

(No Model.)

2 Sheets—Sheet 1.

O. O. WALKER.
CAVE.

No. 465,900.

Patented Dec. 29, 1891.

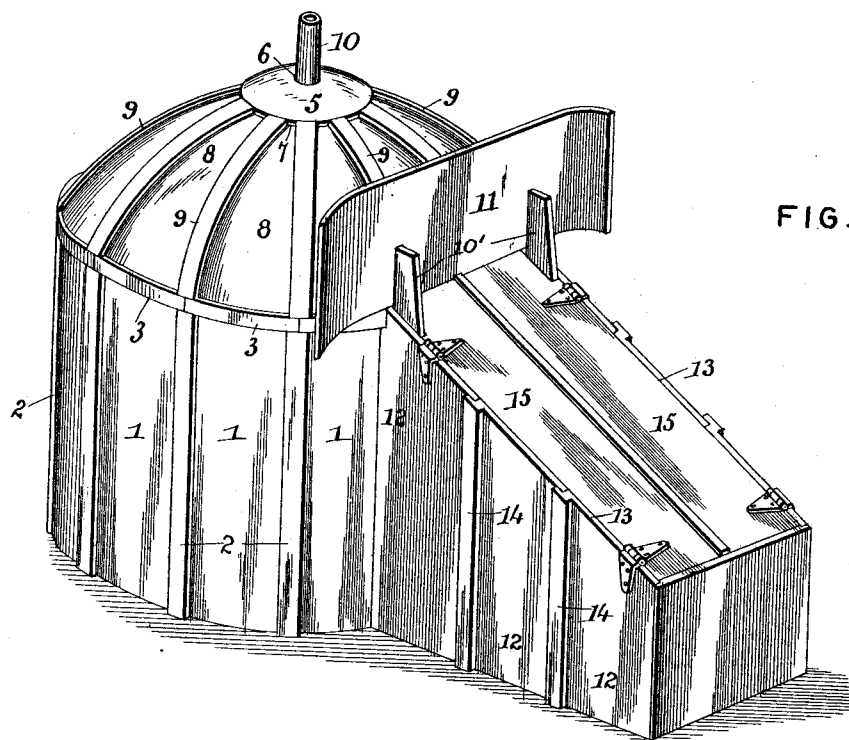


FIG. 1.

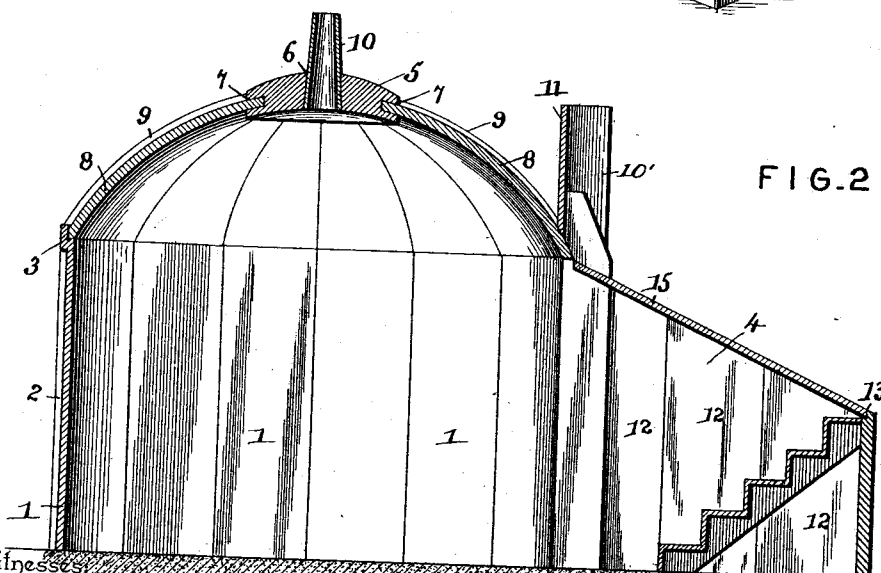


FIG. 2.

Witnesses

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Inventor

Orlando O. Walker

By *his* Attorneys,

Chas. Snow Geo.

