A. W. GRAHAM.

SEPULCHRAL MEMORIAL.

APPLICATION FILED JUNE 17, 1915.

1,167,292.

Patented Jan. 4, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

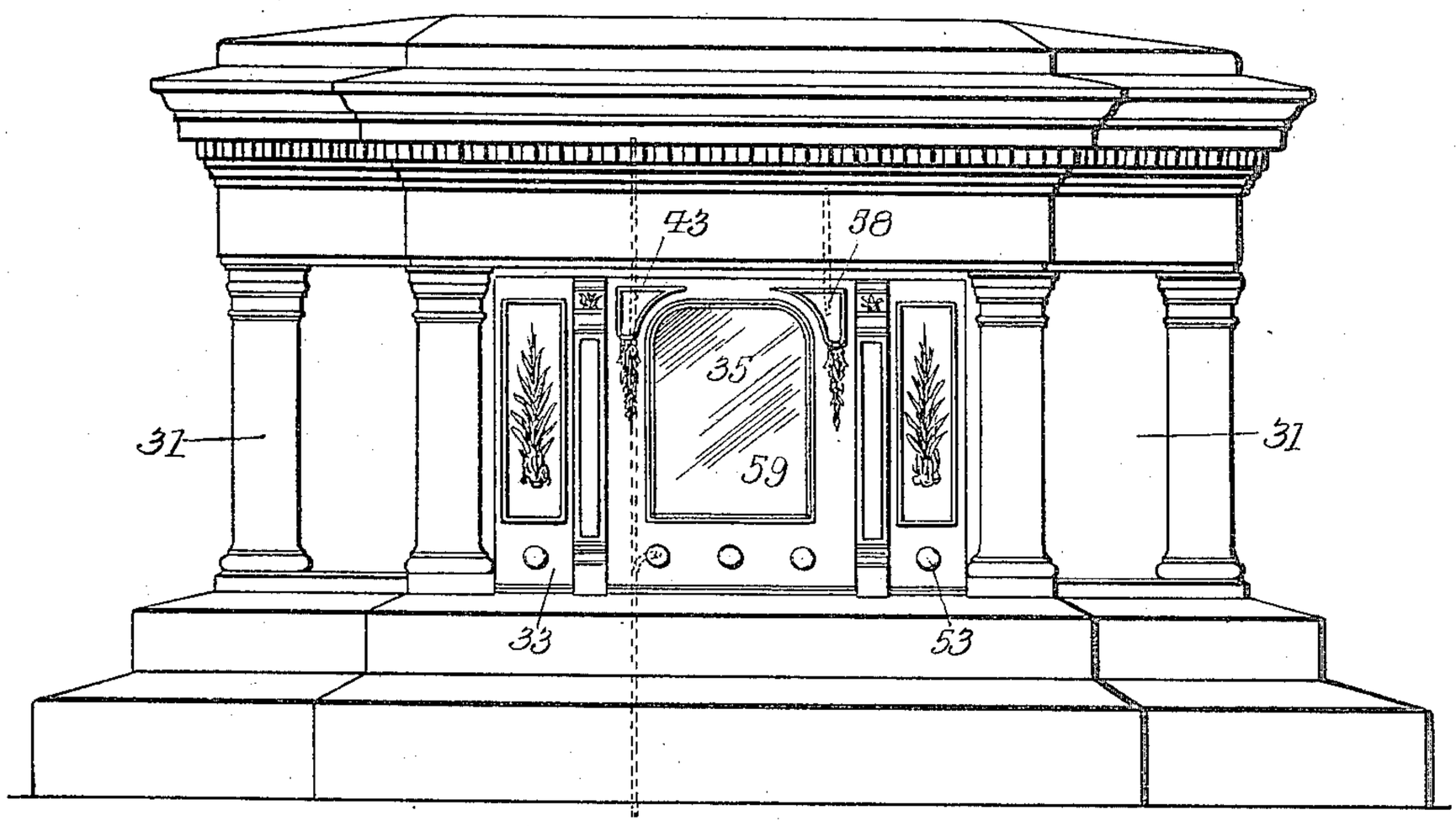
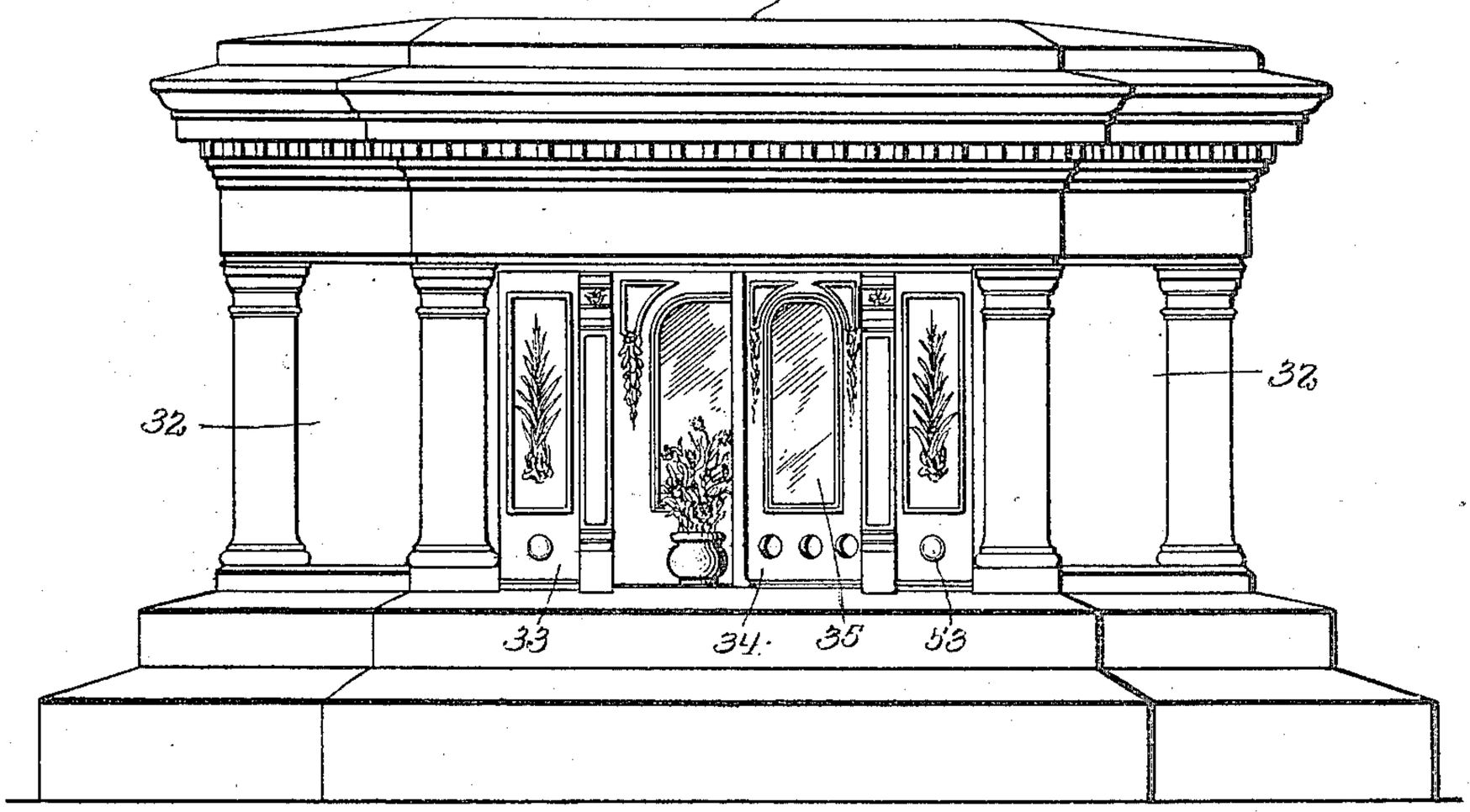


