(No Model.)

C. J. KELLY.

BANJO.

No. 332,538. Patented Dec. 15, 1885.

Fig. 1

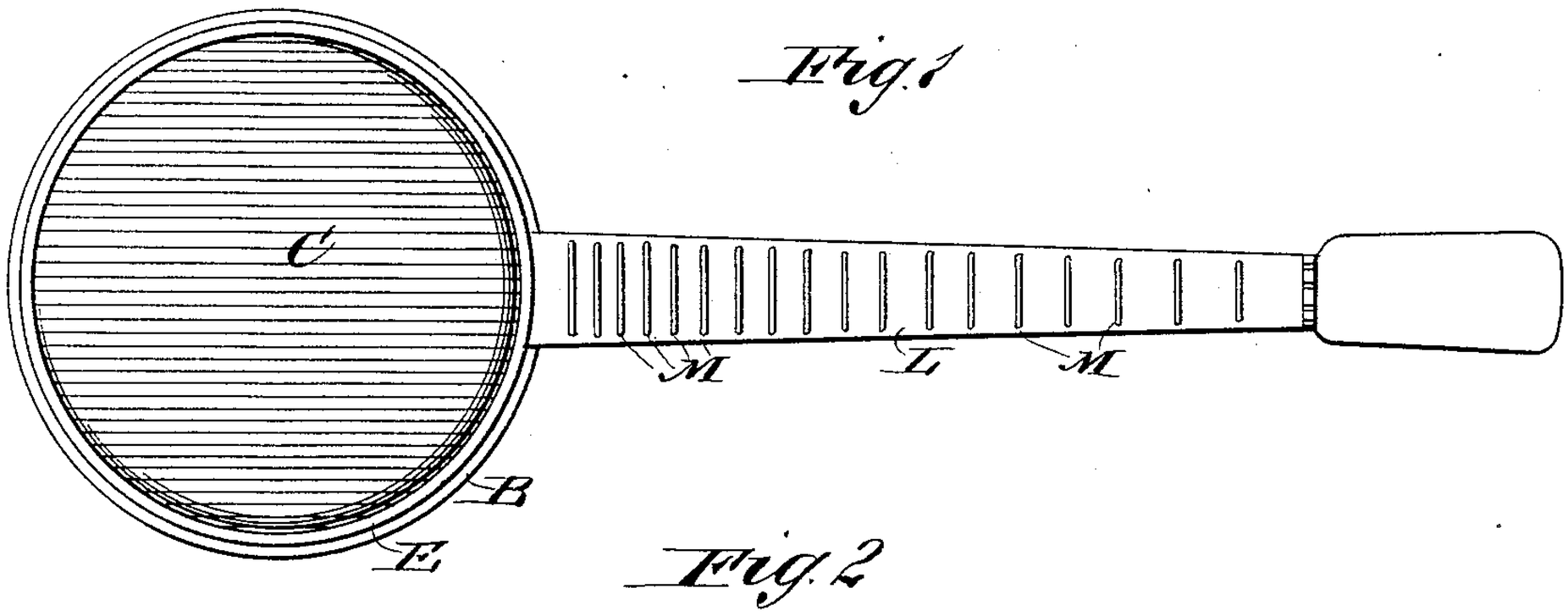


Fig. 2

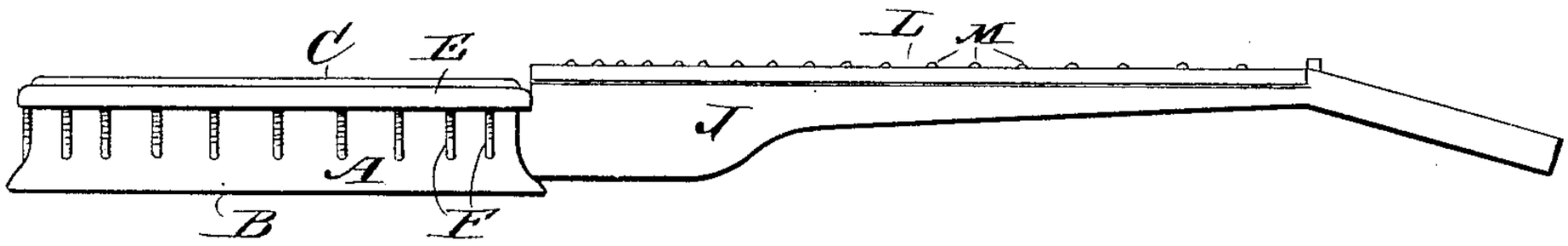


Fig. 3.

