Nov. 29, 1927. 1,650,699

W. H. DILLON

TELEPHONE SIGNAL LIGHT

Filed Feb. 5, 1927

Fig. 1.

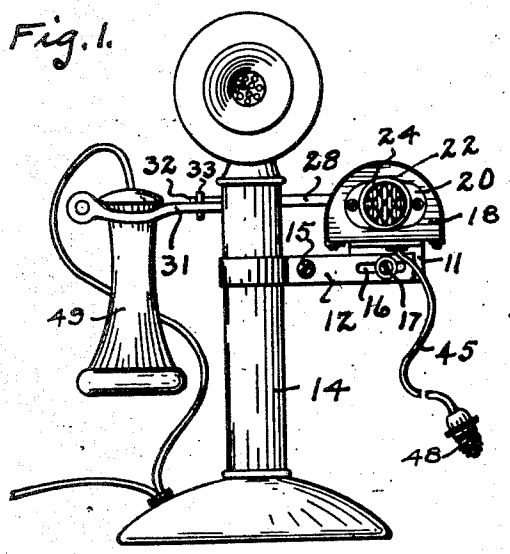
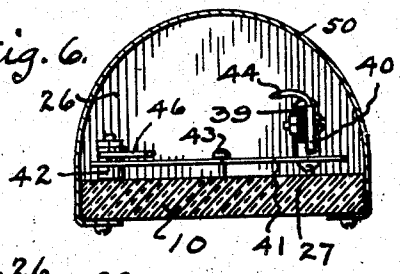


Fig. 6.



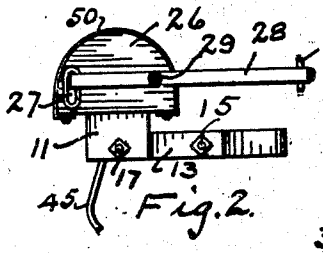


Fig. 2.

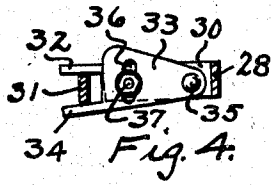


Fig. 4.

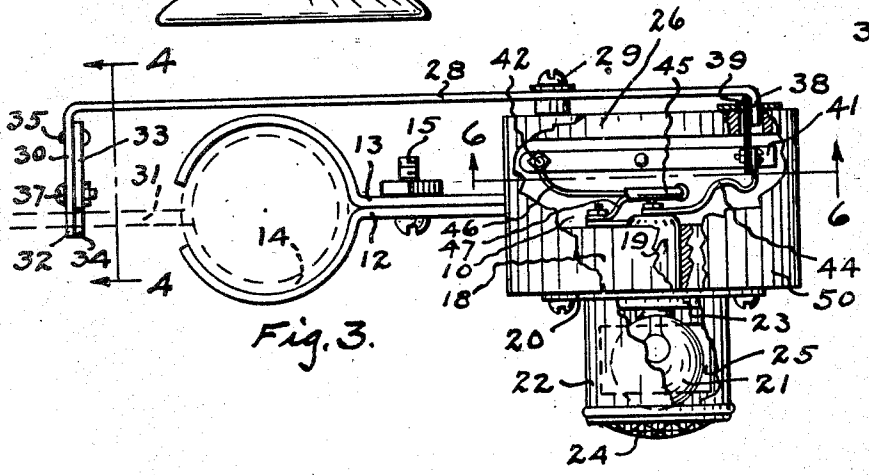


Fig. 3.

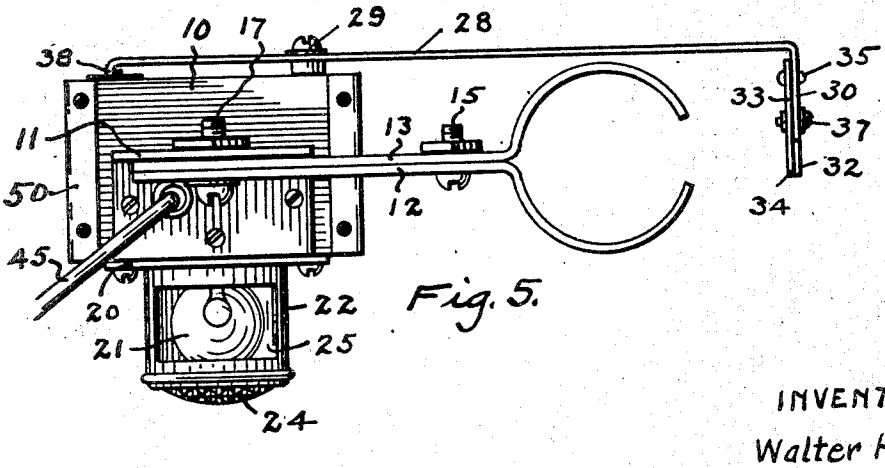


Fig. 5.

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UNITED STATES PATENT OFFICE.

WALTER H. DILLON, OF INDIANAPOLIS, INDIANA.

TELEPHONE SIGNAL LIGHT.

Application filed February 5, 1927. Serial No. 166,034.

This invention relates to a device to be attached to a telephone for the purpose of indicating when the telephone receiver has been left off the receiver hook and also for the purpose of automatically causing a light to shine about the telephone as a source of illumination when the telephone is being used.

While adapted for use in connection with any type of telephone, the invention is of particularly great advantage when used in cooperation with the well known desk-type telephone. In many cases, especially in stores, the telephone is located in an out-of-the-way place, so that little or no light may be had about the telephone to permit the person using the telephone writing down an order or make notes of the received message. Particularly is a light of great advantage when the telephone is of the automatic type having an operating dial affixed to its base and the dial must be operated at night. My invention supplies a light directed toward the telephone base, automatically switched on when the telephone receiver is removed from its hook and automatically switched off when the receiver is returned to its hook.

