United States Patent [19]

Klingenberg

[11] **3,913,092**

[45] **Oct. 14, 1975**

[54] **METHOD AND APPARATUS FOR TRANSMISSION OF CRITICAL INFORMATION FROM AN ILL PERSON**

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[22] Filed: **Sept. 21, 1973**

[21] Appl. No.: **399,406**

[52] **U.S. Cl.**..... **340/332;** 340/274 R; 340/279; 340/331

[51] **Int. Cl.**[2]..... **G08B 13/08**

[58] **Field of Search** ..... 340/332, 334, 331, 309.1, 340/286 R, 279, 276, 230, 274, 224; 58/152 R, 152 B, 39.5

[56] **References Cited**

UNITED STATES PATENTS

2,803,810	8/1957	Evans et al.	340/277
2,910,680	10/1959	McLain	340/332
3,136,114	6/1964	Jauch	58/39.5
3,360,791	12/1967	Lazar	340/332
3,440,347	4/1969	Spencer	340/224
3,599,199	8/1971	Bunting	340/286
3,614,763	10/1971	Yannuzzi	340/279

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[57] **ABSTRACT**

A method and at least one apparatus for performing the method for transmission of critical information from an ill person in a house to any person outside are disclosed. The examplary apparatus comprises a rectangular housing having means for mounting in a window of the ill person's room, a HELP sign on a transparent front surface, an opaque rear surface having a card holder thereon encircled with a row of holes, a critical information card having the likely diagnosis or disability of the ill person in the card holder, a clock mounted on one side of the housing, an easy-to-operate switch on the housing for a flashing light circuit therein, which upon actuation by the ill person, the flashing light makes the HELP sign a first attention calling means for attracting the attention of people outside the house, the encircling row of holes becomes a line of flashing lights comprising a second attention calling means on the housing for attracting attention of people inside the house to the card holder containing the critical information card therein, and the clock is started to indicate the lapse time since the ill person first energized the system.

13 Claims, 5 Drawing Figures

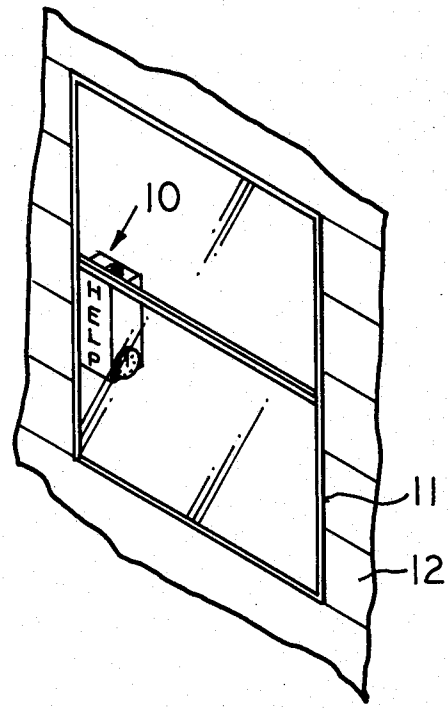
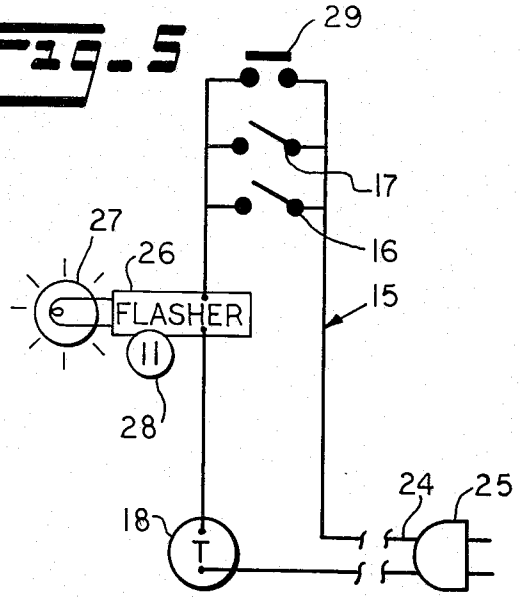