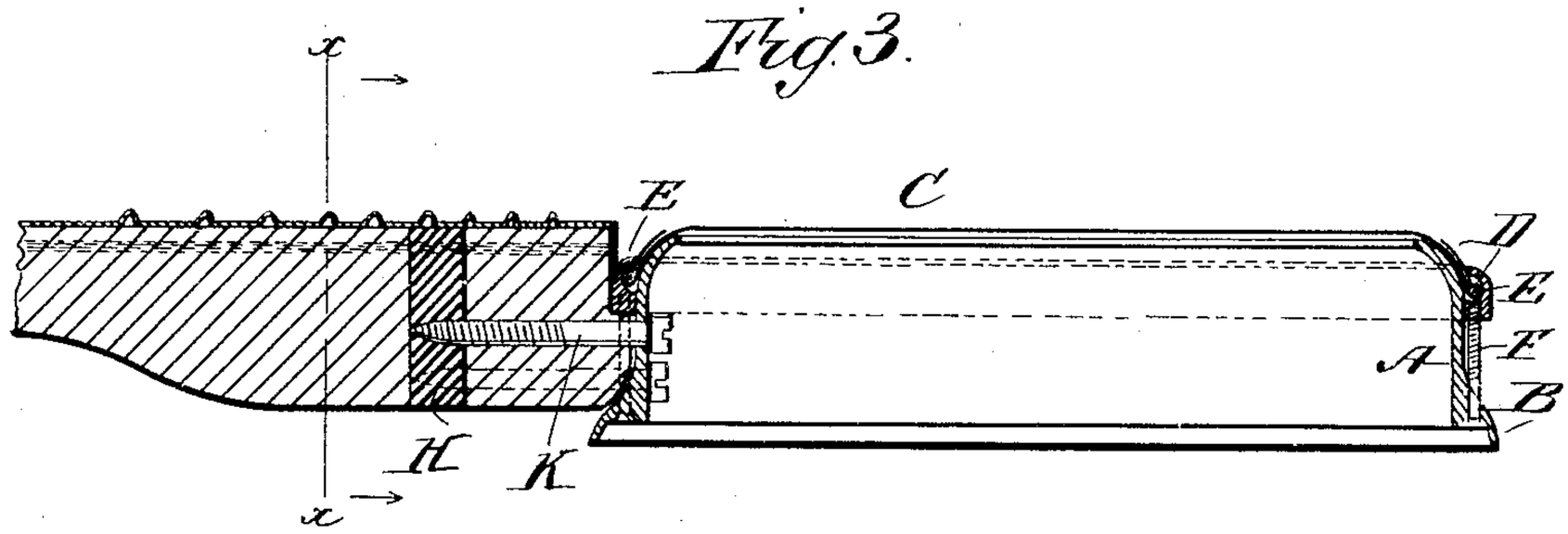


Fig. 4

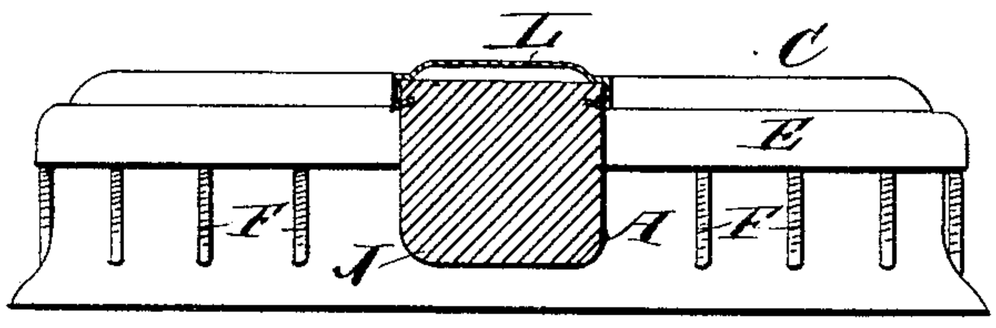
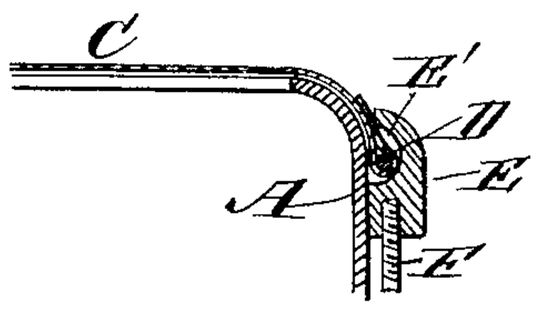


Fig. 5.