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

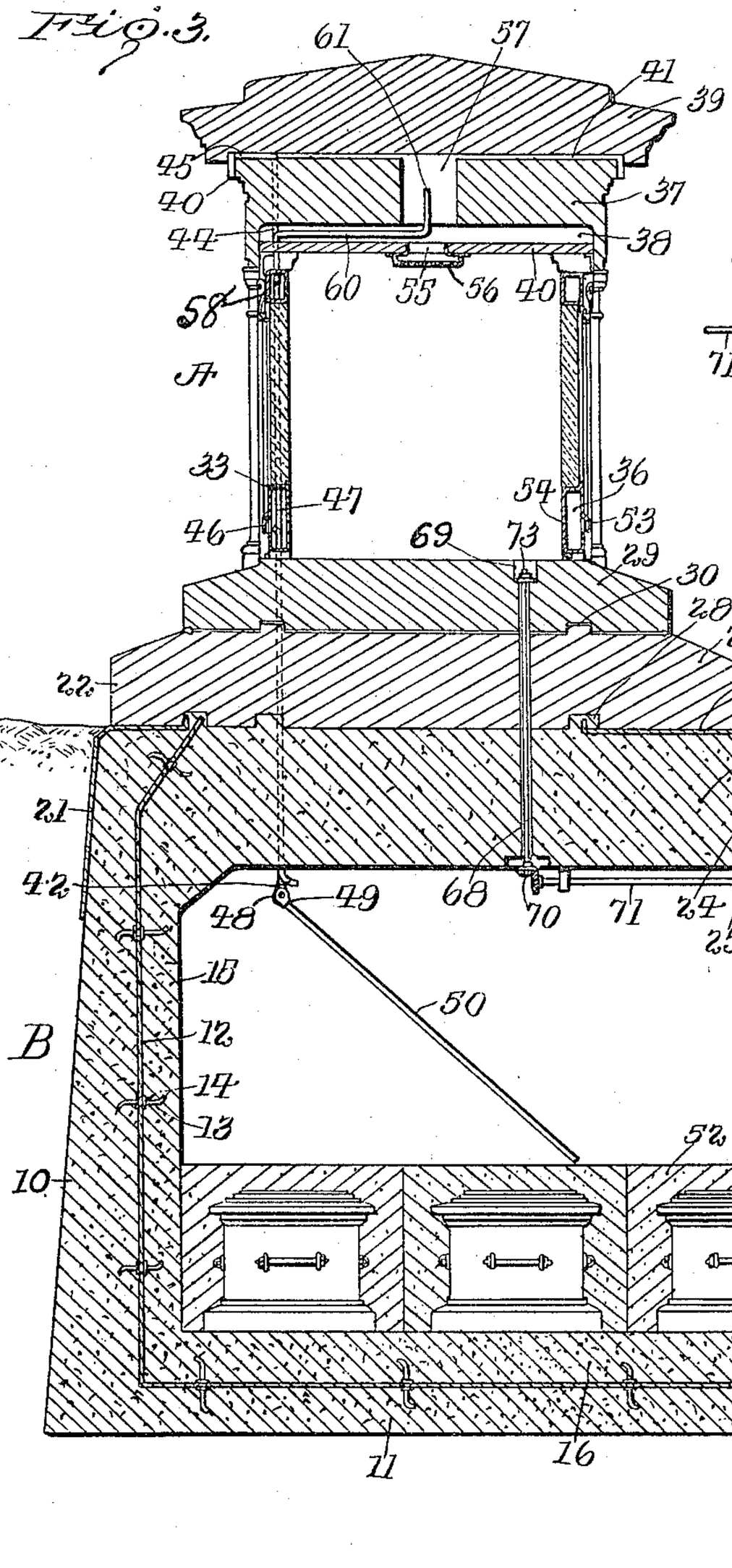
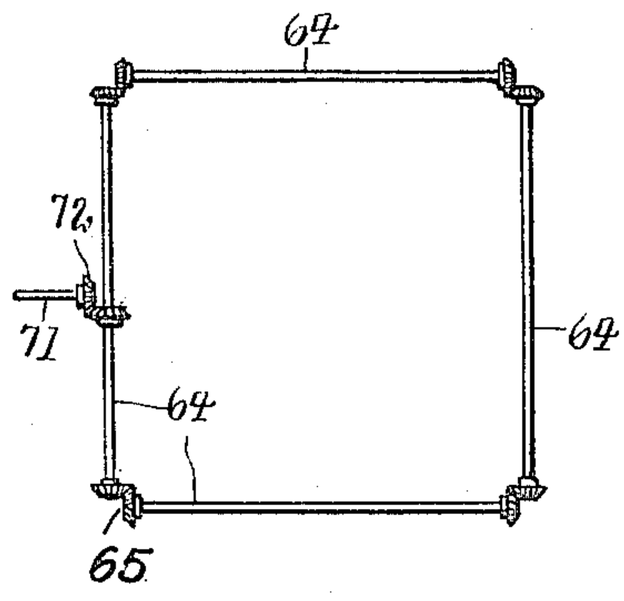