Fig-5



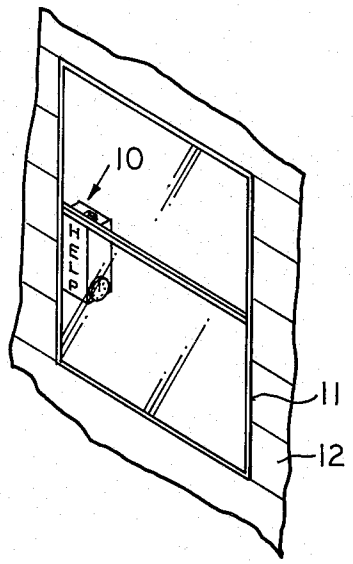


Fig-1

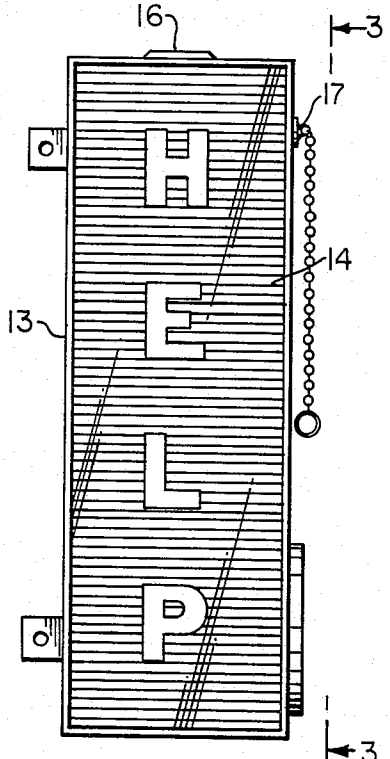


Fig-2

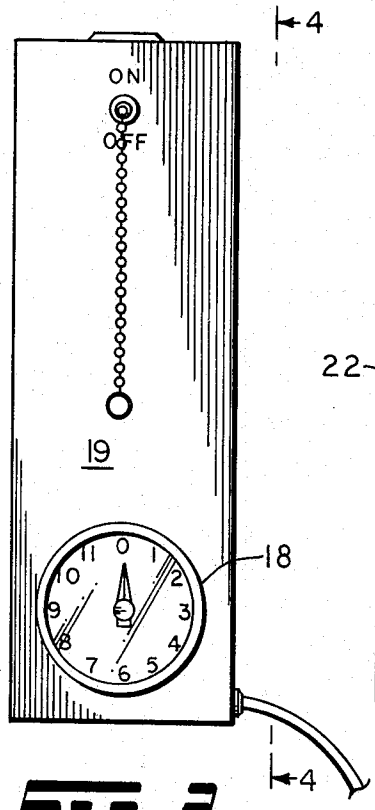


Fig-3

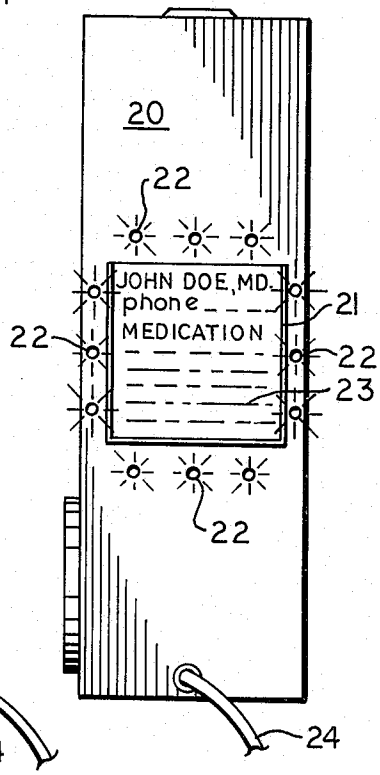


Fig-4

METHOD AND APPARATUS FOR TRANSMISSION OF CRITICAL INFORMATION FROM AN ILL PERSON

BACKGROUND

The most common type of emergency which the disclosed system will take care of when the conventional telephone method breaks down as it requires the looking up of a doctor's telephone number, calling the doctor, and giving him the details of symptoms and home address. Likewise, this conventional telephone system is too time consuming and takes too much effort by a very ill person to carry through with and thus not always effective for being depended on. This particularly is true with a person having a heart attack and where the individual may only have moments of consciousness during which time he can make an effort to contact outside assistance. Other patients that the disclosed system is very effective for are those who are handicapped, diabetic, epileptic, etc.

Various individual singular alarm systems have been designed but are not in use as each has its limitations. U.S. Pat. No. 2,512,775 shows a signaling device comprising a flashing light and a radio for awakening people. U.S. Pat. No. 2,929,162 shows an illuminated sign for mounting in the window of a house for illuminating the interior for those to view from the exterior. U.S. Pat. No. 3,624,635 discloses a light and siren mounted on the roof top for attracting attention. U.S. Pat. No. 3,634,847 illustrates a clock alarm system which sets off the system well after the person is supposed to have awakened in the morning. U.S. Pat. No. 3,651,512 discloses an apparatus for leaving orders for the nurse.

In all of the above systems, if a person comes to help the ill or unconscious person, no means is provided for giving the person a clue as to what ails the patient, who his doctor is, where his pills are, or how he can help in any way. The disclosed method and at least one apparatus for transmission of critical information from an ill person will provide such important information. People have been found near death in their homes after a few days of trying to summon help or have died shortly after being found due to their not having been in condition to advise the people what was first required.

OBJECTS OF THE INVENTION

Accordingly it is a primary object of this invention to provide a method for transmission of critical information from an ill or handicapped person alone in a house to people outside.

Another primary object of this invention is to provide at least one apparatus for performing the method of transmission of critical information from an ill or handicapped person.

