

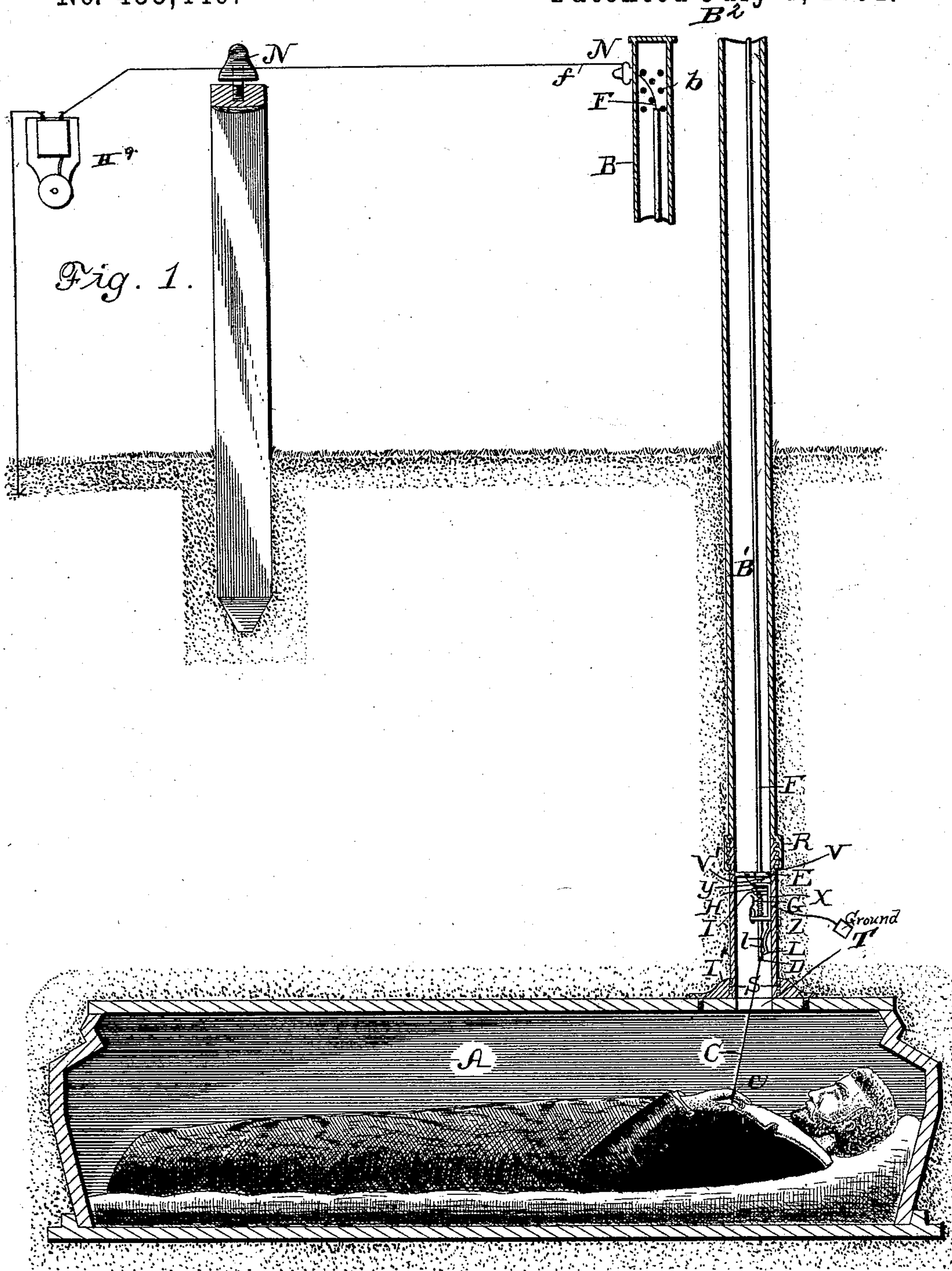
(No Model.)

2 Sheets—Sheet 1.

W. H. WHITE.  
GRAVE ANNUNCIATOR.

No. 455,446.

Patented July 7, 1891.



Witnesses:

Geo. Y. Thorpe.  
H. E. Price

Inventor:

W. H. White.

By *Heddon & Heddon*, Attys



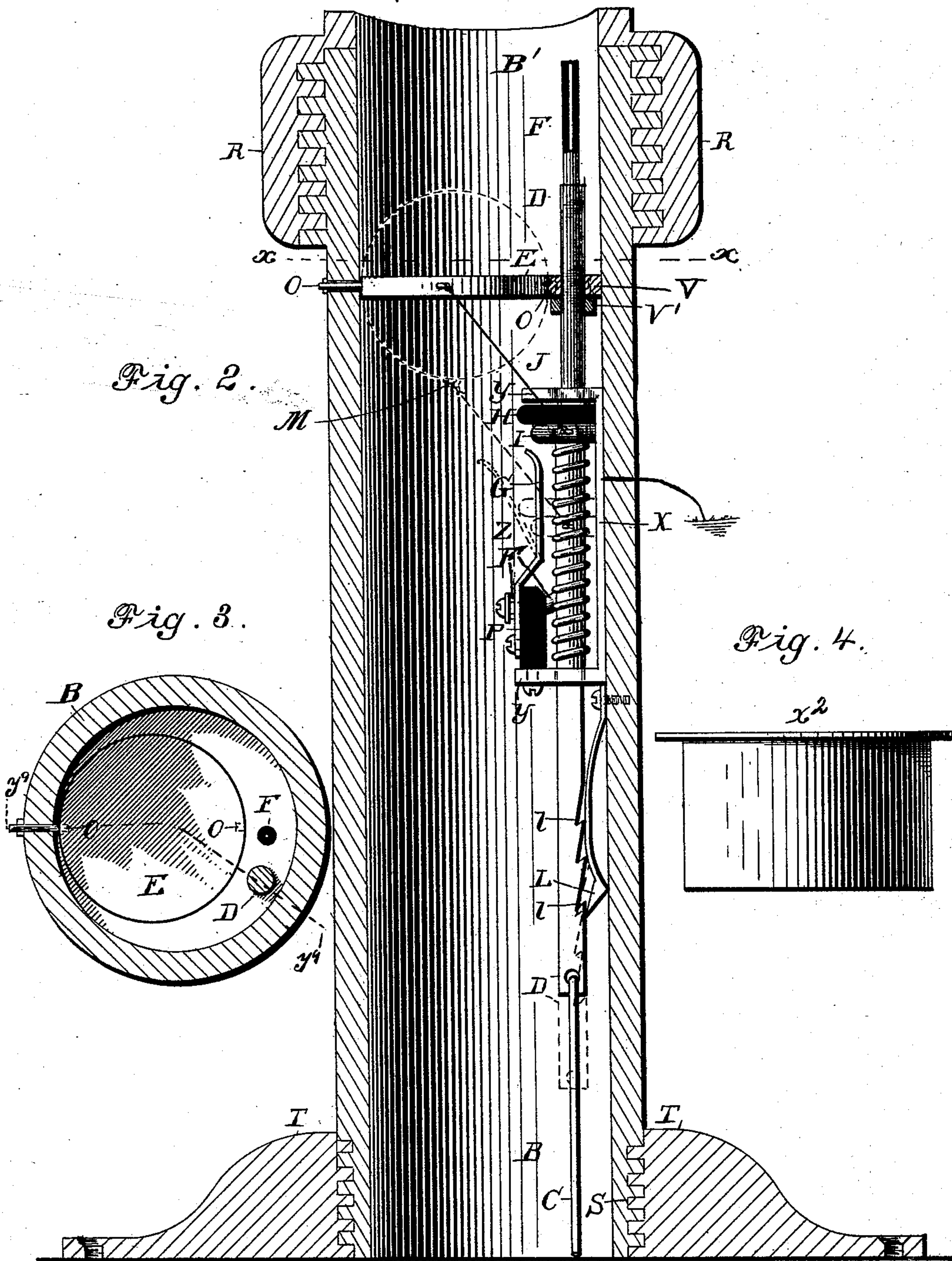
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# UNITED STATES PATENT OFFICE.

WILLIAM H. WHITE, OF TOPEKA, KANSAS.

## GRAVE-ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 455,446, dated July 7, 1891.

Application filed May 22, 1890. Serial No. 352,813. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. WHITE, of Topeka, Shawnee county, Kansas, have invented a Grave-Annunciator, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to certain improvements in that class of alarms that are adapted for use in connection with graves or vaults for the purpose of indicating the movement of the body contained therein, and thus to give information that life still exists; and for this purpose it consists of a vertical flue connected with the coffin and having a contact-maker for an electrical circuit contained therein, the said contact-maker being actuated by a movement of the body to which it is connected, the said flue projecting above the surface of the ground and containing a valve which is opened by the movement of the said contact-maker, the said flue being separable above the said valve for the purpose of removing its upper section, when desired, without permitting the escape of the gases generated in the coffin, and it also consists in the construction, arrangement, and combination of the parts of which it is composed, as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, in which corresponding parts are designated by corresponding letters, Figure 1 is a section of my invention, showing it attached to a buried coffin. Fig. 2 is a detail vertical section of a part of the flue thereof, taken on line  $y^y$  of Fig. 3. Fig. 3 is a horizontal section taken on line  $x x$  of Fig. 2. Fig. 4 is a side view of the cap for the lower section of the flue.

To the upper surface of the lid of the coffin A (preferably near the head thereof) is secured the threaded collar T, surrounding the upper end of the aperture T' in the lid and the lower end of the lower section B of the flue, which is screwed therein, thus permitting it to be placed in position after the coffin has been lowered into the grave, before which time the aperture T' may be closed in any suitable manner.

