(No Model.)

J. B. HOWE.

BANJO.

No. 314,295. Patented Mar. 24, 1885.

Fig. 1.

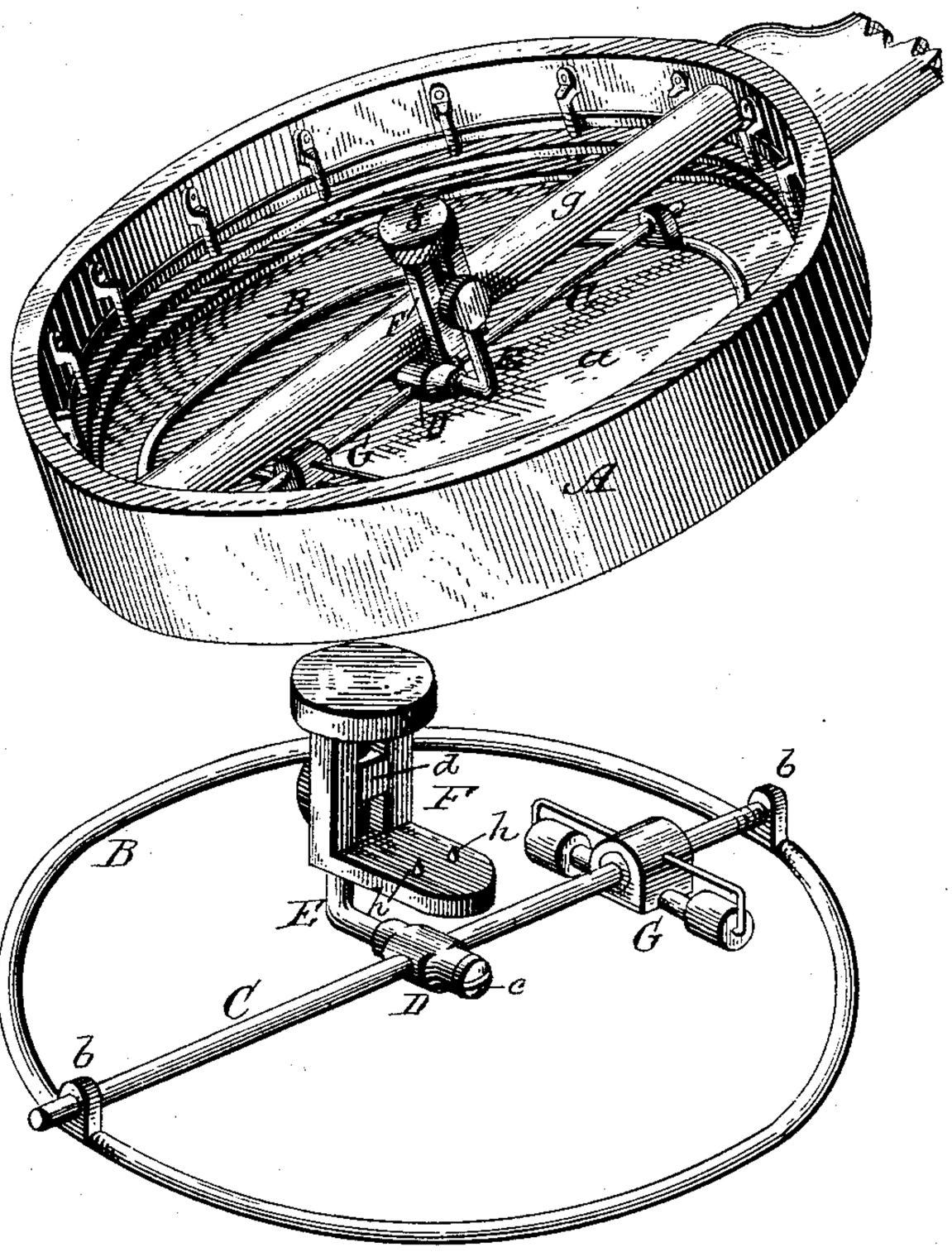


Fig. 2.

Fig. 3.

