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 APPLIANCE FOR USE WITH TELEPHONE TRANSMITTERS.
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925,806.

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Fig. 1.

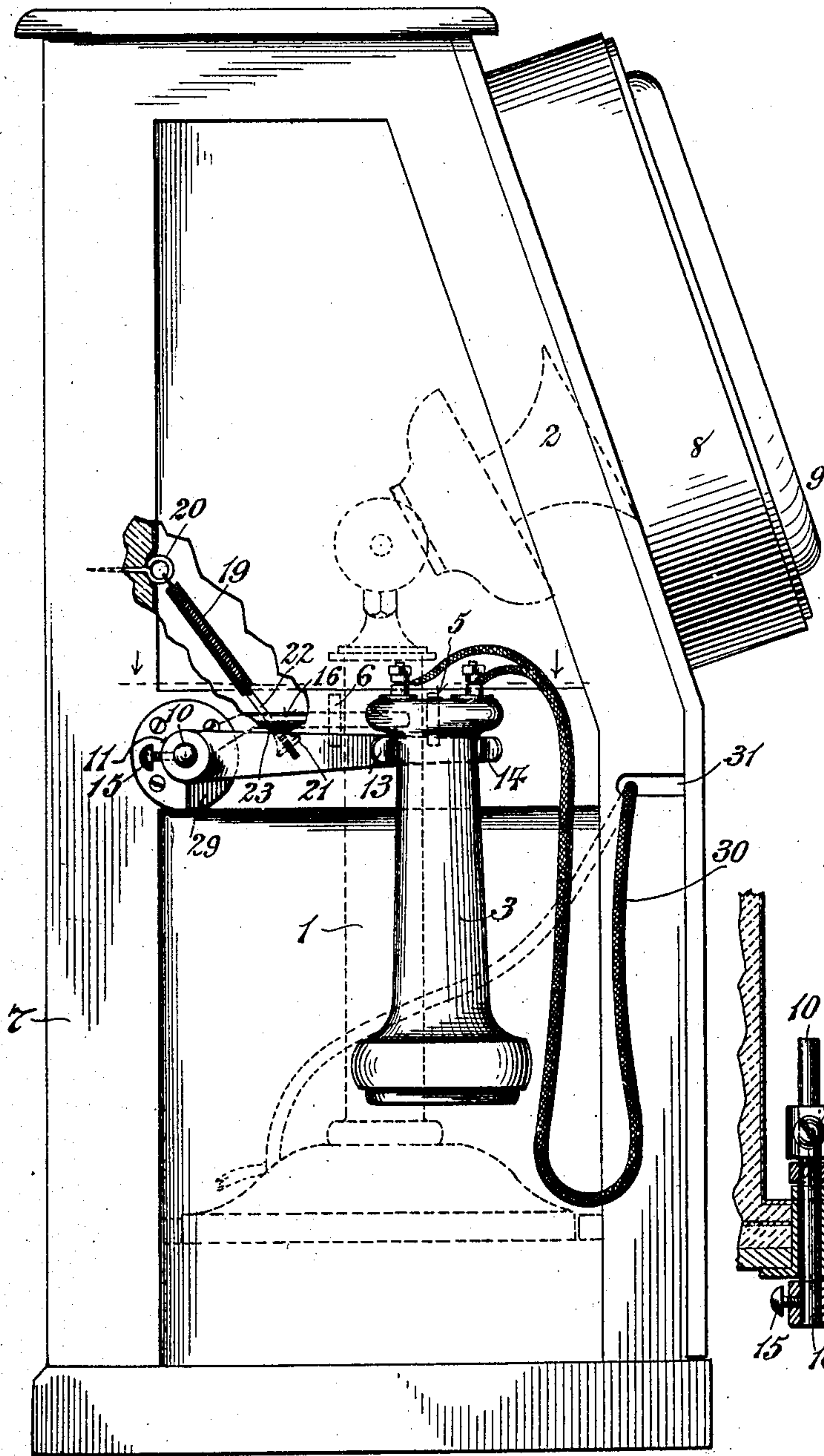


Fig. 3.