A further object of this invention is to provide an emergency system that supplies critical information as the likely diagnosis or disability of the ill person, identifying his doctor, location of vital pills, etc.

A still further object of this invention is to provide the lapse time since the ill person first activated the emergency call system.

A further object of this invention is to provide a method and at least one mechanism for transmission of critical information from an ill or handicapped person that is easy to operate, is of simple configuration, is economical to build and assemble, and is of greater efficiency for the transmission of such information.

Other objects and various advantages of the disclosed method and apparatus for transmission of critical information from an ill or handicapped person will be apparent from the following detailed description, together with the accompanying drawings, submitted for purposes of illustration only and not intended to define the scope of the invention, reference being had for that purpose to the subjoined claims.

BRIEF DESCRIPTION OF THE DRAWINGS

The drawings diagrammatically illustrate by way of example, not by way of limitation, one form of the invention wherein like reference numerals designate corresponding parts in the several views in which:

FIG. **1** is a schematic diagrammatic perspective view of an emergency transmission system mounted in the window of an ill or handicapped person living alone:

FIG. **2** is a schematic front view of the emergency transmission system;

FIG. **3** is a schematic side view of the apparatus of FIG. **2**;

FIG. **4** is a schemetic rear view of the apparatus of FIG. **2**; and

FIG. **5** is a typical schematic electrical circuit for the system of FIGS. **2–4.**

METHOD OF THE INVENTION

This invention comprises a new method for transmission of critical information from an ill or handicapped person alone in a house to people outside.

The method comprises the steps of,

1. generating a flashing light behind a HELP wanted sign in the window for attracting the attention of people outside of the house for providing aid to the ill person who has just signaled a desire for aid,

2. lighting up with the flashing light a critical information card holder inside the room for attracting the attention of people who have come inside to a critical information card in the card holder,

3. supplying critical information of the likely diagnosis or disability of the ill person, identifying his doctor, etc., from the card inside the card holder, and

4. supplying the lapse time from the moment of signaling by the ill person desiring aid.

