(No Model.)

M. KARNICKI.

APPARATUS FOR SAVING PEOPLE BURIED ALIVE.

No. 572,119. Patented Dec. 1, 1896.

Fig. 1.

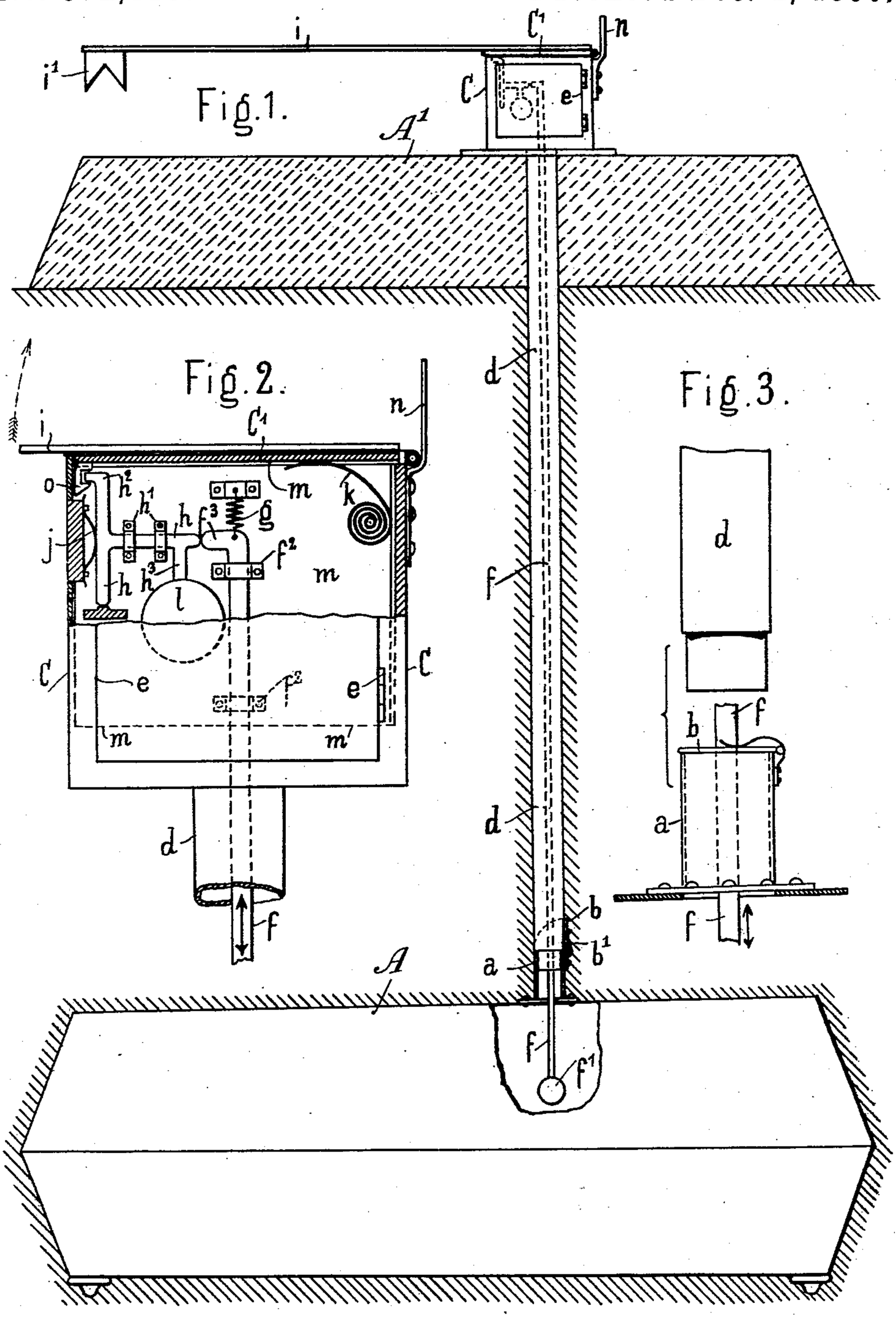


Fig. 2.

Fig. 3.

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APPARATUS FOR SAVING PEOPLE BURIED ALIVE.

SPECIFICATION forming part of Letters Patent No. 572,119, dated December 1, 1896.

Application filed July 3, 1896. Serial No. 597,953. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL KARNICKI, a subject of the Emperor of Russia, residing at Warsaw, Poland, Russia, have invented certain new and useful Improvements in Apparatus for Saving Persons Buried Alive, of which the following is a specification.

The principal objects of my invention are, first, to provide, in an apparatus for saving persons buried alive, a coffin, a pipe leading from the coffin-lid to the surface of the grave, a box inclosing the upper end of the pipe, a rod traversing the pipe and extending into the box and into the coffin, a spring maintaining the rod in a state of equilibrium, a projection formed at the box end of the rod, a sliding spring-controlled catch arranged inside the box and adapted to be held in locking position by the projection on the rod, said catch holding under spring-tension a lid down upon the box, a flag or other visual signal secured to said lid, and an audible signal adapted to be operated by the spring-catch when the lid is released from the box, and, second, to provide, in connection with the air-tube connecting the coffin with the box and the rod traversing the tube and adapted to open the box, a sealing flap or valve located near the lower end of the tube and held in open position under spring-tension by said rod and adapted to close the tube upon the withdrawal of said rod.