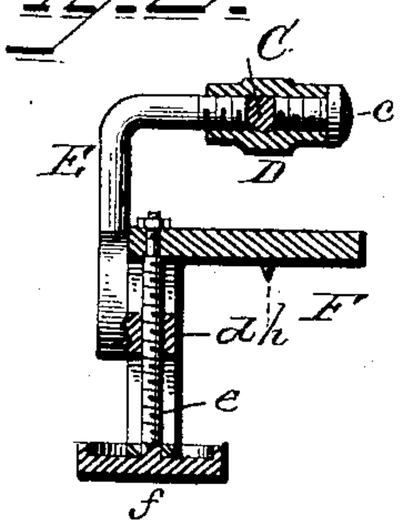
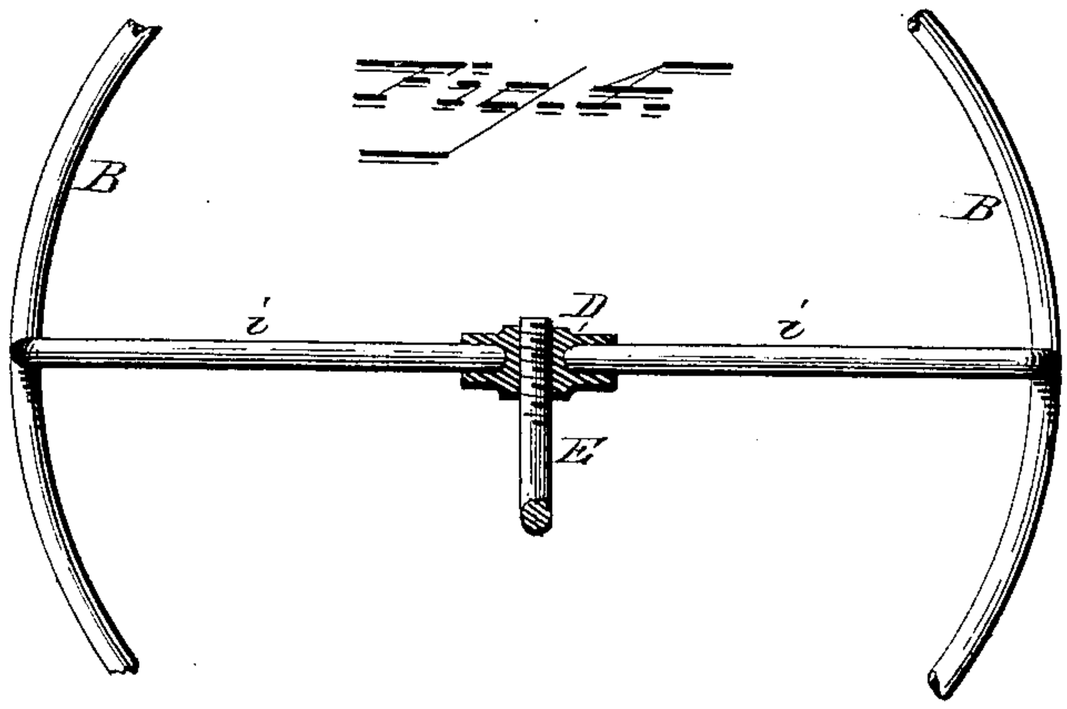


Fig. 4.



WITNESSES

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BANJO.

SPECIFICATION forming part of Letters Patent No. 314,295, dated March 24, 1885.

Application filed December 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. HOWE, a citizen of the United States, residing at Danbury, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Banjos; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is an under side perspective view of a portion of a banjo with my invention applied thereto; Fig. 2, a perspective view of my invention; Fig. 3, a detail view, partly in section, of the device for securing the bell to the brace-bar of the banjo and rendering the bell adjustable; and Fig. 4, a modification of my invention.

The present invention has for its object to provide a bell to bear against the head-skin of the banjo, consisting of a ring connected by suitable means to the brace-bar and rendered adjustable to increase or diminish the pressure of the ring upon the head, and thus modify the tone; also, providing such a bell with a mute, as will be hereinafter described and claimed.

