

P. B. CLARKE.
 TELEPHONE INSTRUMENT.
 APPLICATION FILED DEC. 27, 1910.

1,004,995.

Patented Oct. 3, 1911

Fig. 1.

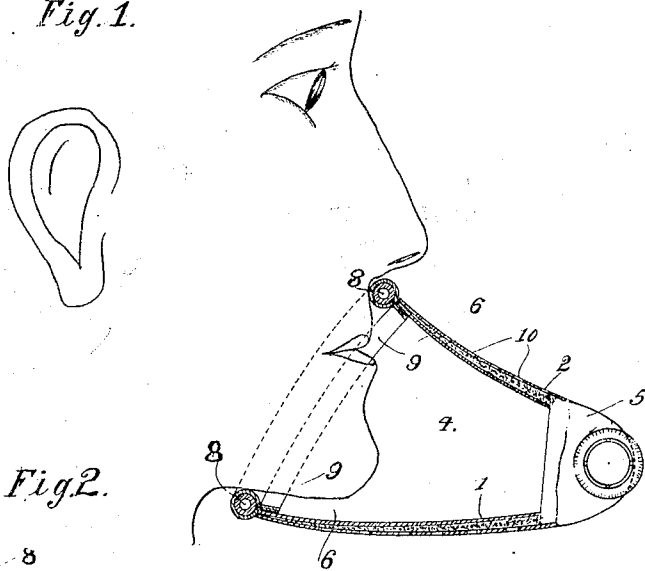


Fig. 2.

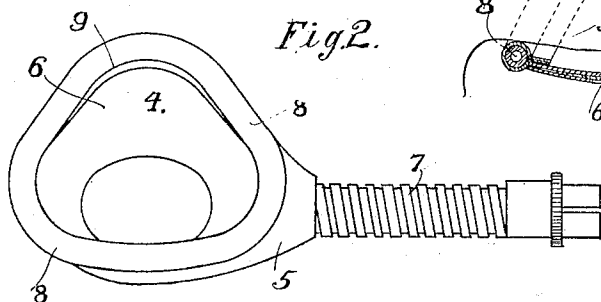
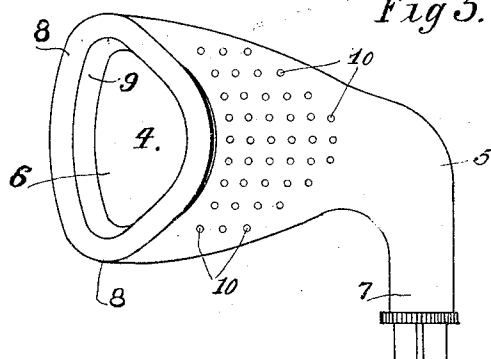


Fig. 3.



witnesses
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 F. M. Meyer

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by
 J. M. [Signature] atty.

UNITED STATES PATENT OFFICE.

PEETE BASIL CLARKE, OF LIVERPOOL, ENGLAND.

TELEPHONE INSTRUMENT.

1,004,995.

Specification of Letters Patent.

Patented Oct. 3, 1911.

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To all whom it may concern:

Be it known that I, PEETE BASIL CLARKE, citizen of the United States of America, residing at Liverpool, in the county of Lancaster, England, have invented certain new and useful Improvements Connected with Telephone Instruments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as 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 letters or figures of reference marked thereon, which form a part of this specification.

This invention has reference to mouthpieces of telephone instruments, of the type which enable persons to make use of a telephone instrument without other persons standing close to the instrument being able to hear what is spoken into the transmitter, and at the same time which enables the user to take in and emit breath. Instruments of this character which have heretofore been provided, have not been satisfactory, and have not met all the requirements of the case in the use of such appliances; and the object of the present invention is to improve this kind of apparatus or appliance, and render it efficient and satisfactory, and of general usefulness in speaking into the instrument.

The walls of the mouthpiece is provided with sound proof ventilating apertures, and means whereby the attachment is always maintained in a clean condition, and not liable to prove injurious to the health of the user, that is, the attachment is adapted to be fitted with means whereby the outer surface thereof—which comes next to the face of the speaker—can be renewed or removed and adapted to be provided with moisture collecting means, and means for rendering such moisture non-injurious to health.

A mouthpiece for the transmitter of a telephone or like instrument provided with the improvements under this invention is illustrated in the accompanying drawings, in which—

Figure 1 is a part sectional side elevation of the mouthpiece illustrating the same in use; and Fig. 2 is a front elevation of same. Fig. 3 is a plan view of a modified form of the mouthpiece shown in Figs. 1 and 2.

