

(No Model.)

H. C. DOBSON.

BANJO.

No. 249,321.

Patented Nov. 8, 1881.

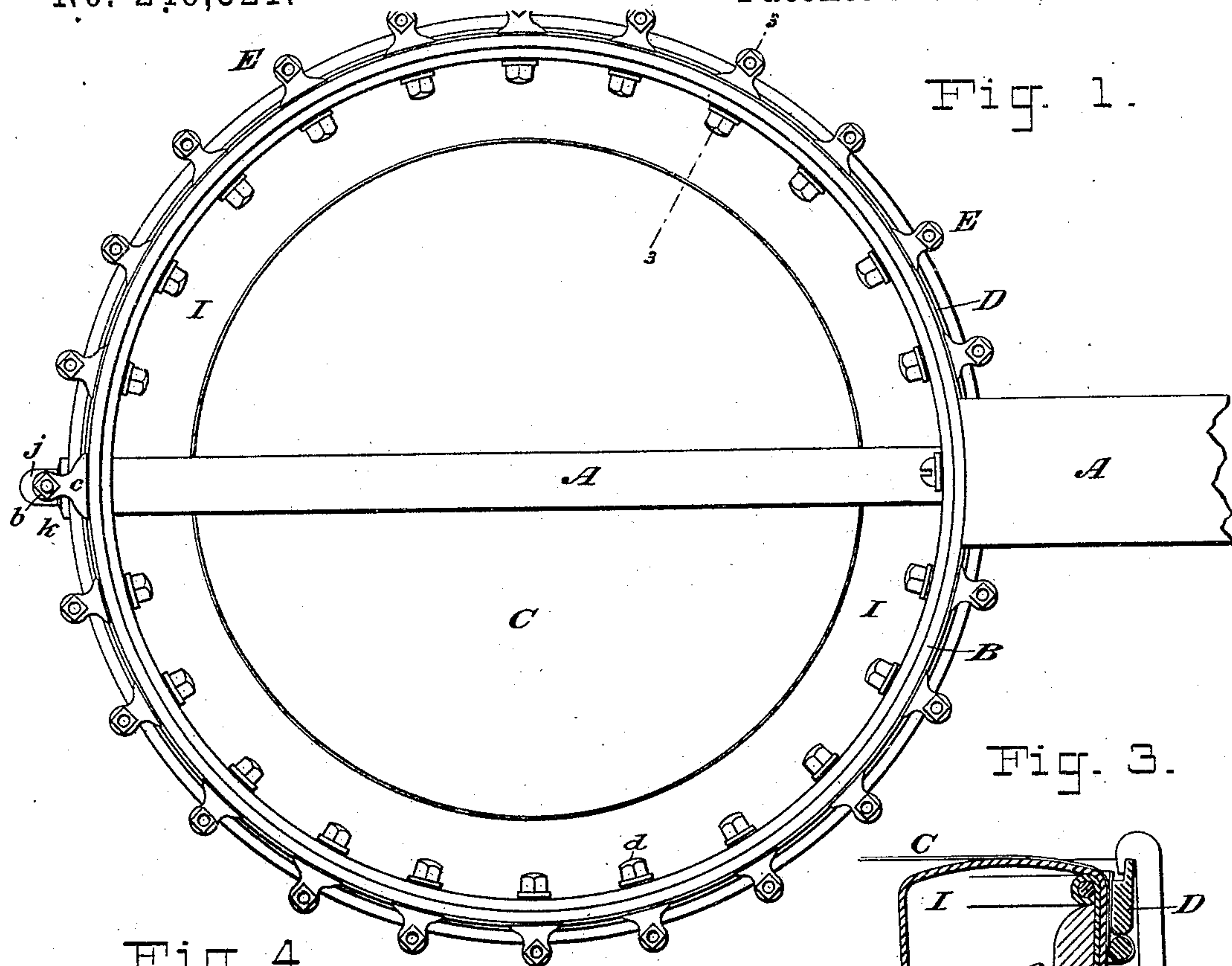


Fig. 1.

