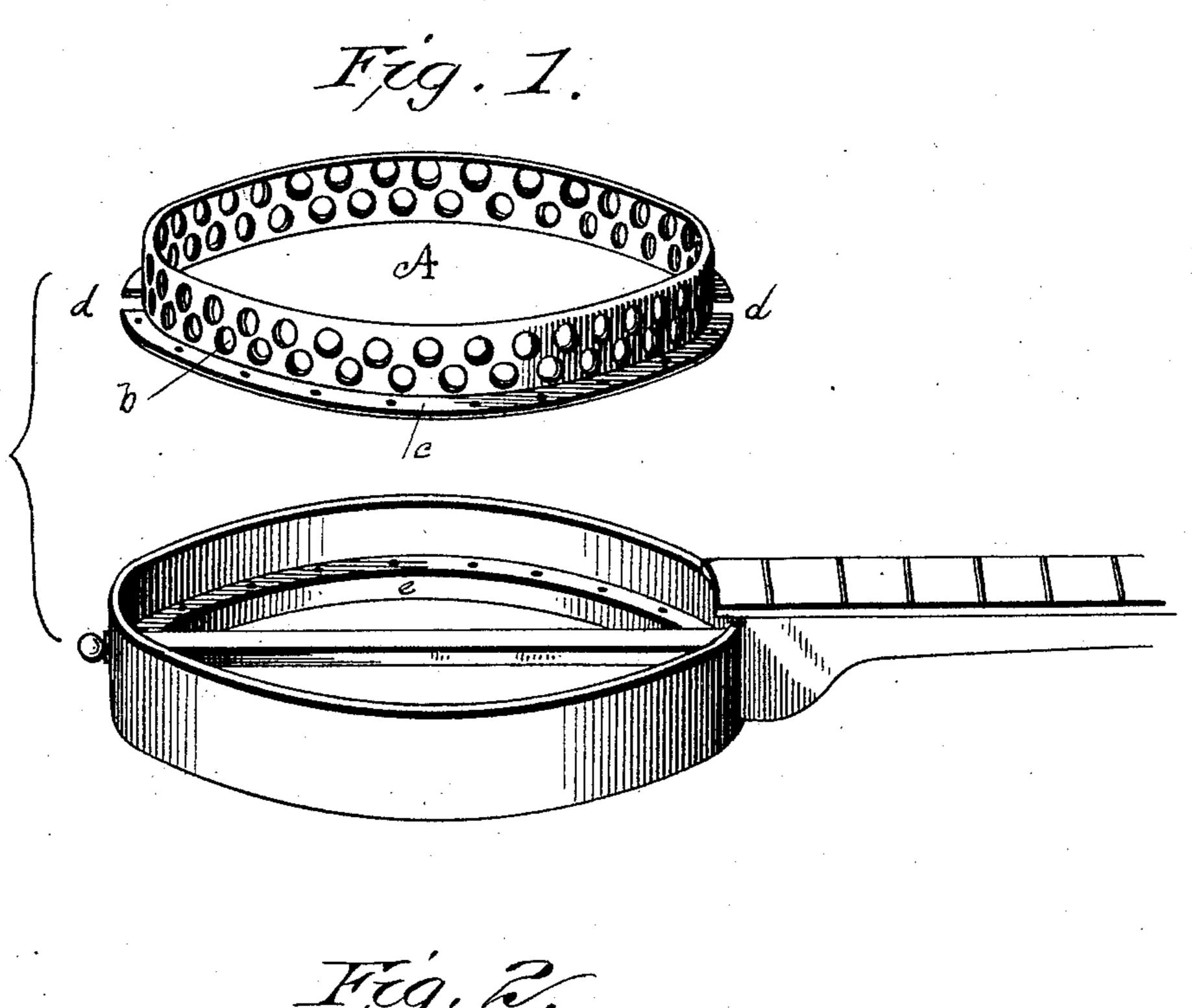
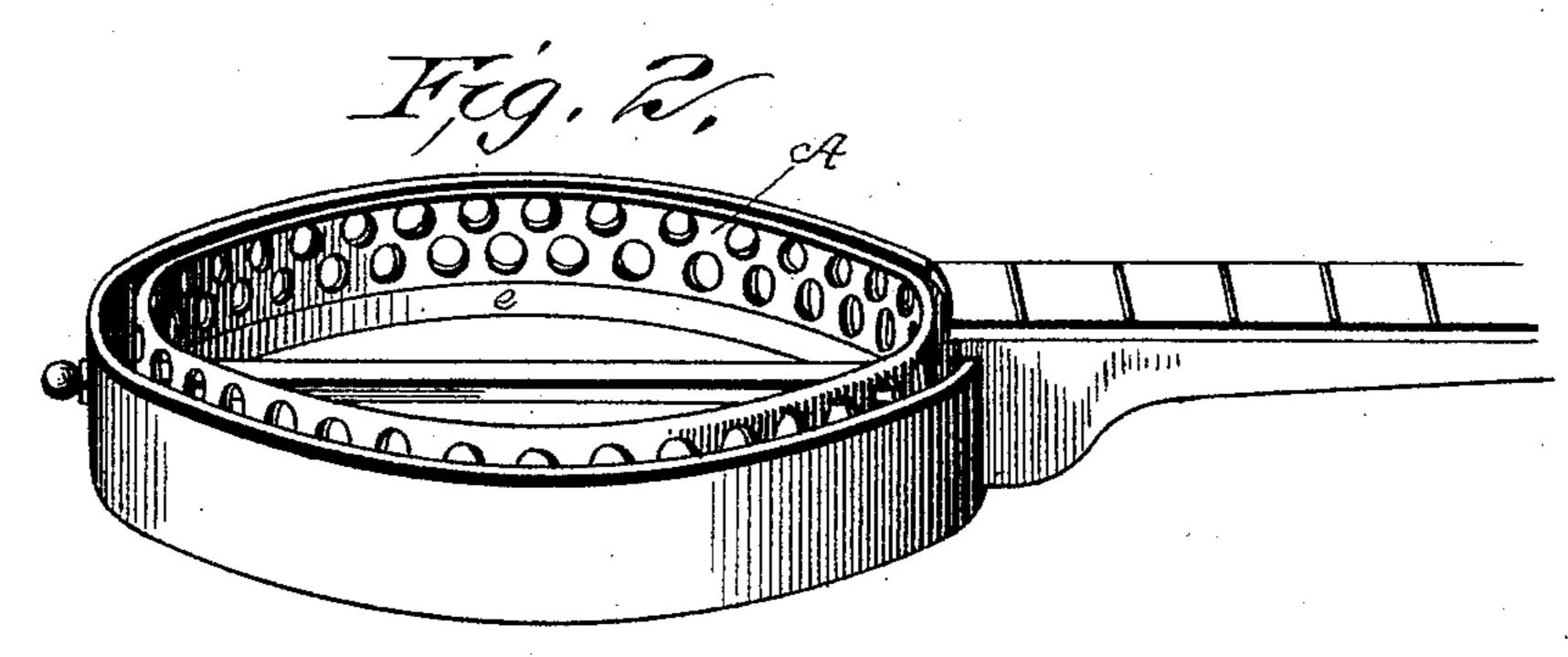
(No Model.)

