

No. 891,576

PATENTED JUNE 23, 1908.

E. W. VANDUZEN.
BELL AND ALLOY FOR SAME.
APPLICATION FILED SEPT. 14, 1907.

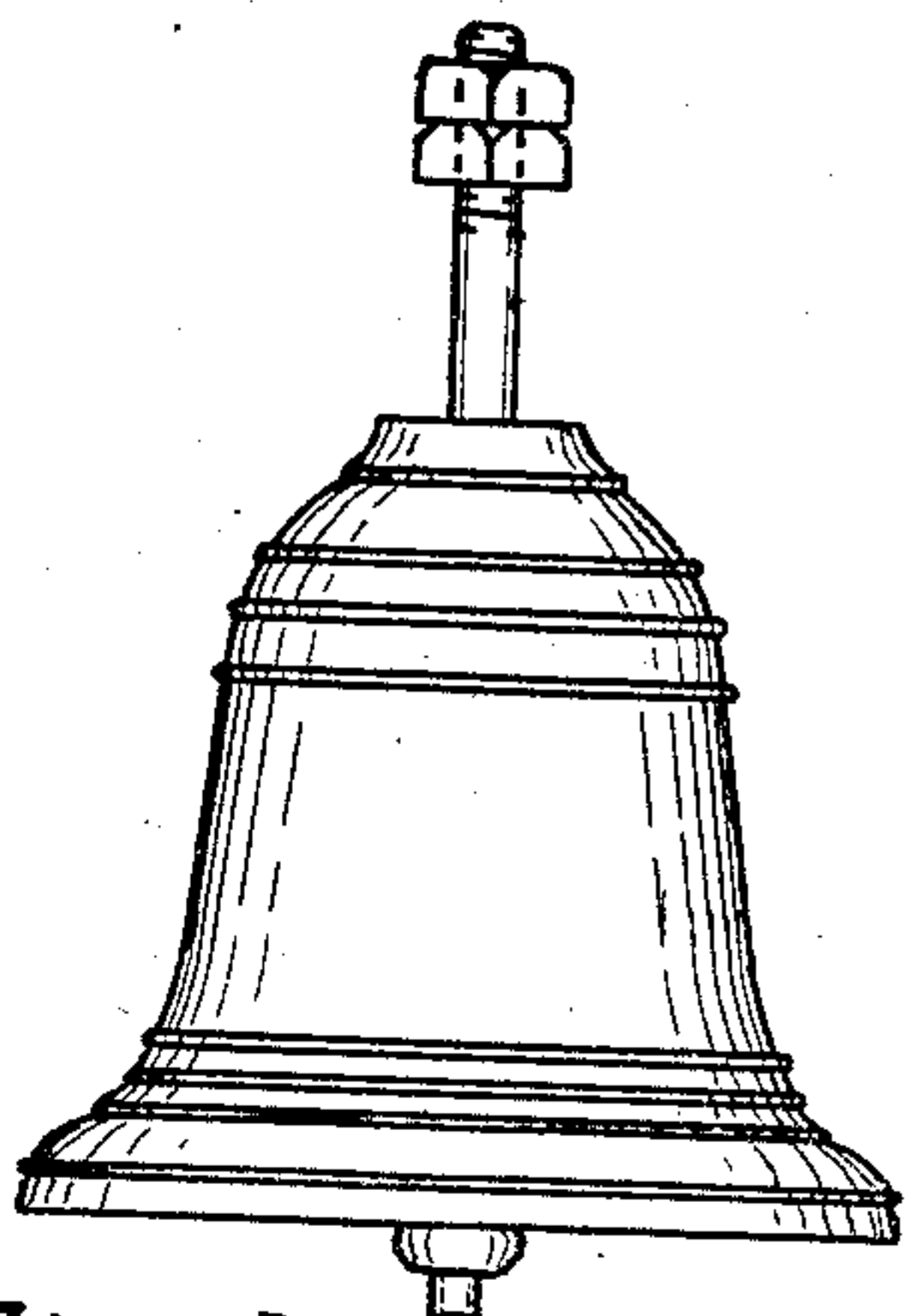


Fig. 1.