Fig. 4.

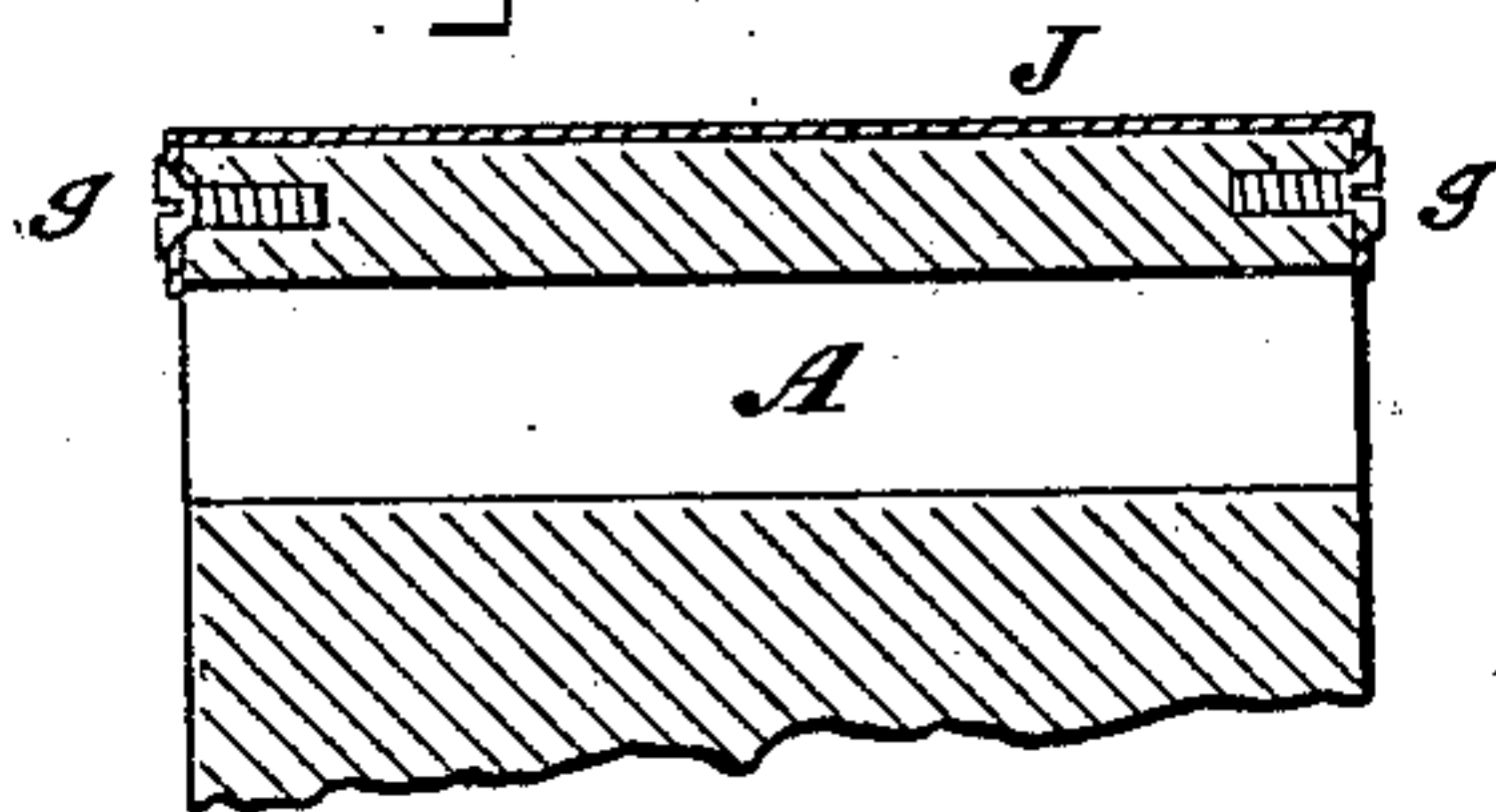


Fig. 6.