(No Model.)

2 Sheets—Sheet 2.

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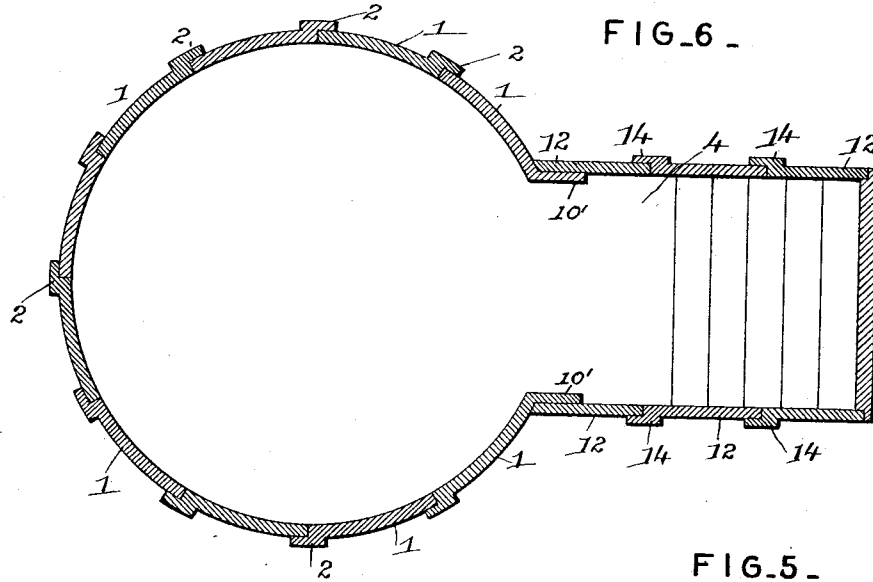


FIG. 6 -

FIG. 3 -

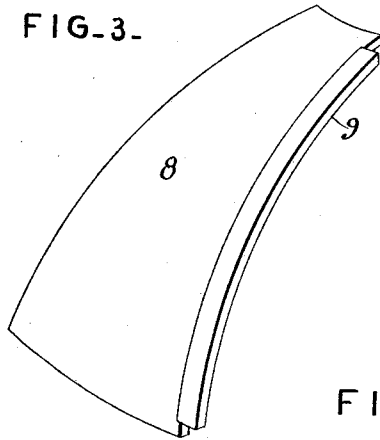


FIG. 5 -

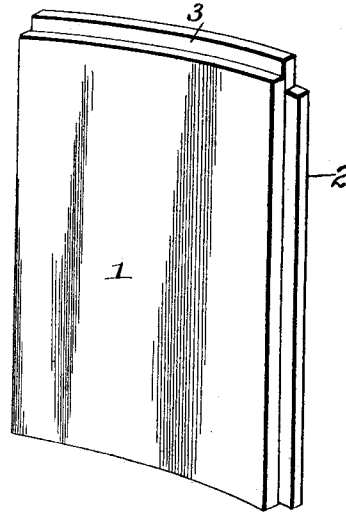
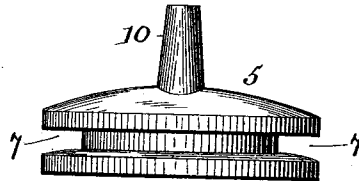


FIG. 4 -



Witnesses:

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UNITED STATES PATENT OFFICE.

ORLANDO OWEN WALKER, OF BEDFORD, IOWA, ASSIGNOR OF ONE-HALF TO
J. H. SNYDER, OF SAME PLACE.

CAVE.

SPECIFICATION forming part of Letters Patent No. 465,900, dated December 29, 1891.

Application filed October 13, 1891. Serial No. 408,620. (No model.)

To all whom it may concern:

Be it known that I, ORLANDO OWEN WALKER, a citizen of the United States, residing at Bedford, in the county of Taylor and State of Iowa, have invented a new and useful Cave, of which the following is a specification.