In the accompanying drawings, A represents the usual hoop or frame of the banjo, having the head-skin *a* connected thereto by suitable straining devices.

My improved sounding device, which I term a "bell," consists of a metal ring, B, of any suitable diameter, provided with eye-plates *b*, to receive a guide-rod, C, one or both ends of the rod being screw-threaded to engage with screw-threads in the eye-plates, or otherwise connected to said plates in a manner that will admit of the ring turning upon the axis of the rod. A sleeve, D, provided with a transverse hole, through which the rod C passes, is fastened at any point along the rod by a set-screw, *c*. The sleeve D is screw-threaded a portion of its length at each of its ends to receive the set-screw, and also the screw-threaded end of an angle-rod, F, the opposite end thereof terminating in a block, *d*. This block fits in a slotted clamp, E, and is caused to travel in the slot by an adjusting-screw, *e*, provided with a suitable thumb-nut, *f*, the threads of the screw engaging with a screw-threaded hole in the block *d*. This clamping device is for the purpose of attaching the bell or ring B to the brace-bar *g* of the banjo, as shown in Fig. 1, the rod C being provided with a mute, G.

The clamping or fastening device may be of any desirable form and construction that will provide means for securely connecting it to the brace-bar of the banjo, spurs *h* being used to prevent the clamp from slipping on the brace-bar. After the bell, with its mute, is secured in place, as shown, by turning the screw *e* in the proper direction the angle-arm E will be moved outward in a direction toward the under surface of the head-skin *a*, and carry with it the ring B, which is pressed against the head-skin, causing the spurs *h* to enter the brace-bar *g*. The attachment should be placed in the center of the banjo, on the brace-bar, the bar or rod C being under the latter and parallel therewith, so that the mute G will be moved in line of the strings.

As all brace-bars are not placed in banjos at the same angle, or perfectly parallel with the head-skin, it is necessary to provide means whereby the ring and mute may be adjusted to conform to these irregularities, which is accomplished by the angle-arm E. Thus by turning the adjusting-screw *e* the angle-arm is moved forward or backward, the ring is moved in a true vertical line, and by means of the pivotal connection of the ring with the rod C the former may be tipped to either one side or the other. A further adjustment of the ring B is provided, which is in the direction of the length of the rod C, means for attaining this end being shown in Fig. 3. By loosening the set-screw *c*, the rod, with its ring, can be moved in a true horizontal line to the right or left, and held in its adjusted position by the set-screw, which is screwed tightly against the rod, whereby the ring, with mute, is caused to press evenly on the head-skin *a* and with equal force. The mute G is also adjustable, in that it is capable of sliding and tipping on the guide-rod C, so as to press evenly on the head-skin *a*.

In Fig. 4 I have shown a modification of my invention, which dispenses with the eye-plates *b*, and instead of having the guide-rod C continuous it is made in sections *i*, being rigidly

secured at its outer ends to the ring B on a true diametrical line, and the inner ends loosely fitting in sockets in the ends of the sleeve D, whereby the same adjustments of the ring are obtained.

The bell or ring when in contact with the head-skin of the banjo produces a round, sharp tone, the mute modulating it to a soft, sweet tone, thus greatly improving the ordinary harsh, flat tone of a banjo.

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

1. The combination, with a banjo, of a bell consisting of an adjustable ring adapted to press upward against the head-skin thereof, and provided with means for connecting it to the brace-bar of the banjo, whereby its vertical adjustment can be controlled, substantially as and for the purpose set forth.

2. A bell for banjos, consisting of a ring provided with an adjustable mute, said ring adapted to be brought in contact with the head-skin of the banjo, substantially as and for the purpose specified.

3. A bell for banjos, consisting of a ring, a guide bar or rod connected thereto and extending diametrically across the same, and a sleeve connected to the bar or rod and to an angle-arm adjustably connected to a clamping or fastening device for attachment to the brace-bar of the banjo, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN B. HOWE.

Witnesses:
WARNER H. NORTHOP,
JAMES FRY.