T. N. HOWELL.

Grave-Torpedo.

No. 217,379. Patented July 8, 1879.

*Fig. 1.*

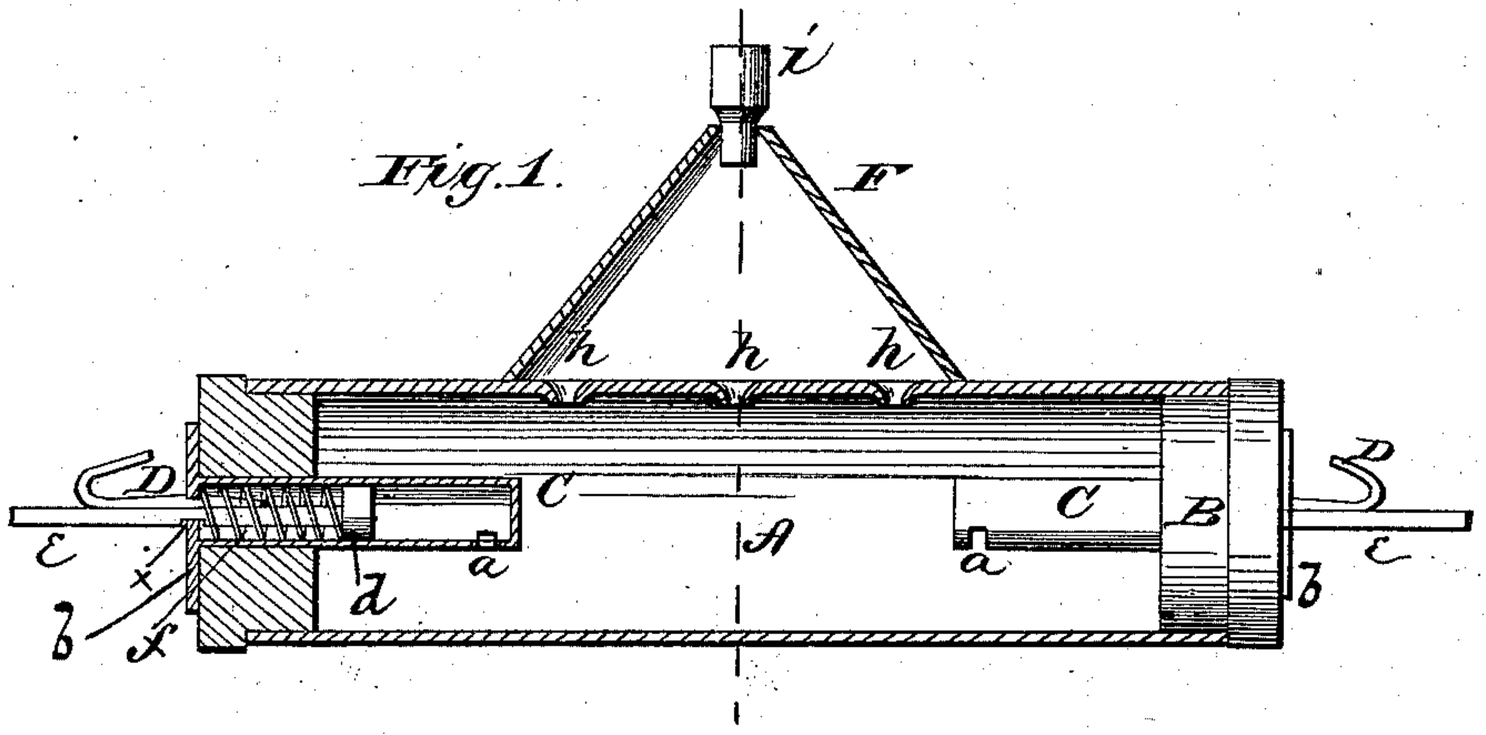
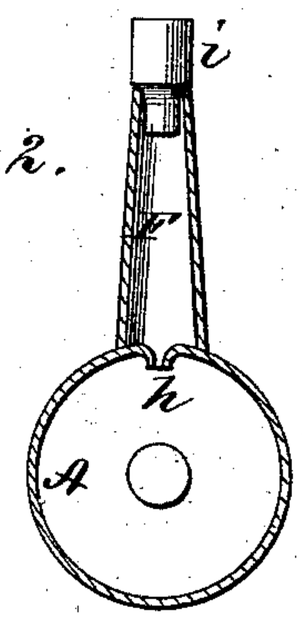



*Fig. 2.*




WITNESSES

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# UNITED STATES PATENT OFFICE.

