(No Model.)

W. F. LIBBY.

BANJO.

No. 542,165. Patented July 2, 1895.

Fig 1

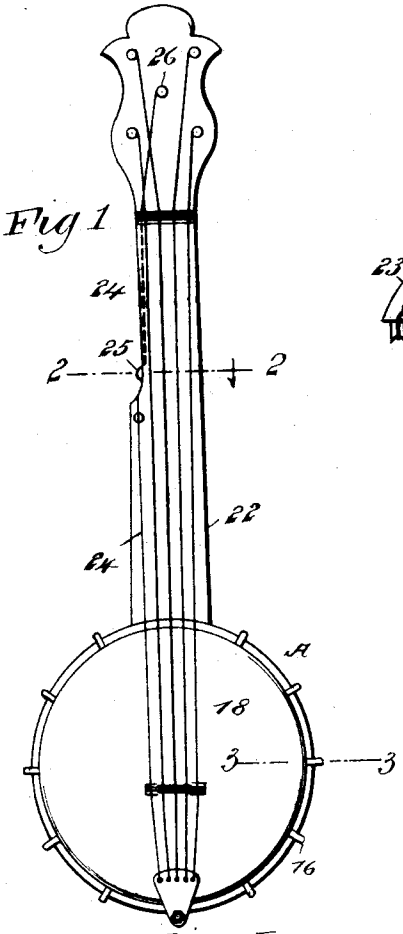


Fig 2.

Fig 4

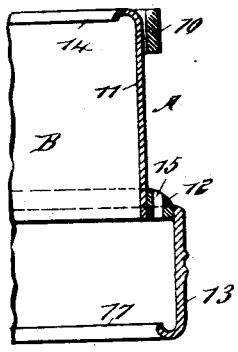


Fig 3.

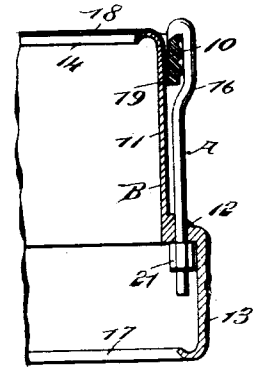
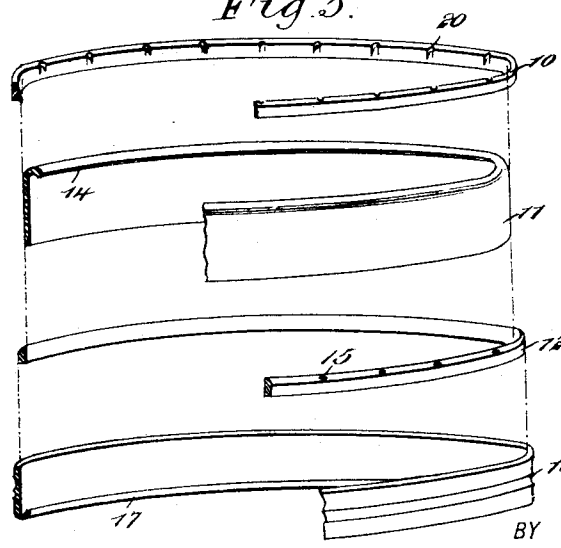


Fig 5.



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SPECIFICATION forming part of Letters Patent No. 542,165, dated July 2, 1895.

Application filed February 26, 1895. Serial No. 539,764. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. LIBBY, of Gorham, in the county of Cumberland and State of Maine, have invented a new and useful Improvement in Banjos, of which the following is a full, clear, and exact description.

My invention relates to an improvement in banjos; and it has for its object to construct an instrument of that character in a manner whereby volume and sweetness of tone may be produced at a minimum cost in the construction of the frame of the head, and whereby also the fifth string of the banjo, ordinarily stopped short of the nut of the neck, may be carried up beyond the neck and attached to a key associated with the keys of the other strings.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the instrument. Fig. 2 is a section taken through the neck substantially on the line 2 2 of Fig. 1, looking in direction of the arrow. Fig. 3 is a section taken through the frame of the head substantially on the line 3 3 of Fig. 1. Fig. 4 is a section similar to Fig. 3, the clamp being removed, and illustrating the manner in which the sections of the frame are connected; and Fig. 5 is a detail perspective and partial sectional view of the various sections comprising the frame of the head separated and placed in the order in which they are to be assembled.