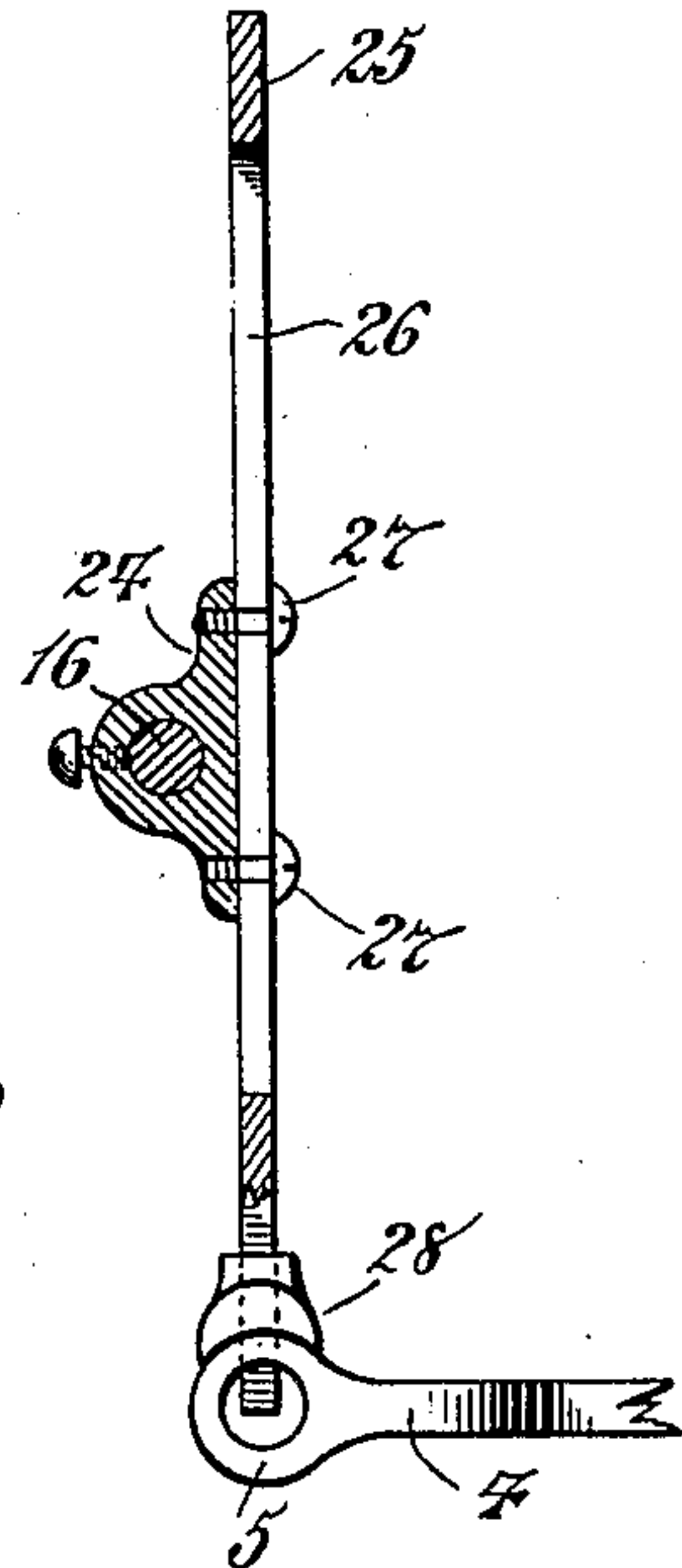
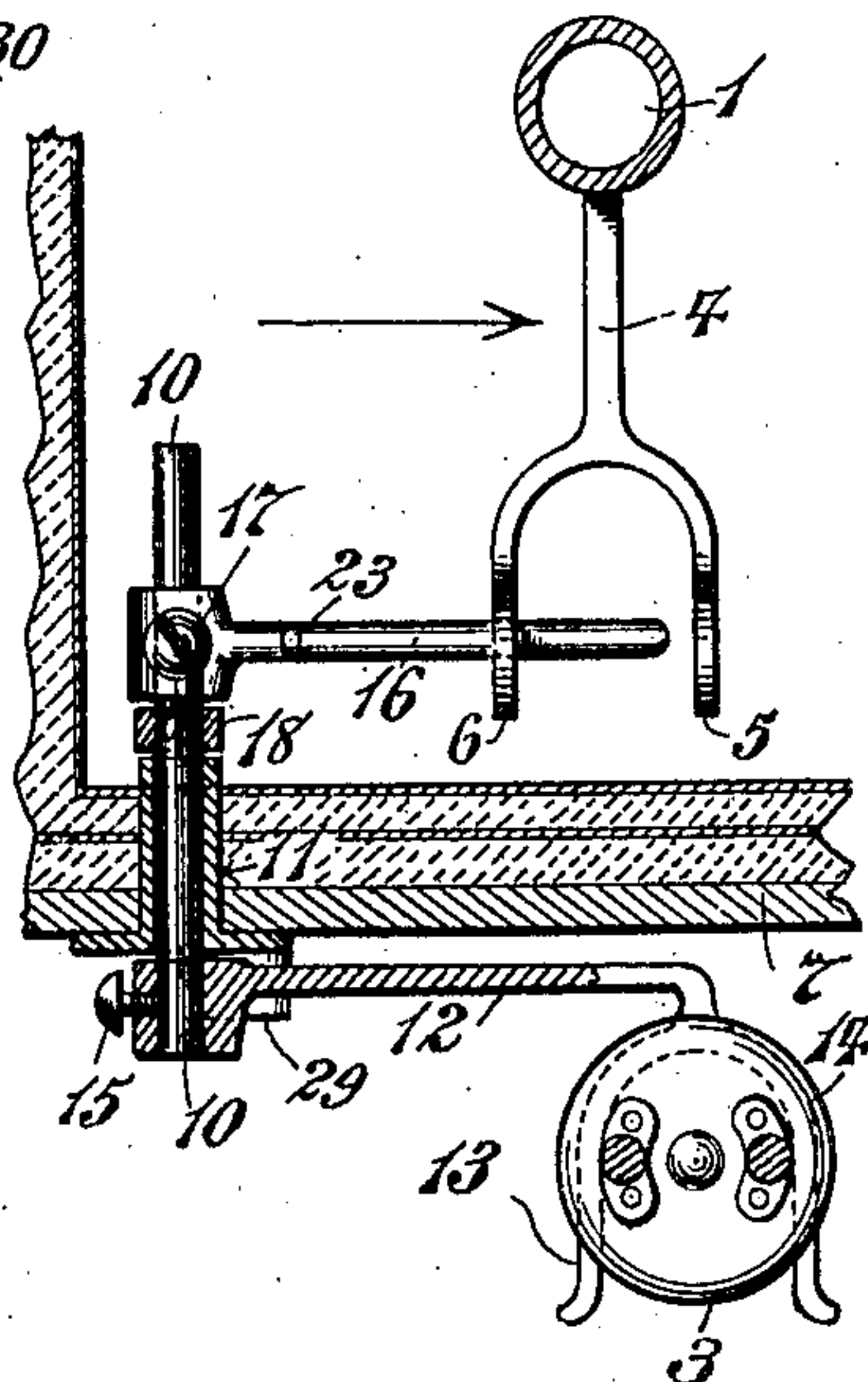


