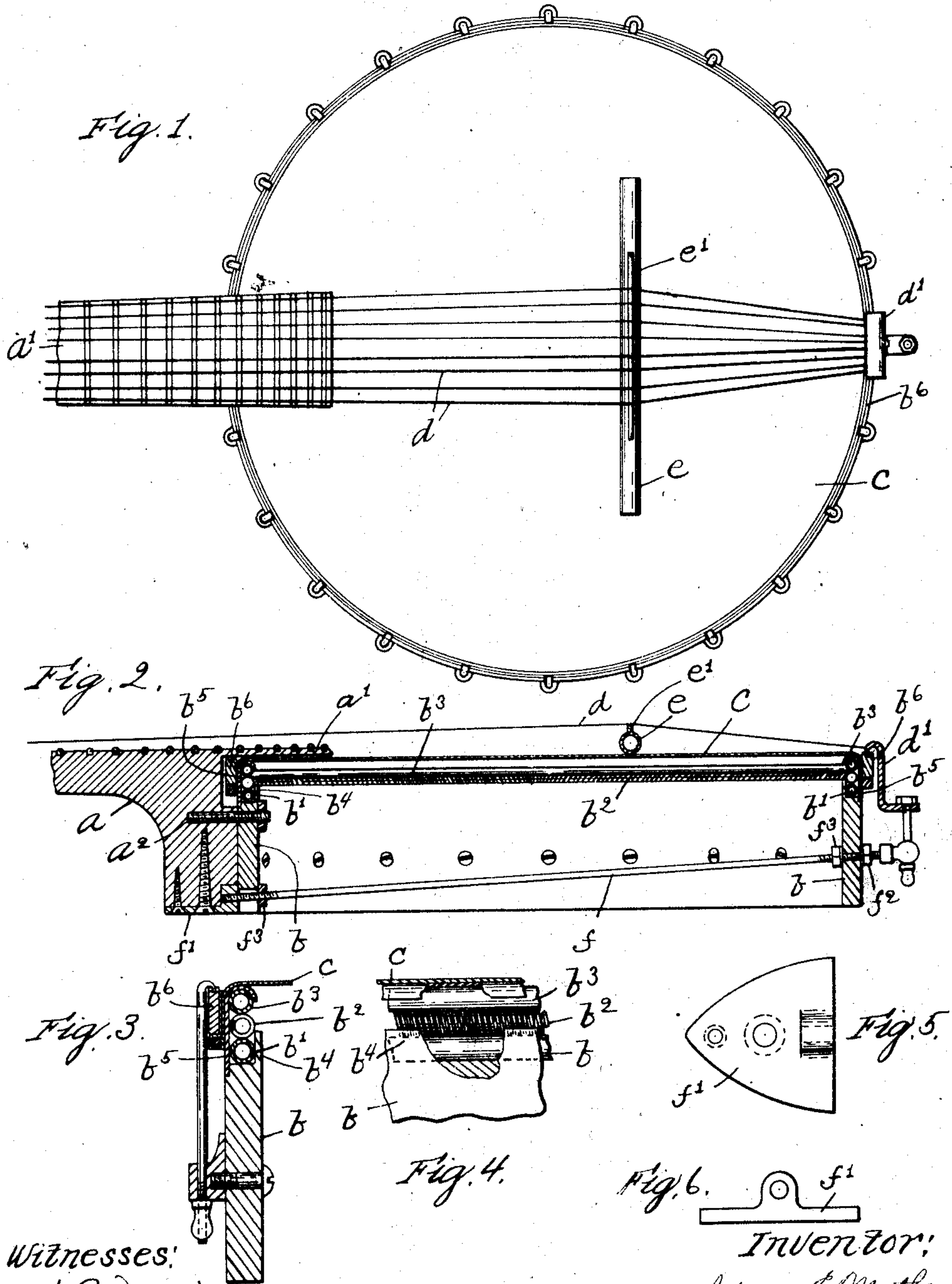


No. 885,269.

PATENTED APR. 21, 1908.

A. E. MATHEY.  
STRINGED INSTRUMENT.  
APPLICATION FILED MAY 27, 1907.



Witnesses:  
H. B. Davis  
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# UNITED STATES PATENT OFFICE.

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## STRINGED INSTRUMENT.

No. 885,269.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed May 27, 1907. Serial No. 875,807.

*To all whom it may concern:*

Be it known that I, ALCIDE E. MATHEY, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Stringed Instruments, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

10 This invention relates to stringed instruments and has for its object to construct an instrument of the banjo variety whereby a tone of novel character may be produced which is soft, full and clear and has great carrying power, and which is quite distinct from  
15 the ordinary tone of the banjo or mandolin or guitar.

The invention consists in providing the circular rim, which supports the head, with improved means, interposed between the rim and head, whereby the tone is softened, the vibrations caused to continue for a long period of time, and the carrying power of the tone increased. Also, in means for drawing  
20 the top part of the neck away from the rim to which it is attached, to free the vibrating parts from engagement therewith.

Figure 1 shows in plan view a stringed instrument embodying this invention. Fig. 2  
30 is a longitudinal vertical section of the instrument shown in Fig. 1. Figs. 3 and 4 are enlarged details of the cushion which is interposed between the head and rim. Figs. 5 and 6 are enlarged details of the plate which  
35 is secured to the bottom of the neck

*a* represents the neck of the instrument; *a'* the finger-board; *b* the circular rim which is attached to the neck; *c* the head and *d* the strings, which latter are connected with a  
40 tail-piece *d'*.

