

May 22, 1934.

O. M. CRAIG

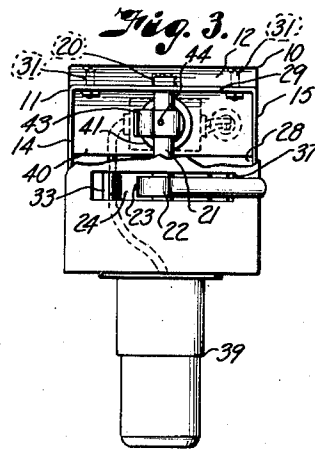
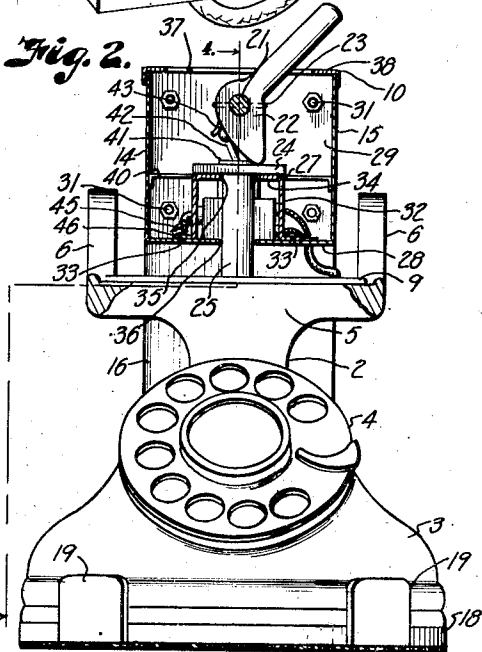
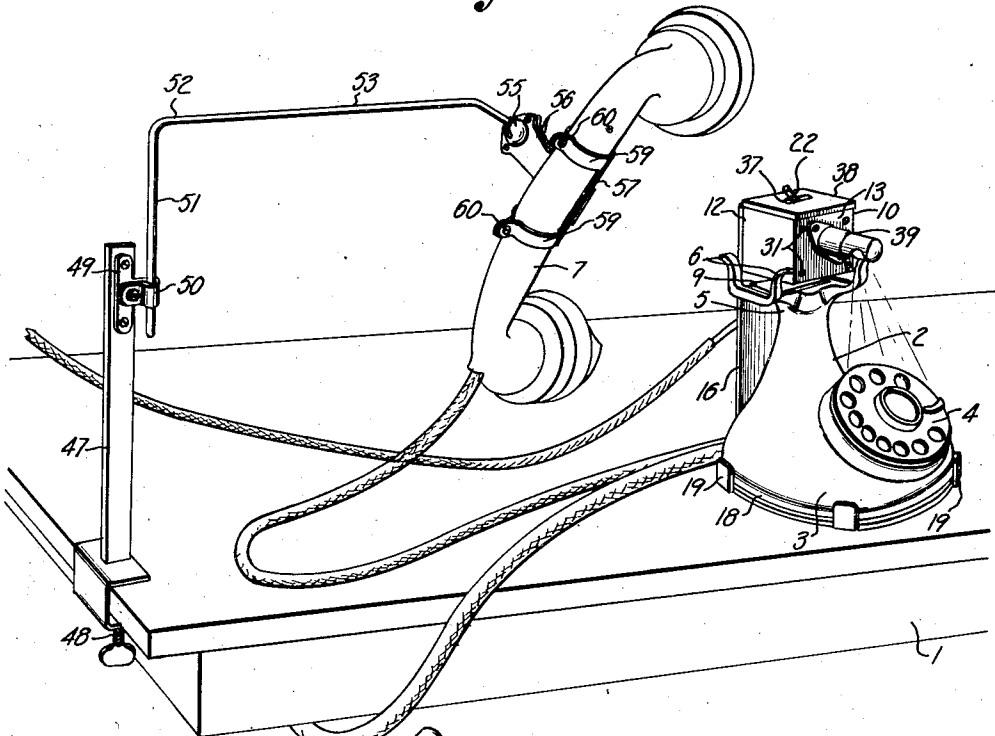
1,959,572

TELEPHONE ATTACHMENT

Filed Feb. 26, 1932

2 Sheets-Sheet 1

Fig. 1.



