

Aug. 11, 1925.

1,549,020

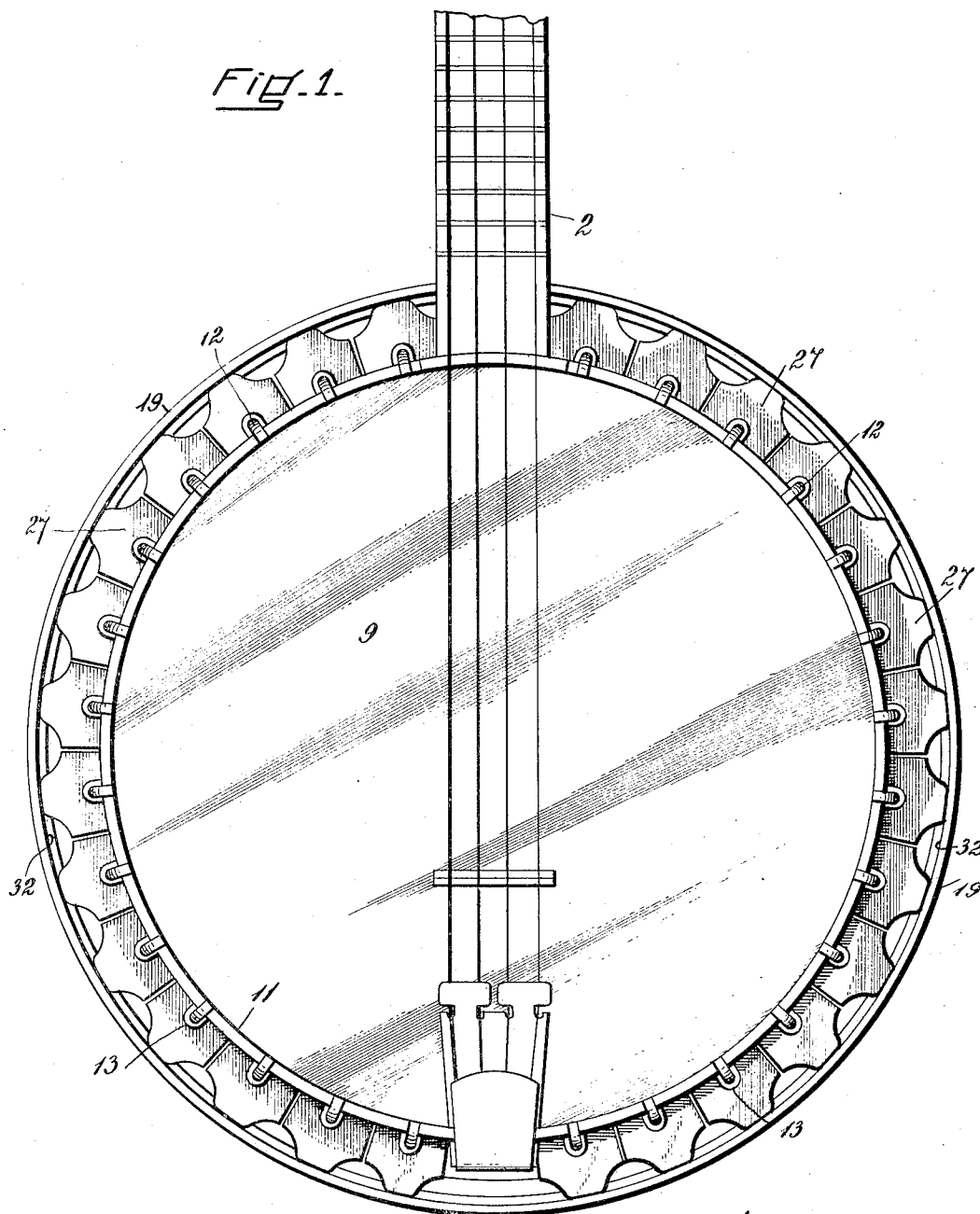
C. L. W. NELSON

BANJO

Filed Oct 30, 1923

2 Sheets-Sheet 1

Fig. 1.