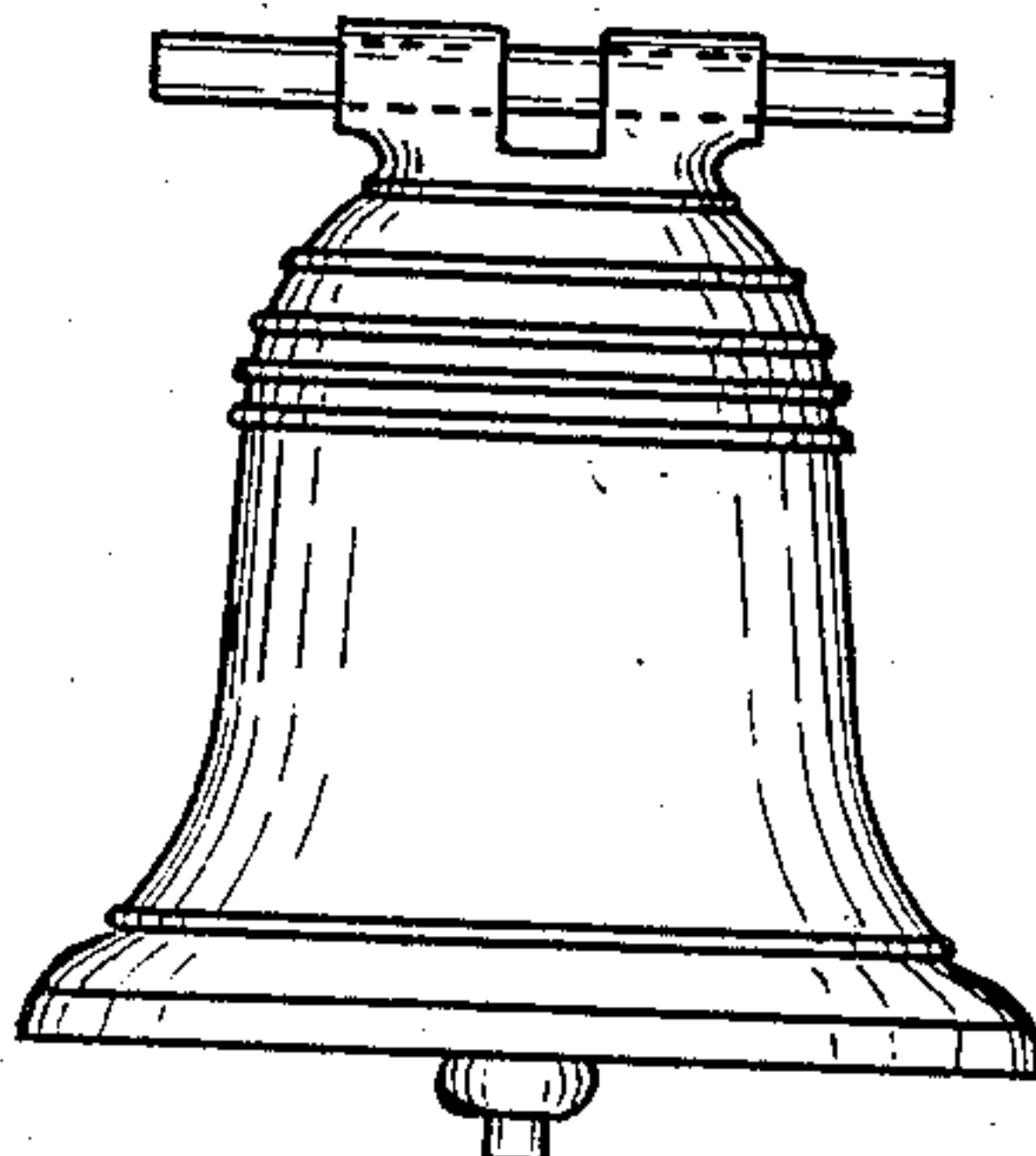


Fig. 2.

