Sept. 22, 1931. J. O. CADIEUX 1,824,705

WALL TELEPHONE INSTRUMENT

Filed March 22, 1930

Fig. 1.

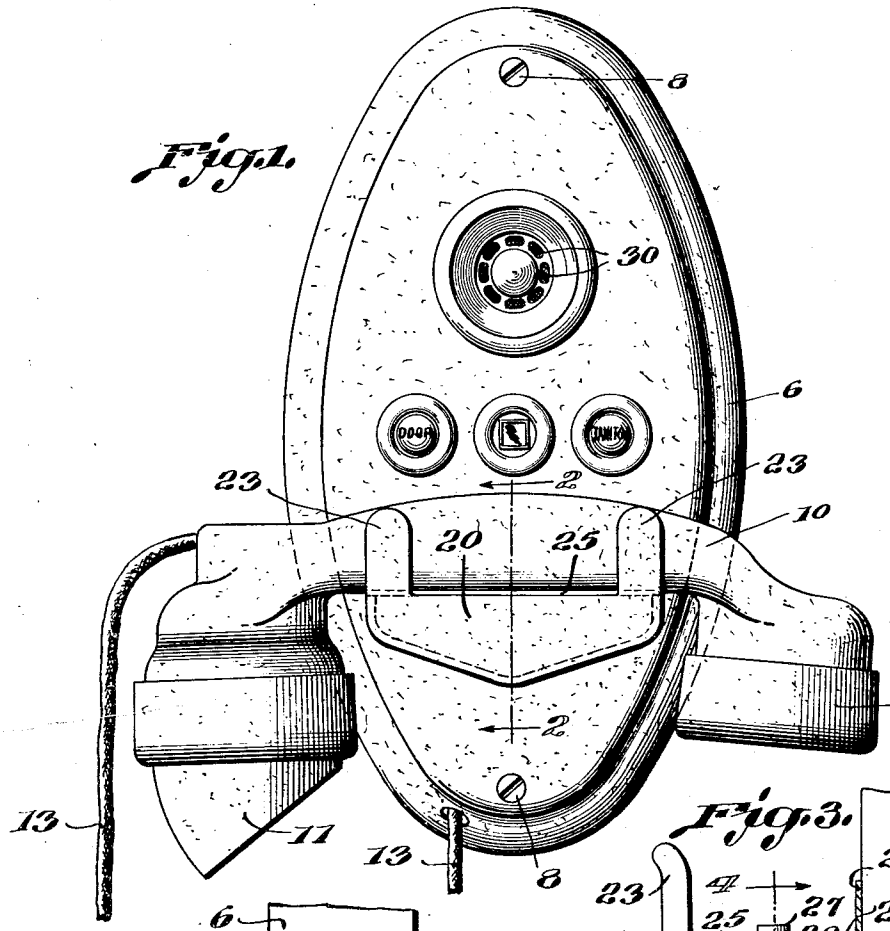


Fig. 2.

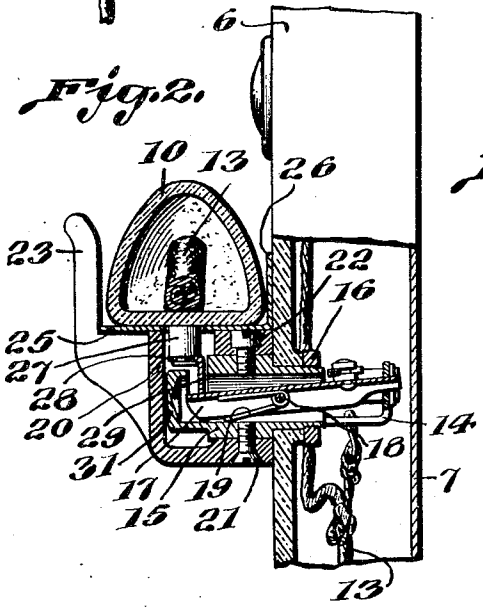


Fig. 3.

