H. C. KARLSON.

SANITARY ATTACHMENT FOR TELEPHONES.

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1,367,267. Patented Feb. 1, 1921.

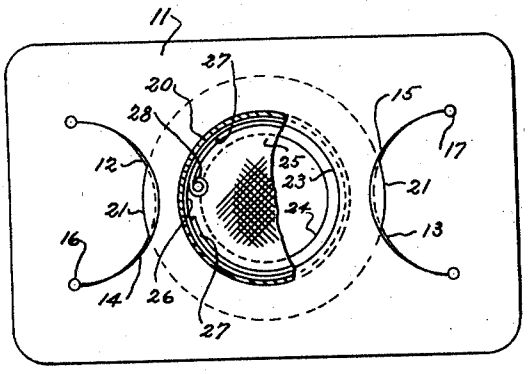


Fig. I

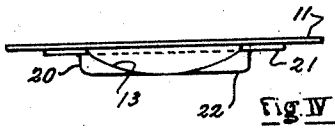


Fig. IV

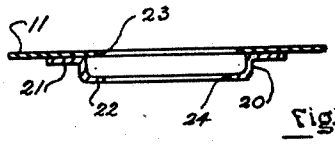


Fig. V

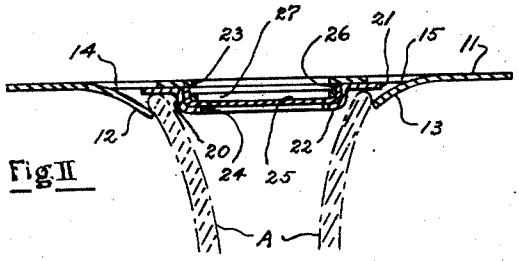


Fig. II

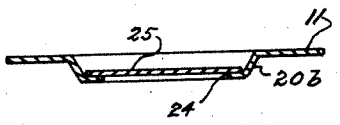


Fig. VI

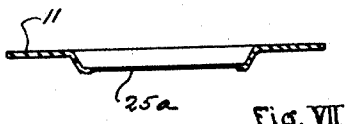


Fig. VII

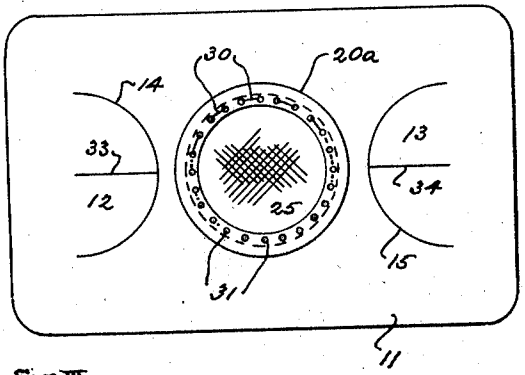


Fig. III

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SANITARY ATTACHMENT FOR TELEPHONES.

1,367,267. Specification of Letters Patent. Patented Feb. 1, 1921.

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To all whom it may concern:

Be it known that I, HENRY C. KARLSON, a citizen of the United States, and resident of the borough of Hasbrouck Heights, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Sanitary Attachments for Telephones, of which the following is a specification.

This invention relates to devices for guarding against infection when speaking into telephones and it especially appertains to appliances designed for attachment to mouth pieces of telephone transmitters.

One of the objects of the invention is to produce an improved attachment of the character described that shall be applicable to a telephone instrument simply by sliding it over the edge of the mouth-piece thereof from any direction and which will center itself with regard to the latter so as to remain securely in place as well as capable of being quickly removed.

Another object is the provision in an attachment of the nature set forth of a sanitary screen that will not interfere with the transmission of sound waves and shall have convenient means removably securing it in position.

A further object is to provide an attachment of the species mentioned that shall be of suitable size to carry in a wallet, vest-pocket or hand bag, and adapted to have desired information imprinted on both its front and rear faces.

Still another object is the production of an attachment of the class specified which shall be strong, simple, composed of few parts, not liable to get out of order and amenable to low cost of manufacture.

Other objects and advantages of the invention will become apparent as the specification proceeds.

With the aforesaid objects in view, the invention consists of the novel combinations and arrangements of parts hereinafter described in their preferred embodiments, pointed out in the subjoined claims, and illustrated on the annexed drawing, wherein like parts are designated by the same reference characters throughout the several views.

