ROBERT AERNOUT BARON VAN LYNDEN.

TELEPHONE AND MICROTELEPHONE.

APPLICATION FILED JULY 11, 1918.

1,386,744. Patented Aug. 9, 1921.

Fig. 1

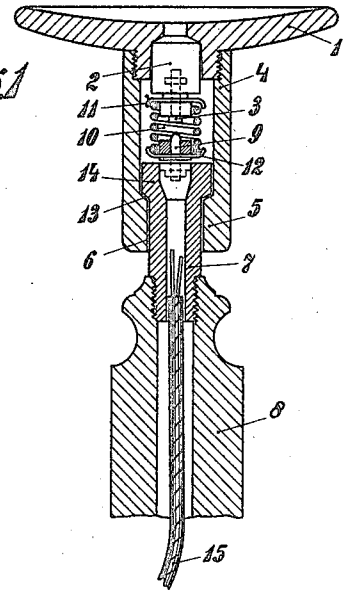
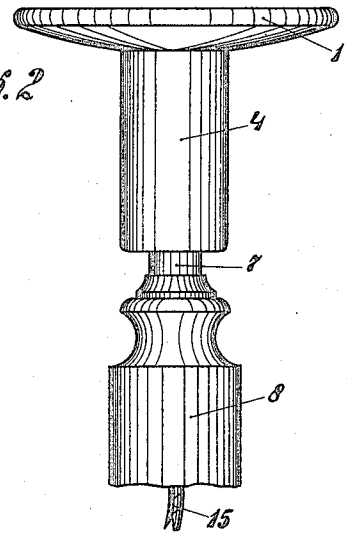


Fig. 2



INVENTOR

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ROBERT AERNOUT BARON VAN LYNDEN, OF UTRECHT, NETHERLANDS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO AMERICAN THERMOPHONE COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

TELEPHONE AND MICROTELEPHONE.

1,386,744. Specification of Letters Patent. Patented Aug. 9, 1921.

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To all whom it may concern:

Be it known that I, ROBERT AERNOUT BARON VAN LYNDEN, gentleman, a subject of the Queen of the Netherlands, residing at Utrecht, in the Province of Utrecht, in the Kingdom of the Netherlands, have invented certain new and useful Improvements in or Relating to Telephones and Microtelephones, of which the following is a specification.

This invention relates to an improvement in or relating to telephones or microtelephones wherein the plane of the earpiece is placed perpendicular to the axis of the handle. My invention relates to an improved construction in which the earpiece can move with respect to the handle in the direction of the axis. This movement is limited in any way by stops or by abutments while both parts are normally forced apart by means of a spring; in the position wherein both parts are brought as close together as possible, a switch is operated to close a gap provided in the circuit of the telephone or of the telephone and the microphone.

An embodiment of the invention is illustrated in the annexed drawing, representing a telephone-receiver according to this invention.

Figure 1 is a cross section of a telephone according to this invention, this particular embodiment comprising a thermic telephone instead of the usual electromagnetical telephone with diaphragm.

Fig. 2 is a front view of the telephone represented in Fig. 1.

On the drawing 1 is the ear-piece, 2 the thermic-telephone member, containing the known heat-conductors and with the same the external terminal 3 of the telephone is connected. The ear-piece 1 is screwed in a bushing 4, the bottom 5 whereof is provided with an aperture 6 through which passes a hollow cylindrical part 7, which is screwed with its lower end in the handle 8 of the telephone. The part 7 is movable in the direction of the axis in the bushing 4 over a relatively short distance, which is determined by the distance between the external terminal 3 of the thermic-telephone and the inner terminal 9 which is fixed to the part 7 on the handle. The terminals or contacts 3 and 9 with the parts connected therewith are normally separated by means of a spring 10, the ends whereof rest in spring caps 11 and 12 respectively made of conducting material, the cap 11 being connected with the thermo-telephone, the cap 12 with the part 7. The latter rests against the bottom of the bushing 4 with the annular surface 13 of the upper enlarged part. The spring cap 12 is insulated from the inner terminal or contact 9 and each of these parts 9 and 12 is connected with one of the wires of the flexible cord 15. From the spring cap 12 the current passes to the spring 10 and then to the spring cap 11, the body 2 of the thermic telephone and the outer terminal 3; the spring cap 11 and the terminal 3 are insulated from one another and between these two parts the thermic telephone is provided.

If the ear-piece is pressed against the ear by means of the handle 8 of the telephone, the part 7 moves slightly lengthwise in the bushing 4 thus compressing the spring 10. The terminals or contacts 3, 9 are thus brought into contact with one another so that the telephone circuit, which until then was open, is now closed. The terminals 3 and 9 serve at the same time as abutments for the limitation of the relative movement of the parts 4 and 7.

By pressing the ear-piece against the ear, the telephone-circuit or the telephone and microphone circuit is closed. It is also possible to interrupt any other circuit, for example by the switch 3, 9 the electrical connection of the microphone battery with the microtelephone may be effected. The invention is not limited to thermo-telephones but may be applied with the same advantage to the well-known electromagnetical telephones.

What I claim is:

1. A telephone comprising a handle member and another member connected therewith slidably and carrying the telephonic apparatus proper, a spring tending to separate said members, and a switch operated by the relative movement of said members.

2. A telephone comprising a telephone member proper containing the acoustic parts of the telephone, a handle for said member, connected therewith slidably, means tending to separate the handle from said member, and a switch operated by the movement of the handle relatively to the telephone member proper.

3. A telephone comprising a telephone member proper containing the acoustic parts

of the telephone, a handle fitted into said member to slide lengthwise thereof, a spring contained within said member and tending to project the handle from said member, and a switch operated by the relative movement of handle and telephone member.

4. A telephone comprising a tubular member containing the acoustic parts of the telephone, a tubular handle fitted to slide in said member telescopically, and adapted to receive circuit-wires, a spring located within said member and tending to project the handle from said member, and a switch located within said member and operated by the movement of the handle and member relatively to each other.

In testimony whereof I have hereunto set my hand.

ROBERT AERNOUT BARON van LYNDEN.

Witnesses:
D. KLEIJN,
M. ALVARADO.