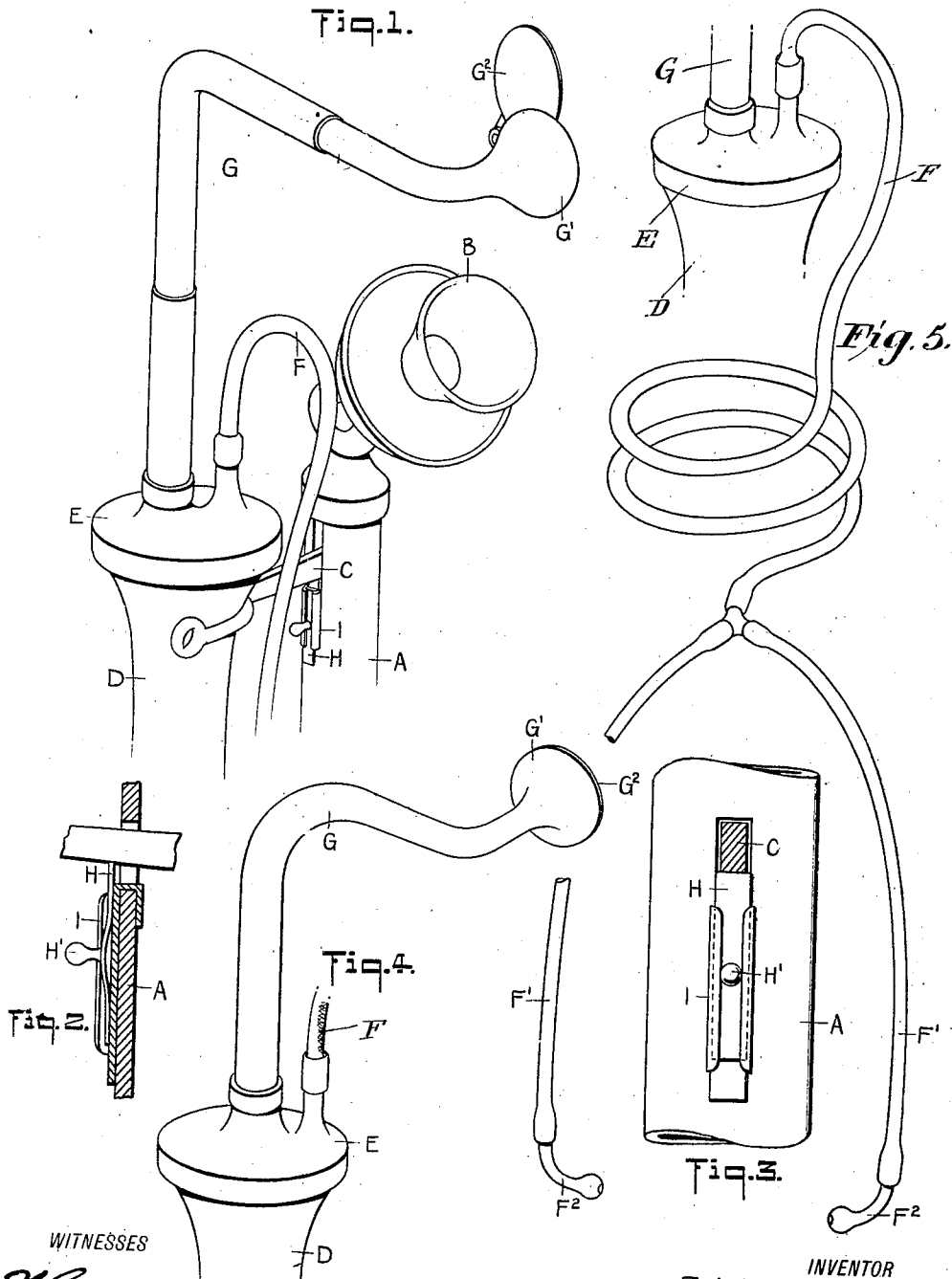


E. SANDERS.
TELEPHONE ATTACHMENT.
APPLICATION FILED DEC. 19, 1914.

1,189,490.

Patented July 4, 1916.
2 SHEETS—SHEET 1.



WITNESSES
[Signature]
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INVENTOR
Estella Sanders
BY *[Signature]*
ATTORNEYS

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2 SHEETS—SHEET 2.

Fig. 7.

