

(No Model.)

G. C. DOBSON.
BANJO.

No. 550,951.

Patented Dec. 10, 1895.

FIG. 1.

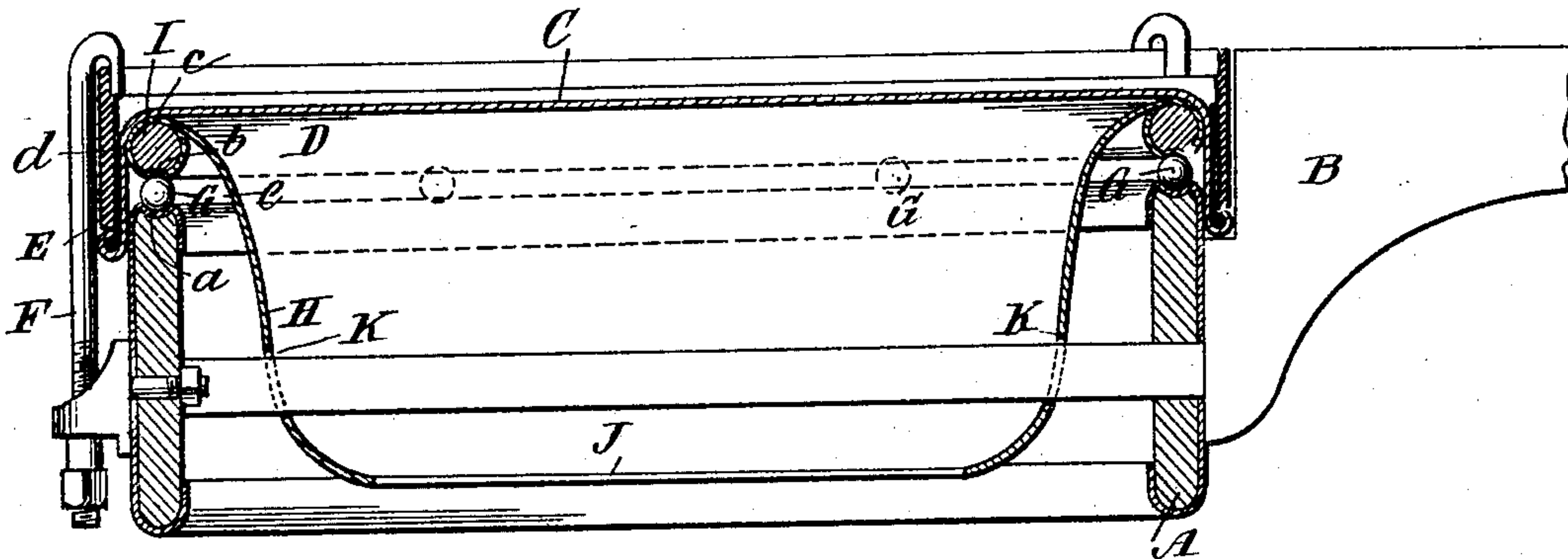


FIG. 2.