More details of the method prior to the step of generating the flashing light comprises the further steps of,

1. applying the critical information of the likely diagnosis or disability of the ill person, identifying his doctor, etc., to a card, and

2. inserting the critical information card into the card holder for use by others when the ill person signals for aid.

DESCRIPTION OF THE PREFERRED EMBODIMENTS FOR PERFORMING THE METHOD

The invention disclosed herein, the scope of which being defined in the appended claims is not limited in its application to the details of construction and arrangement of parts shown and described for carrying out the disclosed method, since the invention is capable of other embodiments for carrying out other methods and of being practiced or carried out in various other ways. Also, it is to be understood that the phraseology or terminology employed here is for the purpose of de-

scription and not of limitation. Further, many modifications and variations of the invention as hereinbefore set forth will occur to those skilled in the art. Therefore, all such modifications and variations which are within the spirit and scope of the invention herein are included and only such limitations should be imposed as are indicated in the appended claims.

FIG. 1 discloses a new apparatus 10 for carrying out the above method of transmission of critical information from an ill or handicapped person alone in a house to someone outside.

FIG. 1, a perspective view, discloses the apparatus 10 mounted in a front window 11 of a house 12.

FIG. 2, a front or plan view of the apparatus 10, illustrates the method by showing a metal housing 13, which may be formed of fiberglass if so desired, with a transparent front surface 14. An opaque sign, as the work HELP is applied to the transparent surface so that an illuminated light internally of the housing and accordingly behind the sign will cause the letters to stand out bright and clear.

An electrical circuit 15, FIG. 5, is disclosed herein after for activating the apparatus 10. A vital switch for activating the apparatus is a conventional heat sensitive switch 16 which is positioned on the middle of the top of the housing in the most convenient and accessible location on the housing. Being heat sensitive, only the touch of the human finger with little pressure is required to operate the switch. Thus while the slightest touch by the ill person with only a glancing pass will actuate the system, it is not actuated by any inanimate cold articles, as a dust rag, broom, fly swatter, or even falling out of the window will not actuate it.

A second switch 17, FIG. 2, FIG. 3, and FIG. 5 is a pull-chain type of on-off switch mounted on the next most convenient and accessible position on the housing, on the upper portion of a side of the housing. A person who can not reach the top of the rectangular housing may fumble for the chain on the side to activate the apparatus.

Likewise, this chain may be lengthened to extend into a distant bedroom for actuation of switch 17 by an ill person in a bed some distance from the front room window 11.

FIG. 3, a side view of the new apparatus 10, illustrates the pull-chain on-off switch 17 as well as the clock 18 in side panel 19, which clock is turned on when the circuit is activated for providing the lapse time from the instant of activation of the system to those people coming into the bedroom to aid the ill or handicapped or unconscious person.

FIG. 4 discloses one of the most important features of the total combination of elements making up the novel combination or system for performing the previously described method. The opaque back surface 20 has a card holder 21 fixed to the middle portion of the opaque back surface. A closed loop or row of holes 22 is formed around the periphery of the card holder in the opaque back surface. The ill person or his nurse or guardian maintains a current critical information card 23 in the card holder having all critical information about the ill, handicapped, diabetic, epileptic, etc., person giving the probable diagnosis or disability, identifying and giving the telephone number of his doctor, and giving the location of vital pills, medicine, etc. An electrical cord 24 for plugging into a conventional house electric outlet for energizing the system circuit 15 is shown.

FIG. 5 illustrates a typical electrical circuit 15 for the disclosed apparatus 10 for transmission of the critical information from an ill or handicapped person to any person outside.

