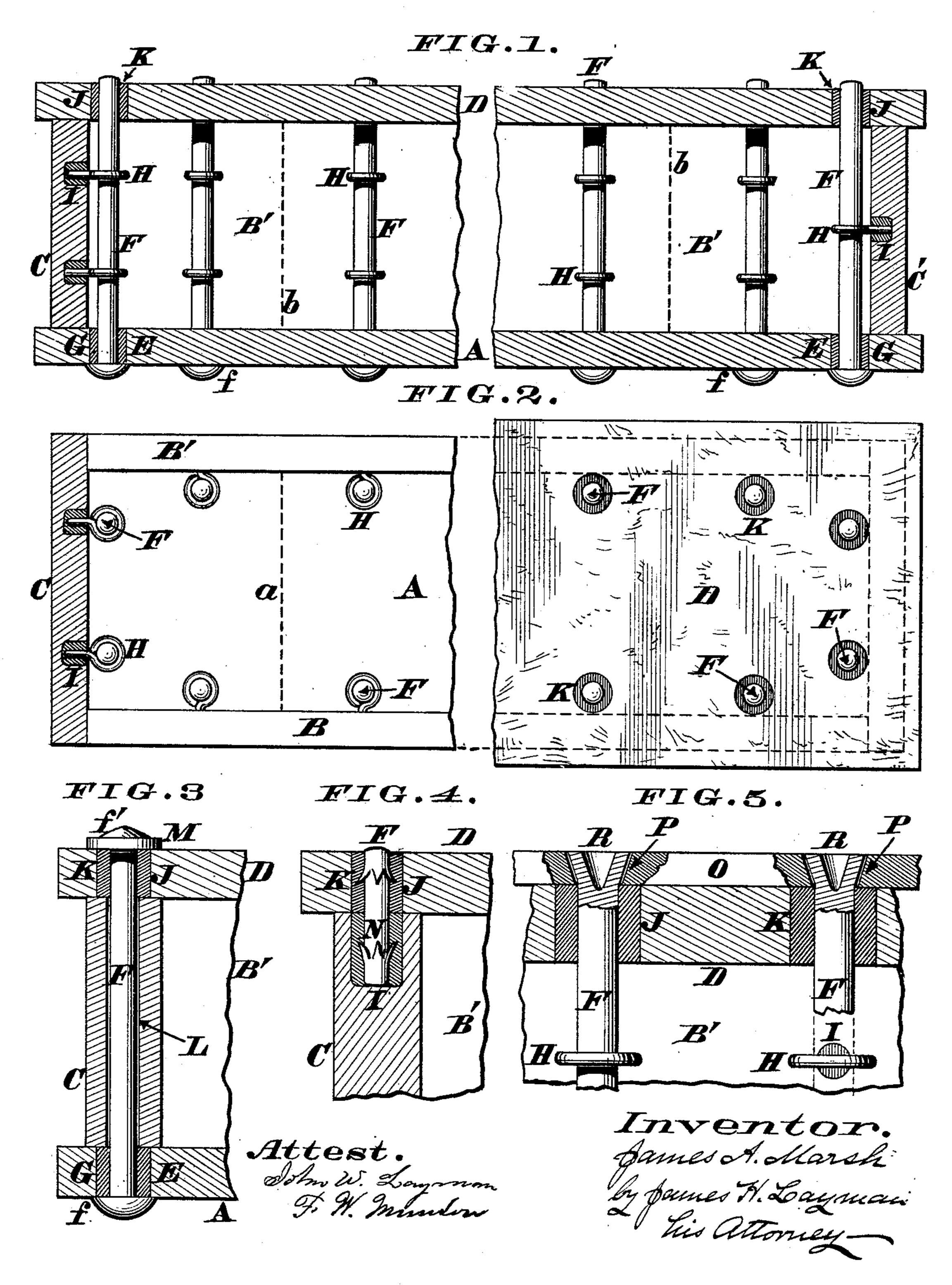
J. A. MARSH.
Burial-Vault.

No. 218,185.

Patented Aug. 5, 1879.



UNITED STATES PATENT OFFICE.

JAMES A. MARSH, OF CINCINNATI, OHIO.

IMPROVEMENT IN BURIAL-VAULTS.

Specification forming part of Letters Patent No. 218,185, dated August 5, 1879; application filed January 20, 1879.

To all whom it may concern:

Be it known that I, JAMES A. MARSH, of Cincinnati, Hamilton county, Ohio, have invented certain new and useful Improvements in Burial-Vaults, of which the following is a specification.

