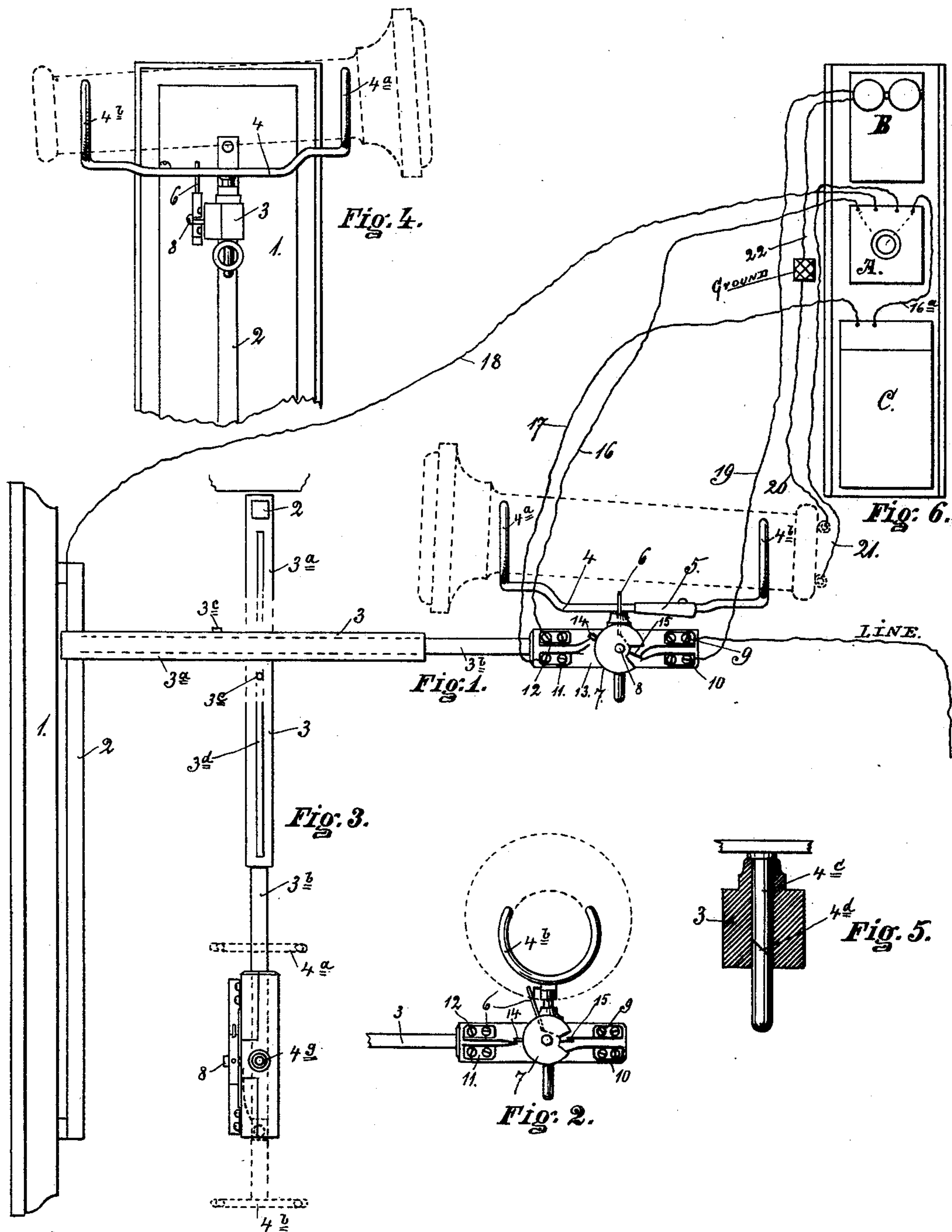


(No Model.)

N. S. FISK.  
TELEPHONIC APPARATUS.

No. 407,004.

Patented July 16, 1889.



WITNESSES.  
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# UNITED STATES PATENT OFFICE.

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## TELEPHONIC APPARATUS.

SPECIFICATION forming part of Letters Patent No. 407,004, dated July 16, 1889.

Application filed April 15, 1889. Serial No. 307,385. (No model.)

### *To all whom it may concern:*

Be it known that I, NATHAN S. FISK, of the city of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Telephonic Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in supports for the receiver of a telephone and means for making and breaking circuits.

In the drawings which accompany and form part of this specification, and in which similar letters and figures refer to like parts in the several figures, Figure 1 shows a side elevation of my improved device and the manner in which it is connected with a telephone. Fig. 2 shows a portion of Fig. 1 in a changed position. Fig. 3 shows a top view of the device, a portion being shown in dotted lines. Fig. 4 shows a front view. Fig. 5 is a sectional detail view. Fig. 6 shows the front of an ordinary telephone and is provided to show connections.

