42 which terminates the neck and an abutting end 43 which engages closely against a part of the circle of the body 1.

In an apertured portion of this abutting end 43 engages the connecting arm 5, with which the inner brace member 51, which extends entirely across the circular body of the banjo, is preferably integral. At its outer end the brace 51 is secured to the curved wall of the body 1 by a screw 8. The brace 51, which is thus secured to the body of the banjo, extends diametrically thereunder, and supports it in desired position with respect to the neck of the instrument, and with the desired degree of rigidity, since the fit of the connecting arm 5 in the end 43 is so firm as to make it structurally integral with the neck. At the same time the strain upon the assembled instrument, due to the pull of the strings, when they are attached and tuned to the proper degree, does not fall upon the particular portion of the periphery of the body adjacent to the end of the neck, but is distributed over the body by the presence of the brace 51. The outer wall of the body is provided at intervals with external brackets 9 held in the body thereof by screws 10 and through these brackets engage hooks 11 that themselves engage the membrane-stretching hoop 12. The membrane crosses the ring of the body 1 and its edges pass between it and a small wire-like hoop 13 that engages tightly thereabout under the main hoop 12; hoop 13 is drawn down along the outer walls of the body by drawing hoop 12 by means of the hooks 11, each of which is threaded on that end which projects through bracket 9 and is provided on the threaded part with a nut 14. Preferably the finger board surface of the neck is made plain with a number of frets 15, and a wooden strip 16 is secured to this surface of the neck by screws 17. To the wooden strip 16 is glued or otherwise secured the finger board member 18. The strips 16 thus serve as supporting braces whereby the finger board member 18 is held in desired relation to the component metal sides of the neck 4.

What we claim is:—

1. A banjo, having in combination a hollow neck member of cast metal, an integral extension piece projecting from the inner
5 end thereof, a fret surface secured to the upper face of said neck member, an annular grooved body portion resting upon said extension piece and secured to the outer end thereof, whereby it is rigidly held in place
10 with respect to said neck member, a membrane extending across said grooved body, and means for regulating the tension of the same, substantially as described.
2. In a banjo, in combination with a hol-
15 low, metallic neck, having an integral projection at the lower end thereof, an annular

body portion resting upon said projection and secured to the outer end thereof, a membrane extending thereover, a hoop member engaging the peripheral edges of said mem- 20 brane, and means for adjusting the position of said hoop member and thereby varying the tension of said membrane, substantially as described.

In testimony whereof, we sign this speci- 25 fication in the presence of two witnesses.

ARTHUR G. RENGERT.
RICHARD S. SCHWANDT.

Witnesses:

CHARLES F. BURTON,
VIRGINIA C. SPRATT.