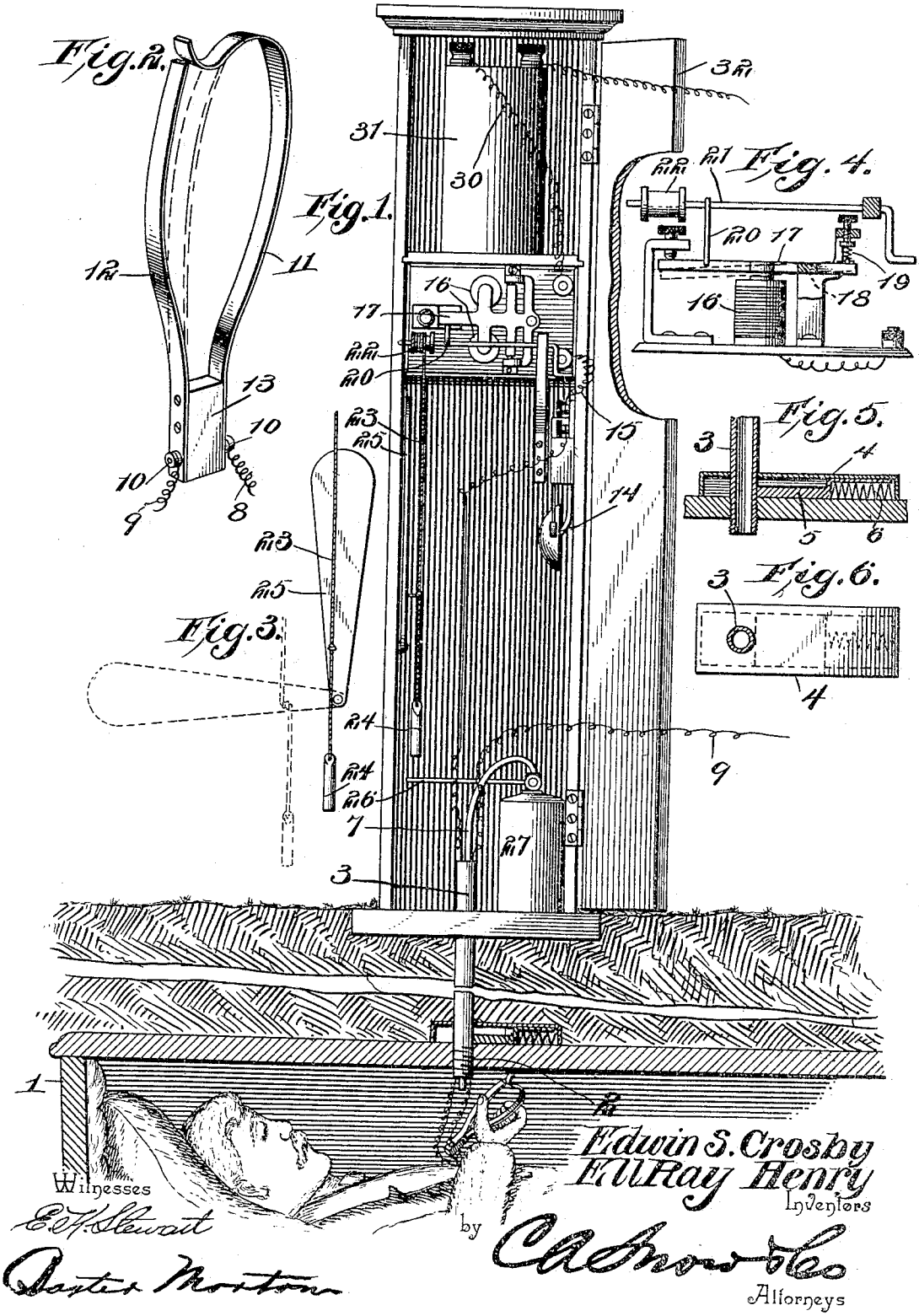
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APPARATUS FOR SIGNALING FROM GRAVES.

APPLICATION FILED NOV. 27, 1903.

NO MODEL.



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No. 766,171. Patented August 2, 1904.

UNITED STATES PATENT OFFICE.

EDWIN S. CROSBY AND ELL RAY HENRY, OF LAKE CHARLES, LOUISIANA.