This electrical circuit 15, FIG. 5, comprises a plug 25 for plugging into a wall electrical outlet near the window in which the housing is mounted for supplying current through the wires 24. Both heat sensitive, on-off switch 16 and pull-chain on-off switch 17 are connected in parallel in the circuit 15, followed by a conventional flasher 26 for intermittently breaking only the circuit to a light bulb 27 mounted in the center of the housing 13. The time piece or clock 18 is connected next in the circuit. The clock is set on zero so that upon actuation of the circuit, the clock gives the exact time or lapse time since the circuit had been actuated by the ill person.

The flasher 26, while illustrated in the circuit 15, does not break the circuit when the circuit is closed, but always permits a constant flow of current in the circuit 15 to the clock 18, for example, even though the flasher automatically breaks its circuit to its light bulb 27.

A socket 28 on the flasher 26 is a connection for the two ends of a circuit which extends to a flashing light and/or buzzer (not shown) at the neighbor's house. The neighbor's flashing light and/or buzzer goes on the instant the circuit 15 and its flasher 26 are energized for warning the neighbor so that he is summoned to help the ill person.

Switch 29, in parallel with the circuit 15 is a radio receiver operated switch responsive to a manually operated battery powered transmitter switch near a bed in a remote bedroom of the house at some distance from the distress signal system in the front window 11. Thus, an ill person in his bed may flip his switch to his battery powered transmitter which transmits a radio signal to receiver switch 29 to close circuit 15 for setting the distress signal system in operation.

ALTERNATIVE CIRCUIT

For greater reliability in case of power failure in the area of the ill or handicapped person, another battery powered circuit may be utilized. In parallel with the circuit with the battery may be the heat sensitive or capacitance sensitive switch, the pull-chain switch, and a radio receiver responsive to a body temperature sensitive transmitter carried on the ill person. This latter temperature sensitive transmitter may be sensitive to a 2° or 3° drop or increase from the normal body temperature of 98.6° F., for example. From the switches, the circuit continues to a relay which would operate a bank of switch contacts for actuating the flashing light, flashing critical card holder, and the clock before returning to the other side of the battery.

Briefly in operation of the emergency apparatus for carrying out the above methods, when a person alone in a house has a sudden change of health, as a person having a cardioplegia, a diabetic, an epileptic, or suddenly feels faint for any reason, he or she merely has to step quickly or crawl to the emergency apparatus in the window and drag his hand over the top whereby just touching the heat sensitive switch 16 actuates the critical information transmission system. Alternatively, if he can not reach the top, he probably can pull the pull-

chain switch 17 for activating the system. Or further if he has the radio receiver operated switch responsive to the manually operated battery powered transmitter switch near his bed, that may be actuated. The flashing light 27 immediately commences which flashes the HELP sign in the window. Any one outside seeing the light and answering the call for help would come inside the house and room occupied by the ill, handicapped, or unconscious person. From inside the room, attention would be called to the back side of the housing with its flashing row of lights outlining the card holder holding the critical information card.

From this critical information card, the helping person would find out the likely diagnosis of the ill person, where his pills were, if they were required, the identity of his doctor, telephone number for the doctor, and what to do until professional help arrived. This preliminary first aid to a handicapped person alone in a house could very well be the helping hand that saves his life.

Accordingly, it will be seen that a method and an apparatus for performing the method of transmitting critical information from an ill or handicapped person alone in a house to anyone outside will operate in a manner which meets each of the objects set forth hereinbefore.

While only one method of the invention and several mechanisms for carrying out the method have been disclosed, it will be evident that various other methods and modifications are possible in the arrangement and construction of the disclosed system without departing from the scope of the invention and it is accordingly desired to comprehend within the purview of this invention such methods and modifications as may be considered to fall within the scope of the appended claims.