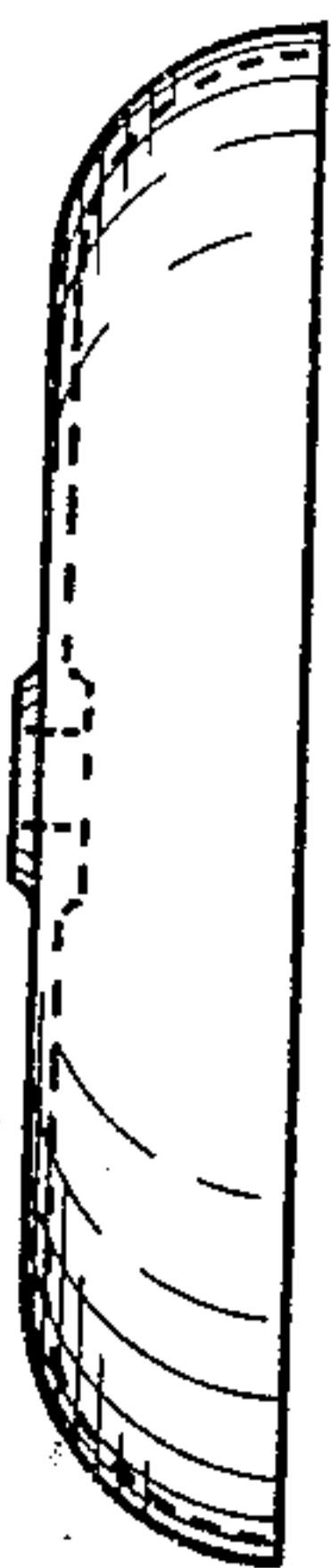


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

EZRA W. VANDUZEN, OF CINCINNATI, OHIO.

BELL AND ALLOY FOR SAME.

No. 891,576.

Specification of Letters Patent.

Patented June 23, 1908.

Application filed September 14, 1907. Serial No. 392,842.

To all whom it may concern:

Be it known that I, EZRA W. VANDUZEN, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Bells and Alloy for Same, of which the following is a specification.

My invention or discovery relates to improvements in bells and alloy or composition of metals for the same.

One of its objects is to provide bells which are thinner than heretofore.

Another object is to provide bells which are less liable to crack or become broken.

Another object is to provide bells of less expensive composition than heretofore, and having an equal or superior tone.

In the accompanying drawings Figures 1, 2, and 3 represent different styles of bells adapted to be formed or cast from my improved alloy or composition of metals.

In practice the bells are preferably cast in molds, the metal or alloy employed being produced by melting together copper, zinc and tin in substantially the following proportions; metallic copper four pounds, or sixteen parts metallic zinc one pound, or four parts metallic tin one fourth pound, or one part.

I have found the proportions above specified to give the best results; the copper may be varied however by approximately two

parts greater or less, the zinc by approximately one part greater or less, and the quantity of tin may be varied slightly, particularly increased, which however results in an increased cost without other advantage.

By employing the metals in substantially the proportions herein specified, I am enabled to produce bells up to about forty pounds in weight, having a tone equal to or superior to the tone of bells cast from the best copper-tin bell metal heretofore in use.

Bells formed from my improved alloy or composition will bend rather than crack or break, and may be formed of thinner metal, thus rendering the bells lighter in weight and much more serviceable than heretofore.

Having described my invention, what I claim is;

1. As a new article of manufacture, bells formed from an alloy consisting of copper, zinc, and tin in substantially the following proportions, copper sixteen parts, zinc four parts, and tin one part.

2. As a new article of manufacture, bells formed from an alloy of copper sixteen (16) parts, zinc four (4) parts, and tin one (1) part.

In testimony whereof I have affixed my signature in presence of two witnesses.

EZRA W. VANDUZEN.

Witnesses:

C. H. BARTH,
C. W. MILES.