## O. R. CHASE.

BANJO.

No. 343,564.

Patented June 15, 1886.

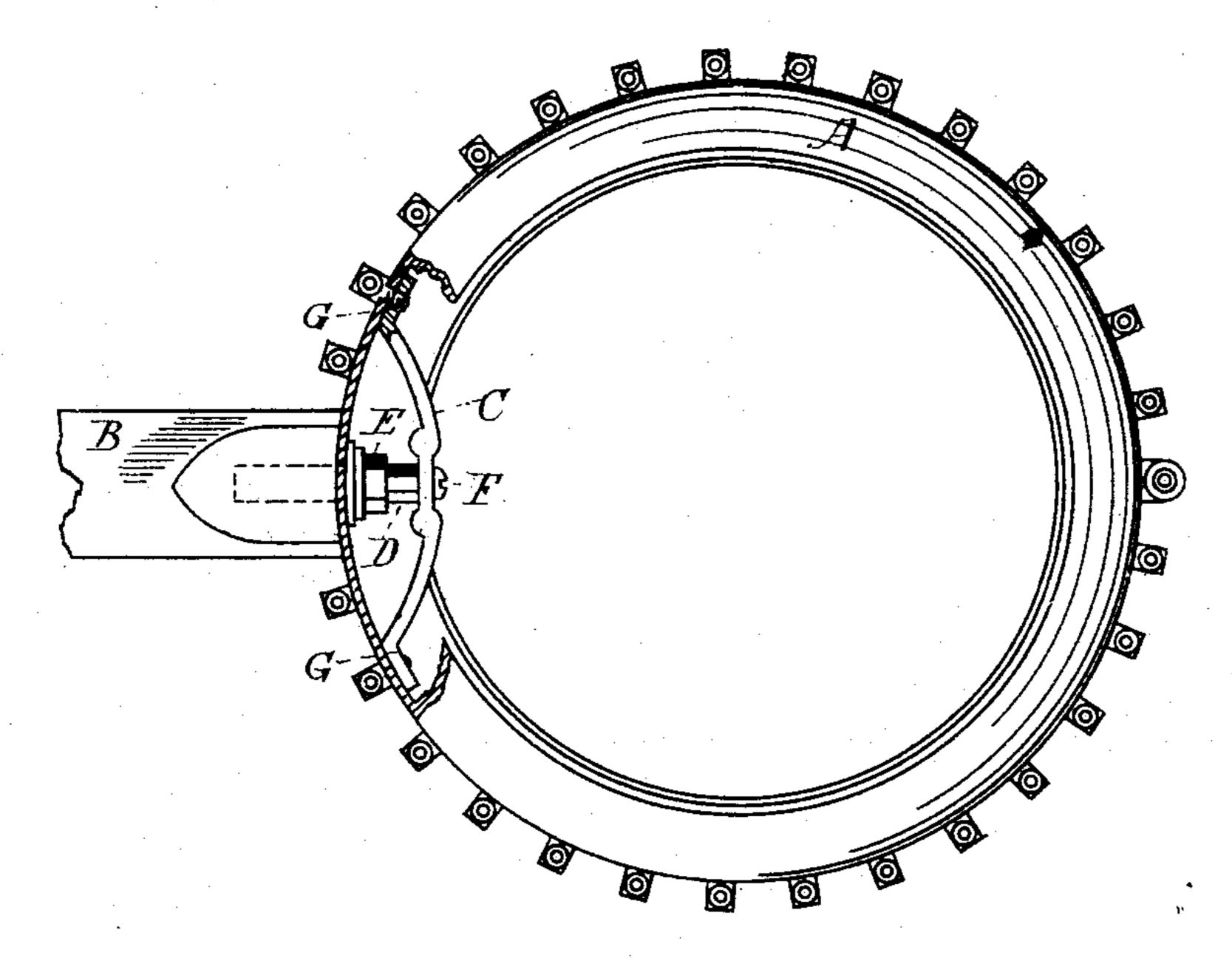


Fig- 1

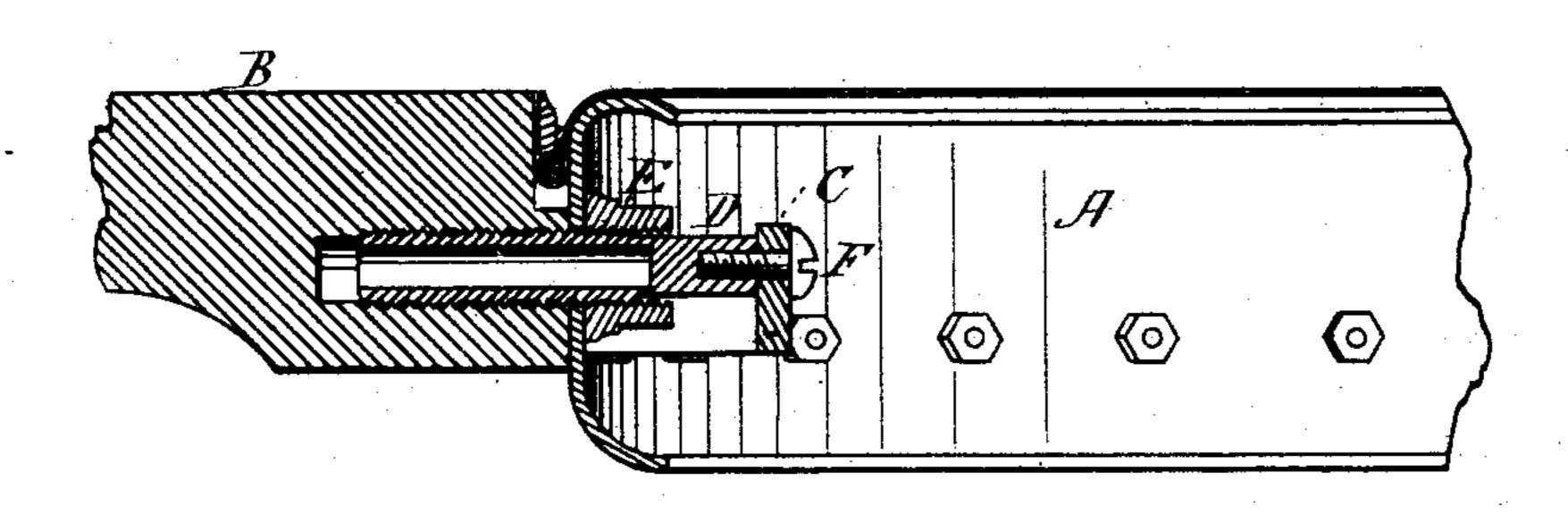


FIG. Z.

MITNESSES. In. E. Parker Albert Wolfreau

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## United States Patent Office.

OLIVER R. CHASE, OF BOSTON, MASSACHUSETTS.

## BANJO.

SPECIFICATION forming part of Letters Patent No. 343,564, dated June 15, 1886.

Application filed July 9, 1884. Serial No. 137, 180. (No model.)

To all whom it may concern:

Be it known that I, OLIVER R. CHASE, a citizen of the United States, residing at Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Banjos and other similar Musical Instruments, of which the following is the specification.

This invention relates to improvements on the banjo patented by me December 19, 1882, No. 269,178; and it consists in the means employed for attaching the handle to the ring or rim of the banjo in such a manner that the handle does not extend through the ring or rim from one side thereof to the other, as will be hereinafter more particularly described.

In the accompanying drawings, Figure 1 is the plan view of a banjo embodying my invention, with the rim of the banjo partly 20 broken away. Fig. 2 is a sectional view of the head or body of the banjo, showing sectional views in detail of my improvement in attaching the handle to the rim or frame of a banjo.

My invention is adapted to be used with all classes of banjos and similar musical instruments, whether they have a metal rim or wooden frame. It is, however, of special advantage in instruments having the body or head thereof formed of metal, as when the handle passes through the rim and extends through the banjo to the opposite rim, as banjos have hitherto commonly been manufactured, it forms a disturbing element in the harmony of the instrument. By doing away with this extension of the handle or "strengthening-bar," as it is commonly termed, to the banjo, I acquire as nearly as it is possible to

attain an undisturbed vibration, with a freedom from secondary rumbles and dull repetitions. I acquire a sweet and sonorous tone with great roundness and depth.