Fig. 2.



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UNITED STATES PATENT OFFICE.

ORRIN H. GOODRICH, OF CASTLETON CORNERS, NEW YORK, ASSIGNOR TO THE MINIATURE TELEPHONE BOOTH CO., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

APPLIANCE FOR USE WITH TELEPHONE-TRANSMITTERS.

No. 925,806.

Specification of Letters Patent.

Patented June 22, 1909.

Application filed September 14, 1908. Serial No. 453,050.

To all whom it may concern:

Be it known that I, ORRIN H. GOODRICH, a citizen of the United States, and resident of Castleton Corners, Staten Island, county of Richmond, and State of New York, have made a new and useful Invention in Appliances for Use with Telephone-Transmitters, of which the following is a specification.

My invention is directed particularly to an improvement upon the invention disclosed in a prior patent granted to me on the 25th day of August, 1908, numbered 897,084, and it has for its objects, first, to simplify, cheapen and render more efficient those parts of the mechanism whereby the receiving telephone is caused to actuate the switch as it is hung upon or removed from the switch actuating lever exterior to the inclosing casing or box. Second, to make it possible for an inspector or other authorized person to more readily detach the portable telephone, transmitter, receiver and interconnected attachments from the inclosing casing or box and with the least possible annoyance and inconvenience. Third, to effect an adjustability of all of the switch operating parts to such an extent as to make the same applicable for use with telephone receivers of different weight and also with portable transmitters where the switch actuating arm may be located at variable heights, thereby adapting the inclosing casing or box for use with various types of portable telephones.

