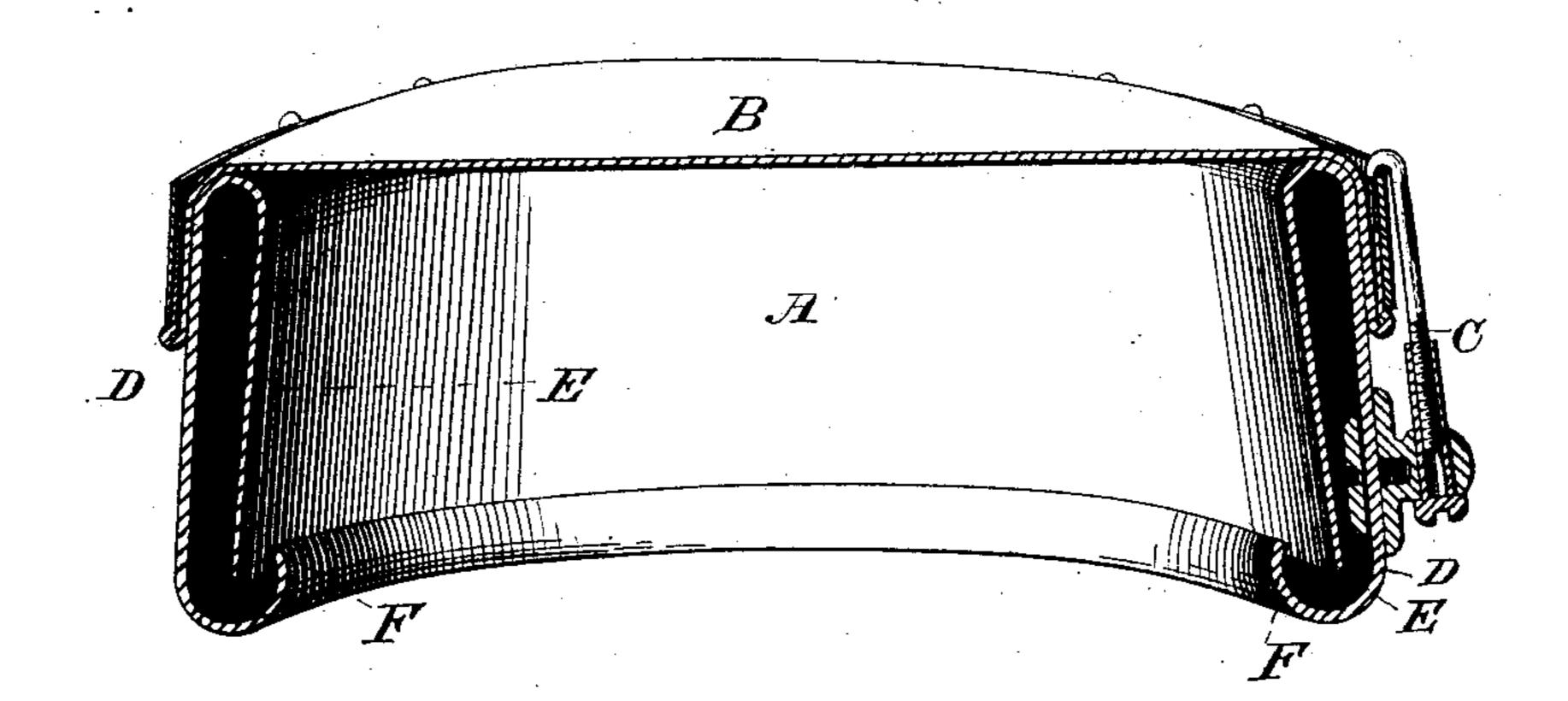
(No Model.)

E. J. CUBLEY.

BANJO.

No. 274,915.

Patented Apr. 3, 1883.



Witnesses Horge Woodland Korge Van Zand Inventor.

Edmin f. Bubbley

## United States Patent Office.

EDWIN J. CUBLEY, OF RAVENSWOOD, ILLINOIS.

## RANJO.

SPECIFICATION forming part of Letters Patent No. 274,915, dated April 3, 1883. Application filed October 7, 1882. (No model.)

To all whom to may concern:

Be it known that I, EDWIN J. CUBLEY, a citizen of the United States, residing at Ravenswood, in the county of Cook and State of 5 Illinois, have invented a new and useful Improvement in Metal Shells for Banjos, of which

the following is a specification.

My invention relates to improvements in. banjos in which the shell or ring which forms to the body of the instrument is made entirely of sheet metal, and to which the straining device is attached upon the outer side thereof; and the objects of my improvement are, first, to strengthen the shell by shaping it so that the | 15 strain will come upon the metal in the line of shape of a true circle; second, to beautify the appearance of the shell by covering from view the internal attachments by which the strain-20 ing device is fastened upon the outer side, and providing a continuous surface unbroken and with rounded corners, capable of being finely and easily polished; and, third, to strengthen, increase, purify, and render more melodious 25 the musical tone of the instrument. I attain these objects by the metal shell illustrated in the accompanying drawing, in which the figure is a perspective view of a section of the shell, showing a section of the membrane there-30 on and a device for straining it.

A represents the shell; B, the membrane; C, the straining device. The shell is a cylinder having double or triple walls, D E F representing the walls. It is formed by turning 35 over and drawing or spinning the edges of an ordinary sheet-metal cylinder back upon itself nearly its full length, as shown, yet so as to leave an air-chamber between the walls and

forming two or three concentric cylinders separated at all points except at the edge by which 40 they are each attached to the outer wall. The inner walls may overlap each other as far as may be desired, but do not come in contact. The large round corners strengthen the circle and prevent bending or buckling when the 45 head is tightly strained. They also add to the beauty of outline. The inner walls cover from view the fastenings of the straining device and present a continuous surface, which, when placed upon an ordinary polishing-wheel, takes 50 readily a fine finish. The sonorous vibrations of the columns of air partly imprisoned within the hollow shell sweeten and purify the musiits greatest resistance and to maintain the | cal tone, and the resonant inner walls, the metal of which is hardened and thinned by 55 the spinning, increase the power of that purified tone.

I am aware that prior to my invention banjos have been made having shells entirely of metal, also having double concentric walls ad- 60 justable upon each other to produce a straining device, also having shells formed partly of wood and lined or covered with metal. I do not therefore claim such a construction, broadly; but

What I do claim as my invention, and desire

to protect by Letters Patent, is-

A banjo or drum constructed with a metal shell formed in one piece with double or triple concentric walls separated by air-spaces, all 70 substantially as shown.

EDWIN J. CUBLEY.

Witnesses: HENRY B. WILLITS, JOHN O. NELSON.