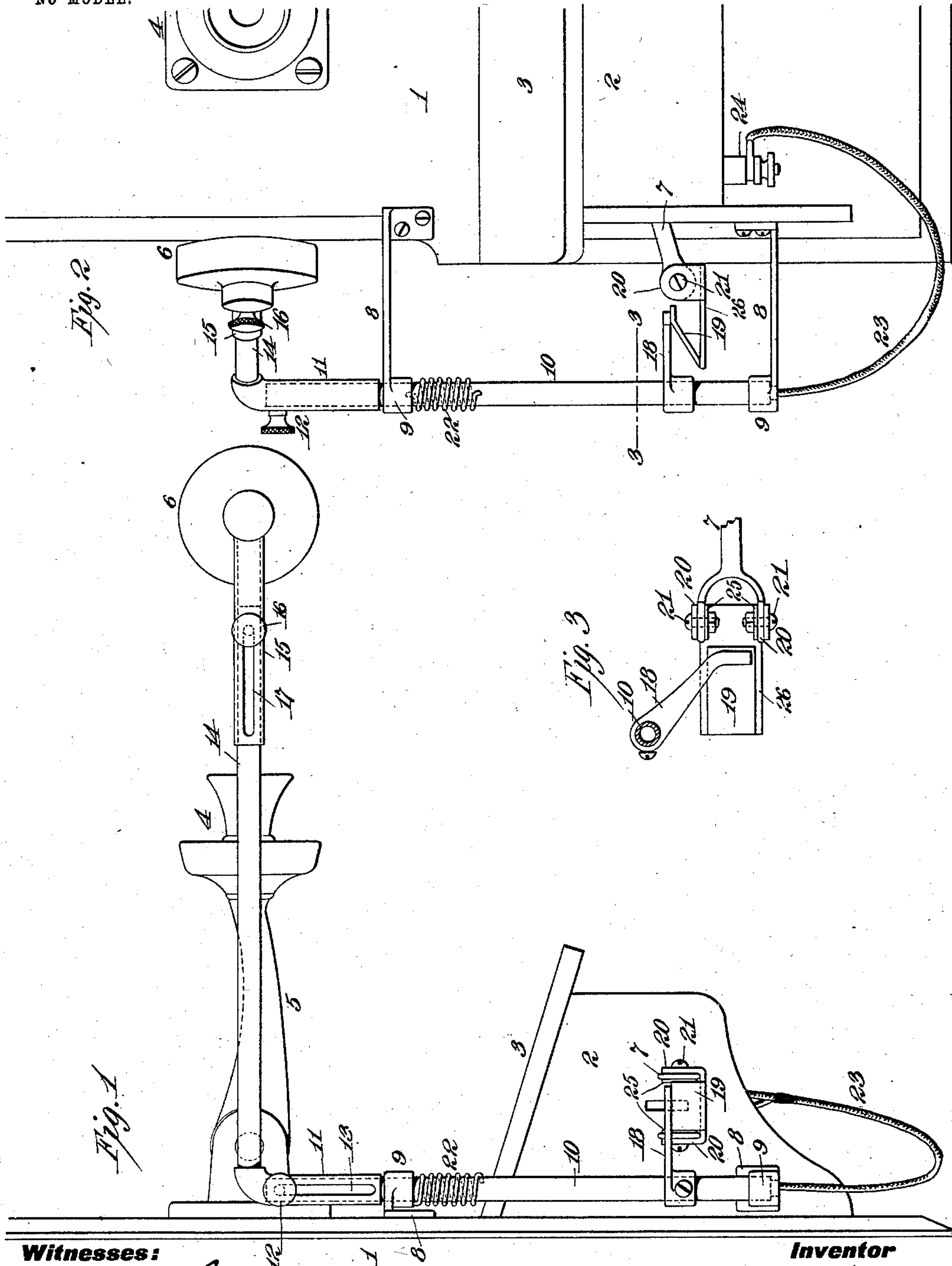


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G. B. BUCHANAN.
TELEPHONE ATTACHMENT.
APPLICATION FILED SEPT. 15, 1902.

NO MODEL.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE BRIGGS BUCHANAN, OF HAVERSTRAW, NEW YORK.

TELEPHONE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 752,649, dated February 23, 1904.

Application filed September 15, 1902. Serial No. 123,446. (No model.)

To all whom it may concern:

Be it known that I, GEORGE BRIGGS BUCHANAN, a citizen of the United States, residing at Haverstraw, in the county of Rockland and State of New York, have invented a certain new and useful Improvement in Telephone Attachments, of which the following is a description.

My invention relates to an improved attachment for telephones by which the operation of the instrument will be considerably facilitated.

My attachment is applied to any ordinary telephone and offers a support for the receiver, so that both hands of the operator will be free to make notes of conversations, memoranda of orders, &c.

In addition to sustaining the receiver my improved telephone attachment coöperates with the usual receiver-hook or the switch controlled thereby, so that by moving the receiver to a slight lateral extent the same effect is produced as when the receiver is removed from the hook in the ordinary instruments. This lateral movement of the receiver either short-circuits the magneto when used or results in a signal being transmitted to the central office in the case of automatic instruments—i. e., instruments which automatically call up the central office upon the removal of the receiver from the hook. The lateral movement of the receiver referred to is effected by normally mounting the receiver slightly out of its operative position, so that when moved to its operative position the telephone hook or apparatus controlled thereby will be actuated.