Referring to the drawings, 1 represents a base on which vertical bar 2 is rigidly mounted. Bar 2 is preferably square and rigid, and carries projecting extension-arm 3. Bar 2 passes through an opening in arm 3, and the arm is adjustably supported thereon by the binding action thereof. Arm 3 is composed of the parts 3<sup>a</sup> and 3<sup>b</sup>. 3<sup>a</sup> is hollow and 3<sup>b</sup> passes through it and is adjustably secured therein by means of slot 3<sup>d</sup> in part 3<sup>a</sup> and projecting pin 3<sup>c</sup> on part 3<sup>b</sup>. Arm 3 carries receiver-supporter 4, which is provided with two circular pairs of fingers, clasps, or prongs 4<sup>a</sup> and 4<sup>b</sup>, one of which is on a higher horizontal plane than the other, so that the tendency of the receiver therein will be to work backward with any jar or movement, and thus retain its position in the open fingers of the supporter. The fingers or clasps 4<sup>a</sup> and 4<sup>b</sup> do not grasp or surround the receiver; it merely lies therein. Supporter 4 is mounted upon a pivot 4<sup>c</sup>, which engages arm 3 in a socket 4<sup>e</sup>, (see Figs. 3 and 5,) and has its lower

end cut on acute angle and adapted to rest upon an incline surface in the bottom of the socket, as shown at 4<sup>d</sup>, so that the weight of the supporter and receiver will tend to keep the supporter in the position shown in Fig. 1. Supporter 4 carries a spring 5, which is adapted to be brought in contact with pin 6 in rotating disk 7, and operate disk 7, as hereinafter set forth. Disk 7 is preferably made of non-conducting material, and is pivoted at 8 to arm 3.

9, 10, 11, and 12 are electric conductors mounted upon non-conducting pieces 13 upon arm 3, and terminate in springs which are adapted to be operated by disk 7. A pin 14 in disk 7 is adapted to be brought in contact with spring 12, and spring 12 into contact with 11 by rotating disk 7. A pin 15 upon rotating disk 7 is adapted to engage 9 and throw it out of contact with 10. Pin 15 is electrically connected through or behind disk 7 with pin 6, as is shown in dotted lines in the disk.

16 is a wire connecting 12 with the transmitter A and continuing in 16<sup>a</sup>, battery C.

17 is a wire connecting 11 with the battery C.

18 is a wire connecting bar 2 with the transmitter A.

19 is a wire connecting 10 with the bell.

20 is a wire connecting the receiver with the ground.

21 is a wire connecting the receiver with the transmitter A.

22 is a wire connecting the bell with the ground. The line-wire connects with 9.

The purpose and operation of the device are as follows: The height of the receiver-supporter may be adjusted by raising slightly the outer end of arm 3 and then moving the same up or down bar 2. The normal position of the receiver and supporter is as shown in Fig. 1, in which the supporter is substantially parallel with the arm 3, which is determined by the form of the end of the pivot 4<sup>c</sup> and the incline surface upon which it rests, and disk 7 is rotated into its farthest position to the right by the action of the springs 9 and 12. In this position the line is through 9, 10, 19, the bell, and 22, and 11 and 12 out of contact. When it is desired to use the receiver, the supporter carrying the receiver is turned into the position shown in Fig. 4, and substantially



crosswise of arm 3. This movement brings spring 5 into contact with pin 6 and rotates disk 7 to the left, which throws 9 and 10 out of connection and throws 11 and 12 into connection, as shown in Fig. 2. It also establishes a connection from the line through 9, 15, 6, 5, 4, 3, 2, and 18 with the transmitter, and from thence through 21, the receiver, and 20 with the ground. The spring 5 is provided and arranged so that a certain amount of motion will be allowed to the receiver-supporter without breaking the connection. Upon releasing the receiver it will immediately return to its normal position and the connections be established as first described.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a telephonic apparatus, the combination of the projecting arm, the receiver-supporter pivoted upon the arm, and the pivoted disk operated by the turning of the receiver upon its pivot and the contacting conductor-springs, substantially as set forth.

2. In a telephonic apparatus, the combination of a supporting-arm, a receiver-supporter mounted upon a pivot-spindle engaging the arm, the spindle having its bearing end at an acute angle and resting upon an inclined sur-

face, and the circuit former and breaker operated by the turning of the supporter upon its pivot.

3. The combination, in a telephonic apparatus, of a vertical stationary bar, a vertically-movable extension projection-arm, a receiver-supporter mounted upon a pivot-spindle engaging in a socket in the arm and having its bearing end at an acute angle and resting upon an inclined surface, the pivoted disk, and conductor-springs, substantially as set forth.

4. The combination, in a telephonic apparatus, of the vertical stationary bar, the vertically-movable extension-arm, the receiver-supporter, having two pairs of fingers, one of which pairs is on a higher horizontal plane than the other, mounted upon a pivot-spindle, the bearing end of which is at an acute angle and resting upon an inclined surface, the pivoted disk, and contacting conductor-springs, substantially as set forth.

In witness whereof I have affixed my signature in presence of two witnesses.

NATHAN S. FISK.

Witnesses:

ROBT. LOCKASH,  
M. E. ROBINSON.