I claim:

1. A distress signal system for actuation by an ill person alone in a house for sending a call for assistance through a window to any one outside comprising,

a. housing means having a transparent front surface and an opaque rear surface for mounting in the window,

b. light circuit means in said housing means,

c. first attention calling means including a sign on said housing means front transparent surface for generating a flashing light when activated for attracting the attention of people outside of the house,

d. critical information card means in a card holder mounted on said housing means rear surface for supplying pertinent critical information about the likely diagnosis or disability of the ill person alone in the house who may need help,

e. second attention calling means on said housing means rear surface for attracting attention to said critical information card means,

f. switch means for said housing means for being activated by the ill person,

g. timing means for indicating lapse time from the moment of activation of the switch by the ill person, and

h. said switch means being responsive to the person desiring immediate help for being operated for,

1. actuating said first attention calling sign means for attracting attention of people outside of the house,

2. actuating said second attention calling means for attracting attention of people who have come inside the house to said critical information card means for supplying the likely diagnosis or disability of the ill person, identification of his doctor, location of medication, and

3. activating said timing means for indicating the lapse time since the ill person first actuated said switch.

2. A distress signal system as recited in claim **1** wherein,

a. said housing means has means for securing it in a window in a prominent position.

3. A distress signal system as recited in claim **1** wherein,

a. said first attention calling means includes a flasher means in said circuit for generating a flashing light behind said sign.

4. A distress signal system as recited in claim **1** wherein,

a. said card holder has bottom and side flanges for slideably retaining said critical information card means therein.

5. A distress signal system as recited in claim **1** wherein,

a. said second attention calling means includes a multiplitity of holes in said housing means opaque rear surface circumscribing said card holder whereby said critical information card means is outlined by flashing lights when said switch is activated.

6. A distress signal system as recited in claim **1** wherein,

a. said timing means is a clock in said light circuit for being activated by said ill person operated switch for providing the lapse time since the ill person first activated said switch.

7. A distress signal system as recited in claim **1** wherein,

a. said switch is a pull-chain type of on-off switch for easy operation with one pull.

8. A distress signal system as recited in claim **1** wherein,

a. said switch is a heat sensitive type of on-off switch wherein only the touch of the finger of the ill person will activate the switch and accordingly the distress signal system.

9. A distress signal system as recited in claim **1** wherein,

a. said switch is a capacitance sensitive type of on-off switch responsive to the human touch for being activated.

10. A distress signal system as recited in claim **1** wherein,

a. said card holder is mounted on the side of said housing means for attracting the attention of both people outside of the house and people who have entered the house.

11. A distress signal system as recited in claim **1** wherein,

a. said card holder is mounted on the front of said housing means for attracting the attention of people outside of the house.

12. A distress signal system as recited in claim **1** wherein,

a. said first attention calling means has a second circuit to a second flashing light in a remote house for being actuated simultaneously with actuation of said switch means for calling attention of a person in said remote house.

13. A distress signal system for actuation by an ill person alone in a house for sending a call for assistance through a window to any one outside comprising,

a. a housing having walls including a transparent front surface and an opaque rear surface having means for mounting thereof in the window,

b. a light circuit with a flashing light mounted in said housing connected to an electrical source,

c. first attention calling means comprising a "HELP" sign secured to said housing front transparent surface for being made visible only when said flashing light is activated for attracting the attention of people outside of the house,

d. a critical information card mounted in a card holder mounted on said housing rear opaque surface for supplying pertinent critical information about the ill person,

e. second attention calling means comprising a multiplicity of holes in said housing opaque rear surface circumscribing said card holder so that said critical information card is outlined by flashing lights only when said light circuit is activated,

f. a clock in said circuit on one side of said housing for measuring lapse time from the moment of activation of said circuit by the ill person,

g. a switch in said circuit, and

h. said switch being responsive to activation by the ill person desiring immediate help, said switch and said circuit comprising,

1. means for activating said flashing light behind the HELP sign to attract attention of people outside of the house,

2. means for actuating said flashing light behind said multiplictiy of holes for attracting the attention of people inside of the house for noting the critical information card for supplying the likely diagonosis of the ill person, identification of his doctor, location of medication, and

3. means for activating said clock.

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