

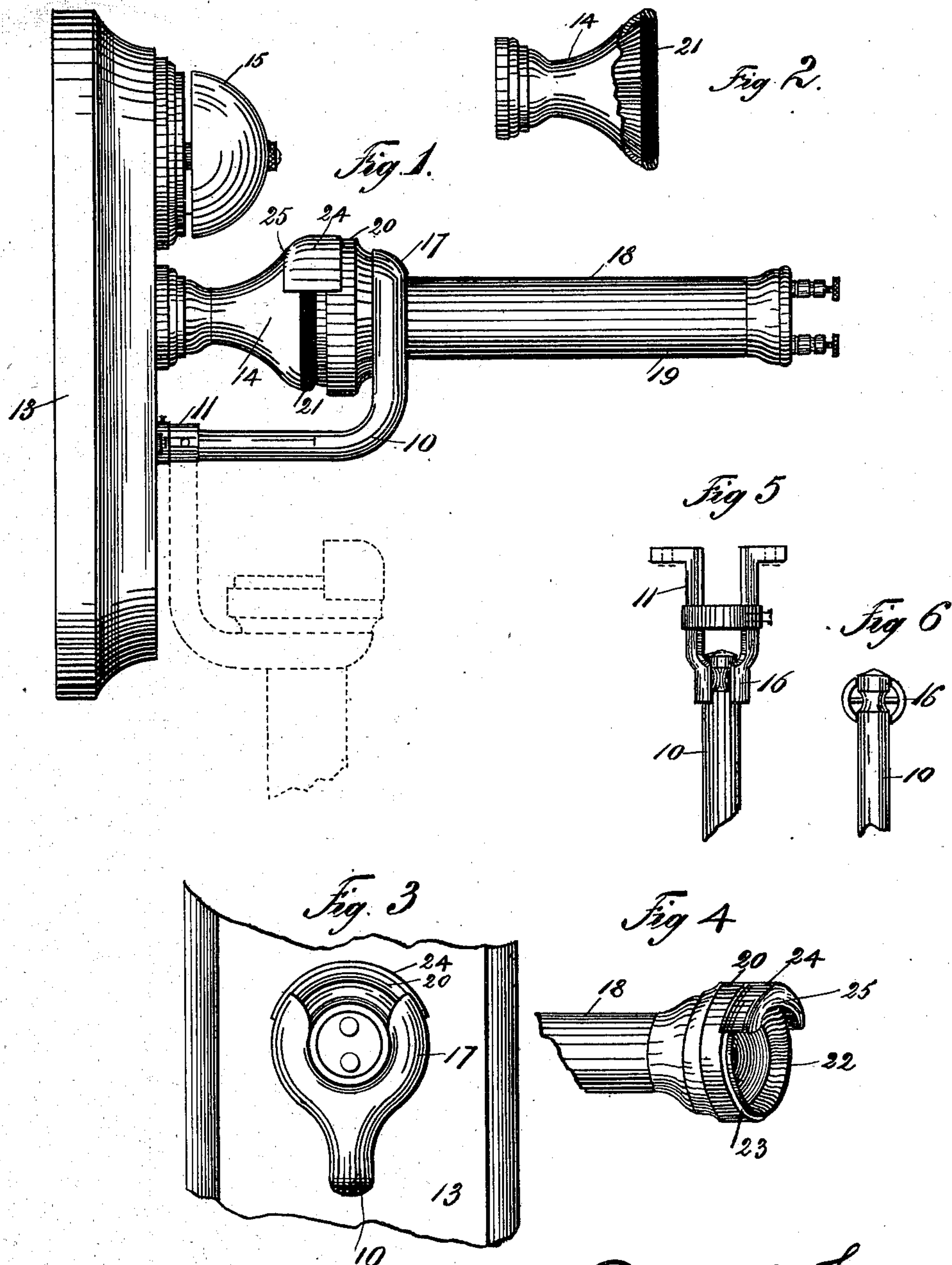
No. 731,822.