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2 Sheets-Sheet 2

Fig. 2.

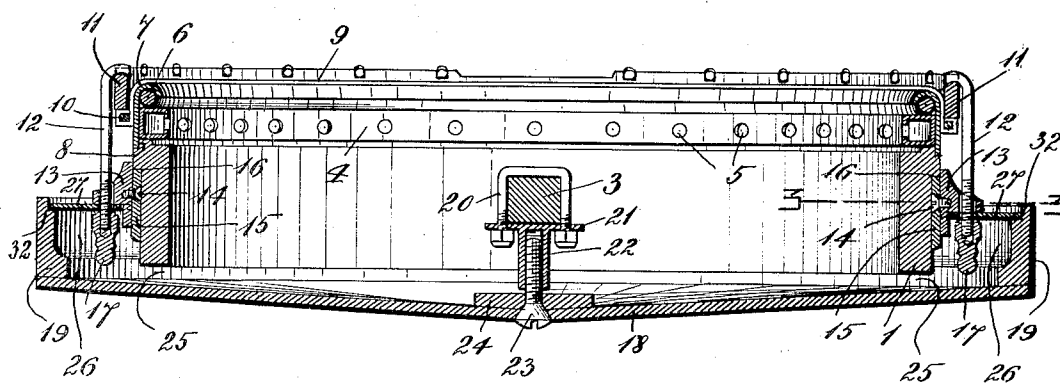


Fig. 4.

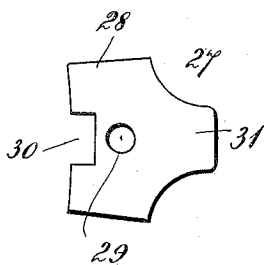
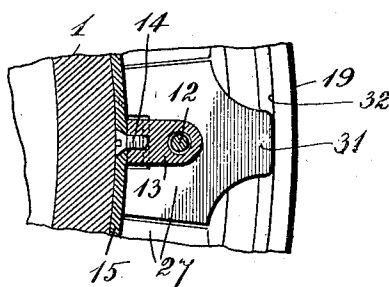


Fig. 3.



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Patented Aug. 11, 1925.

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UNITED STATES PATENT OFFICE.

CARL L. W. NELSON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE VEGA COMPANY,
OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

BANJO.

Application filed October 30, 1923. Serial No. 671,649.

To all whom it may concern:

Be it known that I, CARL L. W. NELSON, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Banjos, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The present invention relates to an improvement in banjos or similar stringed instruments.

The object of the invention is to improve the instrument both structurally and in point of tone-giving quality, all of which can best be seen and understood by reference to the drawings, in which—

Figure 1 is a plan of the improved banjo.

Fig. 2 is a cross section thereof.

Fig. 3 is a section on the line 3—3 of Fig. 2; and

Fig. 4 is a plan of an element of construction to which reference will later be made.

Referring to the drawings:—

1 represents the body of the banjo, 2 the neck and 3 a crossbar or brace extending crosswise through the chamber of the body reinforcing it and assisting in the retention of the neck.

Mounted upon the top edge of the body is a ring 4, preferably a hollow ring with a series of openings 5 on the interior side thereof. On the ring 4 is mounted a band wire 6. Turned inwardly over and around this wire is a guard 7 which extends downwardly by the ring 4 acting as a backing therefor, and onto the body, the bottom edge of the guard fitting into an incision 8 in the top edge portion of the body.

9 represents the skin or vellum which is turned to extend downwardly around the guard 7 and bears a skin hoop 10 against which bears a tension ring 11 which is adapted to be drawn against the hoop 10 for stretching and retaining the skin and otherwise binding the parts together to form a unitary structure.

