April 13, 1937. M. A. SMITH 2,076,677

BURIAL METHOD AND MEANS

Filed June 6, 1936

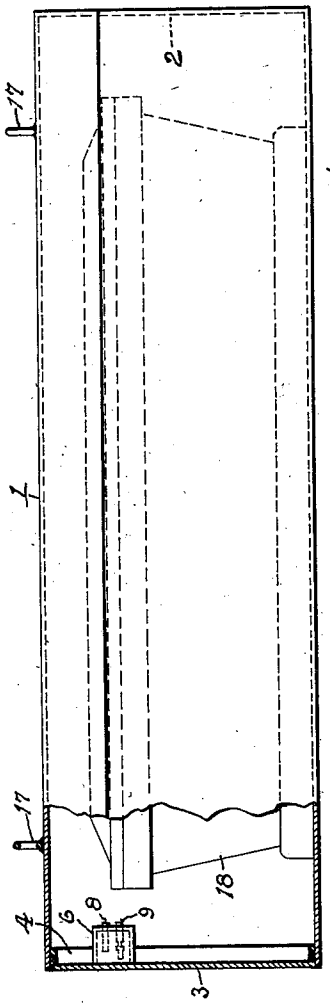


Fig. 1.

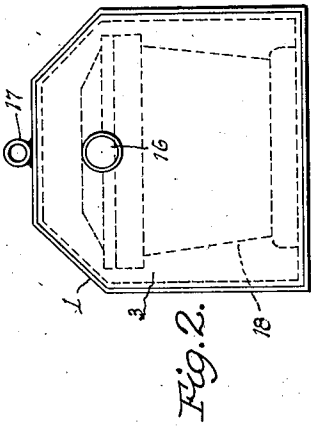


Fig. 2.

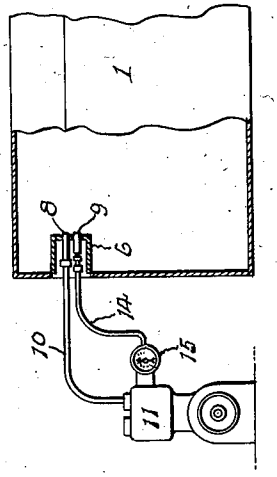


Fig. 6.

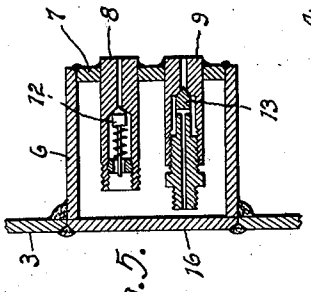


Fig. 5.

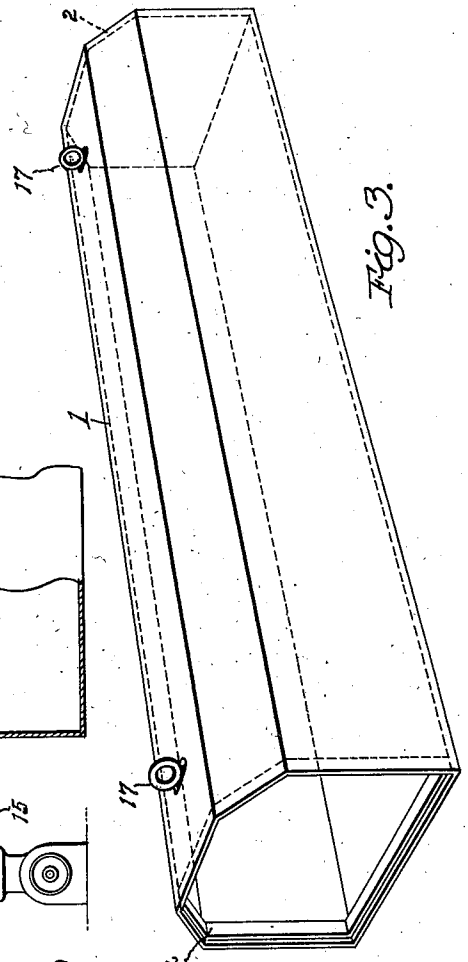


Fig. 3.