PATENTED JUNE 23, 1903.

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APPARATUS FOR TELEPHONING.

APPLICATION FILED AUG. 7, 1901.

NO MODEL.



WITNESSES

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APPARATUS FOR TELEPHONING.

SPECIFICATION forming part of Letters Patent No. 731,822, dated June 23, 1903.

Application filed August 7, 1901. Serial No. 71,153. (No model.)

To all whom it may concern:

Be it known that I, JAMES ROBERT TROLAND, 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 Apparatus for Telephoning, of which the following is a full and complete specification, such as will enable those skilled in the art to which it ap-
 10 pertains to make and use the same.

The object of my invention is to provide a new and improved means for bringing one telephonic circuit into hearing and sounding connection with one or more like circuits and
 15 without making electrical connection between them.

To such ends this invention consists, in substance, of the hereinafter-described apparatus for telephoning wherein a city or long-
 20 distance telephonic circuit of conductors provided in either end with the usual transmitting and receiving devices is connected with a local or apartment house telephonic exchange, such telephonic exchange having a
 25 plurality of house or apartment circuits in communication with the switchboard thereof by bringing the transmitter and the receiver of such exchange (which are adapted to be brought into communication through the
 30 switchboard with any or all of the local or apartment telephonic circuits) into communication with the receiver and transmitter of that end of the city or long-distance circuit; and this invention consists in the means for
 35 securing the transmitter to the receiver of the city or long-distance circuit and the receiver to the transmitter of such city or long-distance circuit.

In the accompanying drawings, forming
 40 part of this specification, in which like numerals of reference designate corresponding parts in the several views, Figure 1 is a side view of a telephone receiver and transmitter provided with my improved attachment for securing
 45 the same together, the same being shown in the position for the transmission of sounds therethrough from one circuit to another. Fig. 2 is a side view, partially in section, of the transmitter-mouthpiece of the form shown
 50 in Fig. 1, showing the air-ring or gasket surrounding the orifice thereof. Fig. 3 is a detail front view of the mouthpiece and the se-

curing-bracket for the receiver looking to the left of Fig. 1. Fig. 4 is a view in perspective of the head of the receiver embodied in my
 55 improvements. Fig. 5 is a top view, on an enlarged scale, of the hinged portion of the securing-bracket which secures the receiver to the transmitter, the same being shown in the securing position shown in full lines in Fig. 60
 1; and Fig. 6 is a front view of a portion of the construction shown in Fig. 5, the securing-bracket being shown in the downward position as shown in dotted lines in Fig. 1.

My improved form of mechanism for secur-
 65 ing telephonic transmitters and receivers together consists, as shown in Figs. 1 and 3, of a bracket 10, hinged between two spring-standards 11, as shown in detail in Figs. 5 and
 70 6, which standards 11 are secured to the base-board 13, carrying the transmitter 14 and also the signaling-bell 15. The bracket 10 is usually of the shape shown in Figs. 5 and 6 and is pivoted between the spring-pieces 11 by means of
 75 a pivot 16, and the shape, arrangement, and combination thereof are such that the resiliency of the pieces 11 will, as shown in detail in Figs. 5 and 6, hold such bracket either in the
 80 raised position shown in full lines in Fig. 1 or in the lowered position shown in dotted lines therein. This bracket 10 is provided at the
 outer end with the upwardly-extending yoke or Y-shaped holding-head 17, the central orifice of which is of just sufficient size to receive
 85 the main cylindrical or handle portion 18 of a telephonic receiver 19, and the forward side thereof is generally so shaped as to fit snugly behind the enlarged head portion 20 of such receiver. Secured upon the outer end and
 90 edge of the transmitter is an annular gasket or ring 21, usually of soft india-rubber or any other suitable packing material impervious to air and fitted when compressed to make an
 95 air-tight joint, the receiver 18 being usually provided with a peripheral flange 22, fitting just within such rubber gasket, bounded by an outer chamfer 23, as shown in detail in
 100 Fig. 4, whereby when the receiver and transmitter are compressed firmly together by the double compression of such gasket-ring 21 an air-tight joint will be formed between the head portion 20 of the receiver 19 and the transmitter 14. In order to more firmly secure the receiver 19 upon the transmitter 14,