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2 Sheets-Sheet 2

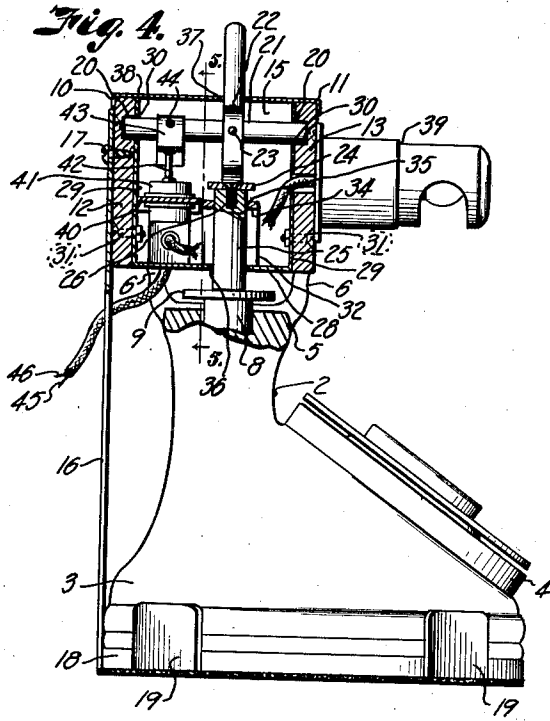


Fig. 6.

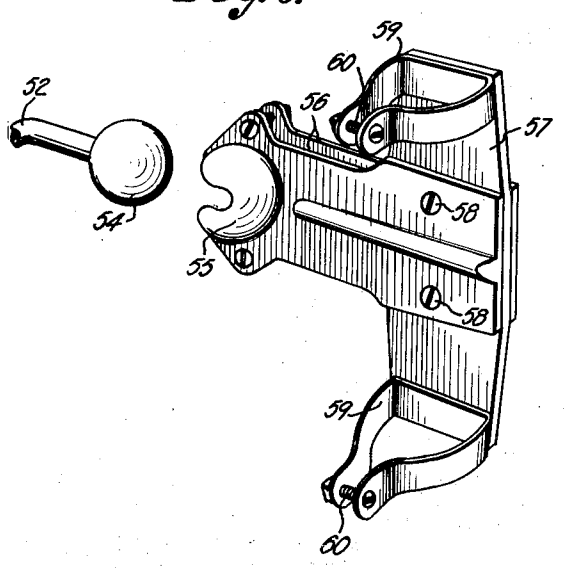
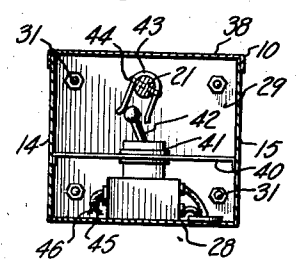


Fig. 7.



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# UNITED STATES PATENT OFFICE

1,959,572

## TELEPHONE ATTACHMENT

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Application February 26, 1932, Serial No. 595,316

3 Claims. (Cl. 179—100)

My invention relates to telephones and more particularly to switch control mechanism for telephones.

In telephones commonly provided the switch controlling connection of the telephone with the line circuit is maintained in open condition by the weight of a receiver or of a combination receiver and transmitter resting thereon. To use these types of telephones, it is necessary to employ at least one hand for removing and holding the receiver or receiver and transmitter in proper position, thus leaving only one hand free for taking notes, order, etc.

The principal object of my invention is, therefore, to provide an attachment for telephones of this character whereby both hands of the user are left free for performing other duties.

Another object of the invention is to embody a signal in an attachment of this character for indicating closed condition of the switch control and to utilize such signalling means for illuminating the dial of a telephone.

A further object of the invention is to provide a mechanism which may be attached to a telephone of conventional design for accomplishing the above results without requiring a change in the original construction or wiring of the telephone.

In accomplishing these and other objects of my invention, I have provided improved details of structure, the preferred form of which is illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view of a telephone embodying my invention and of a bracket assembly supporting a combination receiver and transmitter.

Fig. 2 is a front elevational view of a telephone equipped with a switch control shown in central section to disclose its position when in open condition.

Fig. 3 is a plan view of the switch and signal light, a portion of the switch cover being broken away to disclose the control for the signal.

Fig. 4 is a side elevational view of a dial telephone illustrating particularly the method of mounting a switch control thereon, the control housing being shown in central vertical section.

Fig. 5 is a cross section of the control housing on the line 5—5 of Fig. 4.

Fig. 6 is a detail perspective view of a supporting bracket shown in disassembled relation with the ball end of a supporting rod.

Referring more in detail to the drawings:

1 indicates a desk or other suitable support for the usual type of dial telephone 2 provided with a base 3 and a dial 4 as in common practice. The

telephone further includes a pedestal 5 terminating in spaced forks 6 for mounting a combination receiver and transmitter 7 adapted to rest in the forks and to depress a switch plunger 8 carrying a plate 9 secured on the upper end of the plunger.

It is often desirable to have both hands free for taking notes, orders, etc., particularly when using telephones of this character for business calls. However, with the arrangement heretofore provided, it is necessary to employ one hand for holding the receiver and transmitter in proper position. I have, therefore, provided an auxiliary switch control generally designated 10 and including a housing 11 having end walls 12 and 13 and side walls 14 and 15. The housing is supported above the plate 9 by a bracket arm 16 having its upper end secured by screws 17 or the like to the rear end wall 12 and its lower end fixed to a bottom plate 18 which in turn is provided with upstanding lugs 19 to serve as a socket for receiving the base 3 of the telephone, the base plate 18 being preferably padded on its lower surface with felt or similar non-abrasive material.