The tension ring 11 is drawn against the skin hoop 10 by means of a series of clamps 12 which extend downwardly through brackets 13. Each of these brackets is fastened by a screw 14 to a common band or hoop 15

encircling the body of the banjo with bearing against a shoulder 16 thereon. The clamps are retained by means of nuts 17 threaded upon the end thereof with bearing against the under sides of the brackets 13 through which the clamps extend or rather against certain parts or elements later to be referred to interposed between the nuts and brackets and there held fixed when the nuts are tightened.

18 represents the resonator back to the body of the instrument. This back is larger diametrically than the body and is provided with a turned edge or rim 19. For retaining the back a stirrup 20 is passed around the crossbar 3 and to this stirrup is secured a crosspiece 21 bearing an elongated nut 22. Into this nut fastens a screw 23 passed through the back and through a block 24 with which the back is reinforced. When the screw is tightened the block 24 is drawn tightly against the head of the nut, thereby securely fastening the back to the crossbar.

When the back is thus fastened it extends outwardly beyond the adjacent edge of the body of the instrument and is spaced therefrom to leave a clearance 25, this clearance communicating with the clearance 26 left between the body and the rim 19 to the back, which laps by the back, the clearance 26 being preferably of some appreciable extent.

Bridging the clearance 26, partially closing this clearance and providing also a rigid connection between the body and the adjacent rim 19 to the back, thereby assisting in the support of the back, are a series of flanges 27. Each of these flanges comprises a body portion 28 having a hole 29 in it. The forward edge portion of the flange is provided with a slot or recess 30. The rear portion of the flange is preferably narrowed to provide an extension 31. Each of the flanges 27 is borne by one of the clamps 12 which extends through the hole 29 in the flange with the flange lying between a bracket 13 on the body of the instrument and the nut 17 by which the clamp is fastened. When the nut 17 is tightened for securing the clamp the flange will be rigidly held between it and the bracket. With the flange thus positioned the slot 30 in each flange permits of its fitting around the adjacent bracket 13. Those portions of the flange on

either side of the slot will bear snugly against the hoop 15 encircling the body of the instrument while the rear portion 31 of the flange will rest on the top edge of the rim to the back, the rim being preferably formed with an annular shoulder 32 providing a rest for the various flanges.

Thus positioned each flange will, to the extent of its area, close the space or clearance 26 between the body of the instrument and the rim 19 to the back, and the area or dimensions of the flanges may be changed as desired. The number of the flanges may also be varied. While flanges are shown fastened to all the clamps, yet flanges may be secured to a less number of clamps or other variations employed. In fact, the fitting permits of numerous variations for improving the tone quality of the instrument as may be found most desirable.

The flanges 27 provide also a rigid support for the outer edge portion or rim 19 of the resonator back and against which the rim bears, for when the screw 23 is tightened for securing the back to the crossbar 3 the rim will be forced by the draw of the screw firmly against the various flanges which then provide a series of rigid bridges between the body of the instrument and the back and thereby assist in the formation of a practically unitary vibratory structure, all of which assists in improving the instrument both structurally and in point of tone-giving quality.

Having thus fully described my invention,

I claim and desire to secure by Letters Patent of the United States:—

1. A banjo having a body, a vellum head, means interposed between the body and head over which the head is stretched, a back larger diametrically than said body and provided with a rim, means for stretching said head and securing it to said body comprising a series of clamps, each being provided with a tightening nut, means for fixing said back to occupy a spaced relationship to said body with said rim lapping by the body and spaced therefrom, and a series of elements arranged upon certain of said clamps and retained by the tightening nuts on said clamps partially filling the space between the body and rim.

2. A banjo having a body, a vellum head, means interposed between the body and head over which the head is stretched, a back larger diametrically than said body and provided with a rim, means for stretching said head and securing it to said body comprising a series of clamps, each being provided with a tightening nut, means for fixing said back to occupy a spaced relationship to said body with said rim lapping by the body and spaced therefrom, and a series of elements arranged upon certain of said clamps and retained by the tightening nuts on said clamps partially filling the space between the body and rim and against which elements said rim has bearing.

CARL L. W. NELSON.