The object of my invention is to provide a cheap and secure burial-vault or coffin-receptacle that cannot be opened by resurrectionists in the limited time usually afforded for robbing graves; and the preferred construction of said vault is as follows: The top, bottom, sides, and ends of the vault are composed of heavy stone slabs securely bound together by a system of internal tie-rods, whose ends are leaded or cemented, or otherwise firmly anchored, in the top and bottom slabs, said tie-rods being connected to the sides and ends of the vault with suitable attachments, by which arrangement a structure is afforded that cannot possibly be broken open in a single night, the details of this structure being hereinafter more fully described.

In the annexed drawings, Figure 1 is a vertical longitudinal section of the preferred construction of my burial-vault; and Fig. 2 is a plan of the same, a portion of the lid being removed, and one end of the vault being shown in section. Figs. 3, 4, and 5 represent modifications of the invention.

The bottom A, sides B B', ends C C', and lid D are composed of heavy slabs of natural or artificial stone, which slabs may be from three to six inches thick.

It is preferred to make the bottom of a single slab; but it may be composed of several pieces of stone, as indicated by dotted lines a in Fig. 2.

Similarly, the sides B B' and lid D may be made of several pieces of stone, as represented by dotted lines \bar{b} in Fig. 1; but when this sectional construction is adopted the slabs must | be set so as to "break joints."

Bottom A is perforated at E to admit the upright tie-rods F, whose lower ends are, preferably, provided with heads f, and said rods may be anchored in the perforations E with any suitable filling G, such as lead, or sulphur, or mineral cement. On rods F traverse ring-eyes, or staples, or other attachments, |

and sides of the vault by fillings, I, of lead or other suitable materials. Of these attachments H, one, two, or more may be employed for each tie-rod. The upper ends of these rods pass through apertures J of lid D, into which apertures are poured fillings K, similar to the ones G I.

The above is a description of the preferred form of my vault; but it is evident the staples may be omitted, and the tie-rods may traverse vertical channels or grooves in the side and end slabs, as shown at L in Fig. 3, in which illustration the upper end of rod F is represented as riveted down at f' on a washer, M, which washer protects the filling K.

In Fig. 4 the tie-rod takes the form of a dowel, barbed or nicked at N, to anchor it

more firmly in the leaden joints.

In Fig. 5 a heavy bar or plate, O, is applied to the lid, said bar being provided with counter--sunk apertures P, to receive the upper ends of the tie-rods, said rods being bored out at R, so as to be readily expanded into the countersinks.

My invention may be further modified by omitting washer M and screwing a nut on the upper end of rod F, after which act the thread of said rod may be jammed so as to lock said nut in position. Or, keys or pins may be heated red hot, inserted in suitable slots, and then twisted around the upper ends of the various tie-rods. Or, said rods may be split, and a partially-divided wedge may be driven into this split, the lower ends of the wedge being adapted to diverge and clinch under bar O. Finally, all the joints of the slabs may be thoroughly cemented in the act of construction, so as to render the vault water-tight.

In building the form of vault shown in Fig. 1, the various slabs are first cut to suit the size of coffin, and apertures E are drilled in the bottom A.

Tie-rods F are leaded in at G, and bottom A is lowered into the grave, the staples H having been previously applied to the sides and ends, which sides B B' and ends C C' are then deposited on slab A, so as to cause said staples to engage with the appropriate tierods.

The coffin is now placed in the vault, and H, which attachments are secured in the ends | lid D lowered until it rests upon the slabs B'

into apertures J, and said lid is at once se-

curely anchored to the vault.

It is evident the coffin is now protected by a combined structure of stone and iron capable of being opened only by artisans accustomed to such work, and even then the task could not possibly be accomplished in a single night. To chisel or drill out the fillings K would consume many hours, while an attempt to break in the head-slab C would hardly be successful; but if said slab should be broken, the tie-rods at this end of the vault would remain and serve as a barrier to prevent either the coffin or body being withdrawn.

The fillings G of slab A may be omitted.

I claim as my invention—

1. A burial-vault or coffin-receptacle consisting of a structure of natural or artificial stone slabs securely united together by a system of internal tie-rods suitably attached to the side and end slabs, the upper portions of said rods being leaded or otherwise anchored

C C', after which act the fillings K are poured to the lid of said vault, as and for the purpose specified.

2. A burial-vault or coffin-receptacle consisting of a structure of stone slabs securely united together by leaden joints, staples, and a system of internal tie-rods, substantially as herein described, and for the purpose set forth.

3. An improved burial-vault, consisting of the stone-slabs A B B' C C' D, tie-rods F. staples II, and leaden joints I K, for the pur-

pose specified.

4. In combination with the lid D J K and tie-rods F of a burial-vault, the bar O, having countersunk apertures P, into which apertures said tie-rods are expanded at R, substantially as herein described and set forth. In testimony of which invention I hereunto my hand.

set my hand.

JAMES A. MARSH.

Attest:
JAMES H. LAYMAN, RANKIN D. JONES.