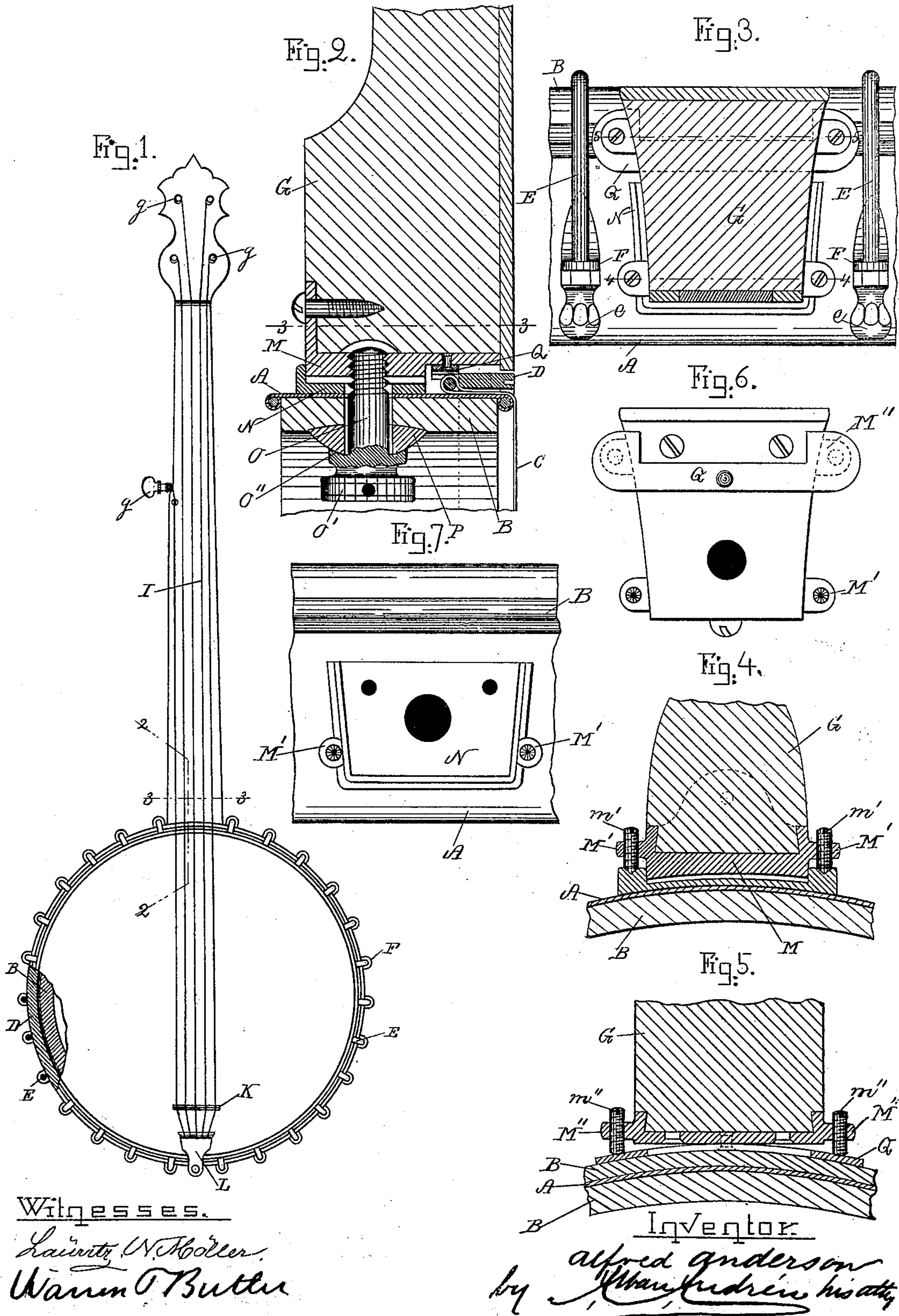


(No Model.)

A. ANDERSON.  
BANJO.

No. 509,507.

Patented Nov. 28, 1893.



Witnesses.

Lauritz W. Holler.  
Warren O. Butler

Inventor.

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# UNITED STATES PATENT OFFICE.

ALFRED ANDERSON, OF CHELSEA, ASSIGNOR OF ONE-THIRD TO JOHN J. DACEY, OF BOSTON, MASSACHUSETTS.

## BANJO.

SPECIFICATION forming part of Letters Patent No. 509,507, dated November 28, 1893.

Application filed July 21, 1893. Serial No. 481,085. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED ANDERSON, a citizen of the United States, and a resident of Chelsea, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Banjos, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in banjos and it consists in combination with the rim and its drum of a detachable and adjustable neck and means for adjusting the position of the latter so as to raise or lower the strings relative to the drum which is very desirable as some players prefer to have the strings high and others low in relation to said drum for producing the desired effects.

Among other advantages of my invention may be mentioned that the neck may be detached from the rim during travel or transportation thus occupying a very small space and preventing liability to breakage. The rim is increased in strength and the banjo is also rendered less heavy.