Within the section B is secured the bracket X, the arms  $y y$  of which form the bearings for the sliding rod D, the lower end of which

is connected with the body within the coffin by means of the wire C, the connection by preference being made with a ring  $c$  upon the finger of the body. The contact-disk I is mounted upon the rod D, between the arms  $y y$  of the bracket, while an insulating-disk H is similarly carried above the contact-disk. The coil-spring Z is contained between the lower surface of the contact-disk and the upper surface of the lower arm  $y$  of the bracket, the tendency of the said spring being to raise the said disk, and thus raise the rod. The spring contact-plate G is mounted upon the insulating-base P, carried by the lower arm  $y$  of the bracket and is connected to the wire F, while the contact-disk is connected through the rod D, bracket-arms  $y$ , and section B of the flue (the said parts being metallic) with the ground. Within the lower section B and above the bracket X therein is the diaphragm V, of india-rubber, in which the opening of the valve E is eccentrically placed, the rod D and the wire F passing through the diaphragm, the former also passing through a packing-ring V', placed below the diaphragm V, for the purpose of rendering the joint between the diaphragm V and the rod D gas-tight, in order to prevent the upward escape of the gases generated in the coffin. The valve E is supported in the diaphragm by means of the oppositely-placed pivots O O and normally lies in a horizontal plane, thus closing the valve-opening, but is connected at one of its sides to the rod D by the wire J.

Upon the section B is screwed the upper section B', which projects above the surface of the ground and has its upper end closed by a suitable cap B<sup>2</sup>, to prevent the entrance of rain, snow, &c., while the perforations  $b$  in section B' afford ventilation therefor. The wire F is insulated by any suitable means, and is carried to a central station, where it is grounded through any suitable form of annunciator H<sup>9</sup>.

The operation of my invention is obvious, but it may be here stated as follows: That portion of the body within the coffin to which the wire C is attached having moved downward, the rod D will be drawn in a corresponding direction, causing the contact-disk I thereon to make contact with the plate G, thus closing the circuit and giving the proper



signal at the annunciator. If the downward motion of the body be still further continued, the insulating-disk H, which, as will be noticed, is larger than the disk I, will strike the plate G and shove it backward, the upper end of the plate being thrown backward to assist in this result, thus breaking the contact between the disk I and the plate G, thus saving the battery from wear, and at the same time the valve E will be tilted on its pivots O, permitting the entrance to the coffin of air to support life until the body may be disinterred, and the teeth l upon the spring-plate L, contained within the lower section, will, by engaging the rod D, hold it down, and will thus retain the valve E in an open position, the several parts having the relative position shown in dotted lines in Fig. 2. If no signal is made by the annunciator within a proper time, the upper section B' may be unscrewed from the lower section B, and having been removed the wire F may be clipped and the cap X<sup>2</sup> may be dropped into position in the upper end of the lower section B, preventing the entrance of dirt, &c.

Having thus described my invention, what I claim is—

1. The combination, with a coffin, of a flue composed of two separable sections, the one above the other, the lower of the said sections communicating with the coffin, a contact-maker, and a diaphragm within the said lower section, a valve within the said diaphragm mechanically connected with the said contact-maker, a wire passing upward from the said contact-maker and through the said diaphragm and upper section of the flue, and an annunciator connected with the said wire, as described.

2. The combination, with a coffin having an aperture in the lid thereof, of a flue consisting of two separable sections, the one above the other, the lower section communicating with the said coffin through the said

aperture, a sliding rod within the said lower section, a contact-disk carried thereby, the said contact-disk being electrically connected with the ground, a spring contact-plate adapted to make contact with the said disk, a diaphragm within the said lower section above the said contact-plate, a valve within the said diaphragm and connected with the said sliding rod, a wire connected with the said contact-plate and passing through the said diaphragm, and an annunciator connected therewith, as described.

3. The combination, with a coffin having an aperture in the lid thereof, of a threaded collar surrounding the said aperture, a flue composed of two separable sections, the lower section of which is screwed in the said collar, a sliding rod within the said lower section, a contact-disk and an insulating-disk carried thereby, the said insulating-disk being of greater size than the contact-disk, the said contact-disk being electrically connected with the ground, a bracket having upper and lower guide-arms thereon within the said lower section, a spring contained between the said lower arm and the said contact-disk, a spring toothed plate within the said lower section, a contact-plate carried by the said lower arm, but insulated therefrom, a diaphragm within the said lower section above the said contact-plate, a valve within the said diaphragm mechanically connected with the said sliding rod, a wire connected with the said contact-plate and passing through the said diaphragm and upper section of the flue, and an annunciator connected with the said wire, as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. WHITE.

Witnesses:

WM. C. KNOX,  
J. D. SALMONS.