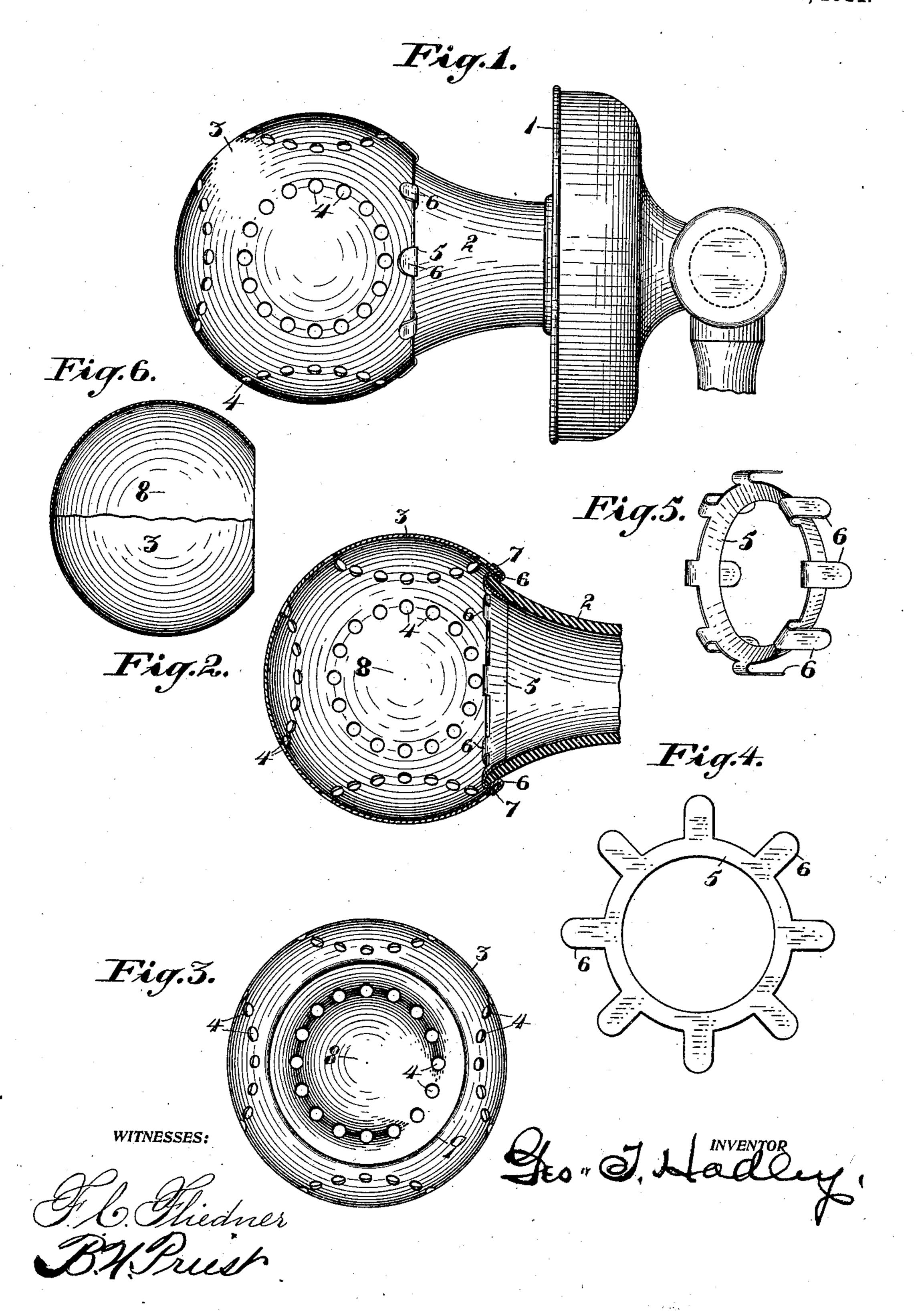
G. T. HADLEY. SANITARY APPLIANCE FOR TELEPHONES. APPLICATION FILED JAN. 10, 1910.

983,491.

Patented Feb. 7, 1911.



UNITED STATES PATENT OFFICE.

GEORGE T. HADLEY, OF SAN FRANCISCO, CALIFORNIA.

SANITARY APPLIANCE FOR TELEPHONES.

983,491.

Specification of Letters Patent.

Patented Feb. 7, 1911.

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To all whom it may concern:

Be it known that I, George T. Hadley, a citizen of the United States, residing at San Francisco, in the county of San Francisco 5 and State of California, have invented new and useful Improvements in Sanitary Appliances for Telephones, of which the following is a specification.