The invention is carried out as follows, reference being had to the accompanying drawings, wherein—

Figure 1 represents a top plan view of the improved banjo. Fig. 2 represents a detail sectional view on the line 2—2 shown in Fig. 1. Fig. 3 represents a cross section on the line 3—3 shown in Fig. 2. Fig. 4 represents a cross-section on the line 4—4 shown in Fig. 3. Fig. 5 represents a similar cross-section on the line 5—5 also shown in Fig. 3. Fig. 6 represents an end view of the inner end of the detachable neck; and Fig. 7 represents a detail plan view of the socket on the rim for receiving said banjo-neck.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In the drawings A represents the metal rim having secured to its inside the wooden rim B as usual.

C represents the drum which is stretched and held in position by means of the top hoop D and adjustable hook screws E, E, going through ears F, F, on the outside of the rim A and provided with tightening nuts e, e, as is common in banjos or similar stringed instruments.

G is the neck which is detachably and adjustably secured to the rim of the banjo for the purpose above mentioned.

g, g, are the tuning pegs to which the upper ends of the strings I, I, are attached as usual.

K is the bridge and L is the tail piece to which the lower ends of the strings are secured in the ordinary manner.

To the inner end of the neck G is secured in a firm and substantial manner a metal plate or shoe M adapted to fit into a metal socket N secured to the outside of the metal rim A as shown. The neck G is secured to the rim of the instrument in a detachable and adjustable manner by means of a set screw O passing loosely through a perforation in the wood and metal rims and screwed into a screw threaded perforation in the metal shoe M as shown in Fig. 2. The screw O has a head O' having a concavity O'' on its under side bearing against a correspondingly shaped convex metal washer P interposed between the concave under side of the screw head O' and the rim B so as to permit of a universal adjustment of the neck G relative to the rim of the instrument.

For the purpose of regulating the position of the neck relative to the rim I prefer to provide the shoe M with screw threaded ears M', M', M'', M'', through which are screwed the respective adjusting screws m', m', m'', m'', as shown. The inner ends of the regulating screws m', m', are adapted to bear against preferably cup shaped recesses on the metal shoe M and the inner ends of the regulating screws m'', m'' are adapted to bear against a washer plate Q interposed between said set screws and the top hoop D as shown respectively in Figs. 4 and 5. The said washer plate Q is secured about midway between its ends to the shoe M as shown in Fig. 5.

In the drawings I have shown the regulating set screws m', m', m'', m'', as being screwed through the metal shoe M on the neck G and adapted to press against the rim of the banjo but I wish to state that if so desired said screws may be screwed from the inside through the rim and adapted to press against the said shoe or the neck without departing from the essence of my invention.

In adjusting the position of the neck rela-



tive to the rim of the instrument I proceed as follows: If it is desired to raise the strings I more or less above the drum C, I release slightly the fastening screw O and release the  
 5 front screws  $m''$ ,  $m''$  and tighten up the rear screws  $m'$ ,  $m'$ , causing the neck G to be slightly tipped forward by which the strings are raised above the drum as far as desired after which the screw O is turned up tightly  
 10 so as to secure the neck G firmly to the rim of the instrument. If it is desired to lower the strings I more or less, I release slightly the rear screws  $m'$ ,  $m'$ , and tighten up the front ones  $m''$ ,  $m''$ , until the desired adjust-  
 15 ment is obtained, after which the set screw O is tightened as before.

In adjusting the neck as above mentioned the socket N prevents the said neck from being turned sidewise during such adjustment  
 20 and fastening thereof. In case the neck should be held out of true centrally relative to the rim of the instrument it can readily be adjusted from side to side so as to place it in a central position simply by releasing  
 25 one pair of screws  $m'$ ,  $m''$ , and tightening the corresponding ones on the opposite side of the neck or vice versa. By this arrangement and construction the height of the strings above the drum may be adjusted with  
 30 the greatest degree of nicety; the central position of the neck relative to the rim is obtained; the strength of the rim is increased as it needs only a very small perforation sufficient for the holding screw O to pass through  
 35 as compared with the large perforation needed for the passing through of the shank of the neck as is common in ordinary banjos. The instrument is rendered lighter than the ordinary ones owing to the dispensing with a  
 40 shank on the neck passing diametrically through the rim; and liability to accidents and breakage is avoided in transportation or

otherwise by detaching the neck from the rim enabling the instrument to be packed away in a very small and convenient space. 45

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

1. In a banjo or similar stringed instrument a rim and detachable neck combined with a  
 50 fastening screw adapted to pass loosely through the rim and screwed into the neck or its connections and having a concave head and a convex washer interposed between said head and interior of the rim, substantially as and 55 for the purpose set forth.

2. In a banjo or similar stringed instrument a rim having a socket and a detachable and adjustable neck having a shoe adapted to fit  
 60 said socket combined with an adjustable fastening screw for securing said neck and rim and a series of set screws for adjusting the inclination of the neck relative to the rim substantially as and for the purpose set forth.

3. In a banjo or similar stringed instrument 65 a rim having a socket and a detachable and adjustable neck having a shoe adapted to fit said socket, combined with an adjustable fastening screw for securing said neck and rim and a pair of adjusting screws adapted to bear  
 70 against the lower part of the said rim and another pair of adjusting screws adapted to bear against the hoop of the rim and a washer interposed between the latter and its adjusting screws, substantially as specified. 75

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 13th day of June, A. D. 1893.

ALFRED ANDERSON.

Witnesses:

ALBAN ANDRÉN,  
 WM. W. LUMMUS.