Provided in the end walls 12 and 13 are aligned sockets 20 for journalling a shaft 21 carrying a cam lever 22 fixed thereon by a cross pin 23 and adapted to engage the head 24 of a plunger 25. As will be apparent from Figs. 2 and 4 of the drawings, the head member is preferably secured to the plunger by a screw 26 and is of greater diameter than the plunger to form a stop wall 27 for a purpose presently described. A bottom wall 28 of the housing includes lateral plates 29 lining the inner surfaces of the end walls 12 and 13 and having openings 30 registering with the openings 20 of the end walls for receiving the shaft 21. The plates 29 may be secured in any suitable manner as by bolts 31 to the end walls.

A bracket 32 is carried by the bottom wall and is mounted thereon by outwardly directed flanges 33 welded, or otherwise secured, to the lower wall, and a cross bar 34 of the bracket is provided with an opening 35 aligned with a similar opening 36 in the bottom wall of the housing for slidably receiving the plunger 25 which is limited in its downward movement by engagement of the stop shoulder 27 with the cross bar.

It will be evident from Fig. 2 that the cam lever 22, including a handle portion extended through a slot 37 of a cover plate 38 of the housing, may be rocked together with the shaft 21 to force the plunger 25 downwardly on the plate 9, thereby opening the circuit to the telephone.

In order to inform the user of the telephone when the switch is closed, a signal light 39 is provided and is preferably mounted on the front wall 13 of the housing to project over and illuminate the dial 4. The light may be controlled by means of a switch 41 secured to a horizontal bracket 40 of the housing and a lever 42 of the switch projects between the spaced ends of a V-shaped bar 43 fixed to the transverse shaft as indicated at 44.

Wires 45 and 46, connected to and forming an electrical circuit for the signal and signal switch, preferably lead from a transformer for reducing the voltage of the usual available current to about six volts to eliminate danger of injury to the user of the telephone.

Any desired type of holder may be provided for supporting the combination receiver and transmitter in proper position for the user, but for the purpose of illustration, I have shown a pedestal 47 secured to the edge of a desk or the like by a clamp screw 48 and carrying a bracket 49 on its upper end provided with a loop portion 50 for receiving the vertical end 51 of a bracket rod 52. A horizontal portion 53 of the rod terminates in a ball end 54 which is adapted to be mounted between complementary socket portions 55 of spaced plates 56 secured in turn to the opposite faces of a transverse bar 57 by screws 58, or the like. Fixed to each end of the transverse bar, by means such as welding, is a clamp 59 provided with a bolt 60 for securing the combination transmitter and receiver 7 to the plate.

Assuming an apparatus to be constructed as described, the procedure for adjusting and using the apparatus would be as follows:

A telephone is mounted on the base plate and the housing is secured in position above the switch plunger by the screws 17 securing the housing to the pedestal and the wires 45 and 46 are connected to a suitable source of electrical current, it being desirable to employ a current of low voltage to eliminate all danger of injury from the use of my attachment. The bracket for the combination receiver and transmitter is thereupon attached to a desk or other suitable support and is properly adjusted for the convenience of the user.

If the user desires to make a call, or if the telephone bell rings to signify an incoming call, the cam lever is moved to the position shown in Fig. 4, thereby closing the circuit to the telephone.

Upon closing of this switch, the switch to the light circuit is also closed and the light will serve, not only to illuminate the dial, but to inform the user that the switch is in closed condition.

With the receiver and transmitter in proper position for use, both hands of the user are free for taking notes, orders, or the like, and when the call is completed the cam lever is moved to the position indicated in Fig. 2 thereby disconnecting the circuit to the telephone and the circuit to the signal.

What I claim and desire to secure by Letters Patent is:

1. In combination with a telephone having a receiver-actuated switch, means independent of the receiver for actuating said switch including a housing supported by the telephone, a shaft journaled in the housing, a plunger slidably mounted in the housing engaging the switch, means for limiting movement of the plunger toward the switch, and a cam lever on the shaft and contacting the plunger for actuating said switch.

2. In combination with a telephone having a vertically movable switch plunger, means for actuating said plunger including a support on the telephone, an operating plunger above and slidably mounted in the support in axial alignment with the switch plunger, a shaft journaled in the support in transverse relation to said plungers, and a lever on said shaft having a cam portion in engagement with the operating plunger to actuate said switch in response to rocking movement of said lever.

3. In combination with a telephone having a vertically movable switch element and laterally spaced guide forks which normally support the combination receiver and mouth piece on the switch element, a support for the telephone having a vertical post, a housing carried by the post and extending over the switch element between said guide forks, and having a slot in a wall thereof, a shaft rotatably mounted in the housing over said switch element, a cam on the shaft for selectively retaining said switch element in depressed position, and a lever on said shaft projecting through the slot in the housing for rotating the shaft to move the cam to and from position relatively to the switch element.

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