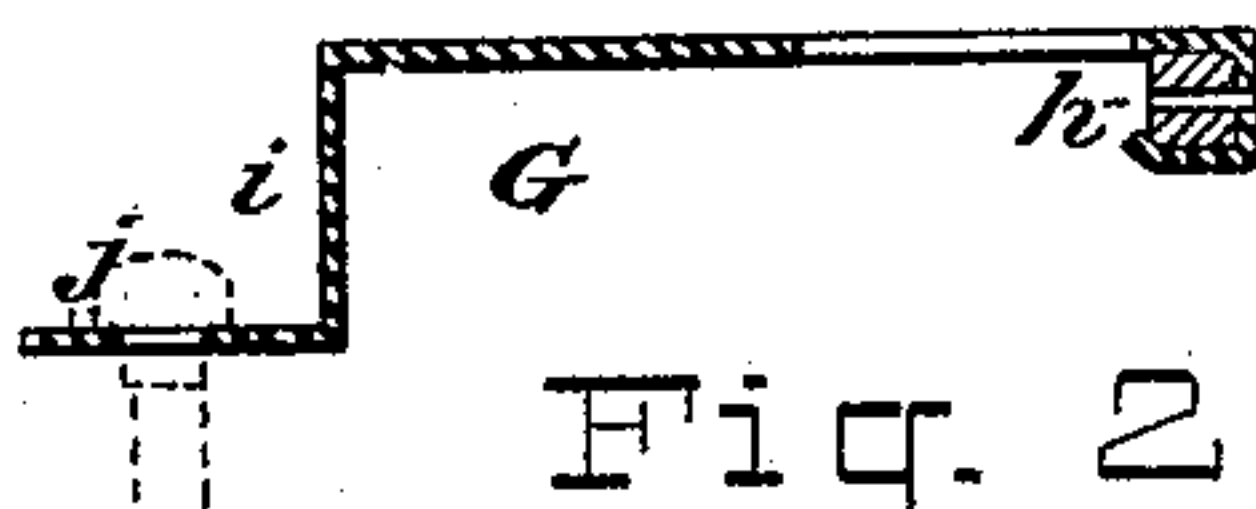


Fig. 2.