APPARATUS FOR SIGNALING FROM GRAVES.

SPECIFICATION forming part of Letters Patent No. 766,171, dated August 2, 1904.

Application filed November 27, 1903. Serial No. 182,879. (No model.)

To all whom it may concern:

Be it known that we, EDWIN S. CROSBY and ELL RAY HENRY, citizens of the United States, residing at Lake Charles, in the parish of Calcasieu and State of Louisiana, have invented a new and useful Apparatus for Signaling from Graves, of which the following is a specification.

This invention relates to apparatus for signaling from graves or from sick-rooms and for supplying oxygen to buried persons or to sick persons.

The principal object of the invention is to provide a comparatively simple and inexpensive apparatus for signaling from graves, which may be repeatedly used, which will indicate by both audible and visible signals the return of animation in a buried person, and which will supply pure oxygen to the buried person to stimulate and sustain life until the casket can be disinterred.

In the attainment of the object above stated we make use of the novel construction and combination of parts of an apparatus for signaling from graves hereinafter fully described, illustrated in the accompanying drawings, forming a part of this specification, and having the novel features thereof specifically pointed out in the appended claims.

In the drawings, Figure 1 is a view, partly in elevation and partly in section, showing the apparatus in position. Fig. 2 is a detail view of the circuit-closer. Fig. 3 is a detail view showing the operation of the visible signal. Fig. 4 is a detail view of the mechanism by which the visible signal is operated. Fig. 5 and Fig. 6 are detail views showing the device for closing the coffin when the signaling apparatus is removed.

Referring to the drawings, in which corresponding parts are designated by similar characters of reference, 1 designates the coffin, in which is contained the body in which life is supposed to be extinct. The coffin is provided in the top with an opening 2, preferably circular in form, for the reception of a tube 3, which extends upward from the coffin to the surface of the ground. On top of the coffin and adjacent to the opening 2 is a casing 4, containing a slide 5, which is provided with an operating-spring 6, which holds the slide normally over the opening 2, but permits the slide to be retracted sufficiently to uncover the opening 2 and permit the insertion of the tube 3. The tube 3 contains a smaller tube 7, leading upward into the casing C of the apparatus, and two wires 8 and 9 for conducting the electric current. The wires 8 and 9 are attached by binding-posts 10 to a circuit-closer consisting of a strip 11 of metal bent approximately into the form of a shepherd's crook, and a shorter and more slightly curved strip 12. The strips 11 and 12 are mounted on a block 13 and are each connected with one of the binding-posts. The circuit-closer is of such dimensions that it may be easily placed within the hand of the buried person before interment and occupy the position shown in Fig. 1. The wire 8 extends upward into the casing C of the signaling apparatus, and the wire 9 extends to the house of the sexton of the cemetery or other person charged with the care of the grave. The wire 8 leads to an electric bell 14 of any ordinary or preferred form which is disposed within the casing, and from the bell 14 another wire 15 leads to an electromagnet 16 of an apparatus resembling a telegraphic sounder and comprising a pivoted arm 17, pivotally supported at 18 and arranged for limited movement horizontally, as indicated in Fig. 4. The arm is normally advanced by means of a spring 19 and is retracted into the position shown in dotted lines by the action of the electromagnet when the circuit through the wires is completed. When the arm is in forward position, it is engaged by a finger 20 upon a rotatable shaft 21, bearing a spool 22, upon which is wound a cord 23, which supports a weight 24, but as soon as the arm 17 is retracted by the action of the electromagnet the finger 20 passes out of engagement therewith, and the weight descends by unwinding the cord upon which it is suspended from the spool. The descent of the weight imparts movement to the pivoted signal-arm 25, which is projected through an opening provided for that purpose in the side

of the casing C, and at the same time the weight moves downward and engages a lever 26, attached to a valve in the top of an oxygen-reservoir 27, to which the tube 7 leads.

From the electromagnet 16 a wire 30 leads to a cell 31 for generating an electric current, and a second wire 32 leads from the cell to the house of the sexton of the cemetery, where it is attached to an electric bell or other signaling device, (not shown,) to which the wire also leads.