My invention relates to the class of sani-10 tary appliances for telephones, its object being to protect the speaker from possible infection through any unsanitary condition of the mouth-piece or speaking parts thereof, without diminishing the effect of sound on

15 the transmitter.

The device is of hollow globular form, and can be made of any thin metal or other material, but preferably of aluminum of about 32 of an inch in thickness, and per-20 forated in any design pleasing to the eye, with holes $\frac{1}{16}$ to $\frac{1}{8}$ inch in diameter. A liquid disinfectant may from time to time be dropped into the globe through the perforations, thereby keeping the appliance in 25 a sanitary condition. The device may be made either with or without perforations, depending upon the material of which it is manufactured and the thickness thereof. It is made attachable to the mouth-piece of the 30 telephone with the metallic fastener hereinafter specified, or to the transmitter by any means suitable for the purpose.

In the accompanying drawing, Figure 1 is a side view of my device in position on 35 the mouthpiece of a telephone transmitter; Fig. 2 is a sectional view of the device, the transmitter being omitted; Fig. 3 is a rear view of the device, detached; Fig. 4 is a plan view of the fastener blank; Fig. 5 is 40 a perspective view of the fastener ready for use; Fig. 6 is a broken side view of a modi-

fied form of the device.

Referring to the drawing, 1 indicates a telephone transmitter of ordinary design,

45 having a mouth piece 2.

3 indicates a sanitary resonator, which is globular in shape and is formed of thin resilient metal or other material. It has a round opening 9, shown in Fig. 3, of size 50 slightly smaller than the end of the mouth piece. In order to apply it to the mouthpiece, it is compressed so that the opening 9 assumes an elliptical or elongated form, and, while in this form, the flaring rim of 55 the mouth-piece is passed obliquely through said opening. The resonator is attached to

said mouth-piece by the fastener 5, which comprises a ring of sheet metal having radial outwardly extending tips or fingers 6, which are bent back upon themselves, as 60 shown in Fig. 5. Said ring is first inserted in the mouth-piece, the fingers or tips 6 extending over and outside the edge of the mouth-piece. The resonator in the manner above explained is then passed over the 65 edge of the mouth-piece and ring and said fingers are then bent again back over the edge of said resonator. This fastener being made of thin brass or other malleable metal may be removed and replaced a number of 70 times without becoming unfit for use. The resonator 3 is either perforated, as shown at 4 in Figs. 1, 2 and 3, or is unperforated as shown in Fig. 6. This fastener may either be fastened to the mouth-piece as shown, or 75 the mouth-piece can be removed and the resonator fastened direct to the transmitter. Being in form almost a perfect sphere with only a sufficient portion removed to allow of connection to the telephone mouth-piece 80 or transmitter it presents to the speaker a convex surface regardless of the direction at which the voice may be directed toward it, and all air currents impinging upon it produced by the speaker in the act of speak- 85 ing are deflected away from the speaker, thereby rendering the return of any germ or microbe-laden air toward the speaker impossible. This, together with the facility with which it may be applied and kept in 90 a sanitary condition, makes it both effective and practical. At the same time the sound vibrations are, by the interior surface 8 of the resonator, conveyed to the transmitter undiminished in amplitude.

I claim:—

1. In combination with a telephone transmitter, a hollow globular resonator of more than a hemisphere in form having a plurality of perforations, and operatively con- 100 nected to the transmitter to permit sound waves from within the resonator to be received by the diaphragm of the transmitter,

substantially as described.

2. In combination with a telephone trans- 105 mitter, a hollow globular resonator of more than a hemisphere in form having its surface apertured and operatively connected to the transmitter through said aperture to permit sound waves from within the reso- 110 nator to be received by the diaphragm of the transmitter, substantially as described.

- 3. In combination with a telephone mouth-piece, a hollow globular resonator, of resilient material, and of more than a hemisphere in form, having an opening smaller than the outer end of the mouth-piece, but sufficiently large that when deformed by pressure on the resonator, said end can be passed therewithin, substantially as described.
- 4. In combination with a telephone mouth-piece and a sanitary device, a fastener for securing said device to said mouth-piece, consisting of a plurality of double bends of flexible material joined together in a circle by a bevel ring of the same ma-

terial; said bends engaging one around the rim of the mouth-piece and the other in an opposite direction around the rim of the sanitary device, the bevel ring by which the double bends are joined fitting into, and 20 conforming to the interior of the mouth-piece, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two sub-

scribing witnesses.

GEORGE T. HADLEY.

Witnesses:
Thomas Tippett,
W. B. Bush.