

(No Model.)

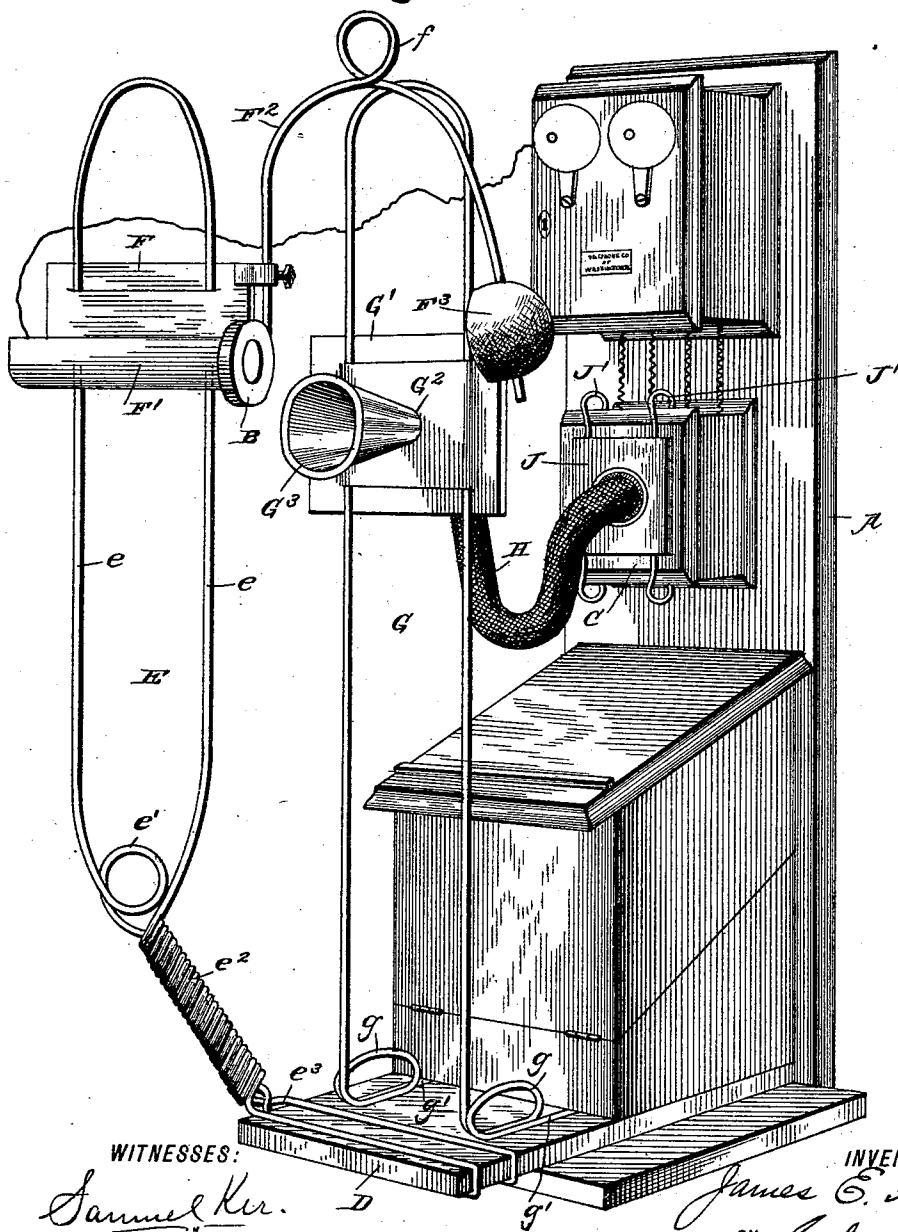
2 Sheets—Sheet 1.

J. E. HILLS.
ATTACHMENT FOR TELEPHONES.

No. 471,549.

Patented Mar. 29, 1892.

Fig. 1.



WITNESSES:

