## C. U. DOWNEY.

madsoledm construction and the like.

## 912,368.



Inventor.

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\text { Cha, les U. Downey } \\
\text { by Inal Grahame } \\
\text { attorney. }
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MAUSOLEUM CONSTROOTION AND THE LIKE.
APPLIOATION FILED MAY $29,1908$.
912,368.
Patented Feb. 16, 1909.
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# UNITED STATES PATENT OFFICE 

## CHARLESU.DOWNEY, OF DECATUR, ILLINOIS.

## MAUSOLEUM CONSTRUCTION AND THE LIKTE.

No. 912,368.
Specification of Letters Patent. Patented Feb. 16, 1809.
Application filed IK. y 29,1908 . Serial No. 435,833.

To all whom it may concern:
Be it known that I, Charles U. Downey, a citizen of the United States, and a resident of Decatur, in the county of Macon and
State of Ilmois, have invented certain new and useful Improvements in Mausoleum Constructions and the Like, of which the following is a specification.

This invention relates to masonry, and more especially to that class of devices thereunder known as mausoleums or burial crypts; and the principal object is to construct the crypt in such a manner as to reduce to a minimum its liability of injury under stress of weather or settling of the support, as well as to provide a construction wherein such injury when it does occur will probably affect only one or two of the parts of any vault and can therefore be remedied with ease.
To this end the invention consists in a construction whose preferred embodiment is set forth below, along with certain details which may or may not be employed in this connection, and is shown in the accompanying drawings wherein-
Figure 1 is a general cross section of the entire mausoleum or crypt; Fig. 2 is a front edge view of the floor and certain of the partitions constituting parts of the lower row of vaults at one side of the main passageway; Fig. 3 is a slightly enlarged end view of one of the partitions, showing a modification thereof; Fig. 4 is a section showing the parts of the lower row of vaults complete and the partitions of the row next above put. in place; Fig. 5 is a section showing the front and rear walls, which close the series of vaults.
As a whole this crypt comprises side walls 01 built on foundations 2 as shown in section in Fig. 1, front and rear walls with doors not necessary to illustrate, a central longitudinal passageway 3 with a main floor 4 and a ceiling 5 , and roof supports broadly designated as 6 and of which the details are not elaborated herein further than to say that they stand beneath the peaked roofing 40 and support the ceiling, resting at their extremities on the cornices 7 as usual. Throughout the length of this crypt on opposite sides of its passageway 3 are erected two like series of vaults built in superimposed rows, and a description of one series will suffice for both. Beginning with Fig. 2, 10 shows a rather thick bottom flooring of cement or like material which may be mold-
ed in place by any improved means and provided with transverse grooves 11 that may be narrow or may be wider as shown at 111 . Upon this bottom floor are erected partitions 12 which may have tenons 13 along their upper and lower edges .engaging said grooves 11 if they are narrow, or the said edges may be left full width as shown at 130 in Hig. 3 if the grooves are wider as at 111. Neat above the lower row of partitions is placed a second flooring 100 , and this and all abce it may be reinforced by expanded metal slicets or strips as shown at 14. This floor and all above it to the uppermost are provided not only with the grooves 11 or 111 in its upper face but also with grooves 15 in its lower face for the reception of the upper ends or the tenons at the upper ends of the partitions below. In this manner a number of rows are superimposed upon each other as seen in Fig. 1, and by preference the uppermost flooring 16 is made of less depth to accommodate the slant of the roof; and this short flooring may even be cast with an integral outer wall as shown at 17. As the floors and partitions are put in place the outer and inner end walls of the vaults may also be molded piece by piece while the