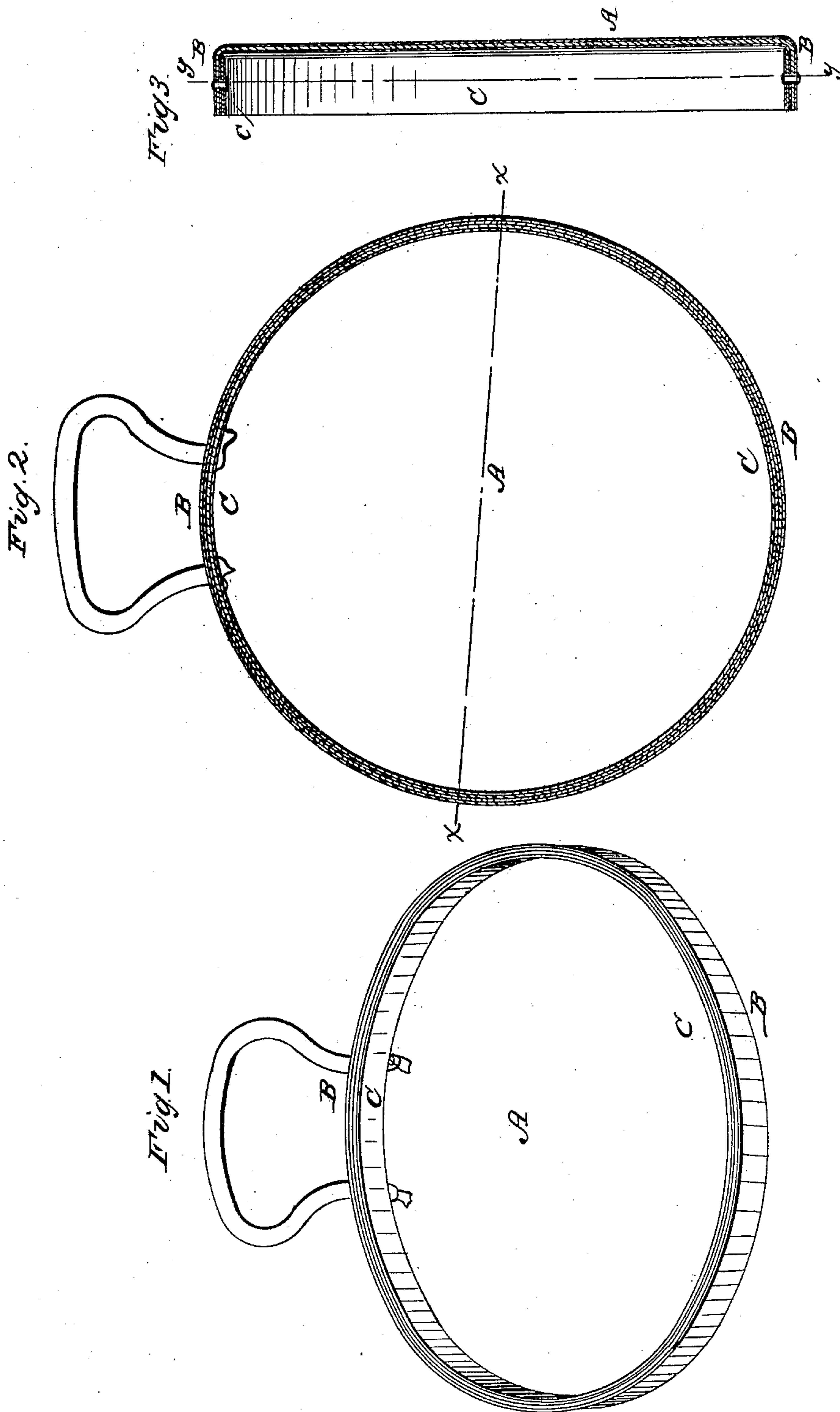


V. B. STARR.
Making Gongs.

No. 8,537.

Patented Nov. 18, 1851.



UNITED STATES PATENT OFFICE.

VINE B. STARR, OF EAST HAMPTON, CONNECTICUT.

GONG.

Specification of Letters Patent No. 8,537, dated November 18, 1851.

To all whom it may concern:

Be it known that I, VINE B. STARR, of East Hampton, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in the Mode of Constructing Gongs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is an isometrical view of one of my improved gongs. Fig. 2, is a section of the rim of the gong, taken in the line $y-y$ in Fig. 3. Fig. 3, is a section taken in the line $x-x$ in Fig. 2.

Similar letters of reference indicate corresponding parts in each of the several figures.

The nature of my invention consists in constructing gongs of sheet or plate iron, or steel, with a rim all round; strengthened by a ring or band, the whole being coated, having the crevices, interstices and all unsound parts filled with a suitable alloy, say of copper and tin for producing the desired sound or ringing tone.

To enable those skilled in the art to make my improved gong, I will proceed to describe the manner of constructing it.

A, represents a plate of sheet iron, and B, is a rim projecting from the same as shown in Fig. 3; this rim forms part of the plate A; and is supported or strengthened with a metallic ring C; this ring or band is of a similar shape and depth as the rim B, and is riveted or otherwise secured inside the rim.

After the rim B, has been formed on the plate of iron A, and the metallic ring or band C, has been firmly riveted or otherwise fastened to the inside of the rim B; the whole surface of the gong, thus constructed, is coated with a metallic alloy of copper and tin, or any suitable alloy which will produce a similar metal to what is commonly called "bell metal," in the following manner. The surface of the gong is first dampened with water for the purpose of causing the ingredients to adhere to the surface of the same, the metallic alloy is then formed into granules and distributed over the whole surface of the gong as shown in the drawing

colored yellow. After this operation has been performed the whole surface of the gong thus covered with the metallic alloy is covered with borax for producing a flux; (after the whole has been submitted to the heat). When this process has been completed, the next operation to be performed is that of covering the surface of the gong with a coating of clay in the following manner; a coat of clay is first placed over the bottom and then around the outside of the rim; the gong is then turned over and a coat of clay is placed over the inner top surface of the plate A, and also the inner surface of the rim and ring B, and C, and thus the whole is incrustated; it is next submitted to a great heat for a sufficient length of time, for the purpose of causing the alloy to flow freely and spread over the surface of the plate and into every uneven part, and fill up all crevices and interstices in the same; the clay serving to keep the metallic alloy &c. confined, and also to make it adhere to the surface of the metal.

By constructing gongs after my improved mode, of sheet iron or plate metal or steel, coated with any suitable metallic alloy, a great saving in expense is gained and the gongs thus produced will answer the purpose intended and produce nearly as fine a sound as the ordinary Chinese gong, which is very expensive.

In the drawing I have shown the gong as round, but I do not intend by any means to confine myself to this particular form, as it may be made of any desired shape.

What I claim as my invention and desire to secure by Letters Patent is—

Making gongs of sheet or plate iron, or steel, with a rim B, all round strengthened by a ring or band C, the whole being coated and having the crevices, interstices, and all unsound parts filled with an alloy of copper and tin, or any alloy of a similar nature or composed of similar metals to what is usually called "bell metal," substantially as herein set forth.

VINE B. STARR.

Witnesses:

NATHL. C. SMITH,
HENRY S. SMITH.