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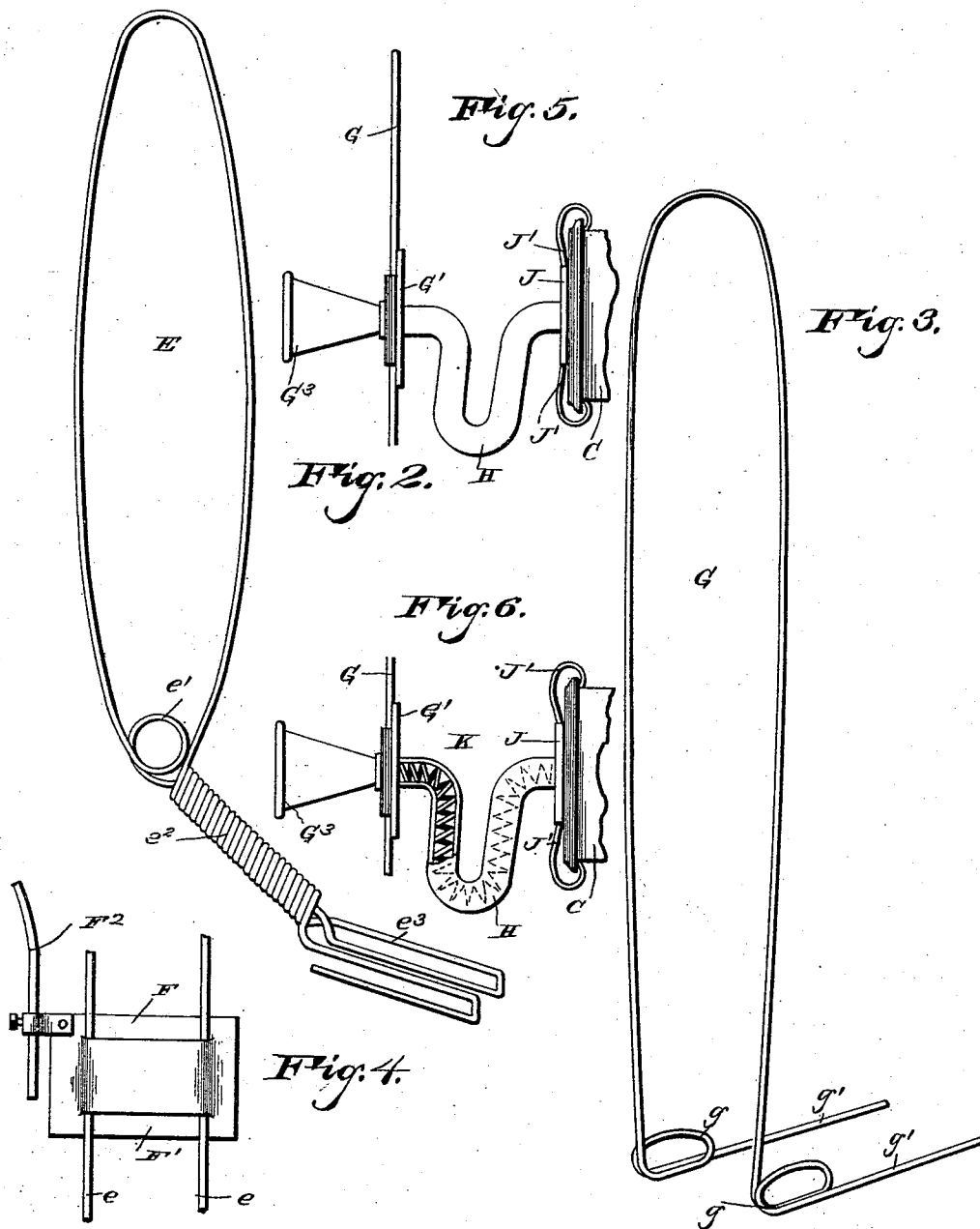
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UNITED STATES PATENT OFFICE.

JAMES E. HILLS, OF NEW YORK, N. Y.

ATTACHMENT FOR TELEPHONES.

SPECIFICATION forming part of Letters Patent No. 471,549, dated March 29, 1892.

Application filed April 27, 1891. Serial No. 390,594. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. HILLS, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Telephone Attachments; 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.

My invention relates to attachments for telephone transmitters and receivers, and comprises adjustable supports, intermediate connections of the several parts, and features of construction and arrangement of the parts, as will be more fully hereinafter set forth.

The objects of the invention are to provide means for supporting the receiver in a novel manner and to make a stationary transmitter accessible from different elevations, together with means for excluding sound from the unused ear. I attain these objects by the preferred mechanism, either individually or conjointly, shown in the accompanying drawings, wherein similar letters of reference are used to designate corresponding parts in the several views, and in which—

Figure 1 represents a perspective view of the plant of a telephone transmitter and receiver, showing my several improvements applied thereto. Fig. 2 represents a perspective view of the receiver-support detached. Fig. 3 represents a similar view of the support for sound-conveying device for making the transmitter accessible. Fig. 4 represents a rear elevation of a portion of the receiver-support. Fig. 5 represents a side elevation of the transmitter and the sound-conveying device and support therefor. Fig. 6 represents one mode of connecting the parts of the sound-conveying device and the transmitter.

Referring to the drawings, A designates the casing or frame, B the receiver, and C the transmitter, of a telephone-plant. To the lower part of said casing or frame is suitably affixed a base-rest D, and to this base-rest is removably fitted a support E for the receiver C. The said support E consists of an elongated loop, whose sides *e* are normally slightly distended or elliptical in form and continued at the upper end by a short bend

and at the lower end merge into a coil *e'*, which provides them with a resiliency. From the said coil the wire is twisted tightly, as at *e*², to provide a reinforced or stiff stem for sustaining the loop of the support E in upright position. This stem extends from the support E at an angle to thereby properly position the said support, and the opposite end of the stem is formed with a foot *e*³, which comprises a loop to be removably fitted on base-rest D and a bracing arm or finger to bear on either the upper or lower side of said base-rest to assist in resisting the strain brought to bear on the said foot. On the said elongated loop a slide plate or bracket F is mounted, and consists, preferably, of a plate having openings or slots therein, forming guides to embrace the sides *e* of the loop, and to said plate or bracket is secured a curved seat or rest F' to receive and support the receiver B. To one side of said seat or rest F' is adjustably connected a curved arm F², having a coil *f* therein to impart a resiliency thereto, and on the opposite free end thereof is attached an elastic cup F³, adapted to be pressed against the unused ear to avoid inconvenience of surrounding noises or sounds. The said arm F is adjustable vertically or laterally, so that different positions of the person receiving or sending a message may be readily accommodated.