In the said views:—

Figure I is a face or front view of this improved attachment, parts being broken away to show rearwardly disposed elements;

Fig. II is a longitudinal section of the attachment represented by the above figure, shown in position on a telephone mouth piece, the latter being indicated by dot and dash lines;

Fig. III is a rear face view of the attachment shown in the previous views, certain modified details being included therein;

Fig. IV is an edge view of the attachment looking from either the right or left thereof;

Fig. V is a transverse vertical section of the attachment, parts being omitted;

Fig. VI is a similar section of a modified form of the invention; and

Fig. VII is a like sectional view of another modification.

Generally described, the invention includes in its organization a shield of sufficient size to overlie the outermost edges of a telephone transmitter. With this shield are formed a pair of substantially diametrally opposed retainers adapted to take over and wedgingly engage the outside of the mouth piece so as to clamp the shield thereto. Coacting with the interior of the mouth piece is a depressed part on the shield which serves to locate or centralize the latter with respect to the transmitter. This depressed centralizer has an opening through it covered by a screen which can be made of suitable fabric that will absorb an appropriate germicide and may be kept in its assigned position by means permitting of its renewal when unsuitable for further use.

The advantages of the invention as here outlined are best realized when all of its features and instrumentalities are combined in the one and same structure, but, useful devices may be produced embodying less than the whole.

It will be obvious to those skilled in the art to which the invention appertains, upon becoming conversant with the details thereof, that the same may be incorporated in several different constructions. The accompanying drawing, therefore, is submitted only as showing the preferred exemplification of the invention.

The improved form of the attachment under consideration comprises a flat, approximately parallelogrammic plate or shield-like body 11. Disposed substantially equi-distantly on both sides of the shield's longitudinal and transverse axes are diametrally opposed retainers 12, 13. The latter

may be formed by reversely disposed comparatively wide semi-circular slits or through incisions 14, 15, terminating in perforations 16, 17, respectively, that render the retainers more flexible and prevent the slits from tearing out of the card from which the shield may be made. When the said shield is to be applied to a telephone transmitter, these retainers are pressed down sufficiently to cause their inwardly facing arcuate portions to pass over the rim of a mouth piece as A, whereupon, when liberated, they exert a clamping action due to their inherent tendency to spring back to a flat state again. The shield can be positioned onto the mouth piece from any direction by a mere sliding movement, and as readily removed in the same manner.

In order to locate the said shield with relation to the center of the transmitter, a depressed portion 20 is provided intermediately of the retainers and also preferably in the middle of the card or plate of which it is made. This depression or centralizer may consist as shown in Figs. I, II, IV and V of an annulus constituting a separate piece from the body of the shield, and provided with a flange 21 attached to the rear side of the latter by some adhesive or any other approved means. As will be observed from Figs. I and II, the said flange 21 overlaps the retainers 12, 13 and serves as a stop therefor, so that the same cannot be forced back into the openings from which they were cut. In the face of the card and bottom 22 of the annulus are formed coaxial openings 23 and 24 respectively, of which the former may be of somewhat larger size. By reason of the fact that the wall bounding the side of the annulus is slightly greater in diameter than the opening 23 in the shield, a recess is produced at the rear side thereof, and in this recess is lodged a screen or diaphragm 25 of fabric or other suitable material. This diaphragm is supported upon the ledge left in the bottom 22 of the annulus between its circumferential side wall and the opening 24. As will be noticed, the said diaphragm has an upstanding edge 26, and against the same is made to bear a keeper 27, which may consist of a circularly bent wire. A looped head 28 provided at one end of this wire ring affords a convenient manipulating grip when inserting the keeper into the interior of the annulus to hold the diaphragm in place therein. When the latter becomes unfit for continued use, it is an easy matter to pull out the keeper after which a new screen diaphragm can be substituted for the soiled one. A few drops of suitable disinfectant spread upon the absorbent material of the diaphragm will effectively prevent germs in or on the transmitter from injuriously affecting the person speaking into the telephone instrument. It is obvious that the shield, card or plate 11 can be made of a size convenient to carry in the pocket-book or vest-pocket and still be large enough to bear any appropriate information or inscription which may be useful and handy to refer to when calling up a telephone number or carrying on a conversation.

