

[54] TELEPHONE ALARM SYSTEM
 [76] Inventors: Joseph L. Stendig, 2500 Riverside Dr.; Claude A. Davis, 568 Piney Forest Rd., both of Danville, Va. 24541

2,439,502 4/1948 Tate..... 179/5 R
 2,520,340 8/1950 Robinson..... 179/5 R
 3,255,441 6/1966 Goodwin et al..... 340/220
 3,274,578 9/1966 Block et al..... 340/416
 3,441,929 4/1969 Coffey et al..... 340/409

[22] Filed: Oct. 11, 1972

Primary Examiner—David L. Trafton
 Attorney, Agent, or Firm—Anthony A. O'Brien

[21] Appl. No.: 296,612

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 209,180, Dec. 17, 1971, abandoned.

[52] U.S. Cl. 340/220, 179/5 R, 340/227 R, 340/276, 340/416

[51] Int. Cl. G08b 19/00

[58] Field of Search..... 179/5 R, 2 A; 340/216, 340/416, 220

[57] **ABSTRACT**

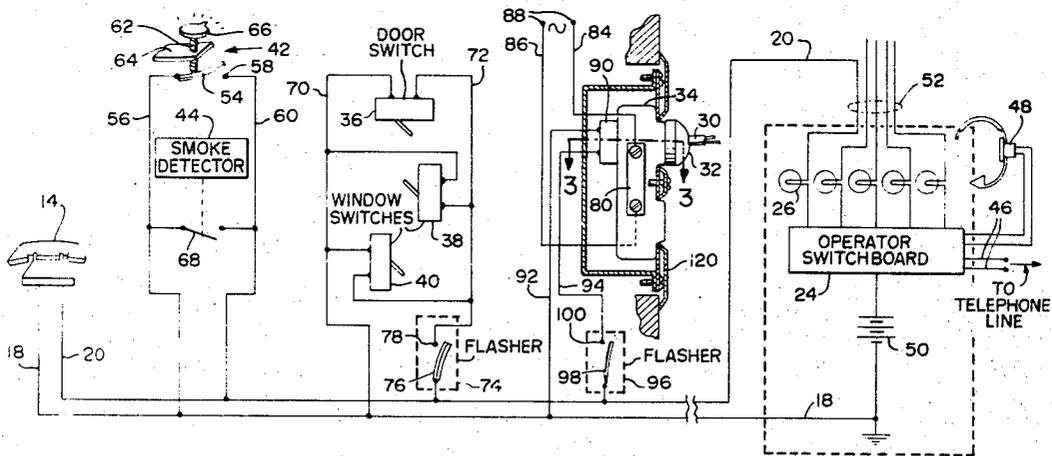
An alarm system is disclosed having a condition responsive means therein which completes a circuit through a telephone and an auxiliary telephone ringing power supply upon the occurrence of an alarm condition. The circuit includes an interrupter to cause the telephone to ring in response to the alarm condition.