THOMAS N. HOWELL, OF CIRCLEVILLE, OHIO.

## IMPROVEMENT IN GRAVE-TORPEDOES.

Specification forming part of Letters Patent No. **217,379**, dated July 8, 1879; application filed May 8, 1879.

*To all whom it may concern:*

Be it known that I, THOMAS N. HOWELL, of Circleville, in the county of Pickaway and in the State of Ohio, have invented certain new and useful Improvements in Grave-Torpedoes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The object of my invention is to prevent the despoiling of graves; and it consists of a torpedo placed in the grave, and arranged in such a manner that it will explode when the grave is dug up, and carry destruction to the parties attempting the same, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a longitudinal vertical section of my grave-torpedo. Fig. 2 is a central transverse section of the same.

A represents a canister or casing of cylindrical or other suitable form, provided at each end with a head, B. Through each head B is passed a tube, C, having one or more openings or perforations, *a*, near the inner end, the outer end of such tube being permanently fastened in the head or to a plate, *b*, attached to said head.

In each tube is a piston or plunger, *d*, provided with a rod, *e*, which has a notch, *x*, at a suitable point thereon. Surrounding the rod *e*, between the piston *d* and the outer end of the tube, is a spiral spring, *f*, as shown. When the rod *e* is drawn out the piston or plunger *d* compresses the spring, and said parts are then held by the notch *x* catching on the plate *b*. A key, E, is then inserted in the hole in said plate *b* to lock the piston and piston-rod in place, the said key forming at its outer end a hook or similar device for the attachment of one or more wires.

In the upper side of the casing or canister A is a series of holes, *h h*, punched down, forming funnel-shaped openings or channels into the casing. Over these openings is formed a cone-shaped chamber, F, with an opening in its top.

In the inner end of each tube C is to be placed a fulminating-cap, and each trigger is set—the trigger being composed of the piston, rod, and spring, as above described—and locked by the key D. The torpedo is then placed over the coffin-box in the grave, with a few inches of dirt, if desired, between the box and the torpedo. A number of small wires are then to be fastened to each key D, and said wires run in various directions to near the edge of the grave, where they are to be fastened to larger wires driven down to the bottom of the grave, the whole being covered with dirt, so as to be held in place.

A tube is to be fitted over the upper end of the cone-shaped chamber F, and the grave filled in the usual manner. The charge of powder is admitted through this tube and passes through the holes *h* into the canister A. A stopper, *i*, is then dropped through the tube and inserted in the hole in the cone by means of a rod, after which the tube is withdrawn and the dirt stamped down and the grave finished.

If anybody should attempt to dig up the grave they would necessarily come across and pull on one or more of the wires, which will pull out the key D sufficiently far to release the trigger or piston-rod, and the spring *f* will at once forcibly throw the piston inward, exploding the cap, thereby igniting and exploding the charge in the torpedo, causing the dirt to be thrown in all directions, and injuring, if not killing, the would-be grave-robbers.

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

1. The casing A, provided with funnel-shaped holes *h*, and the conical chamber F, surrounding the same, and having an opening in the apex, for the purposes herein set forth.

2. The combination of the casing A, provided with funnel-shaped holes *h*, heads B, tubes C, having openings *a* and spring-pistons *d*, keys D, and the conical chamber F, having an opening in its top, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of April, 1879.

THOMAS N. HOWELL.

Witnesses:

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