No. 694,159.

Patented Feb. 25, 1902.

E. E. KISTLER. EAR PROTECTOR.

(Application filed Apr. 11, 1901.)

(No Model.)

Fig. 1.

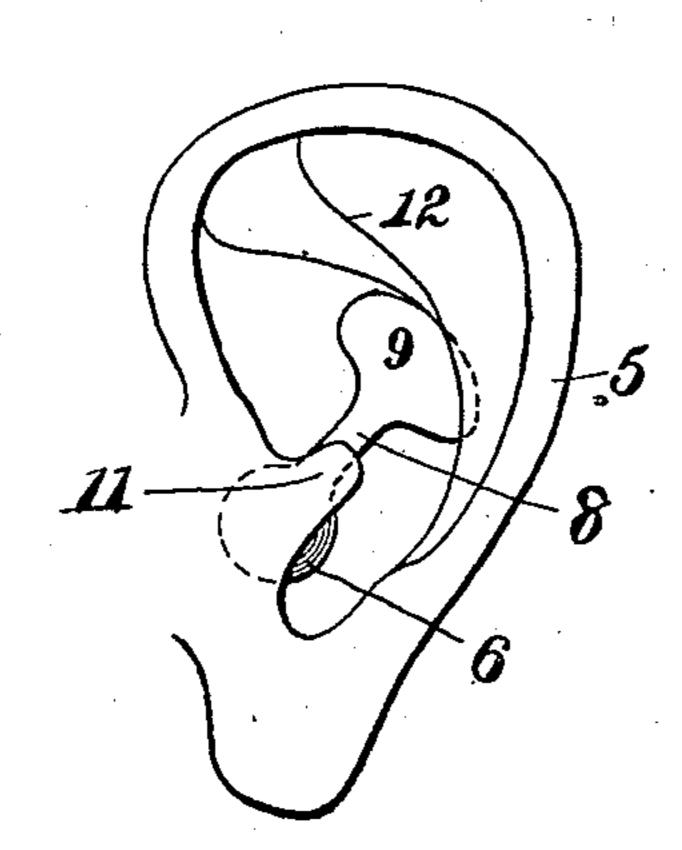


Fig.R.

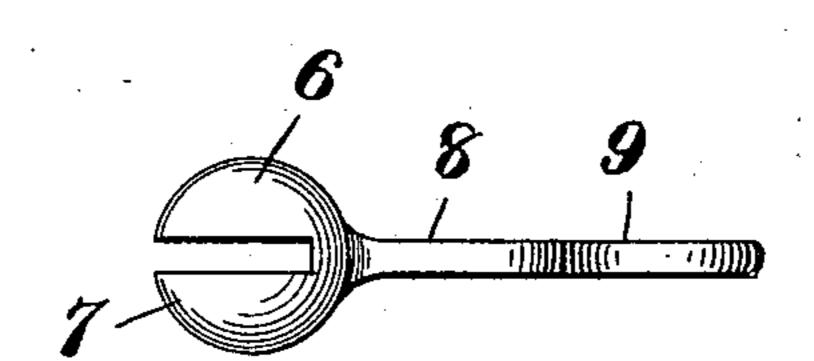
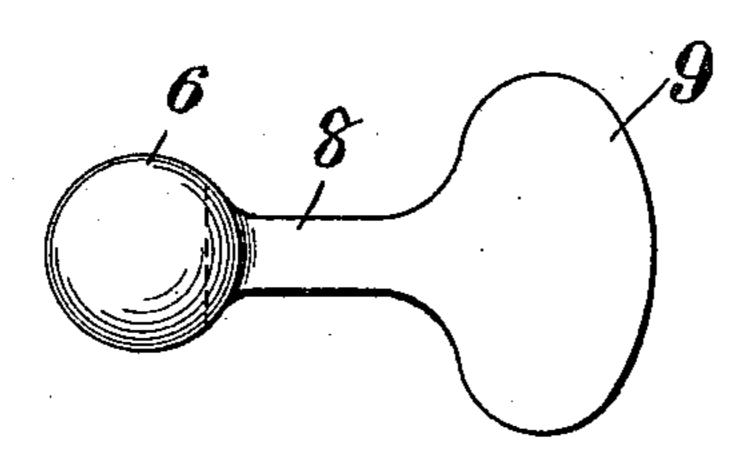


Fig. 3.



WITNESSES:

Elmer E. Oristler BY Stere Legar Stere MITORNEYS

THE NORRIS PETERS CO. PHOTO-LITHO., WASHINGTON, O. C.

United States Patent Office.

ELMER E. KISTLER, OF PHILADELPHIA, PENNSYLVANIA.

EAR-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 694,159, dated February 25, 1902.

Application filed April 11, 1901. Serial No. 55,292. (No model.)

To all whom it may concern:

Be it known that I, ELMER E. KISTLER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and 5 State of Pennsylvania, have invented certain new and useful Improvements in Ear-Protectors, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to

10 make and use the same.

This invention relates to ear-protectors; and the object thereof is to provide a device of this class which is designed to be inserted into the outer ear and to cover or protect the 15 opening or canal of the ear, and is particularly designed to prevent foreign substances from entering the ear and to prevent salt water or other water from entering the ear while bathing, a further object being to pro-20 vide a device of the class specified which will exclude all harsh sounds and noises from the ear.

The invention is fully disclosed in the following specification, of which the accompa-25 nying drawings form a part, in which the separate parts of my improvement are designated by the same reference characters in each of

the views, and in which-Figure 1 is a side view of the ear, showing 30 my improvement applied; Fig. 2, a longitudinal section removed from the ear, and Fig.

3 a plan view thereof.

In the drawings forming part of this specification, reference being made to Fig. 1, I 35 have represented at 5 the human ear, and in the practice of my invention I provide a device of the class specified which comprises a spherical body 6, provided at one side with a transverse slot or opening 7 and at the oppo-40 site side with a neck 8, having an enlarged elliptical end portion 9.

This device may be composed of any desired material, but is preferably composed of rubber or other elastic, so that the body 6 may 45 be compressed, and thus made to fit in the

ear-opening.

In Fig. 1 I have shown the device applied, the spherical body 6 being inserted into the ear-opening or into the entrance to the canal of the ear and being held in place by the front 5° but backwardly-directed lobe 11 of the ear, while the part 9 of the device is inserted behind and held in place by the rear outer fold 12 of the ear.

When this device is made and applied, as 55 described, it is impossible for insects or foreign substances or articles to enter the ear, and water will also be excluded, while the ear will be practically closed to noises or rumblings which frequently annoy and cause 60

great inconvenience.

Having fully described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. An ear-protector, comprising a spherical 65 body portion provided on one side with a neck ending in an enlarged flattened end portion, and on the side opposite to the neck with a diametrical open slot formed in the same plane as the flattened end portion of the neck, 7c substantially as shown and described.

2. An ear-protector comprising an elastic spherical body provided in one side with a transverse slot, and at the opposite side with a neck the end of which is enlarged and flat- 75 tened, substantially as shown and described.

3. An ear-protector comprising a spherical body portion provided in one side with a transverse slot, and at the opposite side with a projecting neck having a flattened end, sub- 80 stantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 8th

day of April, 1901.

ELMER E. KISTLER.

Witnesses:

CHARLES E. KISTLER, CHARLES L. MORROW.