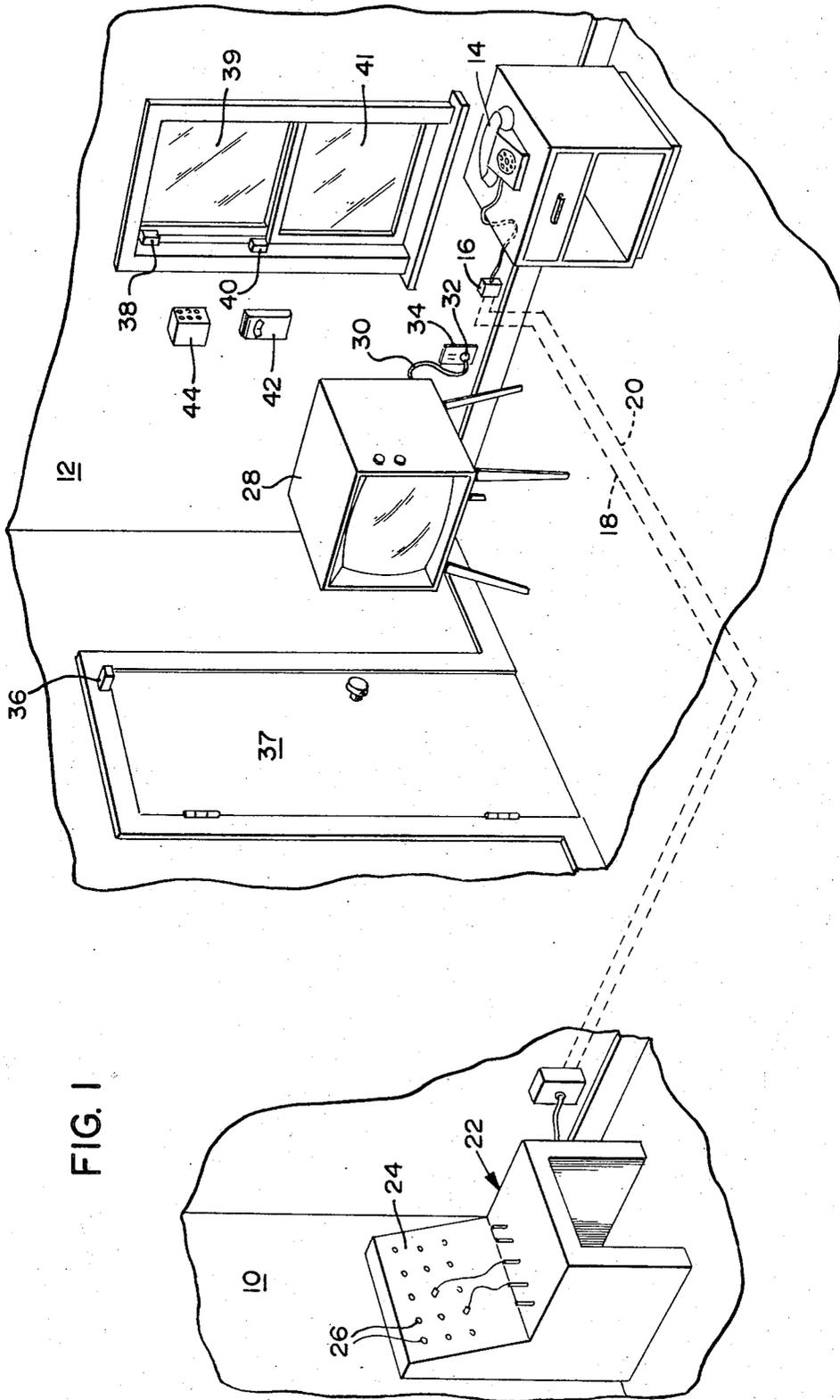
[56] **References Cited**

UNITED STATES PATENTS

2,000,185 5/1935 McBrien et al..... 340/216

12 Claims, 6 Drawing Figures