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CHARLES J. KELLY, OF DENVER, COLORADO.

BANJO.

SPECIFICATION forming part of Letters Patent No. 332,538, dated December 15, 1885.

Application filed April 11, 1885. Serial No. 161,981. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. KELLY, of Denver, in the county of Arapahoe and State of Colorado, have invented new and useful Improvements in Banjos, of which the following is a full, clear, and exact description.

The object of my invention is to provide certain new and useful improvements in banjos, whereby the tone is improved, the instruments made more durable, the construction is simplified, and all projections on the rim of the head are avoided.

The invention consists in the combination, with a flanged ring-frame, of a head-holding ring surrounding the ring-frame, and screws passed through the flange in the ring-frame and into the head-holding ring.

The invention further consists in the combination, with the ring-frame and neck, of a metal block in the neck and screws screwed through the ring-frame into said block.

The invention also consists in a sheet-metal finger-board, on which frets are formed.

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

Figure 1 is a top or face view of my improved banjo. Fig. 2 is a side view of the same. Fig. 3 is an enlarged longitudinal sectional view of the head and lower part of the neck. Fig. 4 is a cross-sectional view on the line *x x*, Fig. 3. Fig. 5 is an enlarged detail sectional view of part of the head.

The head-frame consists of a ring, A, provided on its bottom edge with an exterior flange, B, which has its bottom recessed, as shown. The top edge of the ring is bent inward on a quarter-circle. The head C, of calf-skin, has its edges passed around a wire ring, D, which is placed in a groove, E′, in the inner surface of a ring, E, surrounding the ring-frame A directly below the curved top part of the same, whereby the head is drawn over the curved upper parts of the ring-frame A. Screws F are passed loosely up through the flange B on the outside of the ring A, and their upper ends screwed into threaded apertures in the bottom edge of the tightening-ring E. By turning the said screws the ring E is moved up or down on the ring-frame A, and the head C can thus be tightened as much as desired. The heads of the screws are in the recess in the flange B.

By providing the screws F in the manner described all projecting heads and parts are avoided, which is a great advantage, as the heads of the screws on banjos of the usual construction are apt to catch on articles of clothing, &c. A metal piece, H, is held transversely in the neck J, near its inner or lower end, and into screw-threaded apertures in the said plate the ends of screws K are passed, which are also passed through apertures in the ring-frame A, the said screws having heads which rest against the inner surfaces of the said ring-frame. The neck is thus held very securely on the ring-frame and cannot rattle. On the top of the neck J the finger-board L is held, which is made of sheet metal, and has its side edges bent over the sides of the neck and passed into longitudinal grooves in the said sides of the neck. Frets M are pressed upward in the sheet-metal finger board or plate, as shown.

By arranging the finger-board in the manner set forth the expense of setting the frets separately is avoided, and the frets cannot become loosened or detached.

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

1. In a banjo, the combination, with a ring-frame having an outwardly-projecting bottom flange, the under side of which is grooved, of a ring surrounding the ring-frame and serving to hold the head, and of screws passed through the flange of the ring-frame into the bottom edge of the head-holding ring, substantially as herein shown and described.

2. In a banjo, the combination, with the ring-frame A, having the flange B, of the head C, the wire ring D, the ring E, having a groove, E′, and of the screws F, substantially as herein shown and described.

3. In a banjo, the combination, with the ring-frame A, of the neck J, the metal piece H in the same, and the screws K, screwed through the ring-frame into the piece J, substantially as herein shown and described.

4. A banjo finger-board made of sheet metal, parts of which are struck up to form frets, substantially as herein shown and described.

5. The combination, with a banjo-neck, of a sheet-metal finger-board on the same, the side edges of the said finger-board being bent over the sides of the neck and into longitudinal grooves in the said neck, substantially as herein shown and described.

CHARLES J. KELLY.

Witnesses:
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