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O. A. SHANN

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HAND TELEPHONE

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FIG. 1

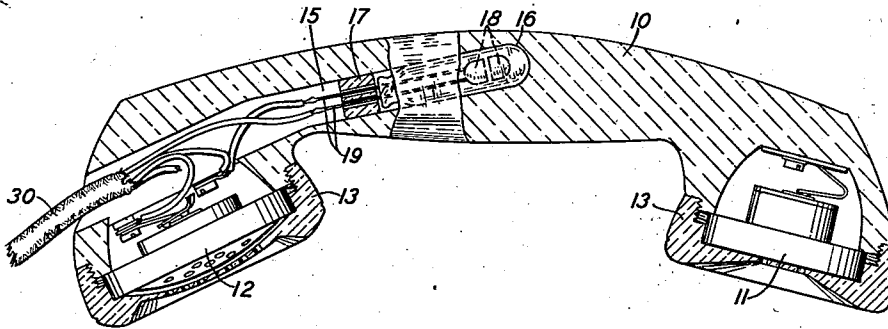
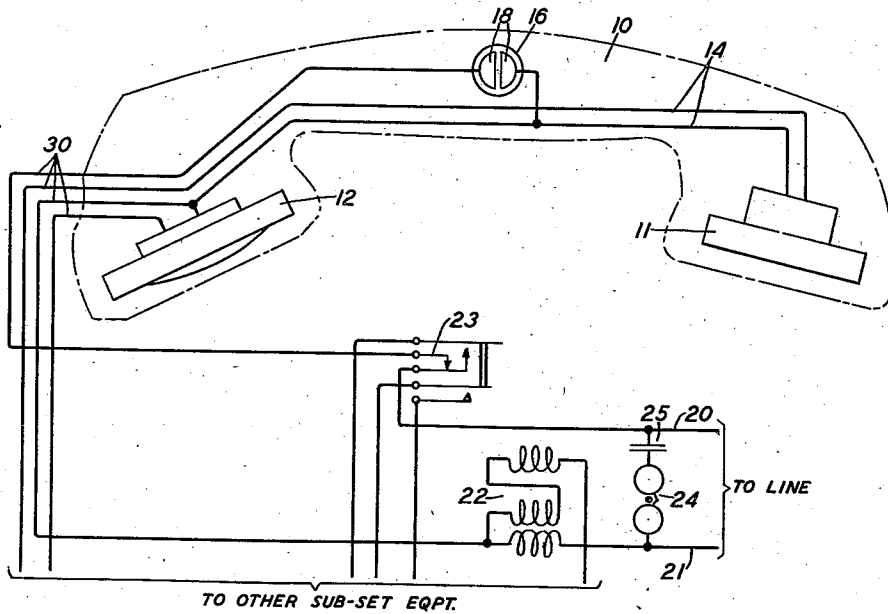


FIG. 2



INVENTOR
O. A. SHANN
BY
Walter C. Kiesel
ATTORNEY

UNITED STATES PATENT OFFICE

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HAND TELEPHONE

Oscar A. Shann, Bayside, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application June 20, 1939, Serial No. 280,045

1 Claim. (Cl. 179-103)

This invention relates to telephone apparatus and more particularly to hand telephones having a plurality of telephone instruments, such as a receiver and a transmitter, mounted upon a common handle.

In some cases, a plurality of telephone sets may be mounted in proximity in a room, or upon a single table, desk or the like and difficulty may be experienced by the subscriber or attendant in discerning which of the sets is being called at any particular time because the several sets may have ringers of the same tone, or differences in the tone of several ringers may not be clearly apparent. In other cases, for example in a sick room, the loud ringing tone of the usual ringer may be undesirable.

One object of this invention is to produce a visual signal at a telephone set being called, the signal being clearly visible from substantially all directions and at fairly great distances.