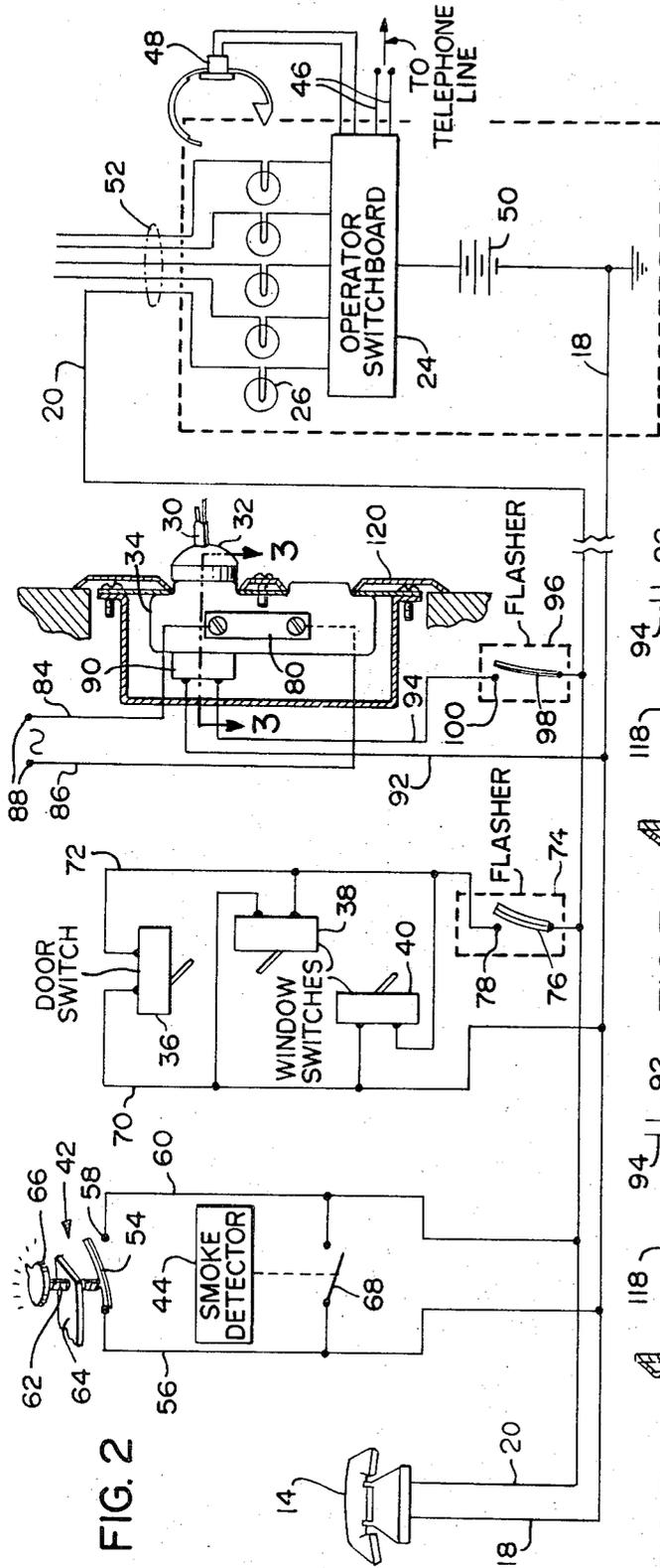


FIG. 2

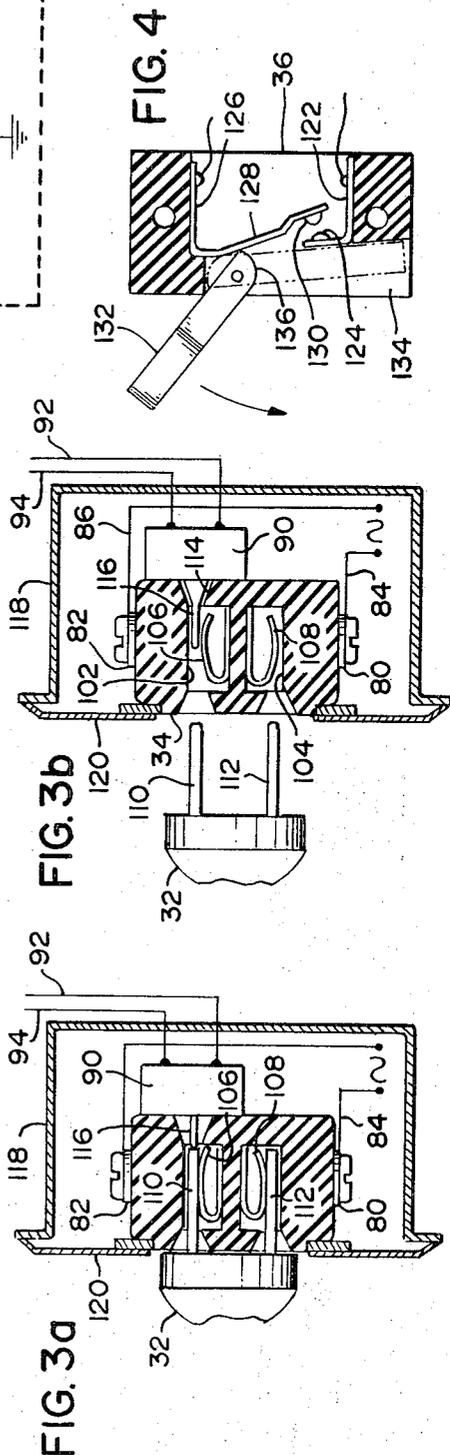


FIG. 3a

FIG. 3b

FIG. 4

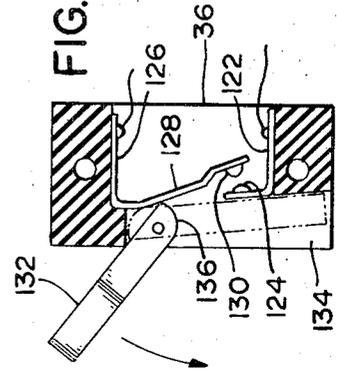
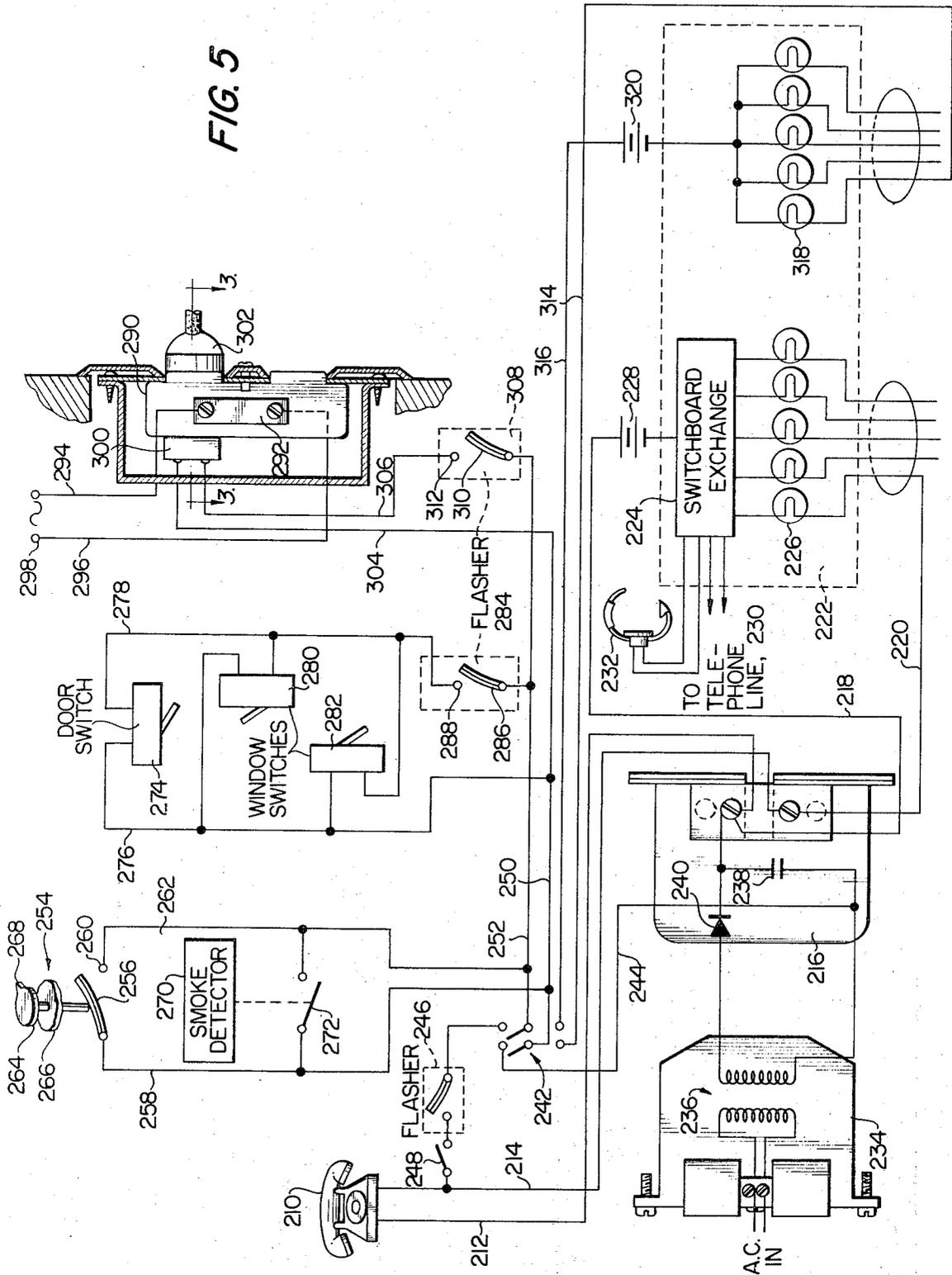