builder can conveniently work upon them, and by preference both are made in members or parts each individually closing the extremity of one vault. The outer wall is designated at 20 , and where its members meet on the lines 21 they are recessed on their inner corners as at 22 for the side edges 130 or the side tenons 13 of the partitions 12. In like manner the inner wall 23 is applied in members or parts, but in place of the recesses the adjacent edges of these front sections are shouldered as at 24 so that the tenons at the front edges of the partitions project between the meeting lines of the inner sections as best seen in Fig. 5. This is done because in molding the partitions bolts 25 are cast into them with their threaded ends projecting beyond the front edges of the partitions to receive the washers 26 and rosettes 27 . Finally slabs of marble or other ornamental facing material 28 are applied over the fronts of the inner wall members 23 with the edges of the slabs abutting against each other and their corners notched so that four such meeting corners produce an opening through which a bolt 25 may project. The washer 26 which is then applied is of a width to reach onto said four
corners and hold the slabs in place, and finally the ornamental nut or rosette 27 holds the washer in place and locks all parts in position. Thus it will be seen that each which are integral throughout the length of the crypt, and of side partitions and outer and inner end walls which are all made of individual members. This construction I 10 prefer because experience has shown that the stress on structures of this character by reason of climatic changes or settling does not ordinarily injure members which lie horizontal, especially if they are reinforced by crack any partition or wall member it could easily be replaced. I do not confine myself to the molding of these parts direct into position, as they may be molded separately 20 elsewhere and then assembled although in that case a suitable cement would be used at the joints in order to make each vault air tight. Through the rear walls 20 are preferably formed vents 30 covered by valves 31 25 which are preferably constructed of flexible flaps suitably attached to the walls so as to hang over the vents and shed any liquid or condensation which may trickle down in the vent flues 32. As seen in Fig. 1, the latter
30 are formed by spacing the outer walls 20 slightly away from the side walls 1 of the crypt structure itself, and at their upper ends these flues 32 communicate with chambers 33 in which will be placed suitable de35 odorizers or disinfectants forming no part of the present invention. If desired, the rear walls of the short vaults in the upper row may be provided with similar vents and valves.
a long human experience, $I$ am disposed to believe that a crypt and its vaults as thus constructed would endure for a period of a great many years, but this assertion is made the conndence because of the fact that should any member or part of the various vaults become cracked or any of its seams beeome opened under the stress which might arise from time to time, said part above.
I believe the ordinary settling well known to exist with buildings erected in damp places would be resisted for a long period 55 by making the bottom flooring 10 thick and solid as shown and reinforcing the other floors 100 by expanded metal-both of which points of construction would tend to cause either side series of vaults to settle or ally, in the event that settling did occur. By preference the parts are constructed of cement in a manner well known in the art, and its composition may be such as to per-
other distortion subject to strain without cracking; and the attachment of the marble slabs 28 above described is such that they can be individually and readily removed and replaced if they should become cracked or discolored, without necessarily removing the inner wall members 23 and hence without opening a vault at all. The feature of the valved vent and the flue and deodorizer is not amplified in detail in the present ap- 7 plication, but I consider its use quite valuable in this connection for reasons which will be obvious.