My invention provides for details of construction by which its efficiency and general convenience will be increased.

My objects generally are to provide an attachment for telephones which shall be capable of ready attachment to existing apparatus and by means of which the results above suggested may be effectively realized.

I shall describe my invention in connection with an ordinary wall apparatus, from which its capacity for use with desk-telephones and other special telephones will be understood.

In the drawings forming part of this speci-

fication, Figure 1 is a side view of an ordinary wall-telephone with my attachment applied thereto; Fig. 2, a front view of the same, and Fig. 3 a section on the line 3 3 of Fig. 2.

In all of the above views corresponding parts are represented by the same numerals of reference.

The ordinary telephonic apparatus shown comprises a base-board 1, a battery-box 2, having a desk-top 3, a transmitter 4, carried on a pivoted arm 5, and a receiver 6. The hook 7 projects from the box 2 and normally supports the receiver. With the form of apparatus shown the removal of the receiver from the hook automatically calls up the central office. With other forms of instruments the removal of the receiver from the hook short-circuits the magneto, which requires to be first operated to signal the central office. My improvements, as will be explained, are equally applicable to instruments of the latter type.

Supported by the instrument are a pair of brackets 8 8, carrying bearings 9, in which is mounted a vertical tubular shaft 10. Fitting over the upper end of the shaft 10 is a sleeve 11, vertically adjustable on the shaft, as shown, and maintained in any position of its adjustment by a screw 12 engaging the shaft and working in a slot 13 in said sleeve. In this way the vertical adjustments of the receiver are provided for.

The sleeve 11 carries a horizontal tubular arm 14, on the forward end of which is mounted a sleeve 15, horizontally adjustable thereon and maintained in any position of its horizontal adjustment by a screw 16, working in a slot 17. The sleeve 15 carries the receiver 6 in any suitable way. The wires leading to the receiver pass through the tubular shaft 10 and arm 14 and are attached to the binding-posts 24, a sufficient length being left to form a loop 23, which will provide a surplus of wire sufficient to accommodate the parts when the receiver is extended and elevated to the extreme position. The wires being carried within the shaft and arm will be protected from injury and their liability to catch or become entangled with the person or clothing of the operator will be prevented, as will be

understood. Carried by the shaft 10 is an arm 18, coöperating with an inclined cam 19, formed integrally with a base-plate 26, which is provided with ears 20 for attaching the cam to the hook 7 by means of screw-bolts 21 and washers 25, the latter being sufficiently large to prevent the bolts being drawn through the ordinarily large eyes which are formed adjacent to the extremities of the arms of the hook. Normally the arm 18 engages the upper end of the cam 19 to depress the hook 7; but by partially rotating the shaft 10, as by swinging the receiver 6 laterally, the arm 18 will be withdrawn from the cam to permit the hook 7 to be automatically elevated to call up the central office or to short-circuit the magneto, according to the type of instrument used. A spring 22 is coiled around the shaft 10 and is anchored at one end in said shaft and at the other end in the bearing of the upper bracket 8 to normally turn the shaft to bring the arm 18 into engagement with the upper part of the cam 19 to thereby depress the hook.

Normally the receiver 6 is located so that its aperture is swung beyond the transmitter 4. When the apparatus is to be used, the receiver is moved to one side either by the operator's hand or by a movement of the head until the operator's mouth is brought in position at the transmitter, the receiver remaining in contact with the operator's ear. This lateral movement of the receiver partially rotates the shaft 10, as will be understood, and actuates the hook 7. As soon as the operator is through using the apparatus the spring 22 returns the parts to their normal position and again results in the depressing of the hook 7.

By providing for vertical and horizontal adjustments of the receiver and with the usual adjustments of the transmitter the apparatus

can be readily and quickly adjusted to any extent desired, and as by its use the receiver will be properly sustained in the desired relation to the operator's ear the attachment particularly commends itself to brokers and other persons who are required in their calling to make memoranda of telephonic orders and conversations.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

1. In a telephone attachment, the combination with a telephone-transmitter and switch-hook, of a cam secured to the switch-hook, a tubular vertical shaft rotatably mounted adjacent to the transmitter, a sleeve adjustably carried at the upper end of such shaft, a tubular arm carried by the sleeve, a telephone-receiver carried by said arm and horizontally adjustable with respect to the same, electrical connections extending through the tubular arm and shaft, and connecting the telephone with the receiver, and a lever-arm carried by the tubular shaft and coöperating with the cam, substantially as and for the purposes set forth.

2. In a telephone attachment, the combination with a telephone-transmitter and switch-hook of a cam removably secured to the said switch-hook, a shaft, a receiver carried thereby and an arm carried by the shaft and adapted to engage with the cam when the shaft is partly rotated, substantially as and for the purposes set forth.

This specification signed and witnessed this 28th day of August, 1902.

GEORGE BRIGGS BUCHANAN.

Witnesses:

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