FIG. 5



TELEPHONE ALARM SYSTEM

CROSS REFERENCE TO RELATED APPLICATION

This is a continuation-in-part of copending application Ser. No. 209,180 filed Dec. 17, 1971.

BACKGROUND OF THE INVENTION

1. Field of the Invention:

The present invention pertains to security systems and more particularly to a security system especially suited for use with a telephone system to provide distinct alarm indications of unauthorized entry, burglary, fire and/or smoke from a number of spaced points or locations within an area serviced by the telephone system.

2. Description of the Prior Art:

People in this and other countries are becoming increasingly concerned about personal safety and the security of their homes and businesses. This concern can be appreciated from the number of presently available electronic security systems which range in sophistication from simple door-tripped alarm devices to complex computer-monitored networks and which are all, in some degree, enjoying widespread commercial acceptance. More than the individual, the businessman realizes that it is becoming economically necessary to purchase and/or lease security systems of this type in order to prevent or at least deter the high incidence of burglary and unlawful entry which he now faces. Motel owners, for example, face an unusually difficult challenge in this regard since a potential thief can easily check in, drive away from the motel office to the door of his room, disconnect and remove the television set in privacy, and abscond undetected within a matter of minutes.

Past activity in this field has outlined certain minimal criteria which must be met in the design of an effective security system. For instance, the system must be capable of promptly detecting an unauthorized entry, and more importantly, the theft of expensive appliances such as televisions, radios and the like. The system must also be capable of concealment both to prevent evasion and, in the case of motels, hospitals, etc., to avoid calling attention to the existence of a crime threat. It is also critical that the system design be simple and foolproof to minimize the occurrence of false alarms, to reduce initial cost and maintenance outlays, and to reduce the wiring necessary to install the system in existing facilities.

The prior art, as exemplified by U. S. Pat. No. 3,114,904, No. 3,411,150, and No. 3,484,775, is generally cognizant of security systems utilizing alarm indications upon the theft of an electrical appliance. However, systems of this general type have not proven fully satisfactory since they are complex and expensive, tend to require frequent maintenance, utilize recognizable, non-conventional components and thus may be easily detected and avoided by a thief, and do not provide integrated protection for unauthorized entry, burglary, fire and/or smoke.

SUMMARY OF THE PRESENT INVENTION

Accordingly, it is an object of the present invention to construct a security system utilizing a standard telephone to alert the premises in the event of a crime (e.g., burglary) and/or a disaster (e.g., fire).

The present invention is summarized in an alarm system including a condition responsive means having a pair of terminals and a condition responsive switch therebetween, a telephone ringing current supply serially connected with the pair of terminals of the condition responsive means, and means connecting the lines of a telephone across the serially connected condition responsive means and current supply to thereby enable the telephone to ring as an alarm indication upon closure of the condition responsive switch.

Another object of this invention is to provide a security system capable of providing alarm indications at either a local telephone or a remotely located switchboard.

Still another object of this invention is to construct an inexpensive, concealed security system capable of providing alarm indications of burglary, unauthorized entry, fire and/or smoke.

Another object of this invention is to construct a security system in which the removal of a standard two-prong a.c. plug from a conventional a.c. wall receptacle may be monitored in concealment over local telephone lines.

This invention has a further object in that a concealed security system is used with a local telephone system to alert the telephone operator of the occurrence of a crime (e.g., burglary) and a disaster (e.g., fire) by distinct alarm signals.

