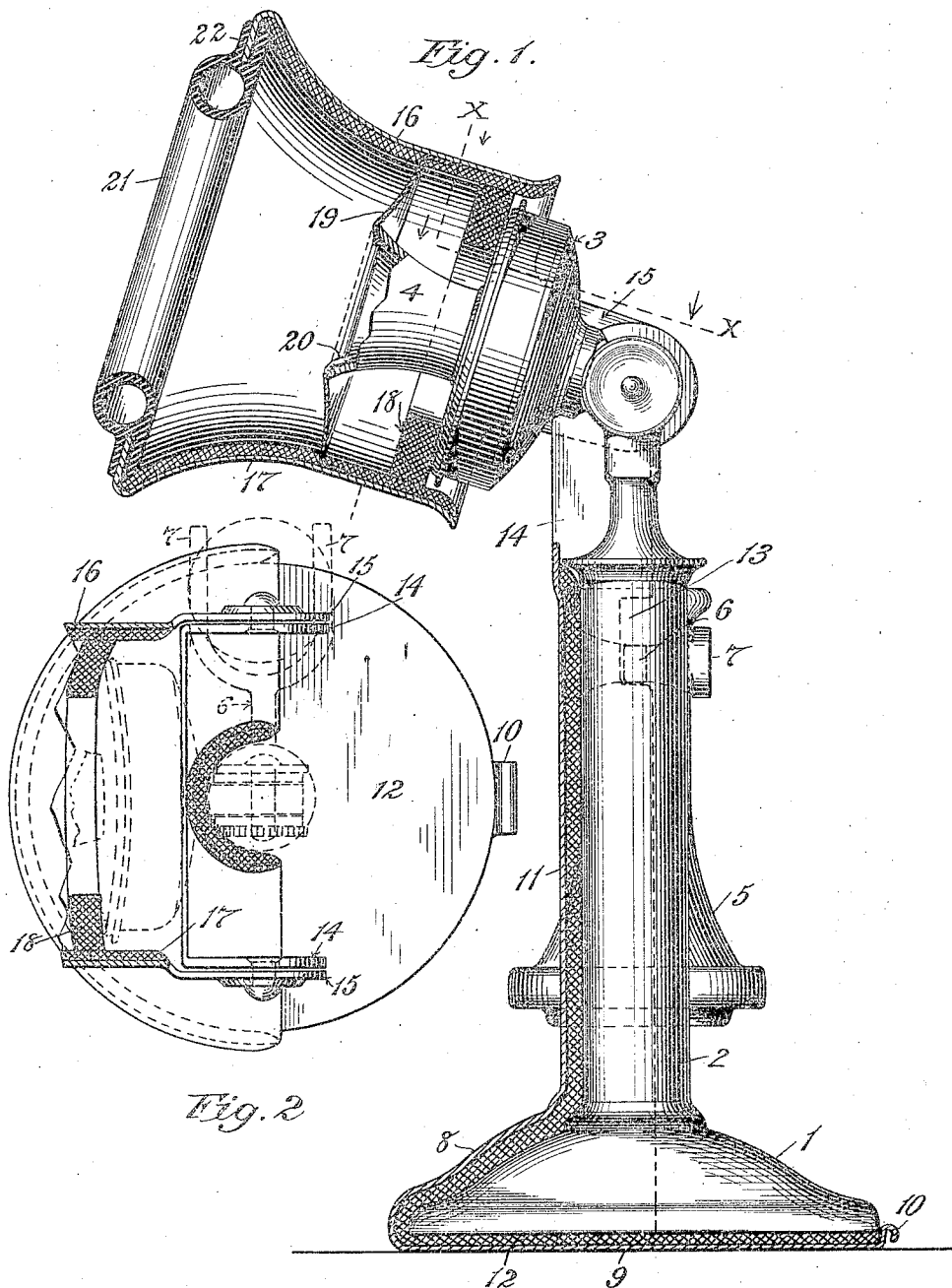


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 APPLIANCE FOR USE WITH TELEPHONE TRANSMITTERS.
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APPLIANCE FOR USE WITH TELEPHONE-TRANSMITTERS.

938,060.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES J. KINTNER, a citizen of the United States, and resident of New York, borough of Manhattan, county and State of New York, have made a new and useful Invention in Appliances for Use with Telephone-Transmitters, of which the following is a specification.

My invention is directed to an improvement in telephone appliances for enabling the users thereof to hold conversation with other subscribers in such manner that persons in the same room where the transmitter is located will not hear any part of the conversation, such appliance, for instance, as is disclosed in U. S. Patent No. 897,084, granted to Orrin H. Goodrich, on the 25th day of August, 1908, and it has for its objects, first, to provide an appliance of this general type of devices which shall be of a more portable nature than that disclosed in the before-mentioned patent; second, to provide an appliance of this general type which shall be cheaper of construction and shall enable the user thereof to hang the telephone receiver directly upon the switching arm of the portable desk telephone with which the same is to be used. Third, to provide an appliance of this general type which shall act as a shield or protecting device to the transmitter so as to avoid any damage thereto, and also be of such a nature that it may quickly be detached therefrom without necessitating the use of screws or other cumbersome appliances which require the use of tools, etc. for attaching such devices to and detaching them from the transmitter proper. Fourth, to provide a device of this nature which shall be much lighter in its general make-up than is the inclosing telephone booth disclosed in the before-mentioned patent, thereby enabling the same to be used with portable telephone sets which are supported upon pivoted arms and adapted to be moved out of the immediate vicinity of the user, such devices being also in well known use.