As the sides of the elongated loop have a tendency to distend or spread apart and as the openings or grooves forming guides for the plate or bracket F are parallel, adjusting devices are unnecessary, by reason of the fact that when said plate or bracket is moved up or down the guides of the same tend to draw the sides *e* of the elongated loop parallel, and thereby produce a binding between said parts, which securely sustains the desired adjustment of said plate or bracket.

G designates a support similar to support E, the sides being slightly distended, and on which a part of the sound-conveying device for the transmitter C is adjustably mounted. The upper portion of said support G is a continuous bend connecting the sides, and at the lower end are loops *g* to give resiliency to the support, and from said loops extend arms *g'* to engage a portion of the casing or frame to hold the support in proper upright position.

The part of the sound-conveying device on said support G consists of a plate or bracket G' with parallel guides, which are fitted to the sides of said support G, and formed with a central opening G², on the front side of which is secured a mouth-piece or trumpet G³. To the rear side of the said bracket G' is connected one end of a sound-conveying tube H, suitably secured to the same and of sufficient length to allow the bracket G' to be adjusted vertically and still sustain the unimpeded transmission of sound therethrough. The said tube H is constructed of suitable material and has its opposite end secured to the central part of a plate J over an opening therein, which is situated in central line with the mouth or sound orifice of the transmitter C. The plate J is held in removable connection with said transmitter by arms J', engaging the same. The plate or bracket G' is adjusted and sustained in its adjusted position in the same manner as the plate or bracket F, which is by frictional contact or binding of one part on the other.

In Fig. 6 one mode of connecting the rear of plate or bracket G' with one end of tube H is shown, and consists of a coiled spring K, securely attached to said plate or bracket and surrounding the opening therein, and having its opposite end inserted in the adjacent end of the tube to thereby prevent cross-sectional contraction of said tube by bending and avoid interference with the sound passing therethrough. The opposite end of said tube is shown connected in like manner to the plate J, the spring K in this instance being secured at one end over the opening in the plate J and the opposite end inserted in the tube, as hereinbefore set forth.

It will be seen that the several supports heretofore set forth could be individually employed without either of the others or be unitedly used, as may be desired.

The receiver-support may be arranged in a right or left position, as may be found convenient, and the arm F² will be correspondingly changed to suit the position of said support.

Having thus described my invention, what I claim as new is—

1. A support for a telephone receiver or transmitter, consisting of an elongated loop having normally-distended curved sides, a lower coil and an upper closed end, and a slide adjustably mounted thereon, substantially as described.

2. A telephone attachment consisting of an elongated supporting-loop closed at top and bottom and having distended sides, and a lower coil, and a slide adjustably mounted thereon and adapted to support a telephone-instrument, substantially as described.

3. A telephone attachment consisting of an elongated supporting-loop closed at the top and provided with a lower coil and distended

curved sides, a friction-slide adjustably mounted on said loop and adapted to support a telephone-instrument, and a curved spring-arm connected to one side of said slide and adjustable vertically and laterally independent of the slide and carrying a rubber cup on its free end to fit over the ear, substantially as described.

4. A support for a telephone receiver or transmitter, consisting of an elongated loop having a looped foot or arm for removable attachment, and a slide mounted on said loop, substantially as described.

5. A support for a telephone receiver or transmitter, consisting of an elongated loop having a lower coil for imparting resiliency to said loop and a slide on the loop, substantially as described.

6. A support adapted for use with a telephone receiving and transmitting plant, consisting of an upright elongated loop, a frictional slide adjustable thereon and formed with an orifice, a sound-conveying tube fitted over the orifice of and carried by said slide, and a transmitter-plant, to which said upright loop is connected, and to the transmitting-instrument of which the free end of the said sound-conveying tube is removably secured, substantially as described.

7. An attachment for a telephonic plant, consisting of a support in the form of an elongated loop, a frictional slide adjustably mounted thereon and formed with an orifice, a transmitter, a plate removably connected to the transmitter and located over and away from the orifice, said plate of itself being formed of an orifice, and a tube connecting said slide and said plate and having its ends attached over the orifices of said parts, substantially as described.

8. An attachment for a telephonic plant, consisting of an upright support located in front of the transmitting-instrument and having an adjustable slide thereon with an orifice therein, a plate removably connected to the transmitter in front over the orifice thereof and of itself formed with an orifice, and a sound-conveying tube connecting the adjustable slide and said plate, substantially as described.

9. A support for a telephone-receiver, consisting of an elongated loop having a reinforced supporting-stem, substantially as described.

10. A support for a telephone-instrument, consisting of an elongated loop having a coil to impart resiliency thereto, a reinforced stem, and a looped foot, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES E. HILLS.

Witnesses:

ERNEST H. PILSBURY,
LLEWELLYN A. WRAY.