The head *c*, instead of being supported upon or connected with the circular rim *b* in a rigid manner, as usual in banjos, is supported upon a cushion, which is interposed between  
45 the rim and head. As herein shown the circular rim *b* is rabbeted at the top and in the recess thus formed a circular tube *b'* is placed, and on said tube a circular tube *b''*, of spirally wound wire is placed, and upon said spirally  
50 formed tube a circular tube *b'''*, constructed like the tube *b'*, is placed. The three circular tubes are arranged vertically, one above the other, and are held against lateral movement with respect to each other by a flange *b''''*,  
55 which extends upward from the rim *b*, on the

inside of said tubes, and by a metallic ring *b'''''* rising from the rim *b* on the outside of said tubes. The upper edge of the metallic ring *b'''''* is bent over the top of the uppermost tube. The ring *b'''''* sets down onto a shoulder which  
60 is formed on the rim *b* so as to resist downward pressure upon it. The ring *b'''''* is made of thin metal and while quite stiff is still free to yield more or less to pressure upon it and to vibrate. A ring *b''''''* is located outside of  
65 the ring *b'''''*, which is employed for the purpose of securely holding the head. The head extends over the top of the ring *b'''''* and down between said ring *b'''''* and the ring *b''''''*, and has a  
70 corded or rolled edge upon which the ring *b''''''* bears. The ring *b''''''* is drawn down and held securely by the usual adjustable screw-threaded hooks. By supporting the head in  
75 this manner the tone is very materially softened; the amplitude of the vibrations augmented and the carrying power of the tone increased; and as a result a tone of a different  
80 character from the tones produced by any other instrument is produced, which is, in fact, quite distinct from the tone of any  
85 stringed instrument known to me.

The neck *a* is secured to the circular rim *b* by a screw *a''*, extended through said rim and into the neck, and also by a bar *f'* extending diametrically across the rim, said  
90 bar also serving as an adjusting-device for the neck. Both ends of the bar *f'* extend through holes in the rim. The bar is screw-threaded at one end to enter a threaded hole in a plate *f''* which is secured to the neck, and  
95 is screw-threaded at the opposite end to receive a nut *f'''*. Said bar *f'* also has upon its screw-threaded ends nuts *f''''*, *f'''''*, which are located inside of the rim *b* and which act to prevent compression of the rim by turning  
100 up the nut *f'''*. The plate *f''*, to which one end of bar *f'* is connected, is secured to the bottom of the neck, and the opposite end of said bar is secured to the rim some little distance  
105 above the bottom. By turning up the nut *f'''* and adjusting the nuts *f''''*, *f'''''*, the bar will be strained to draw the bottom of the neck hard against the rim and thereby acts to draw the  
110 top of the neck away from the rim to a slight extent to relieve the pressure thereon. The movement, however, is sufficient to allow the vibrating parts of the instrument an unobstructed space in which to vibrate, which acts to assist in producing a clear and resonant tone.



Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a stringed instrument, the combination of a circular rim, a head, means for securing the head to the rim, a circular tube and yielding support therefor interposed between the head and rim, substantially as described.

2. In a stringed instrument, the combination of a circular rim, a head, means for securing the head to the rim, two circular tubes arranged one above the other and interposed between the head and rim, one of said tubes being composed of spirally wound wire, substantially as described.

3. In a stringed instrument, the combination of a circular rim, a head, means for securing the head to the rim, and a circular tube of spirally wound wire interposed between the head and rim, substantially as described.

4. In a stringed instrument, the combination of a circular rim, a head, means for securing the head to the rim, a plurality of circular tubes arranged vertically between said head and rim, substantially as described.

5. In a stringed instrument, the combination of a circular rim, a head, means for securing the head to the rim, and three circular tubes arranged vertically between said head and rim, the middle tube being composed of spirally wound wire, substantially as described.

6. In a stringed instrument, the combination of a circular rim rabbeted and formed with a shoulder, a plurality of circular tubes arranged vertically on said rim, a metallic ring inclosing said tubes which rests on said

rim, a head extending over said metallic ring, a locking-ring outside of said metallic ring for the head, and means for connecting said locking-ring with the rim, substantially as described.

7. In a stringed instrument, the combination of a circular rim, a plurality of circular tubes arranged vertically and supported on said rim, a ring also supported on said rim, which is located outside of said tube and which has a curved top, a head extending over the curved top of said ring, and means for securing said head in place, substantially as described.

8. In a stringed instrument, the combination of a circular rim, a yieldingly supported circular tube thereon, a ring also supported on said rim which is located outside of said tube and which has a curved top extending over said tube, a head extending over the curved top of said ring, and means for securing said head in place, substantially as described.

9. In a stringed instrument, the combination of a circular rim, a head thereon, a neck, means for attaching said neck to said rim, a plate secured to the bottom of the neck, and a longitudinally adjustable bar extending diametrically across the rim which is connected at one end to said plate and at the opposite end to the rim at a point some little distance above its bottom, substantially as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ALCIDE E. MATHEY.

Witnesses:

B. J. NOYES,  
H. B. DAVIS.