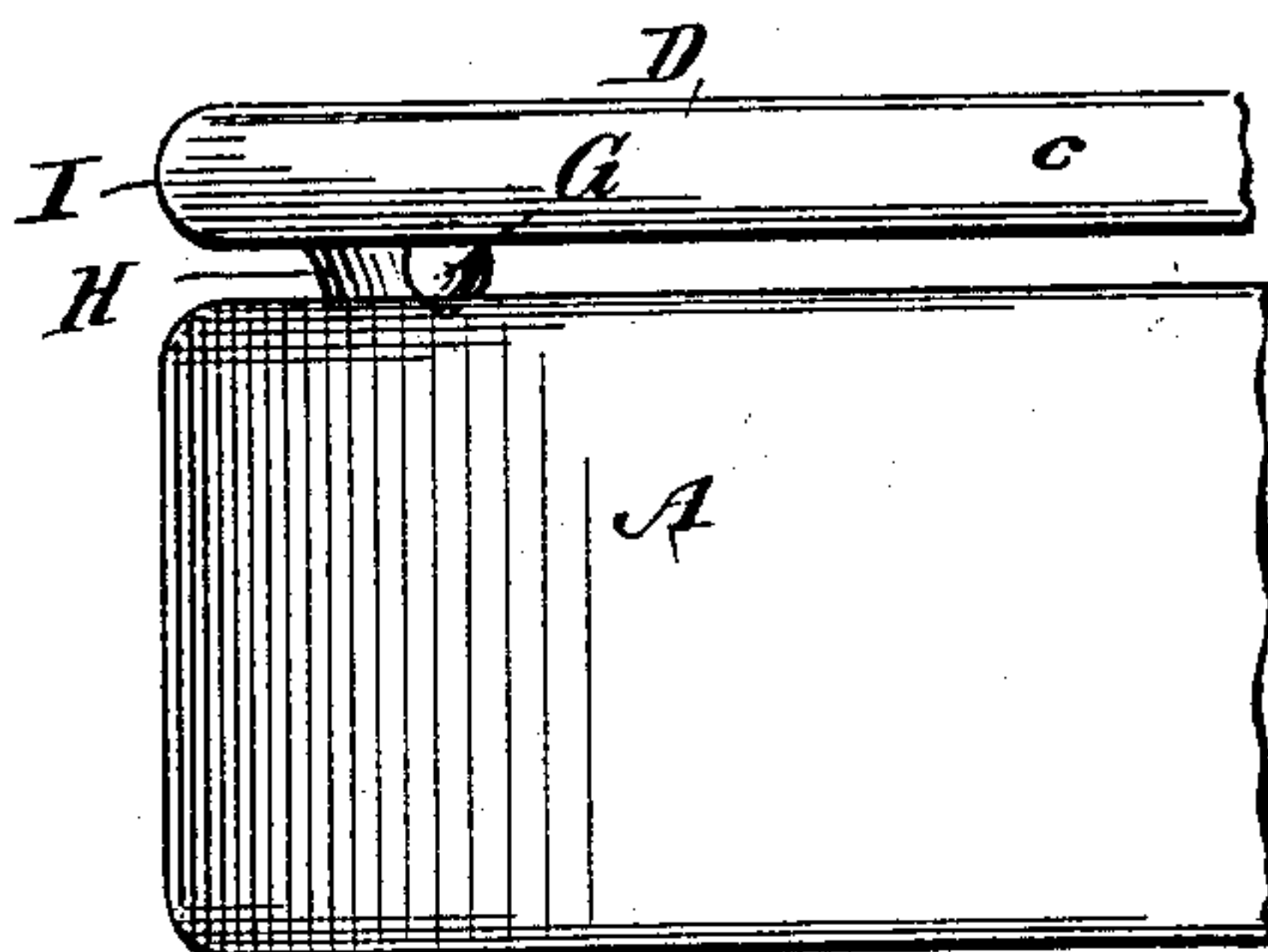


FIG. 3.

