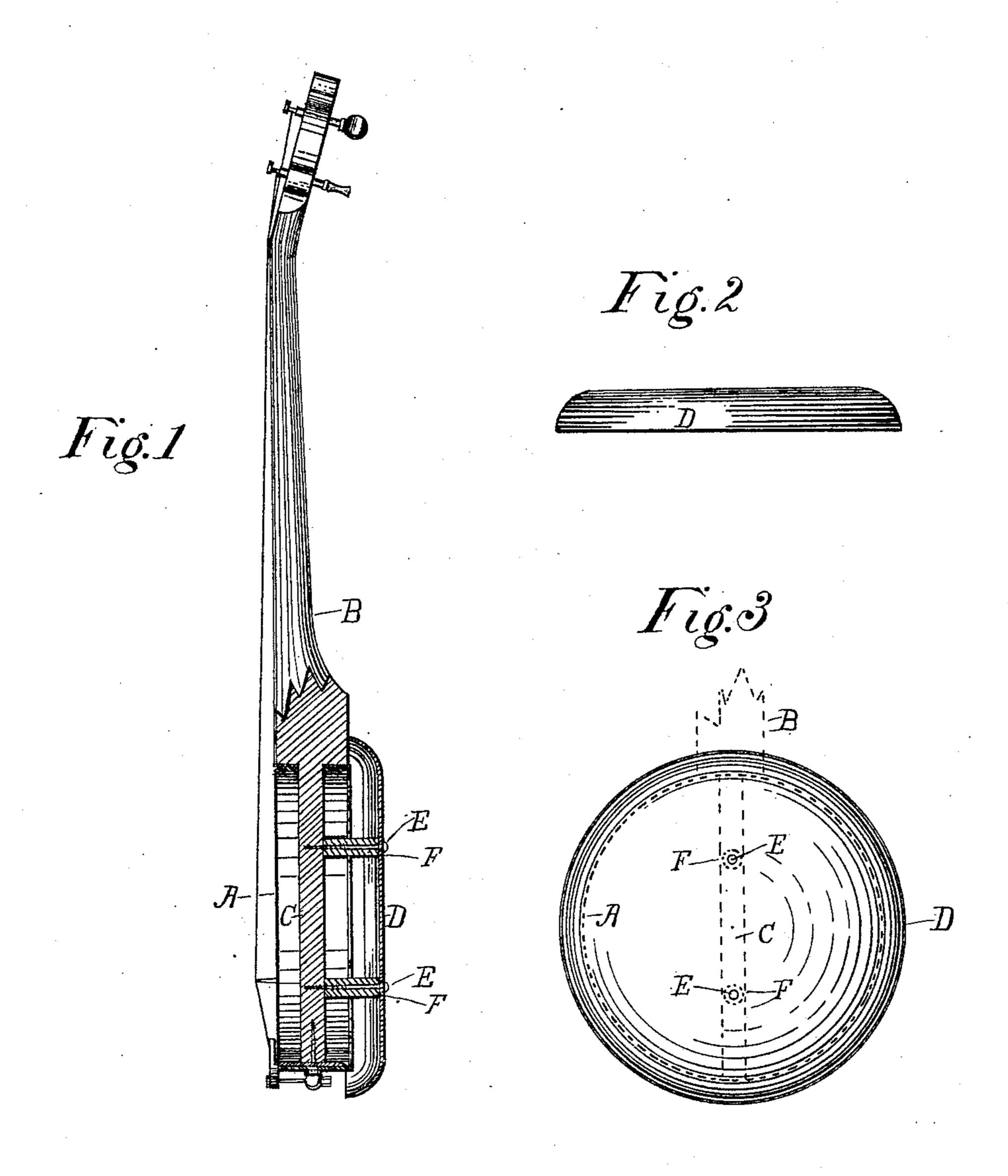
(No Model.)

W. L. ROBERTS.
BANJO ATTACHMENT.

No. 486,053.

Patented Nov. 8, 1892.



Witnesses. Geo. F. Kincaid. Skellie C. Cyan.