Further objects and advantages of the present invention will be apparent from the following description of the preferred embodiment when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a diagrammatic view in partial perspective of a motel illustrating the use of a security system according to the present invention;

FIG. 2 is a schematic diagram partially in block form of a preferred embodiment of the security system of FIG. 1;

FIG. 3a is a sectional view of a monitored receptacle of the security system with a conventional plug inserted therein;

FIG. 3b is a view similar to FIG. 3 with the plug removed from the receptacle;

FIG. 4 is a sectional view of a trip-switch of the security system; and

FIG. 5 is a schematic diagram partially in block form of another embodiment of a security system according to the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention has general utility for protecting any number of buildings or facilities such as motels, factories, offices, hospitals and private residences and is shown and described herein in connection with a motel for exemplary purposes only. Referring to FIG. 1, there is shown diagrammatically a central office 10 of a motel or hotel having a plurality of individual rooms 12 each including a conventional telephone 14 which is connected through a wall-box 16 and a pair of leads 18 and 20 to an operator's console 22 located in the office 10. The operator's console may be of any suitable design and includes a control panel or switchboard 24 which may be provided with appropriate telephone switches or plug cords to enable the operator to

interconnect the line pair for each room to outside telephone lines or to other inside line pairs as required. The particular structural configuration of the various switching networks of console 22 is well known and thus need not be described in detail for the sake of brevity.

Control panel 24 is also provided with a bank of lamps 26 each corresponding to a room or individual telephone extension to provide a visual indication each time the handset of one of the telephones 14 is lifted from the cradle.

In each of the rooms 12, any number of electrical appliances may be provided such as a television set 28. Television set 28 receives operating potential via power line 30 which is terminated in a standard two-prong a.c. plug 32 adapted to cooperate with an a.c. outlet 34. Also located in each room 12 is a door trip-switch 36 mounted to the frame of door 37 such that the switch will be tripped to an electrically closed position whenever door 37 is opened. Likewise, a window trip-switch 38 is disposed on the frame of upper window section 39 and a second window trip-switch 40 is similarly located relative to lower window section 41. A thermostat 42, which may be adjustably preset to respond to a predetermined excessive temperature, may be mounted in any desired location on the wall of room 12 and is preferably attached above telephone wall-box 16 as illustrated. Similarly, a smoke detector 44 is located on the wall of room 12 above wall-box 16. It is noted that smoke detector 44 may be of any suitable type, such as an electrostatic particle detector, adapted to detect the presence of smoke within room 12 and close a set of electrical contacts in response thereto. Since smoke detectors of this general type are well known, the structural details of detector 44 will not be described herein for the sake of brevity.

Referring to FIG. 2, which is a schematic diagram of the security system of FIG. 1, the switchboard 24 of the operator's console 22 is connected to at least one leased public telephone line 46 and includes a suitable headset 48 to enable the operator to monitor the telephones 14 in each room 12. Each of the lamps 26 is connected through switchboard 24 to a source of operating potential such as battery 50 which is returned to ground as shown. Lamps 26 are all normally connected with battery 50 with the connection therebetween controlled by switchboard 24 such that the operator, for example, may disconnect or by-pass each lamp to connect any of the telephones 14 directly with an outside line 46 or another inside line pair 18-20 as desired.

Each of the lamps 26 is also connected with line 20 of a respective one of the line pairs for telephones 14 via a cable 52, with line 18 from all of the telephones connected in common. In this manner, the lifting of the handset of any one telephone 14 completes a current path between lines 18 and 20, as is well known, to enable energization of the lamp 26 corresponding to the room where that telephone is located. The operator thereafter responds to the call by connecting headset 48 across lines 18-20 for the indicated room telephone and acknowledging the caller's request.

Thermostat 42 includes a bimetal 54 connected to a lead 56 and having one end fixed in place and the other end movable relative thereto with heat. A fixed contact 58 connected to a lead 60 is adapted to cooperate with bimetal 54 to provide a heat-responsive switch. Bimetal 54 is disposed such that it is normally remote from

contact 58 to form an open circuit and responds to an increase in heat to engage contact 58. The temperature at which bimetal 54 engages contact 58 is preselectable by a screw 62 which is threadedly mounted in a support member 64 and is adapted to engage an intermediate point on the surface of bimetal 54 for repositioning the same relative to contact 58. A knob 66 is affixed to the upper end of screw 62 for cooperation with a calibrated scale.

Smoke detector 44 is operatively connected with a set of contacts 68, with the contacts normally open, as shown, and adapted to be closed by the smoke detector 44 whenever smoke is present in room 12. Contacts 68 are connected between leads 56 and 60 in parallel with thermostat 42, and leads 56 and 60 are in turn connected with telephone lines 18 and 20, respectively, in parallel with the telephone 14.

The door trip-switch 36 is connected between a pair of leads 70 and 72, with window switches 38 and 40 connected in parallel thereacross. Lead 70 is directly connected with telephone line 18 and lead 72 is connected with telephone line 16 through a flasher device schematically shown at 74. Flasher 74 may be of any suitable type which has a preselected frequency of operation and, for example, may include a bimetal 76 which is normally in engagement with a fixed contact 78 and is adapted to move away from contact 78 upon self-heating.

Power receptacle 34 of the security system of the present invention includes a pair of contact terminals 80 and 82 which are connected by lines 84 and 86, respectively, to a source of alternating current represented schematically by terminals 88. Affixed to a rear surface of receptacle 34 is a single-pole, single-throw microswitch 90 which is responsive to insertion and removal of plug 32 and will be described more fully below. Microswitch 90 is connected in parallel with telephone 14 by leads 92 and 94 which are respectively connected with lines 18 and 20, the latter connection being through a flasher 96. Flasher 96 is similar to flasher 74 and includes a self-heating bimetal 98 which cooperates with a fixed contact 100; however, flasher 96 operates at a frequency which is different from that of flasher 74.