Referring to the drawings, the mouthpiece or attachment 4 is provided with ven-

tilating apertures 10 to enable the user to breathe freely; and over these apertures is fitted a cowl or cover 1, which is either detachably or permanently connected to the mouthpiece or casing in such a manner that the open end thereof leading to the apertures 10 is nearer the small end of the casing, and that part is attached to the casing nearer the large end thereof; while the sides of the cover or cowl 1 are also connected with the casing, so that any sound uttered in the attachment has no direct access to the ventilating apertures 10.

The space between the cover or cowl 1 and the mouthpiece body is so filled with cotton wool 2, or its equivalent, as to permit access and egress of air to and from the casing, and at the same time deaden the effect of any sound uttered therein. The wool 2, or its equivalent may be medicated, or possess antiseptic properties to render the use of such an attachment sanitary and not deleterious to health. Or, a disinfectant or other sanitary substance itself may be employed between the cowl or cover 1 and the air apertures 10, and may be arranged so that the air passes over it only when entering the casing, or when passing in and out thereof. The casing is preferably so shaped and constructed, and the cowl or cover device and means for deadening the effect of sound so disposed relatively thereto, as to cause any moisture occurring on the interior surface of the casing, to gravitate toward and be absorbed by the said wool or its equivalent; where wool or the like is employed for this purpose it will be of such a nature and be so treated, as to not only render the attachment sanitary, but dry in use, the wool being absorbent as well as antiseptic.

For preventing moisture collecting on the interior walls of the attachment they are provided with an absorbent liner which may be removably fitted therein and adapted to be replaced by new or dry liners as the others become unfit for use. The liners are preferably so treated as to render the moisture innocuous, and not objectionable in connection with the use of the attachment. The liners preferably consist of paper or other material possessing absorbent, medicating, or antiseptic properties, and be of such a nature as not to prevent sound uttered in the attachment having its full effect on the transmitter disk.

The mouthpiece 4, generally, is more or

less of triangular form in side and front elevation, and approximates to the frustum of a hollow triangular pyramid; the smaller end 5 being adapted to fit close to the transmitter disk of the telephone instrument, in the same manner as usual mouthpiece of such an instrument, and the larger end 6 being adapted to fit against the face of the speaker, that is, around the mouth portion 10 of the face, as shown.

The attachment may be so constructed as to be disposed at right angles to the inner end portion thereof, as shown in the drawings, either with a flexible portion 7 as shown in Fig. 2, or with a shorter arm portion as shown in Fig. 3. Where the arm portion is as shown in Fig. 3, the flexibility of the mouthpiece relatively to the telephone instrument is obtained through the body of 20 the instrument, and the arm portion; as in this or both constructions the mouthpiece may be constituted of flexible material in the known manner, and be either single or double, with a layer of sound deadening 25 material between the double layers of material.

8 is a soft flexible-facing, such as a pneumatic tube of india-rubber or similar flexible material, which is attached to the outer end 30 of the mouthpiece, and is adapted to take to the contour of the face of the speaker as shown in Fig. 1, and at the same time to permit of the mouth moving for speaking purposes, without allowing sound uttered to escape at this end. This soft flexible facing 35 8, when of india-rubber or like material, is covered with some textile or woven material which may or may not be detachable; and the flexible facing itself is detachably 40 connected to the outer end of the telephone attachment 4, and is fitted with an endless or ring portion 9, adapted to spring into the said outer end 6, and be retained therein as shown in Fig. 1. A series of flexible fac- 45 ings 8 may be provided with each attachment, each of a different size so far as the face portion is concerned, so as to suit faces of different contour, or where several per-

sons make use of the same telephone attachment, they may each have their own detachable facing portion for reasons which are obvious. 50

What is claimed is:—

1. In a device of the class described the combination of an outer casing provided 55 with openings, said outer casing having a sound outlet tube at one end, an inner casing spaced from the outer casing, a layer of absorbent material in the space formed between the inner and outer casings, and a 60 flexible bead at the free edges of the outer and inner casings.

2. In an apparatus of the class described, the combination of an outer casing formed with a plurality of openings and at one end 65 with an exit tube, an inner casing which fits snugly the inner wall of the outer casing near one end and gradually extends inwardly from said outer casing to provide a space which communicates with the interior 70 of the outer casing, the said inner casing terminating in advance of the exit tube, the space being filled with absorbent material; and a flexible bead at the free edges of the 75 outer and inner casings.

3. In a device of the character described, the combination of a tapered outer casing provided at its smaller end with a tubular sound exit tube, said outer casing having a plurality of openings, an inner tapered casing fitting within the outer tapered casing 80 and terminating between the plurality of openings and the tubular sound exit, the outer portion of said inner tapering casing being in contact with and secured to the 85 outer tapered casing, the inner portion of the inner casing being spaced from the outer casing, said space communicating with the interior of the outer casing.

In testimony whereof I have signed my 90 name to this specification in the presence of two subscribing witnesses.

PEETE BASIL CLARKE.

Witnesses:

SOMERVILLE GOODALL,
WILLIAM F. PARRY.