Sept. 16, 1924. 1,508,434

J. J. AYRES

MAGNIFYING GLASS FOR TELEPHONES

Filed Jan. 8, 1923

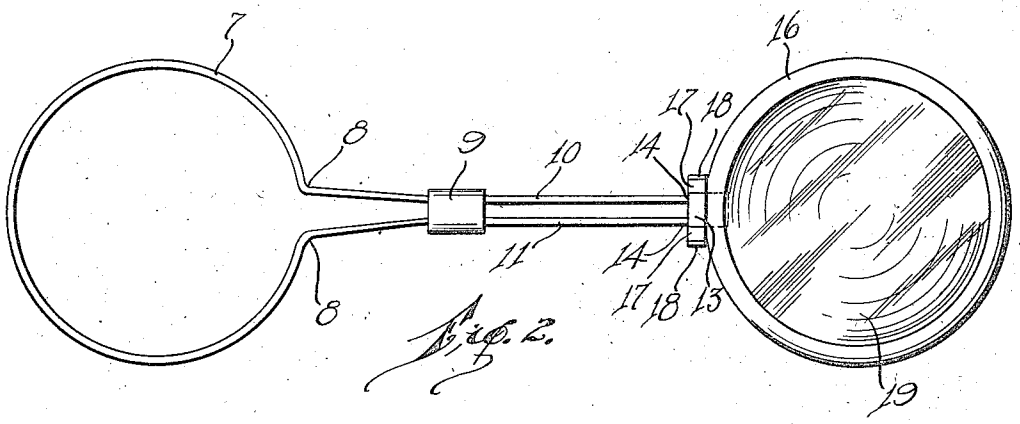
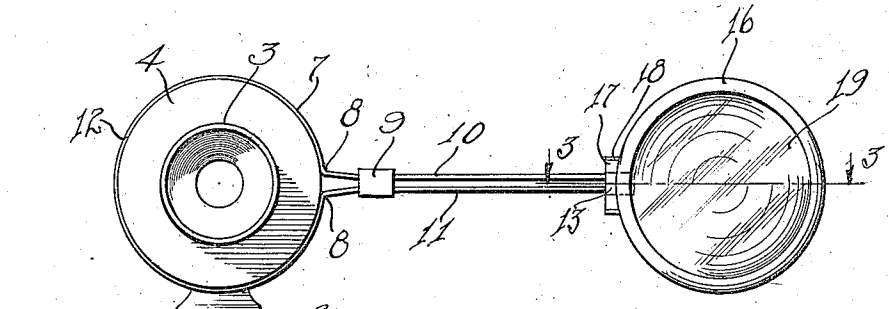


Fig. 2.



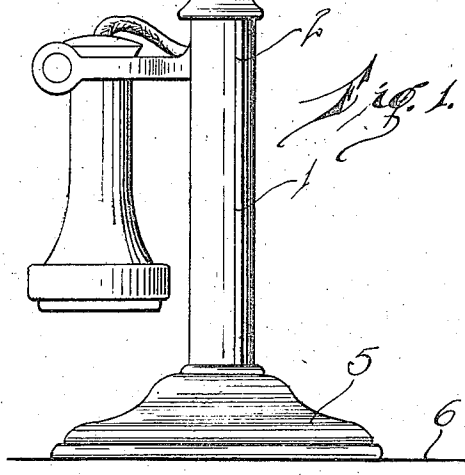


Fig. 1.

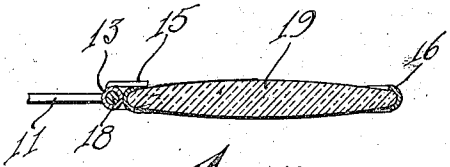


Fig. 3.

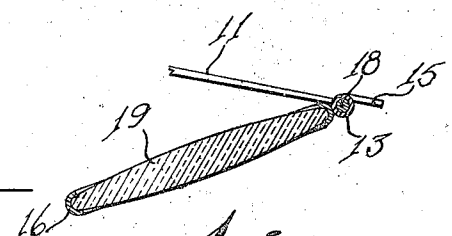


Fig. 4.

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UNITED STATES PATENT OFFICE.

JOSEPH J. AYRES, OF KEOKUK, IOWA.

MAGNIFYING GLASS FOR TELEPHONES.

Application filed January 8, 1923. Serial No. 611,411.

To all whom it may concern:

Be it known that I, JOSEPH J. AYRES, a citizen of the United States, and a resident of Keokuk, in the county of Lee and State of Iowa, have invented a new and useful Improvement in Magnifying Glasses for Telephones, of which the following is a full, clear, and exact description.

My invention relates to improvements in magnifying glass for telephones, and it consists in the combinations, constructions, and arrangements herein described and claimed.

An object of my invention is to provide a device of the character described that may be quickly and easily attached to the ordinary type of desk, wall or extension telephones without the use of tools of any sort.

A further object of my invention is to provide a device of the character described by means of which the person using the telephone may more easily read the context of the telephone directory or the like by merely moving the directory in back of the magnifying glass, which glass is supported at all times in a definite position relative to the telephone transmitter.

A further object of my invention is to provide a device of the character described in which the magnifying glass may be swung inwardly toward the transmitting microphone when not in use.