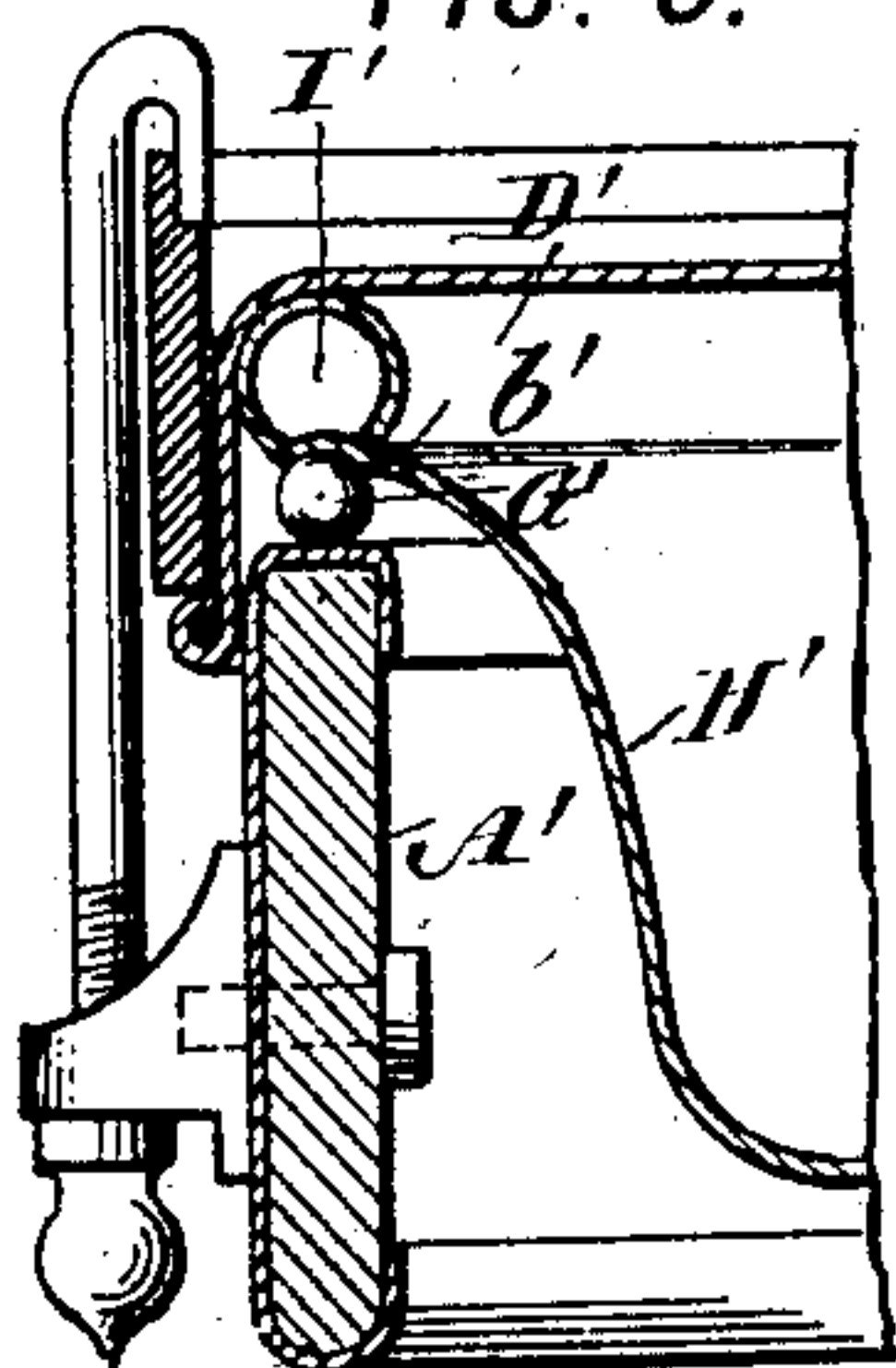