Referring to FIGS. 3a and 3b, receptacle 34 includes a pair of spaced, parallel plug-prong receiving slots 102 and 104 and a pair of contact blades 106 and 108 which are partially folded over upon themselves to extend partially into slots 102 and 104, respectively. Contact blades 106 and 108 are electrically interconnected internally of the receptacle 34 with terminals 82 and 84 to feed operating potential from source 88 to plug 32 via prongs 110 and 112.

Slot 102 of receptacle 34 extends completely there-through by means of an aperture 114 in a rear wall of the receptacle. As shown in FIGS. 3a and 3b, microswitch 90 has an actuating arm 116 extending therefrom and is mounted on receptacle 34 such that arm 116 extends through aperture 114 into slot 102. Arm 116 is biased outwardly of switch 90 and is adapted to be engaged by prong 110 of plug 32 and moved linearly thereby along the elongated axis of slot 102. Also, microswitch 90 is constructed such that it assumes an open state whenever plug 32 has been inserted into the receptacle 34 as is shown in FIG. 3a and is actuated to a closed state upon removal of the plug 32 as is shown in FIG. 3b.

Receptacle 34 and switch 90 are mounted in a conventional wall-box 118, and a cover plate 120 is suitably secured to the receptacle to close box 118 in the conventional manner. It can be appreciated that the existence of microswitch 90 cannot be detected without removing plug 32 and wall plate 120 since plug 32 is of conventional design and the outward appearance of receptacle 34 is identical to that of any ordinary, unprotected or unmonitored outlet.

As illustrated in FIG. 4, door trip-switch 36 includes a hollow rectangular body in which is mounted a first L-shaped contact member 122 having a contact 124 disposed on the end of the shorter arm thereof and a second L-shaped contact member 126 having a resilient contact arm 128 which carries a contact 130 on an offset distal end for cooperation with contact 124. A lever 132 is pivotally mounted onto the body of the switch for movement between a standby position as illustrated and a tripped or released position (shown in dashed lines) within a rectangular channel 134. As can be seen in FIG. 4, lever 132 has a camming surface 136 formed at its proximal end to coact with contact arm 128 such that contacts 124 and 130 are separate from each other when lever 132 is in its standby position and move into engagement with lever 132 is rotated into the channel 134. Due to the construction of camming surface 136 and channel 134, once lever 132 is moved slightly in the direction of the arrow in FIG. 4, it snaps into the channel to close contacts 124 and 130 and cannot be readily reset due to its recessed position when tripped in channel 134. It should be understood that the details of switch 36 shown in FIG. 4 are merely exemplary of the general type of switch which may be utilized in the security system of the present invention and that switches 38 and 40 may be of similar construction.

The security system embodiment of FIG. 5 is similar to that of FIG. 2 in that each motel room contains a telephone 210 having lines 212 and 214 connected to terminals of a wall box 216 located on a wall near the telephone 210. The terminals of the wall box 216 have a pair of outgoing lines 218 and 220 which terminate at a switchboard 222 located at a central office. The switchboard 222 includes a switchboard exchange 224 and a plurality of lamps 226 which are individually illuminated by current flow from a source of operating potential such as battery 228 whenever a switch (not shown) is closed by lifting the handset of telephone 210 to thereby provide a visual indication to the switchboard operator. The switchboard 222 is connected to at least one set of public telephone lines 230 which are selectively connectable to telephone 210 through the switchboard exchange 224. The switchboard 222 additionally includes a suitable headset 232 to enable the switchboard operator to monitor the telephones 210 in each motel room.

An a.c. power receptacle box 234 which is preferably mounted on a wall in the motel room near the wall box 216 contains a transformer 236 therein having its primary winding energized from the a.c. lines powering the receptacle. The transformer 236, which forms a part of an auxiliary telephone ringing power supply, has a secondary winding coupled to a capacitor 238, which is the output of the auxiliary telephone ringing power supply, through a rectifying diode 240, with both capacitor 238 and diode 240 being located within wall box 216. The capacitor 238 has one side connected to

phone line 214 through a terminal of the wall box 216 and the other side connected to a contact of a double pole double throw switch 242 through line 244. An adjacent contact of the double pole double throw switch 242 is coupled back to phone line 214 through an intermittent line interrupter or flasher 246 and a telephone handset responsive switch 248. The interrupter 246 is preferably of the thermal responsive type like flashers 74 and 96 but it may be any other suitable type capable of intermittently opening such as a motor driven type. The double pole double throw switch 242 includes a pair of common or armature contacts having a pair of lines 250 and 252 coupled thereto which have a plurality of diverse condition responsive systems connected thereacross.

A thermostat 254 which may be of the type described in FIG. 2, is normally mounted on a wall of the motel room and includes a bimetal 256 connected to a lead 258 and having one end fixed in place and the other end movable relative thereto in response to the application of heat. A fixed contact 260 connected to a lead 262 is adapted to cooperate with bimetal 256 to provide a heat-responsive switch. Bimetal 256 is disposed such that it is normally remote from contact 260 to form an open circuit and responds to an increase in heat to engage contact 260. The temperature at which bimetal 256 engages contact 260 is preselectable by a screw 264 which is threadedly mounted in a support member 266 and is adapted to engage an intermediate point on the surface of bimetal 256 for repositioning the same relative to contact 260. A knob 268 is affixed to the upper end of screws 264 for cooperation with a calibrated scale.