My invention will be fully understood by reference to the accompanying drawings, in which,

Figure 1 is a side elevational view illustrating the inclosing casing or box complete and the switch actuating and controlling appliances in full lines, a portion of the side of the box being broken away to better illustrate a part of the adjusting appliances; the portable telephone transmitter located within the casing or box being shown in dotted lines, as is also a portion of the flexible conductors running to the suspended receiver exterior to the box. Fig. 2 is a detail part sectional, part plan, view of the improved switch controlling devices; and Fig. 3 is a part sectional, part side elevational view of the means for adapting the switch controlling devices for use in connection with portable telephone transmitters where the switch actuating levers are located at various heights upon the standard of the transmit-

ting telephone, or where adjustability of the switch controlling parts is found necessary.

Referring now to the drawings in detail and first to Fig. 1, 1 represents the standard of a well known portable or desk telephone provided with a transmitter 2 hinged at the top thereof, 3 being the receiver, also of well known form, and 4 (Fig. 2) the usual spring actuated circuit switching lever provided with forks 5 and 6 for supporting the receiver. The transmitter, receiver and switch appliances are connected up with the usual flexible conductors 30, the entire outfit being of well known form. 7 represents the inclosing casing or box provided with a door on its front side and a transmission opening 8 secured thereto in front of the transmitter 2, 9 being a flexible ring secured in the transmission opening and having substantially the contour of the lower portion of a person's face, this feature being substantially like that disclosed in the before-mentioned patent.

The door which supports the transmission opening 8 and flexible ring 9 is hinged or otherwise secured at its top or bottom to the box and is provided with any preferred means for locking or securing it when closed, such, for instance, as one or more buttons or hooks, or a staple and pad-lock.

10 represents a rotary shaft journaled in a journal bearing 11 secured by screws extending through its enlarged head in an opening in one of the sides of the box.

12 is a circuit changing arm provided with forks 13, 14, similar to the forks 5 and 6 of the circuit changing lever 4, its function being to sustain the telephone receiver 3 outside the casing or box, said lever being secured directly to the shaft 10 by a set-screw 15, or in any preferred manner. To the inner end of the shaft 10 is secured by a set-screw 17 an angular arm 16, 18 being a flange for adjusting the position of the arm upon the shaft 10.

19 is a spiral spring secured at one end by a screw-eye 20 to the inner surface of the casing or box 7, the other end of said spring being attached to a slidable rod or pin 22 screw-threaded at its free end and adapted to be adjustably secured through a hole or opening 23 in the angular arm 16 through the agency of a screw-nut 21, the arrangement being such that a variable tension may be put upon the spring 19 after the end of the arm 16 has been inserted through one

of the eyes of the forks 5, 6, thus making the circuit changing attachments adjustable so as to better assure the free operation of the switch lever 4 in accordance with the weight of the telephone receiver 3 when hung upon or removed from the forks 13, 14.

In Fig. 3 of the drawings I have illustrated novel means for effecting an adjustment of the switch operating parts so as to accommodate the same for use with portable telephones in which the switch actuating lever 4 may be located at different heights, the same consisting of a lug or ear 24 adapted to be secured directly to the free end of the angular arm 16 by a set-screw, and in turn adjustably secured to a metal bar 25 slotted longitudinally as at 26, through the agency of screws, 27, 28 being an enlarged extension adapted to bridge the space between the two ends of the forks 5, 6 in the same manner as the like parts are bridged in the above-named patent. With such an arrangement it is apparent that by releasing the screws 27, 28 the parts may be adjusted so as to adapt the parts hereinbefore described to portable telephones of various structure, and in which the circuit changing levers may be located at different heights. 29 is a stop at the outer end of the journal bearing 11 for checking the downward movement of the switch arm 12 when the telephone 3 is hung upon said arm. 31 represents a slot in one of the side faces of the casing or box, said slot being for the purpose of detachably inserting the conductors 30, a similar slot being provided on the opposite side of the box for receiving in like manner the flexible conductors running from the transmitter and call circuit to the line wire and bell circuit; or both sets of conductors might, if preferred, pass out of the single slot 31 and said slot or slots may be closed by inserting soft rubber or other plugs, or in any preferred way, after the conductors are inserted.