In carrying out the invention the frame A of the banjo-head comprises practically a body B and a clamping-ring 10. The said frame in its detail construction is made of sheet metal or equivalent material, and comprises virtually an upper band 11, an offset-band 12, and a base-band 13. These bands have been shown disconnected in Fig. 5, in which they are reduced proportionately to the like bands shown assembled in Fig. 4. The upper or top band 11 has its upper end provided with a flange 14, curved inwardly and downwardly to form an upper convexed or cylindrical edge. The band is otherwise of the same diameter throughout, and the offset-band 12 is of an interior diameter corresponding to the exterior diameter of the upper or top band 11, the said offset-band being adapted to be soldered, brazed, or otherwise integrally secured to the exterior lower portion of the upper or top band 11. The offset-band 12 is provided with a number of apertures 15, extending through it from top to bottom, corresponding to the number of clamps or brackets 16 to be employed in the complete banjo. The lower or base band 13 is of an interior diameter corresponding to the exterior diameter of the offset-band 12, and is adapted to be brazed, soldered, or otherwise integrally secured to the outer exterior surface of the said offset-band, and the base-band 13 at its lower end is provided with an inwardly and upwardly curved flange 17, whereby the bottom of the banjo-frame is rendered smooth and prevented from wearing the clothes of the performer or player.

After the head 18 has been mounted upon the frame A, connected as above described, the clamping-ring 10 is placed in position and is drawn downward to an engagement with the hoop 19 attached to the head, as shown in Fig. 3, by means of the aforesaid brackets 16. These brackets are made to enter at their upper ends recesses 20 made in the clamping or head ring 10, so that the brackets will not slip, and the brackets are carried downward through the apertures 15 in the offset-band within the body, and at their lower ends, which are contained in the body, the lock-nuts 21 belonging to the brackets are placed in position. Thus it will be observed that the said nuts are wholly contained within the body of the frame and will not chafe the clothes of the operator, nor will there be danger of their becoming loosened by the manipulation of the instrument.

The neck 22 of the banjo is secured to the head-frame in any suitable or in the usual manner, but the said neck differs in construction from that of the ordinary banjo, in that it is provided at its right-hand edge, or that edge at which the fifth string is located, with a longitudinal groove 23, which is carried upward through the right-hand end of the nut, and the fifth string 24, instead of being at-

tached to the key below the nut, is carried upward in engagement with a suitable guide 25 in the said groove 23, and thence to a key 26, located preferably between the keys receiving the other strings of the instrument. In this manner all of the keys are grouped together, and therefore the key which controls the fifth string is removed from its usual position, and the neck at both of its sides is perfectly free for the passage of the player's hand.

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

1. In a banjo, a head frame comprising a clamping ring provided with a series of recesses formed in its inner edge, a body portion consisting of an upper band having its upper end provided with a flange curved inwardly and downwardly, a base band of greater diameter than the upper band separate therefrom and provided at its lower end with an inwardly and upwardly curved flange, an offset band separate from the upper and base band located between the opposing edges of said upper and base bands connecting the two, the said offset band being provided with a series of apertures, and brackets having their upper ends held in the said recesses in the inner edge of the clamping ring and their lower ends extending through the said apertures in the offset band and provided with lock nuts upon their lower ends contained within the body of the frame, substantially as set forth.

2. In a banjo, a neck provided at that edge at which the fifth string is located with a longitudinal groove, and a guide located within the said groove and with which the said fifth string is adapted to engage, whereby the said fifth string may be carried to the key board of the instrument, substantially as described.

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