What is claimed as new is:

1. A series of vaults comprising a lower flooring having transverse grooves in its upper face, partitions fitting at their lower edges into said grooves, superimposed floors having grooves in their upper and lower faces receiving adjacent edges of said partitions and of superimposed partitions, an outer wall, an inner wall made in members with their edges shouldered to embrace the front edges of said partitions and floors, fastening devices embedded at one end in the longitudinal members and projecting between the adjacent edges of the inner wall members, facing slabs made in members corresponding with said inner wall members and notched in their meeting corners to embrace said devices, and washers and nuts on the latter for holding the slabs removably in place.
2. A series of vaults comprising superimposed floors and upright partitions, an outer 100 wall; an inner wall made in members with their edges shouldered to embrace the front edges of said partutions and floors, all edges of the partitions having tenons engaging the members which meet them, fastening devices embedded in the partitions and extending through their front tenons, facing slabs individually covering the front wall members and notched at their corners to embrace said devices, and means on the pro- 110 truding ends of the latter for holding the slabs removably in place.
3. A series of vaults comprising a thick lower flooring having transverse grooves in its upper face, partitions fitting at their 115 lower edges into said grooves, superimposed floors reinforced with expanded metal and having grooves in their upper and lower faces receiving adjacent edges of said partitions and of superimposed partitions, an 120 outer wall made in members each corresponding to that of an individual vault with their edges meeting each other opposite said partitions and floors, an inner wall also made in members with their edges shoul- 125 dered to embrace the front edges of said partitions and floors, fastening devices embedded at one end-in the longitudinal members and projecting between the adjacent edges of the inner wall members, facing 130
slabs made in members corresponding with said inner wall members and notched in their meeting corners to embrace said devices, and washers and nuts on the latter for 5 holding the slabs removably in place.
4. A series of vaults comprising superimposed floors and upright partitions, an outer wall made in members each corresponding to that of an individual vault with their edges 0 meeting each other opposite said partitions and floors, an inner wall also made in members with their edges shouldered to embrace the front edges of said partitions and floors, all edges of the partitions having tenons engaging the members which meet them, fastening devices embedded in the partitions and extending through their front tenons, facing slabs individually covering the front wall members and notched at their corners 20 to embrace said devices, and means on the protruding ends of the latter for holding the slabs removably in place.
5. A series of vaults comprising superimposed floor members continuous throughout cent faces, a series of upright partitions having tenons at all edges and engaging said grooves, outer wall members closing the individual vaults and recessed in the corners of their meeting edges to engage the rear tenons, inner wall members closing the individual vaults and shouldered at their meeting edges to embrace the front edges of the partitions and allow the tenons of the latter to project between said meeting edges, fastening devices embedded in the partitions and projecting through their tenons, and facing slabs individually covering said inner wall members and removably held in posi0 tion by said devices.
6. A series of vaults comprising superimposed floor members continuous throughout the series and transversely grooved in adjacent faces, a series of upright partitions 5 having tenons at all edges and engaging said grooves, outer wall members closing the individual vaults and recessed in the corners of their meeting edges to engage the rear tenons, inner wall members closing the ining edges to embrace the front edges meetpartitions and allow the tenons of the latter to project between said meeting edges, all the members thus far specified being formed
of plastic material, fastening devices having their inner ends embedded in said partitions and their shanks projecting through their front tenons, marble facing slabs individually covering said inner wall members and shaped to permit the projection of said devices to the front, and nuts at the front end of said devices against the face of said slabs.
7. A series of vaults comprising superimposed floor members continuous throughout the series and transversely grooved in adjacent faces, a series of upright partitions having tenons at all edges and engaging said grooves, outer wall members closing the individual vaults and recessed in the corners of their meeting edges to engage the rear 7 tenons, inner wall members closing the individual vaults and shouldered at their meeting edges to embrace the front edges of the partitions and allow the tenons of the latter to project between said meeting edges, and wall-fastening devices embedded in the partitions and projecting through their tenons.
8. A series of vaults comprising a lower flooring having transverse grooves in its upper face, partitions fitting at their lower 80 edges into said grooves, superimposed floors having grooves in their upper and lower faces receiving adjacent edges of said partitions and of superimposed partitions, an outer wall, an inner wall made in members with their edges shouldered to embrace the front edges of said partitions and floors, and fastening devices embedded at one end in the longitudinal members and projecting between the adjacent edges of the inner wall members.
9. A series of vaults comprising superimposed floors and upright partitions, an outer wall, an inner wall made in members with their edges shouldered to embrace the front 95 edges of said partitions and floors, all edges of the partitions having tenons engaging the members which meet them, and fastening devices embedded in the partitions and protruding from their front tenons.
In testimony whereof I sign my name in the presence of two subscribing witnesses, this the 26th day of May, 1908.

## CHARLES U. DOWNEY.

Witnesses:
Lee C. Rttchie,
Rosa Voelceer.