In my said patent I said: "The handle of the banjo is secured in any suitable manner to the outer side or periphery of the ring or rim and does not extend through the ring or rim from one side thereof to the other, as has been usually the practice." The means I now show for securing the handle to the ring of the banjo are especially adapted to their purpose in both a mechanical and musical point of view, as while it is necessary to attain strength it is also important not to injure the resonance of tone.

In the accompanying drawings the handle 55 B is attached to the outer periphery of the ring or rim A of the banjo by the threaded tube D, the nut E, the sustaining bracket or arms C, and the screw F. The ends G G of the bracket C are bent sufficiently to conform 60 to the rim of the banjo, and are attached thereto by the shank of one of the brackets for tightening the head, which shank is made slightly longer than the others and has a clamping nut. I preferably make the bar D 65 hollow that I may attain lightness and strength, and threaded at the end which enters the handle and for a sufficient distance to allow the operation of the nut E.

In using my improvement I first drill a hole 70 in the rim of the banjo, and also in the handle, to conform to the size of the tube or bar D, which is then screwed into the handle a sufficient depth to give the required strength. The bar D is then passed through the rim of 75 the banjo, and the nut E is screwed onto the bar D, clamping the handle firmly to the rim, after which the sustaining-bracket C is attached to the bar D by the screw F, and to the rim of banjo by clamping-screws, as described, 80 or a separate clamping-screw can be used. The parts are then screwed to the adjustment desired.

I am aware that heretofore the neck or handle of a banjo has been pivoted to the banjo-85 head and the end of the neck or handle secured to the banjo-body by means of a screwbolt which passes through the end of the banjo-neck, and thence through a perforation in the banjo-body and into a nut on the other 90 side; but this I do not consider to be any part of my invention.

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

In a banjo or similar musical instrument, a device for engaging the handle with the rim or frame consisting of a bar, D, a nut, E, and a bracket, C, the said bar being threaded at one end for engagement with the end of the 100 handle, and the nut E, which works against the inside of the frame and clamps it to the handle, substantially as described.

In witness whereof I have hereunto set my hand.

Witnesses: OLIVER R. CHASE. WM. B. H. DOWSE, G. A. P. CODWISE.