My invention contemplates a secret telephone appliance which shall be readily applicable to well known forms of portable telephone transmitters in which the receiver is usually hung upon a switching arm pivoted in the supporting standard of such portable instruments, and is of such a structural nature that upon grasping the stand-

ard and conveying the instrument to the mouth of the user for holding conversation, the act of thus grasping the same simultaneously effects the secure retention of the secret transmitting appliance in such way that there is no danger of the same becoming detached or disturbed in its relations to the transmitter proper, said device in its entirety being also constructed of materials of such lightness as will not unnecessarily add to the weight of the portable instruments themselves.

For a full and clear understanding of the invention such as will enable others skilled in the art to construct and use the same, reference is had to the accompanying drawings, in which,

Figure 1 represents in side elevational view a well known form of desk telephone transmitter and receiver combined, my improvement as applied thereto being shown in longitudinal sectional view. Fig. 2 represents a partial horizontal and sectional view taken on the broken line X-X Fig. 1, and as seen looking thereat from the top toward the bottom of the drawing in the direction of the arrows, a desk telephone set being shown in position in connection therewith in dotted lines.

The invention disclosed in the before-mentioned patent to Goodrich embodies the idea of an appliance for talking to outlying subscribers in such manner that persons in the same room or in close proximity to the person talking shall not hear any part of the conversation, said appliance being in the nature of a small or miniature telephone booth, in which the portable telephone transmitter like that shown in Fig. 1 of the accompanying drawings is completely housed, while the receiver is hung upon a hook exterior to the portable booth, said hook being connected through intermediate levers, etc., to the switch changing lever constituting a part of the portable set, so that when the receiver is hung upon the outer hook the transmitter is cut out of circuit and the call bell is in circuit for effecting the usual call. My improvement embraces the idea of simplifying such an appliance through the agency of the means illustrated in the accompanying drawings which will now be described in detail.

1 represents the base, 2 the standard of a well known portable desk telephone provided with a transmitter 3 pivoted at the

top thereof, 4 being the usual hard rubber transmitter mouth piece and 5 the receiver hung upon the forks 7 of the circuit changing lever 6 pivotally supported in the standard 2, such a combined set of instruments embracing the usual well known portable or desk telephones found largely in public use throughout the United States.

My improvement embraces a cup-shaped base 8 open at one side and provided with a bottom 9 and a spring latch 10 at the open side of the base, 11 being a semi-circular standard integral with the cup-shaped base 8. It will be noted that this cup-shaped base 8 and standard 11 have, respectively, the exact contour of the base 1 and of the standard 2, the part 11 being semi-circular or concentric with said standard.

12 represents wherever used within the standard and the base, a lining of buck-skin, felt, or like soft pliable material adapted to yield sufficiently to constitute an accurate seat for the base and standard and not scratch or in any way mar said base or standard.

13 is a notch in one side of the standard of sufficient length to admit of proper movement of the switch changing lever 6. Integral with this standard 11 are two arms 14, 14 which together constitute a fork provided with pivot pins at its opposite ends (see Fig. 2) adapted to pivotally support, in exact alinement with the pivot pins of the transmitter at the top of the standard 2, two arms 15, 15 which are integral with or constitute an extension of a secret transmission tube 16, 16 which tube is lined interiorly with one or more layers of sound absorbing material 17 similar to the material 12, 18 being a pad or ring of like material adapted to rest upon the front face of the telephone transmitter and to surround, when put in place, the telephone transmitter mouth piece 4; the tube 16 is made preferably of aluminum.

It will be noted that that portion of the tube surrounding the transmitter fits with reasonable accuracy over the screw-cap of the transmitter and that the felt ring 18 absolutely closes or shuts off any possibility of sound waves passing outward around the body of said transmitter.

19 is a diaphragm preferably of soft rubber or like yielding material, provided at its center with a hole or opening having substantially the diameter of the transmitter mouth piece 4 and provided with a bead 20 adapted to fit within said mouth piece, the outer edge of such diaphragm being secured by glue or in any preferred way directly to the inner wall of the transmission tube 16. The outer end of this tube 16 is enlarged and the edge thereof turned inward as shown so as to constitute a front face therefor, and this front face is provided with a transmission opening to which is secured by flanges 22 a

rubber or other air inflated ring 21 having the proper contour to enable one to talk into the transmitter tube without being heard by others in the same room, this part of the structure not being substantially different from that disclosed in the before-mentioned patent.