The reverse side of the shield depicted in Fig. III represents the depressed annulus 20^a as formed integral therewith, in which case the rearwardly disposed attaching flange is omitted. Here also is shown a different means of fastening the diaphragm in position, consisting of sewing stitches 30 passing through apertures 31 previously formed in the bottom ledge of the annulus. This view further indicates that the retainers 12, 13, may have median slits 33, 34 respectively so as to render them more pliable.

The modification indicated in Fig. VI shows the annulus 20^b as formed integral with the body of the shield as well as dished or made with sloping side walls for convenience in manufacture. Onto the ledge between this wall and the single opening 24 in the bottom of the annular centralizer is secured the screen 25 as by gluing or pasting.

The modified form of the invention disclosed in Fig. VII illustrates the diaphragmal screen 25^a as a thin membrane made solid with the dished annulus, thereby producing a one piece construction of the entire attachment.

While certain preferred embodiments of this device have been shown and described, it will be understood that changes in the form, arrangements, proportions, sizes and details thereof may be made, without departing from the scope of the invention as defined by the appended claims.

Having described my invention what I desire to secure by Letters Patent and claim, is:—

1. An attachment of the character described comprising in combination, a plate-like shield, a pair of retainers formed in substantially opposed relation with said shield and capable of engaging the exterior of a telephone transmitter, and a screened annulus depending from the shield in position to enter the interior of the transmitter, said retainers being cut in the shield at a distance from said annulus.

2. An attachment of the character described comprising in combination, a plate-like shield, a pair of substantially diametrally opposed retainers formed integral therewith and capable of clasping the exterior of a telephone mouth piece, an annulus having a bottom ledge offset from one face of said shield and adapted to be received within the rim of the mouth piece

oppositely to said retainers, a diaphragm overlying said ledge, and means for holding said diaphragm to the latter.

3. An attachment of the character described comprising in combination, a plate-like shield having a screen covered opening, a pair of retainers formed within the body of said shield at a distance from said opening and adapted to engage a telephone mouth piece exteriorly, and means for locating the shield laterally with relation to the interior of the mouth piece so that said retainers will bear upon opposite points on the rim thereof.

4. An attachment of the character described comprising in combination, a plate-like shield including a screened opening, means for locating the opening in said shield substantially centrally with relation to the rim of a telephone mouth piece, and a pair of retainers formed by reversely disposed slits in the shield and capable when depressed of being passed over the edge of said rim to clamp the same from diametrally opposed directions, said retainers being adapted to act in conjunction with said means to hold the shield in its assigned position.

5. An attachment of the character described comprising in combination, a member adapted to overlie a telephone transmitter, a screened portion depressed from said member adapted to enter the mouth piece of said transmitter, and oppositely disposed retainers directed inwardly from points within the ends of the member toward said screened portion and capable of clasping over the exterior of the rim of said mouth piece, said retainers having their inner extremities spaced from the depressed portion so as to leave intervening bridges therebetween.

6. An attachment of the character described comprising in combination, a centrally apertured member adapted to overlie a telephone transmitter, a screen carried in offset relation to the aperture in said member so as to lie within the mouth piece of said transmitter, and a pair of substantially segmental retainers of approximately the same width as that of said aperture positioned on the member to clasp over the rim of said mouth piece from opposite sides thereof.

7. An attachment of the character described comprising in combination, a member having an opening adapted to be positioned opposite the mouth piece of a telephone transmitter, a screen covering said opening, and a pair of inwardly directed retainers formed by slits in said member and with apertures in the outer ends thereof, said retainers being capable of clasping said mouth piece exteriorly from opposite sides of the same.

8. An attachment of the character described comprising in combination, a member adapted to overlie the mouth piece of a telephone transmitter, a pair of substantially diametrally opposed retainers connected with said member so as to take over the rear edge of said mouth piece, an annulus intermediate of said retainers, a bottom ledge on said annulus offset from the member on the same side as the retainers, and a diaphragm supported from said ledge within the annulus.

9. An attachment of the character described comprising in combination, a substantially parallelogrammic shield, a depressed part having an annular ledge located approximately in the middle thereof, a diaphragm fastened to said ledge, and a pair of retaining tongues disposed centrally along the major axis within said shield and surrounded entirely thereby, said tongues having their bases facing the minor sides of the shield and their free ends spaced from said depressed part so as to leave intervening portions between the latter and said free ends.

HENRY C. KARLSON.