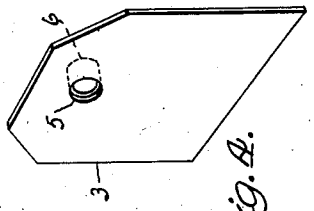


Fig. 4.

INVENTOR

Merle A. Smith,

BY

ATTORNEYS

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# UNITED STATES PATENT OFFICE

2,076,677

## BURIAL METHOD AND MEANS

Merle A. Smith, Trenton, Mich.

Application June 6, 1936, Serial No. 83,939

4 Claims. (Cl. 27—35)

This invention relates to the method of and means for interring and preventing decomposition of the human body after interment, and an object is to provide a simple method which may be conveniently and economically practiced and which will insure the preservation of the corpse over a long period of time, said method being such as to permit the usual practice of placing the body in the usual coffin and conducting the usual funeral services.

A further object is to provide suitable means for carrying out such method, said means including a vault into which the coffin may be inserted at the grave and the vault then sealed, said vault being provided with valvular means through which the air in the vault may be extracted to form a vacuum therein for preserving the corpse, and this valvular means then sealed to permanently hold the vacuum and preserve the body over a very long period of time.

It is also an object to provide a grave vault having no exterior projections liable to become broken in time and permit entrance of air causing disintegration of the corpse, and to provide said vault with certain other new and useful features, all as hereinafter more fully described, reference being had to the accompanying drawing, in which

Figure 1 is a side elevation of a vault with an end portion thereof in cross section to disclose the construction and illustrate the burial method;

Fig. 2 is an end elevation of Fig. 1;

Fig. 3 is a perspective view of a vault with the end closure removed;

Fig. 4 is a perspective view of the closure;

Fig. 5 is a sectional detail of a valve chamber forming part of the end closure of the vault and showing valve members in section therein, and a closure disk for the outer open end of said chamber, and

Fig. 6 is a sectional view of an end portion of the vault showing an end closure provided with a valve chamber and illustrating means connected to said valves for creating a vacuum in the vault and for indicating the amount of vacuum therein.

By placing the human body within a chamber from which practically all of the air has been extracted to provide a complete vacuum and interring the body within such chamber, the body will be prevented from disintegrating over a long period of time and in the present method such a vacuum chamber is provided by means of a suitably constructed grave vault, this vault being preferably formed of sheet metal so that the walls thereof may be electrically welded together along their meeting edges to form an air tight chamber.

This vault is indicated as a whole by the numeral 1 and its top, bottom and sides are formed from a single sheet with the abutting edges electrically welded and the closed end wall 2 is electrically welded within the end of the body. The opposite end of the vault is formed by a separate end wall 3 which may be electrically welded along its inner edge to a strip or abutment 4 which is welded within the end of the vault body at said open end. The end wall is formed with a circular opening 5 over which a tube 6 is welded at its end and extends inwardly of the vault from the wall 3, its inner end being formed by a disk 7 welded within the end of the tube and carrying nipples 8 and 9 within the tube, the nipple 8 for the attachment thereto of a flexible hose-like member 10 leading to a suitable air pump 11 for pumping the air from the interior of the vault past a suitable valve 12 within the nipple which is adapted to seat and close the passage through the nipple whenever the operation of the pump is discontinued and the hose 10 disconnected from the nipple.

The nipple 9 is provided with a valve member 13 having a screwthreaded outer end for the attachment thereto of a tube or conduit 14 leading to an indicator 15 for indicating the amount of vacuum created within the closed vault, the stem of the valve member being screwthreaded within the nipple 9 so that it may be screwed into said nipple and force the valve 13 to its seat and close the passage through the nipple to prevent air from entering the vault when the pipe 14 is disconnected from the outer end of the stem of the valve.

After the separate end wall 3 has been inserted in the open end of the vault and welded in place, the air is withdrawn from the vault by means of the pump 11 to create the desired vacuum within the vault, and the pipes connected to the nipples 8 and 9 are then disconnected and the outer end of the tube 6 is permanently closed by means of a disk 16, the edges of which are electrically welded within the opening 5, providing a flush outer surface with the valves enclosed within the tube 6 and protected against any possible leakage of air into the vault through the nipples 8 and 9.