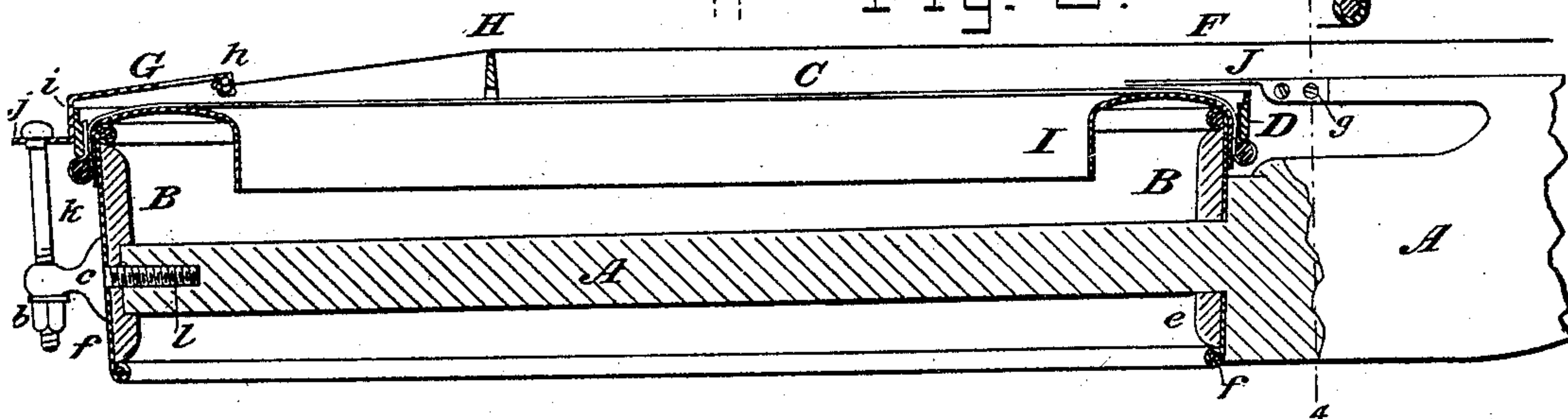
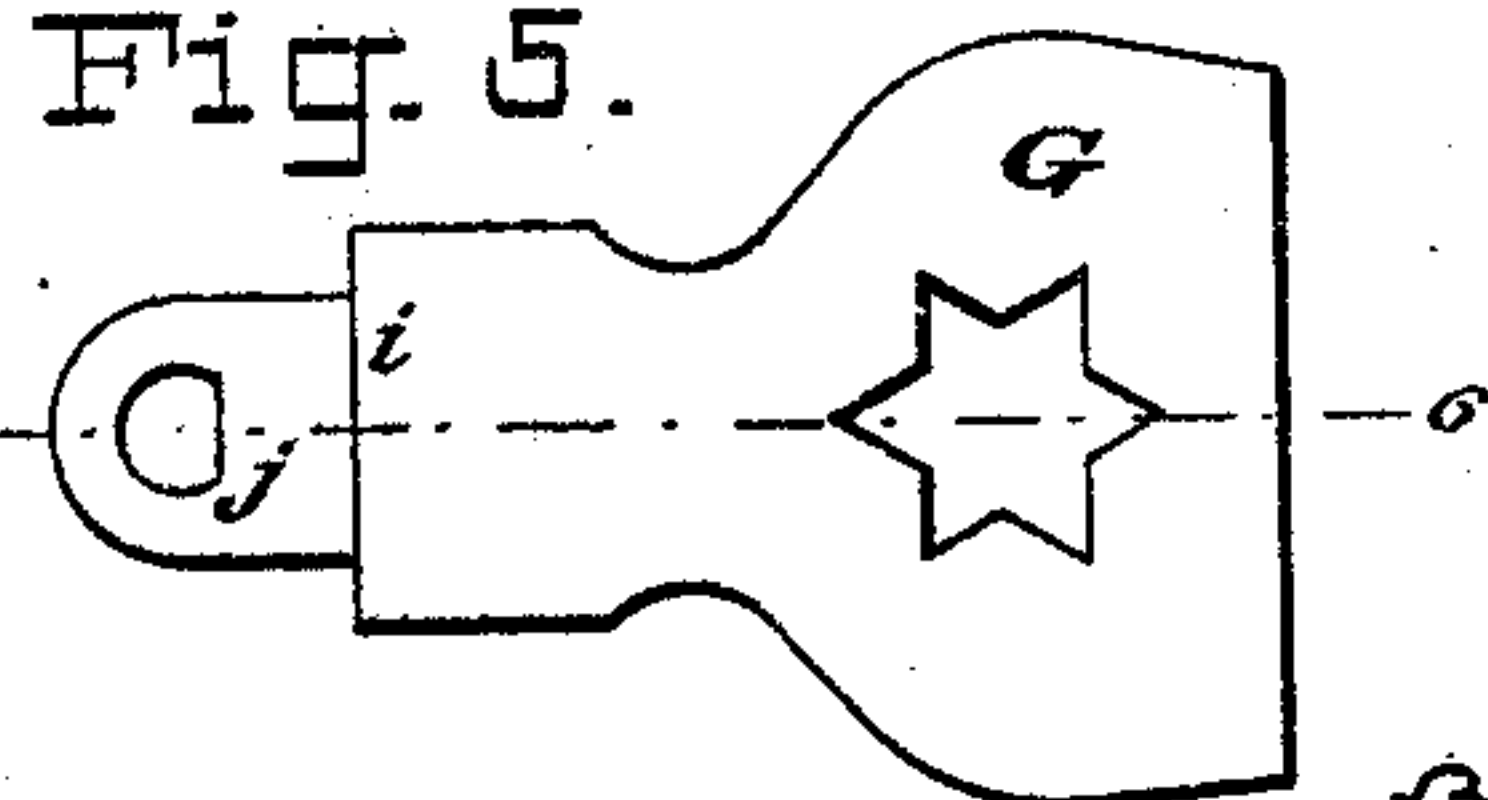