Fig. 4.



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UNITED STATES PATENT OFFICE.

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SEPULCHRAL MEMORIAL.

1,167,292. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed June 17, 1915. Serial No. 34,595.

To all whom it may concern:

Be it known that I, ANDREW W. GRAHAM, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Sepulchral Memorials, of which the following is a specification.

This invention relates to sepulchral memorials and has special reference to a memorial of this type arranged to provide space for flowers, inscriptions and other *memento mori* and, at the same time, to control access to a separate casket receiving compartment, the two being independent in so far as no direct communication exists from one to the other.

One principal object of the invention is to so improve the construction of devices of this character that many of the unpleasant features attendant upon visiting the burial places of the dead will be eliminated, special reference being had to the provision of a memorial room out of communication with the casket receiving compartment or place of sepulcher.

Another principal object of the invention is to provide a separate memorial chamber and casket receiving compartment, the latter being so arranged that access thereto will be controlled from the memorial chamber whereby no access may be had to the casket receiving compartment without first obtaining access to the memorial chamber.

A third principal object of the invention is to provide improved ventilating means for casket receiving compartments of the above described class.

A still further object of the invention is to provide improved means for ventilating memorial chambers of the above description.

With the above and other objects in view, as will be hereinafter apparent, the invention consists in general of certain novel details of construction, combinations of parts and arrangements of details hereinafter fully described, illustrated in the accompanying drawings and set forth in the claims.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and Figure 1 is a rear elevation of the memorial part of the device, the front being identical in appearance when the door is closed. Fig. 2 is a front view similar to Fig. 1 but with the door partly open. Fig. 3 is a vertical transverse section of the device taken on its central plane. Fig. 4 is a detail plan view of the gearing used in the present embodiment of the invention in the locking arrangement connected therewith.

In the embodiment of the invention shown in the present drawings it may be said to consist, like that shown in the companion application bearing the Serial Number 30,836 and filed May 27, 1915, of an over-ground part indicated in general at A and an underground casket receiving compartment indicated in general at B. Like the invention set forth in the previous application above referred to these parts are so correlated as to be co-dependent and thus form a unitary device, the distinction between the two being made solely for the sake of convenience in describing the invention.

As in the companion application above identified, the part A will be hereinafter referred to as the "memorial" while the part B will be referred to as the "sepulcher" or "casket receiving compartment." It is to be understood, however, that the part B in the present application may or may not form a foundation for the part A since, under the present invention, the part A may be set at a distance from the part B as no communication, other than that of the ventilating devices, is necessary between the two parts. However, in the present illustration of the invention as shown in the drawings the memorial is placed above the sepulcher so that the latter may act as the foundation for the memorial and thus avoid the necessity of a separate support for the heavy superposed weight of such memorial.

In the construction of this device, as in that of the copending application above referred to, there is first made in the ground a suitable excavation somewhat larger than

the external dimensions of the intended size of the casket receiving chamber B. In this excavation are then set up the usual wooden or metallic forms or molds and between these forms is poured a suitable concrete to form the outer walls 10, the sub-floor 11 being formed at the same time in the usual and well known manner.