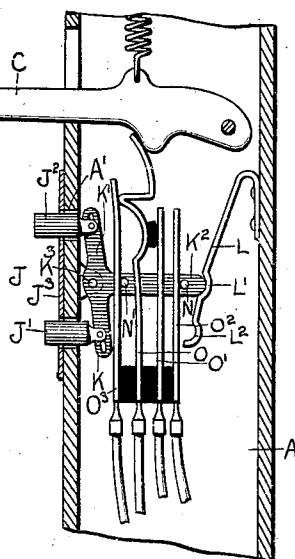
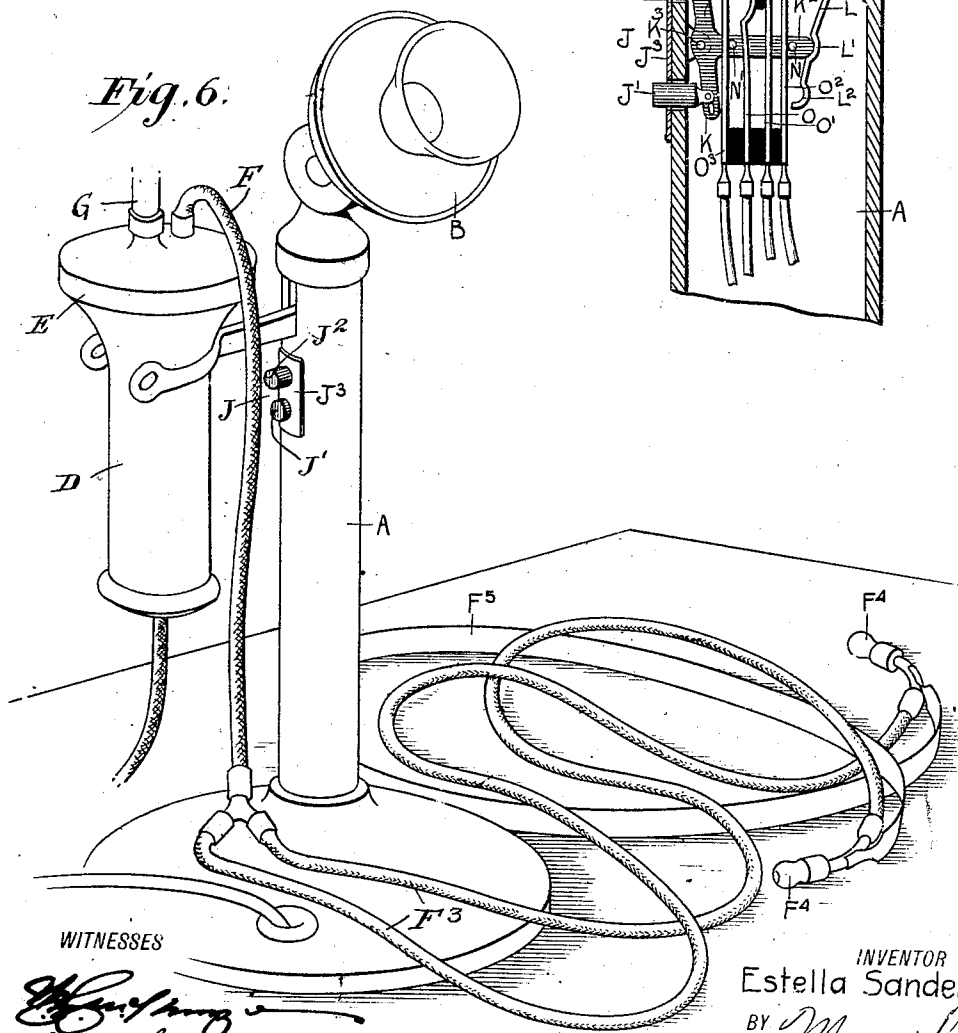


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

ESTELLA SANDERS, OF NEW YORK, N. Y., ASSIGNOR OF ONE-THIRD TO ISIDORE SCHERER, OF NEW YORK, N. Y.

TELEPHONE ATTACHMENT.

1,189,490.

Specification of Letters Patent.

Patented July 4, 1916.

Application filed December 19, 1914. Serial No. 878,067.

To all whom it may concern:

Be it known that I, ESTELLA SANDERS, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Telephone Attachment, of which the following is a full, clear, and exact description.

10 The object of the invention is to provide a new and improved telephone attachment arranged to enable the user of the telephone to carry on conversation without removing the receiver from the hook and to
15 permit the person to use both hands for writing or other purposes while using the telephone.

A further object of the invention is to provide an attachment that requires no material change in the construction of the telephone as now generally furnished by the telephone companies.

In order to accomplish the desired result, use is made of a closed diaphragm cap
25 for attachment to the receiver body in lieu of the open cap now generally used, and tubular ear connections extending from the closed cap and adapted to transmit the sounds to the user's ear.