By forming the vault 1 of sheet metal with the edges electrically welded together, an air tight chamber is provided when the end wall or closure 3 has been electrically welded in place and as the tube 6 which carries the valve nipples 8 and 9 projects inwardly of the vault, this tube carrying the valves may be permanently closed air tight by electrically welding a disk closure 16 over the outer end of the tube. Rings or other suitable

means 17 may be provided upon the upper wall of the vault for the attachment thereto of any suitable means, such as a derrick, for lifting the vault and lowering it into the grave.

With the present method, the body or corpse may be placed in the usual casket 18 and funeral services may be conducted in the usual manner after which the casket will be conveyed to the grave where it will be inserted endwise into the vault 1 through the open end thereof. Means will be provided at the grave for electrically welding the end closure 3 into place within the open end of the vault after the casket has been inserted therein and then a suitable air pump will be connected to the nipple 8 within the inwardly projecting tube 6 carried by the closure 3 and the air will be withdrawn from the vault, to create a vacuum therein which will be indicated by the indicator 15. After the desired vacuum has been created, the tubular connections 10 and 14 will be disconnected from the nipples 8 and 9, the valves 12 and 13 preventing the entrance of air through these nipples into the interior of the vault. The outer end of the tube 6 is then permanently closed air tight by welding the disc 16 in place and thus any possible entrance of air past the valves into the vault is obviated. With this method the whole process of creating the vacuum within the vault after the casket has been inserted therein and the welding of the joints to prevent any possible leakage and the breaking of the vacuum is performed at the grave, after which the vault is lowered into the grave. The retention of the desired vacuum within the vault is thus insured and the usual funeral services and employment of the usual casket for carrying the body is not interfered with.

Having thus fully described my invention what I claim is:

1. Burial means including a vault formed of sheet metal and open at one end, a closure for said open end to be welded in place therein for permanently and hermetically sealing said vault, said end closure being provided with an opening, a tubular member secured to said end closure over said opening and projecting inwardly therefrom, a nipple within said tubular member for the attachment of means thereto for withdrawing the air from the interior of the vault, and a closure for hermetically closing the outer end of said tubular member.

2. A vault formed of sheet metal and having an opening for the insertion of a casket, an end closure formed of sheet metal for closing said opening and welded in place therein to hermetically seal said vault, said end closure having an opening, a tubular member welded in place over said opening and having a closed inner end, a nipple carried by said closed end of said tubular member for the attachment thereto of means for withdrawing air from the interior of said vault, valvular means within said nipple for preventing the entrance of air into the vault upon disconnection of said means from said nipple, and an air tight closure for the outer open end of said tubular member.

3. A burial vault formed of sheet metal and having an open end provided with an abutment member adjacent said end, and an end wall to close said end of said vault and peripherally welded in place against said abutment to permanently seal said vault, said end wall being formed with an opening, a tubular member having a closed end and welded at its open end over said opening in said end wall and extending inwardly of the vault therefrom, valvular means within said tubular member in communication with the interior of said vault and for the attachment thereto of means for withdrawing the air from the interior of the vault, and a sheet metal closure welded over the open end of said tubular member for permanently sealing the same and preventing leakage of air into the vault through said valvular means.

4. A burial vault having bottom, top and side walls and an end wall formed of sheet metal electrically welded together, a sheet metal end wall for closing the open end of the vault electrically welded at its edges to the edges of the walls of the vault and having an opening therein, a tubular member electrically welded to said end wall over said opening and extending inwardly of the vault therefrom, said tubular member having an inner end closure, valvular means within said tubular member mounted upon said end closure thereof for the detachable attachment thereto of means for creating a vacuum within the vault, and a sheet metal disk for closing the outer end of the tubular member when the vacuum creating means is disconnected from said valvular means, said disc closure being electrically welded over the open end of said tubular member.

MERLE A. SMITH.