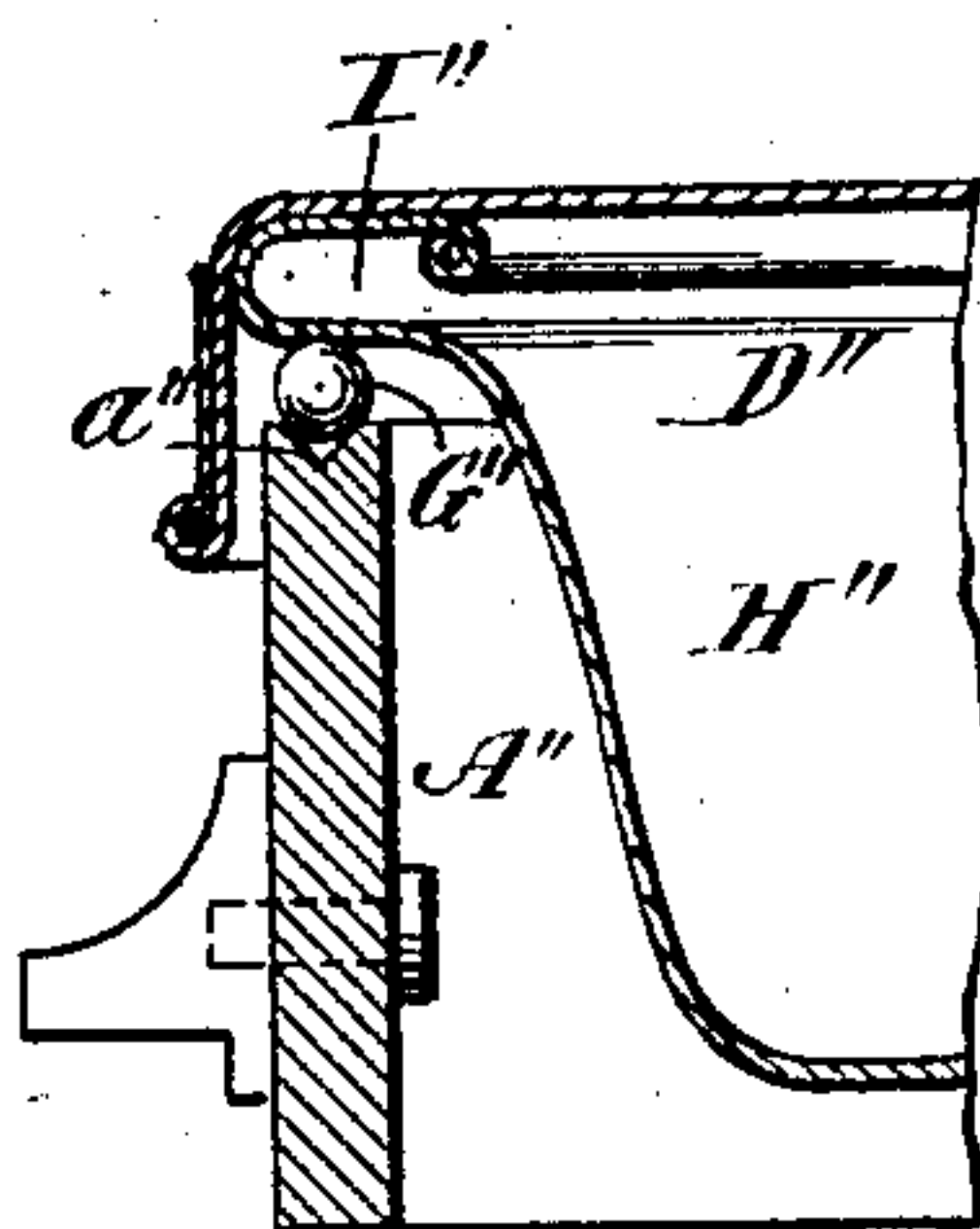