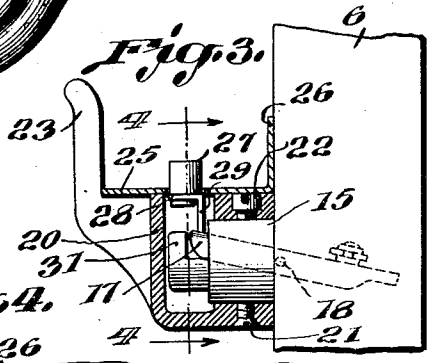
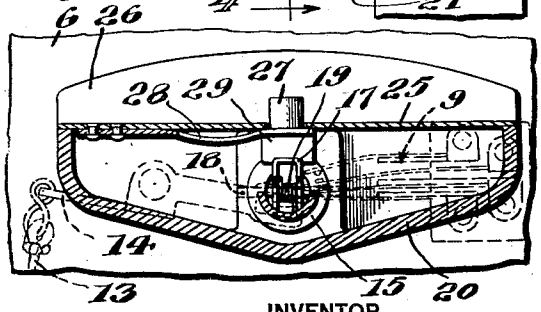


Fig. 4.



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Patented Sept. 22, 1931

1,824,705

UNITED STATES PATENT OFFICE

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WALL TELEPHONE INSTRUMENT

Application filed March 22, 1930. Serial No. 438,022.

My invention relates to instruments particularly intended for use in apartment houses where it is customary to provide a signal device in each apartment which can be actuated by a push button in a vestibule of a building. A transmitter and receiver (not shown here) are also provided in the vestibule and each apartment has a corresponding receiver and transmitter the circuits of which are connected for conversation by the act of removing the receiver from the hook of the switch in the apartment. It has been customary in these apartment type phones to have the transmitter mounted upon or housed within the same casing which carries the signal device, as for instance shown in my Patent #1,717,091. In some instances it is inconvenient to use the transmitter in a fixed position on the wall. I have accordingly provided a rearrangement and reconstruction of the parts so that a combination movable hand instrument can be utilized embodying not only the receiver but also the transmitter. The wall portion or casing of the instrument carries the signal device and the usual push buttons and a hook switch the actuating lever of which is supported in a tube which projects from the casing. On this tube is mounted a special cradle which supports the hand instrument. The parts are preferably so constructed that the same casing and switch mechanism may be employed for a construction in which the transmitter is mounted within the casing, on which also the cradle is omitted and the receiver is hung directly upon the end of the actuating lever to the hook switch.

Fig. 1 is a front view of one form of apparatus embodying my invention with the movable combination transmitter and receiver in place out of action.

Fig. 2 is a fragmentary side view and vertical section on the plane of the line 2—2 Fig. 1 and on a larger scale.

Fig. 3 is a fragmentary side view showing a section of the cradle with the hand instrument removed from the hook switch.

Fig. 4 is a fragmentary front view and vertical section on the plane of the line 4—4 of Fig. 3.

The front part of the casing 6 may conveniently be made of molded insulation and mounted upon the back plate 7 which is adapted to be secured to the wall. The parts of the casing may be secured together with screws 8 and the casing may be provided with a signal bell, plug-in contacts and push buttons as set forth in my former patent.

The switch 9 of the telephone circuit may be of any suitable construction but preferably mounted on the back of the covering or body portion of the casing.

The combination hand instrument 10 may be of any suitable construction and design and provided with a transmitter 11 and receiver 12. The conductors are carried on a cable or cord 13 which extends into the casing and is connected to the lever 14 which directly actuates the switch 9 to place the circuit in its normal inactive position when weight is applied to the cord 13, as for instance by leaving the hand instrument suspended.

A tube 15 projects to the front wall of the casing and is secured in place by a nut 16 screwed on to the rear. This tube carries the hook lever 17 which is mounted on the pivot pin 18 in the tube and pressed toward the position shown in Figs. 3 and 4 by a spring 19. The rear end of this lever 17 coacts with one arm of the lever 14 to move the switch to the normally inactive position when the front end of the lever 17 is depressed.