Inventor. William L. Roberts by A. H. Ste Marie atty

UNITED STATES PATENT OFFICE.

WILLIAM L. ROBERTS, OF SAN FRANCISCO, CALIFORNIA.

BANJO ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 486,053, dated November 8, 1892.

Application filed May 19, 1891. Serial No. 393,372. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. ROBERTS, a citizen of Canada, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Banjo Attachments; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to prevent the sounds emitted by the banjo from being deadened or lost by reason of its contact with the body of the player. I attain this object by providing means for isolating the banjoframe and deflecting the usual course of the sound-waves, as will now be explained.

Referring to the drawings, Figure 1 is a sectional elevation of a banjo furnished with my improved device. Fig. 2 is a side elevation of the attachment separate from the banjo, and Fig. 3 is a bottom view of the same laid over a banjo-frame.

The same parts are indicated by the same letters of reference in the three views.

Let A represent the banjo frame or hoop over which the parchment head is stretched, B the handle or stock of the instrument, and C the central bar or stick which runs across the frame. These and other component parts of the banjo proper do not differ from the usual construction, my improvement consisting in the piece D and the mode of applying it to the instrument.

D is a piece of wood or other suitable material underlying the frame and concentrical therewith. Its body portion is nearly flat and of about the same width as the frame, but its rim is curved up and extended so as to clear the outer lower edge of the hoop A, above which it rises a little. It thus constitutes a concavo-convex disk resembling somewhat a segment of a hollow sphere and the concave surface of which faces the under side of the parchment head. This disk is fastened to the cross-bar C by means of screws E in such a manner as to be out of contact with the frame and not affect the resonance of the

latter. Blocks F may be interposed between the bar and the disk, but in practice they are usually dispensed with. Thus constructed and applied the piece D has a twofold effect. 55 It first acts as a rest for the banjo and holds it out, so as to prevent any alteration or absorption of sound by the garments of the user. In the second place it fills the office of a sound-reflector by intercepting the sound- 60 waves on their passage rearward and deflecting their course toward the fore part of the instrument, thereby affording an audience seated at a distance from the performer a greater facility to hear every note sent forth. 65 Indeed it not only gathers and reflects the sound-waves, but increases their sonorousness by about fifty per cent., as demonstrated by actual test.

I am aware that numerous devices have 70 been resorted to to produce the results I have in view—such, for instance, as double parchment heads, drums, sounding-boxes, shells, &c.; but so far as I have been able to ascertain these contrivances either muffle or im- 75 pair the tone of the banjo, and have, therefore, a contrary effect to that sought to be accomplished. They furthermore form, as a rule, an integral part of the banjo and call for a special construction, whereas my im- 80 proved device is merely an attachment, which can be put on any banjo of the usual type without altering the structure in any wise. The piece which I add to the banjo is simple, light, readily made, and quickly applied or 85 taken off. It is, nevertheless, very effective and makes it possible for the banjo to give out those clear, pure, and rich sounds which befit a musical instrument.

Without confining myself to the exact de- 90 tails of construction and particular forms herein shown and described, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A banjo attachment consisting of a con- 95 cavo-convex piece adapted to isolate the entire banjo-frame from the body of the player and lead the sound-waves forward, substantially as set forth.

in such a manner as to be out of contact with the frame and not affect the resonance of the frame and concentrical therewith, the rim of

said disk rising above the outer lower edge of said frame and standing out therefrom, substantially as set forth.

3. The combination of a banjo-frame and a concavo-convex disk lying beneath and wholly covering the under side thereof, sub-

stantially as set forth.

4. The combination of a banjo-frame, a bar laid thereacross, a concavo-convex disk, and no means to secure said disk to said bar, substantially as set forth.

5. The combination of a banjo-frame, a bar

laid thereacross, blocks seated upon the under side of said bar, a concavo-convex disk bearing upon said blocks, and screws binding 15 said bar, blocks, and disk, substantially as set forth.

Intestimony whereof I affix my signature in presence of two witnesses.

WILLIAM L. ROBERTS. [L. s.]

Witnesses:

AUGUST J. DRUCKER, R. R. STRAIN.