Fig. 5.

WITNESSES:

E. B. Rolton

Geo. Bainton.



INVENTOR:

Henry C. Dobson.

By his Attorneys,

Burke, Orason Bennett

UNITED STATES PATENT OFFICE.

HENRY C. DOBSON, OF NEW YORK, N. Y., ASSIGNOR TO CATHARINE L. DOBSON, OF SAME PLACE.

BANJO.

SPECIFICATION forming part of Letters Patent No. 249,321, dated November 8, 1881.

Application filed June 8, 1881. (No model.)

To all whom it may concern :

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

My invention involves several improvements applicable chiefly to banjos, but also in part to drums and other instruments.

In the drawings, I have shown a banjo provided with my improvements.

Figure 1 is a plan of the inner or under side, the handle being broken away. Fig. 2 is a longitudinal mid-section thereof. Fig. 3 is a fragmentary section, taken on the line 3 3 in Fig. 1. Fig. 4 is a cross-section of the handle on the line 4 4 in Fig. 2. Fig. 5 is a plan of the tail-piece, and Fig. 6 is a section of Fig. 5 on the line 6 6. Figs. 3, 4, 5, and 6 are on a scale double that of Figs. 1 and 2.

A is the handle; B, the ring or rim; C, the parchment-head stretched thereon; D, the straining-ring; E E, the clamps or tightening-screws for drawing down the ring D and straining the head; F F, the strings; G, the tail-piece, and H the bridge. All these parts are in the main of the ordinary construction and arrangement.

I is a metal ring, over which the head is stretched. It rests upon the ring B, is curved at its contact with the head, and has two downwardly-projecting flanges, the outer one of which passes down outside the ring B, and the inner one projects down inside the ring B, and is free from all parts of the instrument, so as to be capable of unrestrained vibration. It is set in vibration by the vibration of the head, and its effect is to give a clear bell-like ringing tone to the instrument. The outer flange serves to retain the rings B and I in proper relative position and to impart additional strength.

The clamps E each consist of a hooked screw-threaded rod, *a*, engaged by a nut, *b*, which bears against a standard, *c*. As heretofore constructed the hooked ends of the rods *a* have been liable to contact with and cut or abrade the head when the ring D was drawn low down, as is necessary in the course of time, on account

of the stretching of the head. To avoid this I cut out the inner and upper corner or edge of the ring D, and make the hooked ends to rest in the rabbet thus formed, as clearly shown in Fig. 3. The standard *c* has a screw which passes through the ring B and receives a nut, *d*, by which the standard is secured firmly to the ring. The nut *d* is a covered or hooded nut, so that it incloses the end of the screw and prevents it from cutting the clothing of the player, and both the nuts *d* and *b* are rounded and smoothed for the same purpose.

The ring B is made of two parts, an inside wooden hoop, *e*, and an outside metal band or ring, *f*, both edges of the latter being wired, and the wired portions turned inward, so as to embrace the wooden hoop and secure the two together. The ring I rests against the upper wired edge of the metal. The handle A passes through the ring B at one side, extends across to the opposite side, as usual, and its end is sunk into a socket or mortise in the hoop *e*, as clearly shown in Fig. 2.