To support the hand instrument I provide a cradle 20 which is mounted on the tube 15 and may be secured in place by screws such as 21 and 22. This cradle 20 is provided with two upstanding guard fingers 23 to hold the hand instrument in place as shown in Figs. 1 and 2. The main portion of the cradle may be formed of a casting and the floor plate 25 may be formed of sheet metal suitably secured in place and provided with a rear flange 26 serving to protect the face of the casing.

A plunger 27 is supported on the end of the spring arm 28 which is carried by

the floor plate 25 and this plunger is normally under tension tending to lift it to the position shown in Figs. 3 and 4. The lower end of this plunger is provided with a lug 29 which engages the outer end of the lever 17 so that when the hand instrument is in the cradle 20 it engages and depresses the plunger 27 and holds the lever and switch plate in the position shown in Fig. 2, which is the normally inactive or disconnected position.

The instrument as herein shown is provided with inlets 30 through which the sound of the signal bell or buzzer is emitted.

The same construction can be utilized to house the transmitter as in my former patent, in which case the cradle 20 would not be used and the receiver of suitable type (not shown) could be hung on the end of the hook lever 17. I accordingly provide a guard 31 on the end of the tube or stud 15 which serves to protect the end of the lever 17 and also prevent the receiver eye from slipping off.

I claim:

1. A telephone instrument comprising a wall casing containing the signal device and circuit switch and lever and having a projecting tube containing a hook lever, a cradle supported by said tube, a plunger coacting with the hook lever, a hand combination receiver and transmitter adapted to rest in the cradle on said plunger and having a cord connected to said switch lever in said casing.

2. An attachment for a wall telephone comprising a cradle having a socket adapted to be mounted on a horizontal lever-carrying tube of a wall casing, a spring arm mounted in the cradle and having a plunger for receiving a hand instrument and a depending lug for engaging a hook lever in said tube.

3. A telephone instrument comprising a casing having a signal device and a switch, a lever for actuating said switch, a second lever having its front end projecting from said casing and its rear end engaging the first lever, a cradle mounted on the front of the casing and having a spring supported plunger with a depending lug engaging the front end of the second lever and a combination hand receiver and transmitter adapted to rest in said cradle and to depress said plunger and having a cord extending into the casing and connected to the first lever.

4. A telephone instrument comprising a casing, a cradle secured to the front thereof and having a floor plate with a rear flange, a plunger projecting through the floor plate, a switch lever beneath the plunger and a combined transmitter and receiver adapted to rest in the cradle on the floor plate in front of said flange and to depress the plunger.

5. A telephone instrument comprising a casing having a sound opening, a signal device behind the opening, a switch in the casing, a cradle on the front of the casing having guard fingers spaced apart from the front of the casing, a switch actuating lever projecting into the cradle and a combination receiver and transmitter resting in the cradle on the switch lever and connected to said switch.

6. A telephone instrument consisting of a wall casing comprising signaling mechanism having a switch therein, a cradle secured to the front of said casing, switch actuating mechanism within said cradle, and a combined receiver and transmitter adapted to cooperate with said cradle and said actuating mechanism in a manner whereby said switch is operated.

7. In combination, a telephone instrument consisting of a wall casing having a cradle, a switch operable within said casing, signaling means associated with said switch, switch actuating mechanism coacting with said switch and said cradle and means for operating said mechanism within said cradle in a manner whereby said switch is actuated.

8. In combination, a telephone instrument wall casing having a signaling device and a switch, a cradle adapted to be secured to said casing, switch actuating mechanism associated with said switch and said cradle and means coacting with said cradle and said mechanism in a manner whereby said switch is actuated.

9. In combination, a telephone instrument wall casing having a switch, a combined hand transmitter and receiver in circuit with said switch, a cradle secured to the casing and adapted to support the transmitter and receiver and means coacting with said switch and said cradle capable of actuating said switch upon the association and dissociation of the transmitter and receiver with the cradle.

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