Again, in using a telephone in a store, the person answering the telephone is often called away from the telephone and leaves the receiver off its hook intending to return and complete the conversation, but being interupted forgets to return, and as the receiver remains off the hook, no further incoming calls may be received. My invention provides a signal observable from a distance indicating at once that the receiver is off its hook, the signal being automatically operated in cooperation with the receiver hook.

The invention is described in one particular embodiment, in reference to the accompanying drawing, in which

Fig. 1, is a front elevation of a desk-type telephone with my invention attached;

Fig. 2, a rear elevation of my device detached from the telephone;

Fig. 3, an enlarged fragmentary top plan view of the device;

Fig. 4, a vertical section on the line 4—4 in Fig. 3;

Fig. 5, a bottom plan view of the device; and

Fig. 6, a vertical section on the line 6—6 in Fig. 3.

Like characters of reference indicate like parts throughout the several views.

The signal device comprises a base 10, with a depending bracket 11. A clamp formed of the two symmetrical pieces 12 and 13 is adapted to grip about the telephone column 14 by one end by means of drawing the two pieces 12 and 13 together by the bolt 15. The other end of the clamp is provided with a slot 16 through both pieces, through which slot is passed a bolt 17 engaging in the bracket 11. By means of the slot 16, the bracket 11 and its base 10 may be moved toward or away from the column 14 as desired within the limits of the length of the slot, and may also be rotated to various angles about the bolt 17, and any position of the base 10 is maintained by tightening up the bolt 17.

The base 10 carries a front wall 18 through which is passed an electric lamp socket 19 and there secured by the front plate 20. A lamp 21 is carried in the socket 19 to project forwardly from the front 18, and a shield 22 is slipped over the lamp to be engaged frictionally on the collar 23 carried by the plate 20.

The forward side of the shield 22 is enclosed with a glass 24 preferably red in color, though any color may be employed as desired. The under side of the shield 22 has a cut-out 25 through which light from the lamp may be directed downwardly.

The base also carries a rear wall 26, through which a slot 27 is cut near one side to permit the lever 28 to enter and travel up and down as it swings about its pivot 29 on the other side of the wall 26. The lever 28 extends back of the telephone column 14 from the pivot 29 and has a forwardly bent section 30 directed toward the telephone receiver hook arm 31. This section 30 has a notch cut back in from its front edge to leave a forwardly projecting finger 32 to rest on top of the arm 31.

The arm 31 in various telephones varies in height, and to provide for such variation,

a plate 33 is pivotally carried by its rear end on the section 30 and has a finger 34 adapted to contact the under side of the arm 31 by swinging the plate 33 upwardly about its pivot 35. The plate 33 is provided with a slot 36 therethrough forward of the pivot 35, through which slot a bolt 37 carried by the section 30 is passed. This bolt 37 is drawn up to retain the plate 33 in a position whereby the arm 31 is gripped between the two fingers 32 and 34. The fingers 32 and 34 may be properly adjusted to the arm 31 in a horizontal plane by swinging the base 10 around the column 14 through the clamp pieces 12 and 13, and in a vertical plane by raising or lowering the clamp pieces 12 and 13.

The end of the lever 28 on the other side of the pivot 29 enters the slot 27 as above described by a short forwardly-turned section 38 to which is attached a short length of a non-conducting or insulating material 39 which extends forwardly through the slot 27 to beyond the front face of the rear wall 26. A contact block 40 is mounted on the insulated block 39 to project downwardly to remain normally just out of contact with the outer end of the contact spring 41.

This contact spring 41 is rigidly secured to and above the base 10 by its opposite end by the terminal post 42 and is prevented from rising above its normal position of non-contact by a pin 43 passed through the spring 41 and secured in the base 10.

A conductor wire 44 interconnects the contact block 40 and one terminal of the lamp socket 19. A two wire cable 45 passes from without up through the base 10, one wire 46 of which is secured to the contact spring terminal post 42, and the other wire 47 is secured to the other terminal of the socket 19. The cable 45 carries a suitable plug 48 on its outer free end to be inserted in a suitable receptacle socket (not shown) in an outlet of any suitable lighting electric circuit. A cover 50 completely encloses the contacting members.

The device as above described is so adjusted on the telephone column 14 that when the receiver 49 is removed from its hook arm 31 to place the telephone in operation, the upward travel of the arm 31 in closing its own switch within the telephone rocks the lever 28 about its pivot 29 to cause the contact block 40 to press down on the contact spring 41, which contacting action closes the circuit from the independent lighting circuit through the lamp 21 and thereby illuminates the lamp to cause light to shine forwardly through the red glass 24, as a signal indicating that the receiver 49 is off its hook arm 31, and also to cause light to shine downwardly through the shield opening 25 to illuminate an appreciable area around about the telephone base.

The lamp 21 so remains illuminated until the receiver 49 is replaced on its arm 31, which arm travels downwardly by the weight of the receiver and rocks the lever 28 to lift the block 40 from contact with the spring 41 to interrupt the flow of current to the lamp 21.

I claim:

In a telephone light, a telephone, a telephone receiver arm, a switch housing adjustably attached to the telephone, a lever pivotally attached to the switch housing having a short end extended to within the housing and a long end extended out from the pivot point and along said receiver arm, a member in the switch housing adapted to be contacted in association with the lever end, and jaws extended from the long end of the lever, one below and one above the receiver arm, one of said jaws being adjustably carried to swing toward the other jaw.

In testimony whereof I affix my signature.

WALTER H. DILLON.