In using this improved appliance it is only necessary to arrange the transmission tube 16 so that the axis thereof is in direct alinement with the axis of the transmitter mouth piece and then slide the parts into contact with each other so that the felt lining of the smaller end of the transmitter tube 16 slides freely over the outer face of the cup-shaped base 8 and the semi-cylindrical standard 11 are moved forward until all of the parts are in the position shown in Fig. 1 of the drawing with the spring latch 10 locked at the outer edge of the base 1. This act causes the outer end of the transmitter mouth piece 4 to place the rubber diaphragm 19 under tension as shown. The device is now ready for use and secret conversation may be held either by talking directly into the transmission tube through the air inflated ring 21 in the manner disclosed in the before-mentioned patent while the complete set stands upon a table, desk, or pivoted supporting arm; or, if the user desires to hold the instrument in one hand the act of grasping the standard 2 and the semi-circular standard 11 holds all of the parts firmly together so that conversation might be effected either while the instrument is stationary or when being moved or held by the person talking.

It will be understood, of course, that by reason of the felt or other soft lining 17 of the transmission tube 16 and the thick felt or equivalent ring 18, together with the flexible diaphragm 19, there is no possibility of sound waves being transmitted to any person other than the outlying subscriber. It will also be apparent that this secret telephone appliance may be quickly and easily removed from the portable set by first releasing the latch 10 and drawing the appliance away from the set with the other hand, it being obvious that the tube 16, under the elastic influence of the diaphragm 19 and the force used, will readily release itself from the transmitter, while at the same time the device may be held by any part of the vertical standard 11 until it is completely released or removed from the set. It is also obvious that such an appliance is free from any possibility of scratching, marring, or in any way damaging any part of the portable set and that it actually affords a protection to such instruments as to avoid their being marred by extraneous acts of persons who carelessly handle the set when used with the appliance.

I do not limit my invention to the specific structural arrangement disclosed in the accompanying drawings as a number of the features thereof may be departed from and still come within the scope of my claims hereinafter made.

I believe it is broadly new with me to combine a secret telephone appliance with a portable telephone set which may be easily removed therefrom and which is held in position by the act of holding the standard of such a set when the user thereof is holding the instrument in one hand.

While I prefer to construct the device with the cup-shaped bottom which covers and protects practically one-half of the base of such a set, obviously this bottom may be done away with and the standard alone constitute the means of connection between the set and secret appliance itself, the elasticity of the outer edges of the standard together with the frictional effects of the tube 16 being sufficient to constitute a means of support when the set is standing on a table or other means of support, the fixed relations being rendered also effectual when the set is being held or grasped by one hand of a person speaking through the transmitter.

Having thus described my invention what I claim and desire to secure by Letters Patent of the United States is—

1. An appliance for use with portable telephone transmitters, embracing a transmission tube provided with means for frictionally and yieldingly securing it around the mouth piece of the transmitter; in combination with additional means frictionally connecting the aforesaid means to the supporting standard of said transmitter, substantially as described.

2. An appliance for use with a portable telephone set, embracing a transmission tube surrounding and inclosing the mouth of the transmitter, said tube being pivotally secured to a vertical standard which frictionally secures it to the supporting standard of the set, substantially as described.

3. An appliance for use with a portable telephone set, consisting of a base and standard adapted to partially inclose the supporting base and standard of the set; an inclosing tube which surrounds the transmitter mouth piece, and pivoted connections between the tube and the inclosing standard, substantially as described.

4. An appliance for use with a portable

telephone set, embracing a transmission tube which surrounds the transmitter mouth piece; a facial opening at the outer end of said tube; a hollow standard adapted to partially surround the standard of the set and grip the same, and pivoted connections between said hollow standard and the aforesaid tube, substantially as described.

5. An appliance for use with a portable telephone set, embracing a transmission tube and a supporting standard connected thereto, said standard having the conformation or shape of the standard which supports the set, both the tube and the standard being lined with a pliable medium which will prevent, when the appliance is in place, any damage to the instrument, substantially as described.

6. An appliance for use with a portable telephone set, embracing a transmission tube adapted to surround or inclose the transmitter mouth piece; in combination with means frictionally connected with the standard of the set and adapted to be grasped and held by the hand of a user against said standard when talking, substantially as described.

7. An appliance for use with a portable telephone set, embracing a detachable sound concentrating device provided with a facial opening at one end; a pliable sound absorbing ring at the other, and an intermediate yielding diaphragm having a central opening which admits sound waves to the outer end of the mouth piece, substantially as described.

8. An appliance for use with a portable telephone set, embracing a detachable sound concentrating device provided with a facial opening at one end; a pliable sound absorbing ring at the other, and an intermediate yielding diaphragm having a central opening which admits sound waves to the outer end of the mouth piece; in combination with a standard having frictional connection with the standard of the set, and pivoted connections with the aforesaid sound concentrating device, substantially as described.

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

CHARLES J. KINTNER.

Witnesses:

M. F. KEATING,
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