In using the apparatus as described it is necessary to place the circuit-closer in the hand of the person to be buried before interment and to connect it with the wires 8 and 9, leading to the tube 3, before the lid is fixed upon the coffin. The tube 3 is fixed in position when the coffin is placed in the grave, so that when the grave is filled the tube will be held in position and any disarrangement of the parts of the mechanism prevented. The casing C, containing the greater portion of the apparatus, is placed in position immediately above the coffin, as shown, and the wires 9 and 32 are extended to the house of the sexton, as already explained.

The reservoir 27 must of course be filled with oxygen under some pressure, and the cord 23 must be wound upon the spool 22, so lifting the signal-arm 25 into inoperative position and holding the weight 24 out of engagement with the valve-lever 26.

When the apparatus has been placed in position, as above explained, any return of animation to the buried person will result in some movement, and any slight movement of contraction, such as always occurs in cases of returning animation, will cause the members 11 and 12 of the circuit-closer to be brought together, as indicated in Fig. 2, and when so brought together they will be retained in that position and the circuit through the apparatus will be maintained until the grave is opened and the person buried has been removed from the casket. The closer of the circuit will of course cause the bell inclosed in the casing C to ring and will sound the bell in the house of the sexton or other person charged with the care of the grave. At the same time the descent of the signal-arm 25 will take place, and the weight 24 descending upon the lever 26 will open the valve of the oxygen-reservoir and cause a sufficient quantity of pure oxygen to enter the casket through the tube 7 to insure the prevention of suffocation of the person buried until help can be rendered.

The special advantage of employing both audible and visible signals is that thereby the particular grave from which the signal is operated will be indicated and any confusion arising when several graves are provided with signaling apparatus will be prevented. If audible signals alone were relied upon, some difficulty might be experienced in locating the grave from which the signal was being operated and aid delayed in reaching the buried person.

When it is desired to remove the apparatus from a grave, the casing is merely lifted off the grave, the tube 3 is drawn upward, causing the breakage of the wires 8 and 9 or their release from the circuit-closer, and the slide 5 is forced into position over the opening 2 as soon as the wires are broken or disengaged from the circuit-closer. The channel left by the withdrawal of the tube 3 may then be filled, and no further attention will be required.

While the apparatus has been shown as in position over a grave and having the oxygen-conduit and the wires leading to the circuit-closer carried downward into a coffin, it is obvious that the casing may be set in convenient position adjacent to a sick-bed and the oxygen-conduit may be brought into close proximity to the patient's head, the circuit-closer being placed in his hand or within easy reach. With the apparatus so arranged a patient may be left to himself without any considerable danger, as it will be easy for the patient, in case he finds great difficulty in breathing, to close the circuit and obtain a supply of oxygen, at the same time operating the signal to summon assistance.

While we have described and illustrated the preferred form of embodiment of the invention, it is to be understood that various changes in the form, proportions, and mode of assemblage of the elements exhibited may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages. We do not, therefore, limit ourselves to the exact form of the invention disclosed, but reserve the right to make changes therein within the scope of the appended claims.

Having thus described the nature and use of our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination in an apparatus of the class described, of an oxygen-reservoir, a conduit from said oxygen-reservoir to the coffin, mechanism for opening said oxygen-reservoir comprising a lever, a suspended weight held normally above said lever, and means arranged within the coffin whereby the buried person may cause the descent of said weight and the opening of the oxygen-reservoir.

2. The combination in an apparatus of the class described, of an oxygen-reservoir, a conduit from said oxygen-reservoir, and mechanism for opening said oxygen-reservoir, said mechanism comprising a lever, a winding-drum, a cord normally wound on said drum, a weight attached to the cord, means normally operative for preventing the unwinding of

said drum, and electrical devices for releasing said mechanism and allowing said drum to unwind to permit the weight to descend upon the lever and effect the opening of the oxygen-reservoir.

3. The combination in apparatus of the class described, of an oxygen-reservoir, an oxygen-conduit extending therefrom, a coffin, means provided upon the coffin-lid for securing the end of said conduit within the coffin, and means disposed above the coffin for causing the opening of said reservoir.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

EDWIN S. CROSBY.
ELL RAY HENRY.

Witnesses:
G. B. WOOLMAN,
S. E. DUHOR.