## F. H. ANDRES. BANJO.

No. 529,514.

Patented Nov. 20, 1894.





Frederick H. Andres

Inventor

## United States Patent Office.

FREDERICK H. ANDRES, OF NEW YORK, N. Y.

## BANJO.

SPECIFICATION forming part of Letters Patent No. 529,514, dated November 20, 1894.

Application filed June 15, 1894. Serial No. 514,636. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK H. ANDRES, of the city, county, and State of New York, have invented a new and useful Improvement in Banjos, of which the following is a full clear and exact description

full, clear, and exact description.

The object of my invention is to provide a simple and inexpensive device whereby the

musical tone or resonance of a banjo may be
no much increased in volume and clearness. I
accomplish this object by providing a flanged,
perforated vibrating ring or rim of metal of
less diameter than the exterior shell or casing of the banjo, secured by threaded bolts
to a wooden hoop and mortised to set over
the bar of the shell.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 of the accompanying drawings represents a perspective detached view of the metal flanged rim or ring A, with perforations b, flange c, and mortises d, d, the inte-25 rior hoop e, provided with complementary holes, and upon which is secured the rim A with threaded bolts passing vertically through the flange. Fig. 2 is a view of the perforated rim A secured in position in the interior of 30 the shell of the banjo, showing a space between the inner periphery of the shell and the outer periphery of the perforated rim around its entire diameter. The upper edge of the perforated rim A is rounded so as to 35 present a smooth and even surface over which the skin or parchment may be bent, thus avoiding undue wear or abrasion of the same.

The flanged perforated rim A may be spun up from sheet metal. The holes, or perfora-

tions b, facilitate the escape of the sound 40 vibrations from the interior to the air space formed by the flange c, and augment the volume of sound given out by the instrument as well as improving its tone.

I am aware that various devices have been 45 patented for the purpose above stated prior to the invention of my device, but the difficulties of their manufacture, unstability and expensiveness have rendered their use limited. I produce a better musical effect with 50 the simple and inexpensive device herein described and set forth.

Having described my invention and methods of manufacture, what I claim, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a perforated, vibrating ring or rim for a banjo of less diameter than the head of the instrument, with its bottom edge flanged, and mortised to receive the head bar, secured to the 60 interior hoop by vertical threaded bolts, as and for the purpose specified.

2. The combination, with the head of a banjo, of a perforated ring or rim spun up from one piece of metal, of a less diameter 65 than the head of the instrument, with its bottom edge flanged, and mortised to fit over the head bar, secured to the interior hoop by vertical threaded bolts, substantially as set forth and described.

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

FREDERICK H. ANDRES.

Witnesses:
ARTHUR R. ALLEN,
CHRIST ANDRES.