the head 20 of such receiver is usually provided on one side with a securing-lip 24, extending outwardly a short distance therefrom, of such shape as to fit snugly down over the top of the transmitter 14, as shown in Fig. 1, the downwardly-depending lip portion 25 of such securing-lip extending down behind the same, as shown in such Fig. 1, by which arrangement it will be seen that the length of the bracket 10 being properly proportioned to the length of the transmitter 14, the shape of the head 20 of the receiver 19, and the thickness of the gasket-ring 21 that when the receiver 19 is placed in the position shown in Fig. 1 upon the transmitter 14, the lip portion 25 of the securing-lip 24 resting upon the top of the transmitter 14, by reason of the shapes of the various parts such receiver will be held thereon by gravity, and in short circuits and under ordinary circumstances no further securing device is necessary; but in longer circuits and in most cases I prefer to more firmly secure the same together by means of the bracket 10, which being then forced up into the position shown in Fig. 1 in full lines from the position shown in dotted lines therein will by the pressure exerted by the head portion 17 thereof upon the rear side of the head 20 of the receiver force the same snugly forward, so as to compress the rubber or other packing-ring or gasket 21 between the receiver and transmitter, so as to form a dead-air chamber between the diaphragms of the transmitter and the receiver and so as to compress the air contained therein.

The operation and advantages of my improved telephoning apparatus will be readily understood. The receiver and transmitter are readily brought together and operatively connected by swinging the receiver and the bracket 10 upwardly from the position shown in dotted lines in Fig. 1 and into the position shown in full lines in the same figure. The gasket 21 forms an air-tight joint between said receiver and transmitter, forming a tight air-chamber, whereby actuation of the operative parts of the receiver will be accompanied by actuation of the corresponding parts in the transmitter. The entire device is very simple in construction and convenient in use, enabling telephonic circuits to be readily connected and disconnected as desired.

I do not desire to be understood as limiting myself to the particular formation and association of the parts as herein described, but

reserve the right to vary the same in adapting my improvement to varying conditions of use without departing from the spirit of my invention or the terms of the following claims.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a telephonic transmitter, of a telephonic receiver secured in such manner that their diaphragms are adjacent, a gasket of soft compressible material interposed between the contacting portions of the transmitter and receiver, and means for forcing the transmitter and receiver together so as to compress the gasket and whereby the transmitter and receiver are secured in position, substantially as shown and described.

2. The combination with a support, of a telephonic transmitter carried by the support, a telephonic receiver provided with a lip upon one side thereof, and means carried by the support for holding the receiver positively in engagement with the transmitter, substantially as shown and described.

3. In an improved telephonic apparatus, a transmitter, a receiver, a gasket of soft compressible material and means for firmly holding the receiver in operative connection with the transmitter, whereby said gasket is compressed between the same, substantially as shown and described.

4. In an improved telephonic apparatus, a telephonic transmitter, a telephonic receiver provided with a lip upon one side of the end thereof, a gasket of soft compressible material, and means for holding said receiver firmly in operative connection with said transmitter, whereby said lip is engaged with said transmitter and said gasket is compressed between said transmitter and said receiver, substantially as shown and described.

5. In an improved telephonic apparatus, the combination with a support of a transmitter carried by said support, and a receiver provided at its end with a projecting lip adapted to engage the transmitter, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 5th day of August, 1901.

JAMES ROBERT TROLAND.

Witnesses:

F. A. STEWART,
F. F. TELLER.