The handle of a banjo is commonly extended over the head for a short distance, forming a continuation of the finger-board for use in sounding high notes. This extension has heretofore been in the way when it has been necessary to renew the head, since it prevented the lifting off of the ring D, so that to renew the head it was necessary to first take out the handle. To obviate this inconvenience I form this extended or overhanging portion of the finger-board in a separate piece from the handle, and fasten it to the handle by screws, as clearly shown at J in Figs. 2 and 4. I form it preferably of sheet metal with turned down flanges *g g*, which embrace the wood of the handle, and through which screws are driven into the handle. When it becomes necessary to renew the head these screws are first withdrawn and the piece J is detached from the handle.

The tail-piece G is of metal with a strip of wood, *h*, confined in its string end. The metal is bent around this strip in such manner as to hold it securely in place, as best shown in Fig. 6, and the string-holes are formed through both wood and metal. Thus the strings bear against wood instead of metal, as heretofore, which is liable to cut and injure them. The tail-piece

is bent downward at *i* and again horizontally at *j*, and the portion *j* is engaged by a screw, *k*, by which the tail-piece may be adjusted up or down. The pull of the strings does not come against the screw *k*, as heretofore, but the vertical portion *i* bears against the ring D, which thus receives the strain. The screw *k* passes through a standard, *c*, and is tightened by a nut, *b*, thereagainst. To prevent the turning of the screw *k* when the nut is turned, the neck of the screw is flattened on one side where it passes through the tail-piece, and the hole in the latter is made with a flat side to engage this portion, as shown in Fig. 5. The standard *c* forms the head of a screw, *l*, which passes through the ring B and screws into the head of the handle A, as shown in Fig. 2.

The improvements relating to the parchment head are equally applicable to drums, and those to the stringing may be also applicable to other stringed instruments.

I claim as my invention—

1. In a banjo or other parchment-head instrument, the metal ring I, having the parchment head stretched over it, its outer portion resting on the ring B, and its inner edge or portion being arranged out of contact with the head, so as to be left free to vibrate independently thereof, substantially as set forth.

2. In a banjo or other parchment-head instrument, the metal ring I, having the parchment head stretched over it, its outer portion resting on the ring B, and its inner portion being turned downwardly to form a flange, substantially as shown and described.

3. In a banjo or analogous instrument, the combination of ring B, convex metal ring I, having a flange which fits over and embraces the ring B, and the parchment head C strained over the ring I, with suitable means for straining it, substantially as set forth.

4. The straining-ring D for a banjo or similar instrument, having a rabbet formed in its upper inner edge for the reception of the hooked portions of the straining-rods *a*, substantially as set forth.

5. The ring B for a banjo, consisting of a wooden hoop, *e*, surrounded by a sheet-metal band, *f*, having both edges wired against the wooden hoop, whereby the latter is confined in place within the metal band.

6. The handle A of a banjo, provided with a continuation of the finger-board extending over the parchment head and detachable at will from the handle, substantially as set forth.

7. The combination of handle A and sheet-metal finger-board extension-piece C, having turned-down ears or flanges *g g* for attachment to the handle.

8. The tail-piece G, formed of sheet metal, and its string end bent around and confining a wooden strip, *h*, through which the strings pass, substantially as set forth.

9. The tail-piece G, bent downwardly at *i* and horizontally at *j*, in combination with the ring D or other part against which the portion *i* may abut, and with an adjusting-screw, *k*, engaging the portion *j*, substantially as set forth.

10. The end of the handle A, mortised into the ring B, in combination with a screw, *l*, passing through the ring and engaging said handle, and its head forming a standard, *c*, for engagement with the adjusting-screw *k* for the tail-piece, substantially as set forth.

11. The combination of the tail-piece G, formed with a hole through its portion *j*, which hole has one straight side, with the screw *k*, arranged to pass through said hole, and having its neck therein flattened on one side to fit the same and with the standard *c* and nut *b*, substantially as set forth.

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

HENRY C. DOBSON.

Witnesses:

ARTHUR C. FRASER,
WILLIAM D. LAMBRAY.