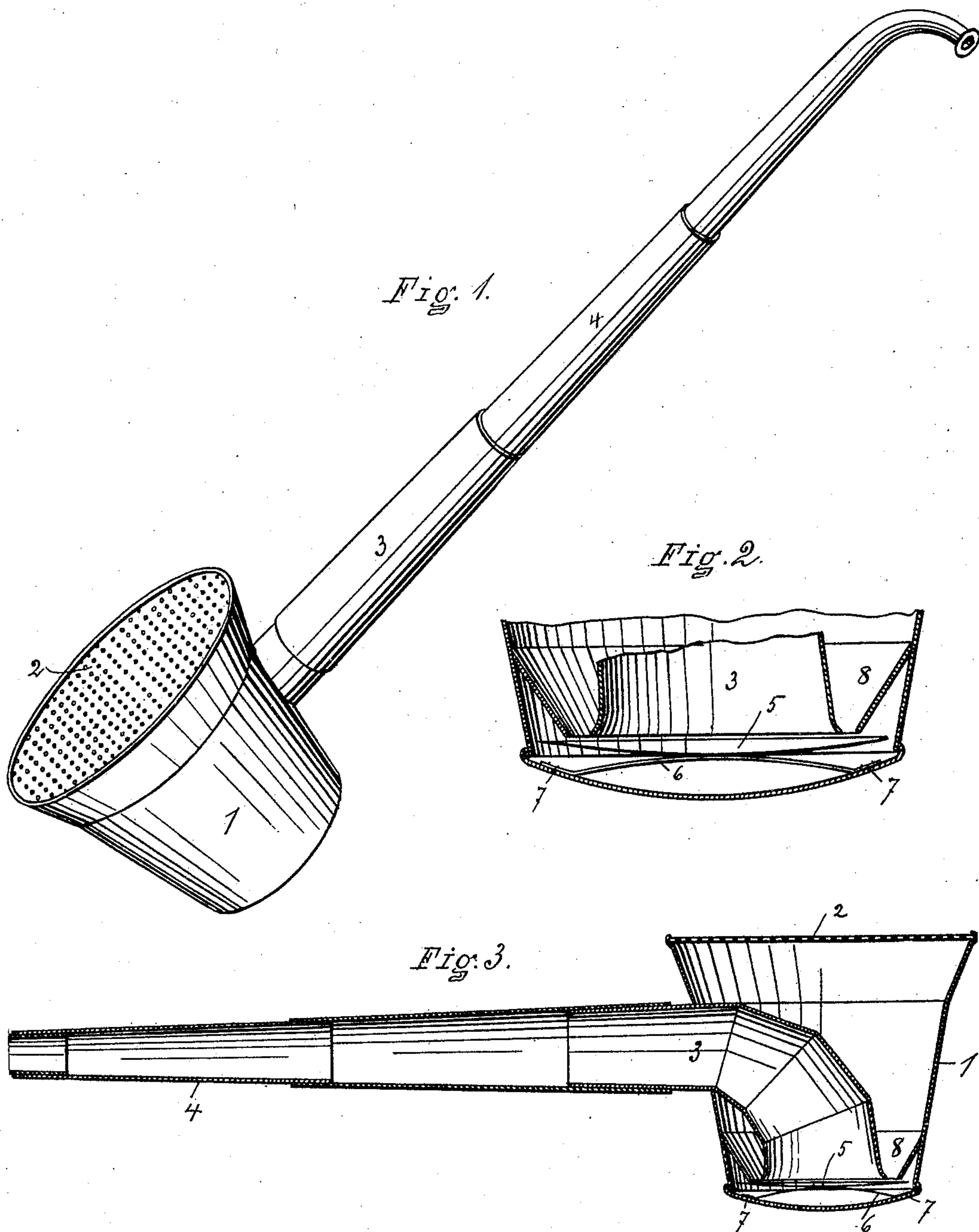


(No Model.)

F. E. BROCKETT.
EAR TRUMPET.

No. 574,384.

Patented Jan. 5, 1897.



WITNESSES.

Rich. A. George.
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FRANK E. BROCKETT, OF ROME, NEW YORK.

EAR-TRUMPET.

SPECIFICATION forming part of Letters Patent No. 574,384, dated January 5, 1897.

Application filed March 6, 1896. Serial No. 582,034. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. BROCKETT, of Rome, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Ear-Trumpets; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to improvements in ear-trumpets.

In the drawings, Figure 1 shows a perspective view of my ear-trumpet. Fig. 2 shows a sectional view of a portion of the body of the instrument. Fig. 3 shows a longitudinal section of the same.

Referring to the reference-figures in a more particular description of the device, 1 indicates the bell of the instrument, provided with a perforated plate 2 at its large or flaring end, and also provided with a fixed section of ear-tube 3, which enters the side of the bell and is curved down adjacent to the bottom, as shown, and is enlarged or flaring at its lower end adjacent to the bottom. Onto the external portion of the tube 3 is attached or slipped on the sectional ear-tube 4, which is a telescoping tube. In the bottom of the body or bell 1 and close to and opposite the inner end of the ear-tube 3 is provided a sounding board or plate 5, mounted on a weak or flexible spring 6 by its center, the spring being secured on the head of the bell at 7 7. There is also provided inside of the bell an inwardly-inclined or conical flange 8, the lower edge of which is substantially on a line with the end of the ear-tube 3 and stands in a position quite close to the edge of the end of the tube 3 and also

a little removed from the face of the sounding board or plate 5. It will also be noted that the diameter of the sounding board or plate 5 is greater than the diameter of the cone 8 and its lower open end.

The use of the instrument is so obvious as not to require particular description but it may be noted that the acoustic properties of this instrument are such that the volume of sound is largely multiplied or increased by this instrument. It may also be noted that this instrument may be used without the perforated plate 2, but I find that it works much more satisfactorily and increases the volume of sound or concentrates it much more perfectly than without the perforated plate 2.

What I claim as new, and desire to secure by Letters Patent, is—

1. In an ear-trumpet the bell, the ear-tube entering the side of the bell and curved down to a position adjacent to the bottom of the bell, a sounding-plate opposite the end of the ear-tube in the bottom of the bell, a spring supporting the sounding-plate, and a perforated plate closing the mouth of the bell, substantially as set forth.

2. In an ear-trumpet the combination of a bell, an ear-tube extending to a point adjacent to the bottom of the bell, a sounding-plate and a spring supporting the same, substantially as set forth.

3. An ear-trumpet having the bell 1, the ear-tube 3, the sounding-plate 5 mounted on a spring and the internal cone 8, substantially as set forth.

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

FRANK E. BROCKETT.

Witnesses:

P. A. TANNER,
RICH. A. GEORGE.