FIG. 4.



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BANJO.

SPECIFICATION forming part of Letters Patent No. 550,951, dated December 10, 1895.

Application filed April 24, 1895. Serial No. 546,971. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. DOBSON, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Banjos and Analogous Instruments, of which the following is a specification.

This invention relates to such musical instruments as banjos, drums, and the like, and aims to provide certain improvements in such instruments.

Banjos and like instruments are constructed with a parchment head stretched over a rim or ring of dome-shaped metal, which in turn rests on the body-ring of the instrument, to which body-ring the handle is attached, and which carries the clamps by which the head is stretched.

My invention aims to improve the connection between the dome-shaped ring, which will hereinafter be called the "sounding-ring," and the body-ring, whereby the former shall have greater or improved tone qualities or increased opportunity for vibration; and the invention consists in interposing between the sounding-ring and the body-ring a plurality of loose and preferably spherical supporting pieces or balls engaging sockets in the respective parts and carrying the one from the other but unattached to either. The interposition of these balls permits the ready and uniform adjustment of the sounding-ring on the body-ring and its free vibration relatively thereto and leaves a space between the two, through which a minor portion of the sound-waves may travel, while the major portion thereof is projected downwardly through the open bottom of the body-ring.

In the accompanying drawings, which illustrate certain adaptations of my invention as applied to banjos, Figure 1 is a fragmentary vertical section of a banjo embodying the preferred form of my improvements. Fig. 2 is a fragmentary side elevation of the body-ring and sounding-ring, showing my improved support between them. Fig. 3 is a fragmentary section showing a modification, and Fig. 4 is a similar view showing another modification.

Referring to Figs. 1 and 2, let A indicate the body-ring of a banjo; B, the handle thereof; C, the parchment head thereof; D, the bell or sounding - ring over which the head is

stretched and which is carried by the body-ring; E, the clamping-ring attached to the head, and F the clamps holding the parts on the body-ring and stretching the head. All these parts may be of any usual, suitable, or desirable construction, those shown being of well-known construction.

According to my invention I interpose pieces or carriers G between the body-ring A and the sounding-ring D, unattached to either and supporting the latter from the former. These pieces are preferably spheres or balls seated in sockets *a* in the top of the body-ring and in sockets *b* in the bottom of the flange or bead *c* of the sounding-ring D in such manner that the latter can tilt or move on or around the balls to properly seat itself thereon and will still be held in proper position on the body-ring thereby. Any number of balls can be employed; but I prefer to use three or more. The pressure of the head against the sounding-ring, due to the effect of the clamps F, is relied on to keep the sounding-ring in contact with the balls and to keep the several parts in position on the body-ring.

The sounding-ring D can be of any construction which comprises a vibrating body H and an outer or peripheral flange I, in which latter the sockets *b* for the balls G are provided and which also serves to support the head. In the construction shown in Figs. 1 and 2 the body H has an opening J at bottom for the escape of sound-waves and openings K for the passage of the handle-stick L. In this construction the flange I consists of a bead formed by turning under the upper outer edge of the ring and rolling it against a wire rod *d*, making a solid flange, and the socket *b* is formed by cutting out part of the flange to form a recess at its under side. In the construction shown in Fig. 3 the flange lettered I' of the ring lettered D' is hollow, being formed by rolling in the outer edge of the metal of the body H'. The recesses *b'* are formed by indenting this metal, and the balls G' rest directly on top of the body-ring A'.

Fig. 4 shows a construction in which the ring lettered D'' consists of a body H'' and a flange I'', formed as a hollow flange by folding the metal of the ring first outwardly, then upwardly, and then inwardly, and the flange has no recesses, but simply rests on the balls

lettered G'', which seat in recesses *a''* in the ring A''.

In operation the sounding-ring rests on the balls removed from the body-ring and finds a proper seating on the balls under the adjustment of the clamps F. It vibrates freely on the spherical supports, giving a full and delicate tone to the instrument. The sound may flow in part through the apertures *e* between the top of the body-ring and the flange of the sounding-ring intermediate of the balls. The connection between the body-ring and sounding-ring is a compensating one, permitting the parts to adjust themselves to any irregularity of construction, and the parts can be readily separated or assembled when desired.

It will be seen that my invention provides improvements in musical instruments which can be variously and advantageously availed of which improve the structural features of the instrument and also its musical qualities and scope.

It will be understood that the invention is not limited to the particular adaptation set forth, but that it can be availed of according to such modifications as circumstances may dictate.

What I claim is—

1. In banjos and analogous instruments a body ring, a sounding ring, and a head, and

means for fastening said parts together, in combination with means for supporting said sounding ring on said body ring consisting of supporting pieces interposed between said rings, engaging each and unattached to either, substantially as and for the purpose set forth.

2. In banjos and analogous instruments a body ring and a sounding ring, a head carried on the latter, and a fastening between said head and body ring holding said sounding ring in position relative to the body ring, and spherical supporting pieces between said rings supporting the sounding ring on the body ring, substantially as and for the purpose set forth.

3. In banjos and analogous instruments, a body ring having recesses in its upper edge, pieces seated in said recesses but unattached to said ring, a sounding ring having a flange resting on said pieces, a head stretched over said sounding ring and clamps drawing said head toward said body ring, substantially as and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

GEORGE C. DOBSON.

Witnesses:

FRED WHITE,
THOMAS F. WALLACE.