Smoke detector 270, which also may be of the type described in FIG. 2, is normally wall mounted like the thermostat and is operatively connected with a set of contacts 272, with the contacts normally open, as shown, and adapted to be closed by the smoke detector 270 whenever smoke is present in the motel room. Contacts 272 are connected between leads 258 and 262 are in turn connected with lines 250 and 252 respectively.

A door trip-switch 274 is connected between a pair of leads 276 and 278, with window switches 280 and 282 connected in parallel thereacross. The door and window switches which are affixed to inner door and window frames respectively in the motel room, may be of the type shown in FIG. 4. Lead 276 is directly connected with line 250 and lead 278 is connected with line 252 through a flasher device schematically shown at 284 which may be of the type described with respect to FIG. 2.

A power receptacle 290 of the security system of the present invention which may be of the type shown in FIGS. 3a and 3b includes a pair of electrically insulated contact terminals 292 which are connected by lines 294 and 296, respectively, to a source of alternating current represented schematically by terminals 298. Affixed to a rear surface of receptacle 290 is a single-pole, single-throw microswitch 300 which is responsive to insertion and removal of plug 302. Microswitch 300 is connected by leads 304 and 306 to lines 250 and 252, the latter connection being through a flasher 308. Flasher 308 is similar to flasher 284 and includes a self-heating bimetal 310 which cooperates with a fixed contact 312; however, flasher 308 operates at a fre-

quency which is different from that of the flasher 284.

The double pole double throw switch 242 has two remaining contacts which have a pair of lines 314 and 316 extending therefrom back to the switchboard 222. Lines 314 and 316 are connected to one of a plurality of lamps 318 mounted on the switchboard 222 through a power supply shown as a battery 320, the remaining lamps being similarly connected to other room alarm systems which have not been shown for the sake of clarity.

In operation of the system of FIG. 2, normally all of the switches in the system are open and telephone 14 is not in use. Thus, lines 18 and 20 are open and lamp 26 is deenergized. Should one desire to place a call, the removal of the telephone handset connects lines 18 and 20 of the caller's room to complete a current path from ground through battery 50, switchboard 24, lamp 26 corresponding to that room, and telephone 14 back to ground. The operator at console 22 is therefore notified of the removal of the handset by the energized lamp 26 and thereafter connects headset 48 with lines 18 and 20 to receive instructions from the calling party.

A similar sequence follows in the event of a fire or usually high temperature in the room since the thermostat 42 or smoke detector 44 detects such condition and again shorts out lines 18 and 20. However, following the ignition of lamp 26 in response to actuation of thermostat 42 or smoke detector 44, the operator upon responding to the signal from lamp 26 hears no sound whatsoever because of the short circuit across the telephone line. Thus, the operator would immediately recognize that a fire or smoke exists in the particular identified room.

In the case of an unauthorized entry, one or more of switches 36, 38 and 40 would be tripped thereby connecting flasher 74 across the telephone lines 18 and 20. The current from battery 50 would thus flow through the flasher which causes a periodic interruption of the short across lines 18 and 20 such that lamp 26 blinks on and off at a recognizable frequency. The operator is in this way immediately signalled of the occurrence of an unauthorized entry. Likewise, removal of the plug 32 of television 28 from the receptacle 32, from the position shown in FIG. 3a to that shown in FIG. 3b, releases actuating arm 116 which moves into slot 102 causing switch 90 to become closed. This results in the connection of flasher 86 across the telephone line producing periodic energization of lamp 26 at a rate recognizably different from the rate of flasher 74. The operator is thus readily apprised of the unauthorized removal of the television set 28 from the room.

In operation of the security system embodiment of FIG. 5, the double pole double throw switch 242 will either be positioned to enable the local telephone 210 or the remote switchboard 222 as the alarm indicator upon the occurrence of an alarm condition. The operation will first be discussed with the remote switchboard 222 connected into the system by the double pole double throw switch 242, that is, with the common or armature contacts connected to the lowermost contact pair having lines 314 and 316 connected thereto. All of the switches in the system are normally open except for the telephone handset responsive switch 248 which remains closed until the telephone handset is removed from its cradle. However, this switch is functionless

when the remote switchboard 222 is selected to provide the alarm indication due to an open circuit existing in the line having the phone switch therein.

Should a motel room occupant desire to place a call, the removal of the telephone handset connects lines 212 and 214 of the caller's room to lines 220 and 218, respectively, to complete a current path through battery 228, switchboard exchange 224, lamp 226 corresponding to that room, and back to telephone 210. The operator at the switchboard 222 is therefore notified of the removal of the handset by the energized lamp 226 and thereafter connects headset 232 with lines 218 and 220 to receive instructions from the calling party.

With each of the condition responsive circuits connected to the switchboard, in the event of a fire or unusually high temperature in the room the thermostat 254 or smoke detector 270 detects such condition and closes switches 256 and/or 272 to thereby short out lines 250 and 252 completing the circuit to lamp 318 to appraise the switchboard operator of trouble by its being illuminated continuously during the trouble.