It will be apparent that with the above described improvement the door may be opened and that a line inspector or other authorized person may remove the transmitter from the inside of the box by simply lifting it out of the supporting ring shown at the bottom in dotted lines, and then advancing it toward the door, as illustrated by the arrow in Fig. 2. At the same time the receiver may be lifted from the hook and the entire outfit and interconnections be held disconnected from the box, thus enabling such inspector to fully inspect, and if need be repair, any part of the telephone outfit.

It is also obvious that with such an arrangement of switch operating parts the best mechanical and electrical effects are had, and that the sound waves issuing from the mouth of the person transmitting will all be effectually retained within the box, there being no opening or openings by which there may be

any emission of such sound waves after the user has effectually seated the lower portion of his face against the flexible ring 9 in the transmission opening 8.

Having thus described my invention what I claim and desire to secure by Letters Patent of the United States is—

1. An inclosing telephone casing or box having a transmission opening adapted to be located in front of an inclosed transmitter provided with a circuit changing switch; in combination with pivotally actuated means exterior to the box for yieldingly supporting the telephone receiver, and an arm secured thereto but within the box adapted to make mechanical connection with the circuit changing switch, substantially as described.

2. An inclosing casing or box for a portable telephone transmitter provided with a circuit changing lever; in combination with a circuit changing arm exterior to the box and adapted to support the receiver, said arm being attached to a shaft journaled in one side of the box; together with mechanical connections inside the box adapted to actuate the circuit changing lever, substantially as described.

3. An inclosing casing or box for a portable telephone transmitter provided with a circuit changing lever; in combination with means exterior to the box for yieldingly supporting the receiver; said means being connected through a shaft journaled in one side of the box to an arm having mechanical connection with the circuit changing lever; together with means for varying the yielding relations of the parts, substantially as described.

4. In an inclosing casing or box for a telephone transmitter provided with a circuit changing switch; a door for said box and a facial opening therein adapted to be located in front of the transmitter when inclosed; in combination with pivotally supported means exterior to the box for sustaining the receiver, and an arm secured thereto but within the box and having mechanical connection with the switch, substantially as described.

5. Circuit changing means for effecting the current changes in and through a portable telephone outfit, embracing a transmitter, a circuit changing switch, and an inclosing casing or box, said means consisting of a circuit changing arm located exterior to the casing and journaled therein; in combination with an arm within the casing operatively connected thereto and mechanically connected to the circuit changing switch, substantially as described.

6. In an inclosing casing or box for a portable telephone outfit, a door and a transmission opening; in combination with a shaft journaled in one side of the box; a receiver supporting arm attached to the outer end of said shaft, and a switch controlling arm at-

tached to the inner end thereof, substantially as described.

7. In an inclosing casing or box for a portable telephone outfit, embracing a transmitter, a receiver, a switch and the usual interconnections; a door provided with a facial opening; a shaft journaled in one side of the box; a receiver supporting arm secured to the exterior end of said shaft; a second arm attached to the inner end thereof, and means for yieldingly adjusting the relations of said parts to the switching arm of the outfit, substantially as described.

8. In an inclosing casing or box for a portable telephone outfit; a door for permitting of the insertion of the transmitter and its attached switch; a facial opening adapted to be located opposite the transmitter when in place in the box; means for removably securing the flexible conductors in the sides of the box; a shaft journaled in one side of the box; a receiver arm attached to the exterior end of said shaft, and a second arm attached to the

inner end thereof and adapted to operatively actuate the switch when the receiver is hung up or removed from said receiver arm, substantially as described.

9. In an inclosing casing or box for a portable telephone outfit; a supporting arm for the receiver secured exterior to the casing; mechanical connections therewith but located within the box for actuating the switch of the outfit when the receiver is hung up or removed; adjustable means for yieldingly varying the relations of said parts, and additional adjustable means for adapting the parts to be utilized with telephone transmitters where the switches are located at different heights, substantially as described.

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

ORRIN H. GOODRICH.

Witnesses:

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M. F. KEATING.