This invention relates to a subterranean cave; and the objects in view are to provide a cheap simple water-tight subterranean cave adapted to be easily set up and taken down with safety and without impairment and to serve as a receptacle for perishable articles and also as a retreat for persons during cyclones, floods, &c.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a cave constructed in accordance with my invention. Fig. 2 is a vertical section thereof. Fig. 3 is a detail of one of the roof-sections. Fig. 4 is a detail of the roof-key. Fig. 5 is a detail of one of the side sections. Fig. 6 is a horizontal section of the cave.

Like numerals of reference indicate like parts in all the figures of the drawings.

In forming the wall of the cave I employ a series of tile-sections 1, which are curved in cross-section, provided at one of their longitudinal edges and upon their outer sides or faces with flanges 2, and at their upper ends and upon their outer faces with curved flanges 3. A series of these tiles assembled so that the flanges 2 will overlap the adjacent edges of the adjacent tiles are cemented together along their meeting edges and constitute an annular wall. This wall is provided at a point desired with an opening 4, and is mounted, preferably, upon a suitable masonry of brick and cement, or cement alone, so that the joints between the bottoms of the tiles and the tiles themselves are impervious to moisture. The roof is semi-globular or arched, and consists of a central circular key 5, having a central perforation 6 and an annular peripheral groove 7, and in a series of tapered or V-shaped curved roof-sections 8, adapted at their inner ends to take into and fit the annular recess 7 and at their outer ends to

rest upon the upper ends of the wall-sections 1 and to be surrounded by the annular flange 3 of said wall. The roof-sections 8 are provided at one side with overlapping flanges 9, which overlap the joint between itself and the adjacent section, in which positions the series of sections are cemented. A ventilating-pipe 10 passes upwardly through the circular key 6 and may extend any height.

That one of the sections 1 located at each side of the doorway is provided at opposite sides of the doorway with flanges 10' at a right angle to the remainder of the section, and extending some distance below the same and above the edge of the roof, and in rear of the same a fender 11 is located and supported by the roof, said fender being designed to prevent rocks and dirt from falling from the roof into the doorway.

A pair of vertical walls extend from the doorway and have their upper edges inclined and their outer edges connected by a transverse wall. These walls are composed of a series of tile-sections 12, and the same have their upper edges channeled, as at 13, while one edge of each section has an overlapping flange 14. The recesses 13 of the tiles receive a sectional door 15, also having an overlapping flange at its center. All of the joints are cemented, and hence the structure is absolutely water-proof. Ventilation is afforded to the ventilating-pipe described.

In cold weather the cave, being located below the ground, will serve as a convenient storage-place for edibles, which will be prevented from freezing, and in warm weather it may be used for a similar purpose for preventing decay. During cyclones, floods, high winds, &c., it serves as an excellent retreat for the safety of persons and prevents harm from befalling them.

It will be seen that the device may be set up and taken down with very little trouble and may be transported from one place to another without danger of breakage or the incurrance of much expense.

Having described my invention, what I claim is—

1. In a cave of the class described, the combination, with the annular wall having a recess in its upper edge, of a dome formed of

sections tapered and curved, each of said sections being provided at one edge with an overlapping flange, the outer ends of the sections resting upon the wall, and a circular key having a peripheral recess for the reception of the inner ends of the sections, substantially as specified.

2. In a cave of the class described, the combination, with the annular wall formed of tiles and provided with an opening, of a dome mounted upon the wall and formed of tiles, the tiles at opposite sides of the opening being provided with flanges extending above the opening, a door for the opening, and a shield supported upon the roof in rear of the flanges, substantially as specified.

3. In a cave of the class described, the combination, with the annular wall formed of tiles and provided with an opening and the

dome, the tile at each side of the opening being provided with an outwardly-disposed flange, of inclined vertical walls cemented to the flanges and provided at their upper and outer edges with recesses, a transverse wall mounted in the recesses at the outer ends and provided with overlapping flanges, and a door formed of tile-sections, the opposite edges of which rest in the recesses in the upper ends of the vertical walls, the inner edge of one of said door-sections having an overlapping flange, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ORLANDO OWEN WALKER.

Witnesses:

S. M. MCKISSICK,
CHAS. B. BEALL.