In the case of an unauthorized entry, one or more of the switches 274, 280 and 282 would be tripped thereby connecting flasher 284 across the lines 50 and 52. The current from battery 320 would thus flow through flasher 284 which causes periodic interruption of the short across lines 257 and 259 such that lamp 318 blinks on and off at a recognizable frequency. The operator is in this way immediately signalled of the occurrence of an unauthorized entry. Likewise, removal of the plug 302 from the receptacle 290, from the position shown in FIG. 3a to that shown in FIG. 3b, releases actuating arm 340 which moves into slot 324 causing switch 300 to become closed. This results in the connection of flasher 308 across lines 250 and 252 producing periodic energization of lamp 318 at a rate recognizably different from the rate of flasher 284. The operator is thus readily apprised of the unauthorized removal of the appliance connected to plug 302 from the room.

In the event that the local telephone 210 is to be utilized as the alarm condition indicator, the double pole double throw switch 242 is changed to engage the common or armature contacts with the uppermost pair of contacts. Closure of any of the condition responsive system switches will again short lines 250 and 252 to now complete a circuit through the normally closed telephone handset responsive switch 248 and interrupter 246 to pre-charged capacitor 238 and back to the telephone 210 through lines 212. The heating of the interrupter 246 due to current flow therethrough from capacitor 238 will cause it to temporarily open to thereby cause the telephone to ring. The frequency of operation of the interrupter 246 is an optional matter but it is preferable less than that of flashers 284 and 308 such that these higher frequency flashers will dominate when an unauthorized entry or plug removal closes the condition responsive circuits through either of them. Accordingly, if the telephone rings at the frequency of interrupter 246, this ringing will then only be associated with the fire and/or smoke detector which has no flasher comparable to flashers 284 and 308, and ready identifications of each alarm condition is possible. Thus, the capacitor 238 tends to discharge through this circuit causing intermittent opening and closing of the interrupter 246 or either of flashers 284 and 308 as discussed above and effecting an intermittent ringing of

the telephone in accordance therewith. The capacitor 238 is continually replenished by the a.c. supply through transformer 236 and diode 240 to provide a continuous supply of voltage for ringing telephone 210 upon the occurrence of interrupter 246 opening.

Thus, it can be appreciated that the security system according to the present invention is capable of readily and accurately notifying, either by a local telephone or remote switchboard monitor, as to the occurrence of various alarm conditions at any number of spaced locations.

The present invention has a number of distinct advantages in that the receptacles present the outward appearance of a conventional, unmonitored a.c. outlet, do not require the use of other than a standard two-prong a.c. plug and do not rely upon the lateral flexure of one or both of the contact blades for actuation of an alarm switch; that the microswitches are structurally independent unit from the receptacles and thus may be replaced separately therefrom the event of a failure; that alarm signals for fire and smoke and for burglary or unauthorized entry and distinct and readily identifiable; and that a complete or integrated security system is simple, reliable and compatible for use with local telephone systems to reduce or minimize wiring.

The present invention has added advantages in the use of a local telephone as an alarm indicator; and in the provision of the alternate alarm circuits to enable either an alarm over a local telephone or over a remotely located switch board.

Inasmuch as the present invention is subject to many variations, modifications and changes in detail, it is intended that all matter contained in the foregoing description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. In a telephone system including an operable telephone, an alarm system comprising:
a condition responsive switch means which closes in response to an alarm condition;
an auxiliary telephone ringing power supply;
means connecting the telephone in a series circuit with the condition responsive switch means and the auxiliary telephone ringing power supply to thereby establish current flow therethrough during closure of the condition responsive switch means;
and

intermittent interrupter means connected in said series circuit for intermittently open circuiting same during closure of the condition responsive switch means to thereby ring the telephone as an alarm indication.

2. The invention of claim 1 wherein the auxiliary telephone ringing power supply includes a capacitor serially connected with the condition responsive switch means and a rectifier means for charging the capacitor.

3. The invention of claim 2 including an energized a.c. receptacle box connected to the rectifier means for charging said capacitor.

4. The invention of claim 3 including an isolation transformer for transmitting a signal from the a.c. receptacle box to the rectifier means.

5. The invention of claim 4 wherein the isolation transformer is retained by said receptacle box.

6. The invention of claim 2 including a telephone wall box located proximate the telephone and wherein the capacitor and rectifier means are contained within said telephone wall box.

7. The invention of claim 1 wherein the intermittent interrupter is a thermally responsive type which opens upon being heated to a predetermined temperature due to current flow therethrough.

8. The invention of claim 1 including a remotely positioned alarm condition monitor, and switch means for selectively connecting the condition responsive switch means to the remotely positioned alarm condition monitor.

9. The invention of claim 8 wherein the switch means disconnects the condition responsive switch means from the telephone ringing current supply.

10. The invention of claim 8 wherein the remotely positioned alarm condition monitor includes a power supply and an illuminable indicator.

11. The invention of claim 10 wherein the remotely positioned alarm condition monitor is a telephone switchboard which includes means for selectively connecting the telephone to outside telephone lines.

12. The invention of claim 1 including another condition responsive switch means in parallel with said condition responsive switch means, and a thermally responsive interrupter in series with said another condition responsive switch means.

* * * * *

50

55

60

65