As in the companion application a moisture proof lining 12 is applied to the inner surface throughout its entire extent. This lining may be of any preferred water resisting material and in some instances it is preferred to make the lining of sheet metal such as copper or other corrosion resisting metal. In this case I insert ties or bolts 13 through the inner wall of the form so arranged that when the form is removed sheets of metal, properly punched may be fitted on the bolts against the concrete, nuts 14 being used to hold the sheets in position. It is to be understood that the edges of the sheets are united in any desired manner, as by soldering, brazing, welding or the like so that a water tight box is formed. After this is done the mold for the inner walls 15 is placed in position and these walls and the floor 16 formed of concrete in the usual manner, the inwardly and upwardly projecting ends of the ties 13 causing firm connection to the outer walls and sub-floor. Thus there is formed a casket receiving chamber or sepulcher 17 and at one side of the top of such sepulcher there is provided an opening 18 of proper and sufficient size to permit the passage of a casket. It is to be understood that the chamber 17 is provided with a roof 19 which, except where it may support the memorial A, lies entirely below the ground or grade line 20 under all conditions but those of a burial, the surface earth being removed by the properly appointed persons at the time of such burial so as to disclose the covering for the opening 18. Moreover, this sepulcher is provided around its entire upper periphery with a metallic apron 21 having flanges 22 overlying the upper surface of the sepulcher, these flanges around the opening 18 being engaged by the downwardly depending flanges of a closure 23, the latter flanges being indicated at 24. Around the opening 18 extends, on the inner side, a plate 25 and through the closure 23 and this plate 25 extend the bolts 26 which serve as the normal holding means to close the sepulcher.

The part A or memorial is erected on any suitable foundation, the sepulcher being utilized for this purpose. Whatever foundation is used there is first placed thereon a base stone 27 having a groove and rib connection 28 with the foundation. On this is placed the surbase 29 connected to the base by a groove and rib connection 30. On the surbase is erected the body of the memorial which is here shown as having rear panels 31 each of which is formed with an integral slab of stone and front panels 32 which are similarly formed. Also the end panels, not shown, are formed integral as in the copending application above referred to. The spaces in the front and back walls between the panels are filled with similar bronze closures 33, the front closure being provided with a swinging door 34, it being obvious that this door may be a sliding door or a lift door as desired. In each of the center panels of these closures, and if desired in the side panels thereof, there is set a heavy glass plate such as is shown as at 35, this plate being preferably one and one-half inches thick. The frames for these closures are preferably hollow as indicated at 36 for the purpose of lightness. On the side walls is placed the lower roof stone 37 which is recessed interiorly as at 38 and supports the main roof stone 39 having depending integral dentils 40 or the like which serve to prevent movement of one roof stone horizontally with respect to the other. The exterior of the memorial is suitably ornamented in any preferred manner and the side and end members, and in fact all vertical joints, are preferably of the dove-tailed type illustrated in the copending application above referred to.

The entire interior of the memorial is lined with heavy plate glass with the exception of the inner sides of the closures 33, the roof lining being shown at 40 where it will be seen that this roof lining is spaced below the stone 37. It will also be noted that a space is left between the stones 37 and 39 as illustrated at 41. The purpose of this is for ventilation as will now be explained. In order to ventilate the sepulcher, I provide a vertical pipe 42 which extends from the interior of the sepulcher up through the rear closure 33 to a box 43 formed in the hollow of the closure and from this box 43 a pipe 44 leads upward to the space between the stones 37 and 39 and outward to a space between the dentils as indicated at 45. At the bottom of the rear closure 33 there are provided air inlets 46 which preferably communicate with a compartment 47 in the hollow rear closure and from this compartment there extends downward a pipe 48 leading into the sepulcher. At the lower end of this pipe 48 is a swivel joint 49 to which is connected a pipe 50 so arranged that it may, when the sepulcher is entirely empty, hang within a few inches of the floor but when the sepulcher is occupied by one or more coffins 51 embedded in the usual manner in cement as indicated at 52, the pipe 50 may rest on top of the cement. By this means the cooler air will flow in through the vents 46 and down

through the vent pipe 48 and vent pipe 50, passing outward through the vent pipe 42, box or compartment 43 and vent pipe 44. In this connection it should be observed that the surface of the box or compartment 43 being exposed to the heat of the sun will greatly assist the ventilation as it will warm up the ascending column of air.