In accordance with one feature of this invention, a hand telephone is provided, within the handle thereof, with a glow or filamentary lamp, the handle being formed wholly or in part of a transparent or translucent material. The lamp may be connected to the ringing circuit of the telephone set and utilized either as the sole calling signal or as a signal auxiliary to the ringer. When the lamp is energized, the entire handset handle, or the major portion thereof, glows and there is thus produced a clear signal visible at a distance and from all directions.

The foregoing and other features of this invention will be understood more clearly and fully from the following detailed description with reference to the accompanying drawing, in which:

Fig. 1 is a side view mainly in section of a hand telephone illustrative of one embodiment of this invention; and

Fig. 2 is a circuit diagram showing one manner of energizing the signal lamp.

Referring now to the drawing, the hand telephone shown in Fig. 1 comprises a handle 10 of transparent or translucent material, such as polymerized methyl methacrylate suitably plasticized, having recesses at its end for accommodating a receiver 11 and a transmitter 12, which may be of standard construction. The receiver and transmitter are held in position by caps 13 threaded to the handle. The handle may have embedded therein a pair of conductors 14 and is provided at one end with an aperture for receiving a four conductor cord 30.

As shown clearly in Fig. 1, the handle 10 is provided also with an elongated recess or bore

15 which extends inwardly to or beyond the center of the handle. Mounted within the recess or bore 15 at the inner end thereof is a signal lamp 16, which is insertable and removable through the recess or bore 15 and may be held in place by a translucent or transparent plug 17 fitted in the bore or recess. The signal lamp may comprise an enclosing vessel having therein an ionizable atmosphere and a pair of substantially hemispherical glow electrodes 18 connected to respective leading-in conductors 19. Although the signal lamp 16 shown is of the glow type, it will be understood, of course, that other types of lamps, for example filamentary, may be employed.

As illustrated in Fig. 2, the receiver 11 and transmitter 12 are connected to three of the conductors of the cord 30 and may be connected to the line terminals 20 and 21 in ways known in the art. One of the conductors 19 is connected to the conductor 14 common to the transmitter and receiver and through one of the cord conductors 30 and a winding of the induction coil 22 to the line terminal 21. The other conductor 19 is connected to the other line terminal 20 through one of the cord conductors 30 and a contact switch 23. The contact switch 23 may be the usual ringer controlling contact in the mounting of a telephone set, such as shown in Patent 2,096,046, granted October 19, 1937, to John J. Kuhn and George R. Lum, or an auxiliary contact. In either case, the contact switch is associated with the plunger of the mounting so that it opens when the hand telephone is removed from the mounting and closes when the hand telephone is placed on the mounting.

A ringer 24, having a condenser 25 in series therewith, is bridged across the terminals 20 and 21 as shown.

When a ringing current is supplied to the terminals 20 and 21 over the telephone line, the ringer 24 will be actuated to produce an audible signal. Simultaneously, the lamp 16 will be energized and, inasmuch as the handle 10 is of transparent or translucent material, a clear visual signal visible from all angles and at a distance will be produced. The subscriber or attendant, then, may readily discern that the telephone set at which the handset is located, is being called and can easily distinguish this set from others which may be on the same table or desk as or in the vicinity of the set being called. When the handset at the telephone called is removed from the mounting, the contact switch

23 is opened and the energizing circuit likewise is opened so that the lamp is extinguished.

It will be understood, of course, that the ringer 24 may be omitted from the set and the lamp 16 utilized as the sole signal to indicate that the telephone set is being called. It will be understood also that various modifications may be made in the specific embodiment shown and described without departing from the scope and spirit of this invention as defined in the appended claim.

What is claimed is:

Telephone apparatus comprising a hand telephone including a handle of translucent mate-

rial, said handle having therein an elongated bore extending from one end to the central portion thereof, the outer end of said bore being open, telephone instruments mounted at opposite ends of said handle, a signal lamp insertable into said bore through said open end thereof and mounted at the inner end thereof, a locking member also insertable in said bore through said open end thereof and fitted in said bore to hold said lamp in position, and a multiconductor cord extending into said handle through said open end of said bore and having its conductors connected to said lamp and said instruments.

OSCAR A. SHANN.