A further object of my invention is to provide a device of the character described which may be moved in an annular path concentric with the transmitting microphone to any point desired.

Other objects and advantages will appear in the following specification, and the novel features of the invention will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings forming part of this application, in which,

Figure 1 is a view of a front elevation of an embodiment of my invention applied to the ordinary type of desk telephone instrument,

Figure 2 is a front plan view of the mechanism removed from the telephone,

Figure 3 is a sectional view along the line 3—3 of Figure 2, and

Figure 4 is a view of the mechanism illustrated in Figure 3 with the magnifying glass swung toward the transmitter.

In carrying out my invention, I make use of the ordinary type of desk telephone instrument 1 having a pillar 2 by means of which the instrument is held in the hand of the user, and which also provides the necessary support for the transmitter mechanism 3. This mechanism is housed in a circular housing 4 which is supported directly upon the pillar 2. The instrument is also provided with a base 5 by means of which it may rest upon a suitable supporting surface 6.

My improved magnifying glass attachment for telephones consists in a relatively heavy wire loop 7, the opposite ends of which are bent at 8 and extend outwardly from the center of the loop 7 for a distance of approximately 5 inches, although this particular distance is merely optional and may be changed to suit the particular conditions to which the instrument is subjected.

A metal sleeve 9 is slidably supported upon the outwardly extending portions 10 and 11 of the loop 7 so that movement of the sleeve 9 toward the loop 7 will cause the loop to contract. This contraction of the loop 7 by means of the sleeve 9 provides a simple and efficient means for clamping the loop on the outer wall 12 of the transmitter casing 4 as shown in Figure 1. The portions 10 and 11 may therefore be supported in radial alignment with the casing 4 at an angle of any degree from the horizontal.

A hinge sleeve 13 is fixed to the outer ends 14 of the outwardly extending portions 10 and 11 by means of soldering or the like. This sleeve is disposed transverse to the portions 10 and 11. The sleeve 13 is provided with a radially extending lug 15 integral therewith, and is formed by bending a portion of the material used in forming the sleeve laterally after the sleeve has been formed. This lug 15 is disposed in a plane parallel with the plane of the loop 7.

A lens supporting frame 16 having hinge sleeves thereon is hingedly supported upon the sleeve 13 by means of the pin 18 that is passed through the aligned hinge sleeves 13 and 17 and subsequently fixed from removal therefrom in any suitable manner such as riveting the ends of the pin as shown. A bi-convex lens 19 is supported in the frame 16. This lens is commonly known as a magnifying glass and possesses the property of magnifying objects that are

viewed therethrough. I prefer to employ approximately a four-power lens so that the type used in the ordinary telephone directory may be magnified sufficiently to permit one to easily distinguish the names and numbers of the subscribers.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. When it is not desired to use my magnifying glass attachment the frame 16 is hinged back against the outwardly extending portions 10 and 11 of the loop 7 on its hinge support as heretofore described. It will therefore be apparent that the frame carrying lens 19 will not be obtrusive nor in any way a nuisance to the person using the phone. Let us assume that a person using the phone desires to find a certain subscriber in the telephone directory and that the names and numbers in the directory are printed in relatively small type as is the case in the ordinary type of directory. If the person has any difficulty at all in reading the directory, which may be due to lighting conditions within the telephone booth or office, or by a fault of the eyes of that person, the frame 16 may be hingedly moved to the position shown in Figure 1 and the directory held therebehind. The person will then experience no difficulty in reading the names and numbers of the various subscribers without moving away from the telephone to adequate light or without applying eye glasses as in the case of a person with poor eyesight.

If the position of the lens 19 as shown in Figure 1 is not desirable, the sleeve 9 may be manually moved toward the ends 14 of the members 10 and 11 and the frame 16, together with the loop 7, may be rotated upon the casing 4 until the lens is in a desirable position for use. The sleeve 9 is then moved toward the transmitter casing 4 and the device is securely fixed to the telephone instrument.

I claim:

1. A magnifying glass for attachment to telephone instruments, and means for movably supporting said glass upon said instrument at one side of the transmitter thereof, said means comprising a wire loop arranged for engagement with the housing of said transmitter and formed with outwardly extending radial end portions, and a frame for receiving said magnifying glass hingedly supported upon the outer ends of said radial portions of said loop.

2. A magnifying glass for attachment to telephone instruments having a transmitter mechanism, comprising a wire loop arranged for engagement with the housing of said transmitter, said loop being formed with radial outwardly extending end portions, means for securing said loop against movement on said housing, a sleeve transversely disposed on the outer end of said radially extending end portions of said loop, a frame hingedly mounted on said sleeve, and a magnifying glass supported in said frame.

3. A magnifying glass for attachment to telephone instruments having a transmitter mechanism, comprising a wire loop arranged for engagement with the housing of said transmitter, said loop being formed with radial outwardly extending end portions, means for securing said loop against movement on said housing, a sleeve transversely disposed on the outer end of said radially extending end portions of said loop, a frame hingedly mounted in said sleeve, means carried by said sleeve for limiting the hinged movement of said frame, and a magnifying glass supported in said frame.

JOSEPH J. AYRES.