In order to ventilate the memorial I provide other ventilators such as those shown at 53 and these ventilators open into the interior of the memorial through suitable openings 54. There is also provided in the upper part of the memorial at the center of the roof glass 40 and opening 55, the under side of which is protected from view by a suitable perforated and ornamented cover plate 56 and immediately above the openings 55 the stone 37 is provided with an opening 57 which communicates with the space 41. Thus the cooler air can pass in through the vents 53 and openings 54 and flow upward and out through the space 41. In order to improve the circulation of this air I provide in the upper part of the rear wall a compartment, the exterior of which is shown at 58 and this compartment communicates by a suitable vent pipe with one of the ventilators 53 as indicated at 59. From this compartment leads a pipe 60 which extends upward into the opening 57 as indicated at 61, the pipe thus acting as a jet pipe. When the heat of the sun strikes the exterior of the compartment 58 the air in such compartment is heated up and the circulation is established which tends to cause a rapid flow of air through the pipe 60 so that the air escaping from the upturned end 61 acts as an injector blast to increase the flow of air through the openings 55 and 57.

In order to lock the plate 23 against removal, even though the bolts 26 were tampered with, I provide on said plate a series of downwardly extending ears 62 each having an opening 63 therein. At each side of the opening 18 is mounted a shaft 64, all of the shafts being connected for simultaneous operation by bevel gears 65. Fixed on these shafts are rock arms 66 carrying locking bolts 67 which pass through suitable openings in the plate 25 and engage in respective openings 63 when in locking position, this being clearly shown in Fig. 3. In order to operate these locking bolts from the memorial I provide a shaft 68 which extends downward from a pocket 69 in the floor of the memorial to a point below the top of the sepulcher and is there connected by means of bevel gears 70 with a shaft 71 which is connected to one of the shafts 64 by means of beveled gears 72. The upper end of the shaft 68 is preferably squared as at 73 for the reception of a turn key. A suitable rubber packing 74 is placed beneath the cover plate 23 adjacent its periphery in order to prevent access of moisture to the interior of the sepulcher.

It is to be noted that normally the cover plate 23 is covered with a layer of earth but when it is desired to inter a body this layer of earth is removed and the nuts on the bolts 26 are taken off. Then, by going into the memorial chamber and applying the turn key to the squared end 73 the bolts 67 may be withdrawn and the cover plate lifted. After the funeral ceremony is completed, the coffin may be cemented in as previously set forth and the cover plate replaced, the bolts 67 shot home and the nuts applied to the bolts 26. The earth and sod are then replaced as before. It will be obvious that any suitable form of lowering device may be utilized to place the coffin within the sepulcher. It will also be observed that by reason of the caskets being embedded in solid blocks of cement no product of decomposition can escape into the sepulcher so that the ventilation through the small pipe is all that is necessary, it being only desired to keep this air within the sepulcher from becoming stagnant. There has thus been provided a highly efficient device of the kind described and for the purpose specified.

It is obvious that many minor changes may be made in the form and construction, as well as the ornamentation and configuration, of the invention without departing from the material principles involved. It is not wished therefore to confine the invention to the exact form herein shown and described, but it is wished to include all such as come within the scope claimed.

What is claimed as new, is:—

1. The combination with an underground sepulcher having an opening in its top; of an above ground hollow memorial, the sepulcher being inaccessible from within the memorial, a closure for the opening, a protected lock for the closure, and controlling means connected to the lock and terminating in the memorial.

2. The combination with a sepulcher located beneath the ground and a memorial structure supported on the sepulcher, the sepulcher being inaccessible from within the memorial and provided with an entrance opening exterior to the memorial; of a closure for the opening, a locking device for the closure located within the sepulcher, and controlling means for the locking device located within and accessible only from within the memorial.

3. The combination with a sepulcher located beneath the ground and a memorial structure supported on the sepulcher, the sepulcher being inaccessible from within the memorial and provided with an entrance opening exterior to the memorial; of a clo-

sure for the opening, a series of locking bolts engaging the closure, rock shafts surrounding the opening, rock arms carried by the shafts and connected to the bolts, gears connecting the rock shafts, and actuating means operatively connected to one of the shafts and terminating in the memorial.

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

ANDREW W. GRAHAM.

Witnesses:
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