30 A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

35 Figure 1 is a perspective view of the improved attachment as applied to the ordinary Bell telephone; Fig. 2 is a sectional side elevation of the manually controlled means for moving the hook into open or
40 closed position and with the receiver in position on the hook; Fig. 3 is a face view of the same with the hook shown in cross section; Fig. 4 is a perspective view of a modified form of one of the ear connections;
45 Fig. 5 is a similar view showing one of the ear connections provided with branch tubes; Fig. 6 is a perspective view of the attachment as applied and showing a modified form of the means for opening and closing
50 the receiver circuit; and Fig. 7 is an enlarged sectional side elevation of the said switching means.

The attachment as illustrated in Fig. 1 is shown applied to a telephone of the port-

able type, that is, having a stand A carrying a transmitter B and provided with a hook C supporting a receiver D. The body of the receiver D is provided with a closed diaphragm cap E in lieu of the ordinary apertured diaphragm cap now generally
55 used, and from the said closed diaphragm cap E extends a plurality of ear connections one of which is in the form of a flexible tube F terminating in branch tubes F' provided with removable ear buttons F², and
60 the other ear connection is in the form of a rigid tube G made in telescoping sections, of which the end section terminates in an ear drum G' adapted to be opened or closed by a suitable cover G². Both ear connections
65 F and G, are on one and the same closed diaphragm cap E, as shown in the drawings. As shown in Fig. 6 the flexible tube F may terminate in two flexible tubes F³ provided at their terminals with removable buttons F⁴ and mounted on a resilient band F⁵ for attachment to the user's head to support the buttons F⁴ in the ears of the user.

In order to transmit the sound from the receiver D through the ear connections to the user's ear without removing the receiver D from the hook C, use is made of means for controlling the transmission circuit. This is preferably done, as shown in Fig. 1,
80 by the use of a slide H in the form of a spring mounted to slide in a slotted guideway I attached to the stand A directly below the hook C. The slide H is provided with a suitable handle H' under the control of
85 user of the telephone. The slide H is normally in lowermost position so that the hook C is in closed position as long as the receiver D is in position on the hook, but when it is desired to use the telephone by way of the
90 ear connections and without removing the lever D from the hook C, it is only necessary for the operator to move the slide H upward so that the hook C moves into open switching condition. It will be noticed that when
95 the hook C is in this position the user of the telephone can either place one or both buttons F² into one or both ears or hold the ear close to the drum G' to receive the message. While receiving the message both
100 hands of the user are free for writing or other purposes. After the conversation is terminated the operator simply slides the
105

slide H downward back into normal lowermost position so that the hook swings back into open position.

Instead of using a mechanical means for controlling the hook C, use is made of a switch J mounted on the stand A for controlling the electric connection to the hook C. The switch J is provided with two buttons J' and J² mounted to slide in a plate J³ attached to the stand A, the buttons passing through apertures A' in the side wall of the stand to the interior thereof to connect with arms K, K' on a three arm lever having an angular arm K² fulcrumed at K³ on the inside of the stand A. The third arm K² is pressed on by a spring L and is provided with two pins N and N' for controlling the spring contacts O, O', O² and O³ of the telephone circuit so that when the parts are in the position shown in Fig. 7 the call circuit is open to allow of calling the person to the telephone. Now in order to make use of the telephone the operator presses the button J² inward so that the switch contact O³ is moved out of engagement with the hook contact O and the contact O² is moved into engagement with the contact O' to cut out the call circuit and to close the hearing circuit for the hook C and the receiver D without removing the latter from the hook C. When the conversation is terminated, the operator presses the button J' to return the part to the normal dormant position shown in Fig. 7. The spring L is preferably provided with spaced indentations L', L² for engagement with the free end of the arm K²

of the three-armed lever to hold the latter in whatever position it is moved into on the operator pressing either button J' or J².

It will be noticed that by the arrangement described the attachment can be readily placed in position on the telephone as now generally constructed without requiring material alteration or change in the construction of the telephone. It will further be noticed that the attachment is very simple in construction and by its use it enables the user of the telephone to receive a message without removing the ordinary receiver D from the hook C, at the same time allowing the user to utilize both hands for writing or other purposes.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

A telephone attachment, comprising a closed diaphragm cap, a plurality of ear connections leading from the said diaphragm cap, one of the said ear connections being flexible and the other formed of rigid telescoping members, and switching means for establishing sound transmission while retaining the receiver in position on its usual support.

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

ESTELLA SANDERS.

Witnesses:

THEO. G. HOSTER,
PHILIP D. ROLLHAUS.