My invention is applicable to both wooden and metal coffins, especial weight being attached to the fact that with the slightest movement of the awakening person air and light are admitted simultaneously to the coffin lying in the earth, a signal in connection with the grave-mound being set in action, by means of which passers-by or the officials of a church-yard may immediately be acquainted with what has occurred. Existing sanitary regulations are also fully complied with, for as long as the apparatus is not in action by the person coming to life there is not the slightest connection between the inner chamber of the coffin and the outside air, and consequently dangerous exhalations are prevented; and the alarm apparatus is so arranged as not to be capable of action from the outside by passers-by, but solely from the inside of the coffin by the slightest movement of the awakening person concealed in the coffin.

My invention consists of an apparatus constructed and arranged in substantially the manner hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a view, partly in vertical section and partly in elevation, of an apparatus employed in connection with a coffin which is shown deposited in the ground and with a box containing certain mechanism located about the grave-mound, embodying the main features of my invention; and Figs. 2 and 3 are respectively elevational views, drawn to an enlarged scale, showing the construction and arrangement more clearly of the box and its accessories.

Referring to the drawings, *a* is a short pipe or nozzle connected with the cover of a coffin A and tightly closed by means of a flap *b* under spring-tension. The flap is provided with a sheet of india-rubber *b'*. When the coffin has been lowered into the ground, the flap *b* is opened, and a pipe *d*, to establish communication with a box C, which is adapted to be located on the grave-mound A', is preferably screwed into the nozzle *a* and the earth then applied about the grave.

A rod *f* is suspended from a vertical partition *m* in the interior of the box C, as illustrated in Fig. 2, by means of a spring *g*, and is conducted down through a pipe *d* into the interior of the coffin A and close to the breast of the person buried, its end being there provided with a hollow ball *f'* or other suitable device. The strength of the spring *g* is so calculated that the rod *f*, which is guided in bearings f^2 on the partition *m*, is freely carried with the ball.

At the top the rod *f* is bent to an angle or provided with a projection f^3, whose end surface is rounded off, so as to engage a slide *h*, carried in bearings *h'* on the partition *m*. This slide is adapted to be actuated by a leaf or flat spring *j*. One end of the slide *h* is hooked, as at h^2, to engage a catch *o* of the lid or cover C', and the other end is provided with an arm h^3, which extends downward and is connected with a spring-controlled bell *l*, adapted to be set in action on the liberation of the whole mechanism. The cover C', hinged to the box C, made, preferably, of sheet-iron, is provided with a signal-rod *i*,

compressing when the lid or cover C′ is closed a spring *k*, which normally tends to raise the same.

A support *n* is fixed to the hinged end of the box C for the purpose, after the liberation of the mechanism, of supporting in an upright position the cover, together with the signal-rod *i*, provided with a small flag *i′*.

e is an air-tight closed door in the box to guard against misuse of the same. The cover C′ is also provided on its inner face with india-rubber to establish a perfectly-tight joint when the lid or cover C′ is closed.

In order to provide an awakened person with light in a satisfactory manner upon the apparatus being actuated, it is advantageous to enamel or paint the apparatus, as well as the inside of the coffin, white, while the outside of the apparatus and its parts may be enameled black to preserve it from rusting.

The apparatus is shown in the drawings in a closed position, and the more the engaging ends of the slide *h* and the rod *f* are rounded off the more sensitive will be the apparatus. Now when a buried person awakens and by a slight movement effects a displacement either upward or downward of the rod *f*, balanced against gravity, the slide *h* will be liberated and move inward under the influence of the spring *j*. With the simultaneous ringing of the spring-bell *l* the cover C′ is freed and thrown open by the spring *k*, air and light thus penetrating the interior of the coffin A, and the cover C′, flag *i′*, and its rod *i* will assume a vertical position. The sounding of the spring-bell *l* and the rising of the flag *i′* will be observed, indicating thereby the awakening of the person to be rescued.

The reliability and certain action of the apparatus will be apparent from the foregoing description and drawings of my invention.

It may be here remarked that the apparatus of my invention may be readily removed at any desired time after burial of the person without disturbing the grave or causing noxious gases to escape from the corpse, for the reason that as soon as the lower pipe end with its ball is removed from the nozzle attached to the coffin the spring-flap of the latter closes tightly and the opening left by the pipe in the earth sinks and closes up the space.

When the apparatus is withdrawn altogether, the pipe end with the ball can for greater security be immediately immersed in a disinfecting fluid. The disinfection of the remaining parts of the apparatus appears, however, to be unnecessary, as, being made of enameled iron, protection is afforded against the absorption thereby of any noxious gases that may be given off thereto.

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an apparatus of the character described, a coffin-lid, a pipe leading therefrom to the surface of the grave, a box inclosing the upper end of the pipe, a rod traversing the pipe and extending within the box and within the coffin, a spring adapted to support the rod in a state of equilibrium a projection formed at the box end of the rod, a sliding spring-catch arranged within the box and held in locking position by said projection, a lid secured to the box under spring-tension by said catch, a visual signal carried by said lid and an audible signal operated by said catch when released from engagement with said lid, substantially as and for the purposes described.

2. In a device of the character described, an air-tube connecting the coffin with a box, a rod traversing said tube and extending into the coffin, said rod adapted to open said box, and a sealing flap or valve located at the lower end of said tube and held in open position under spring-tension by said rod and adapted to close the tube when the rod is withdrawn, substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MICHAEL KARNICKI.

Witnesses:
VLADYSLAW ZANINMIL,
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