J. PRICE & J. E. MURPHY.

Vault-Covers.

No. 149,246. Patented March 31, 1874.

Fig. 1.

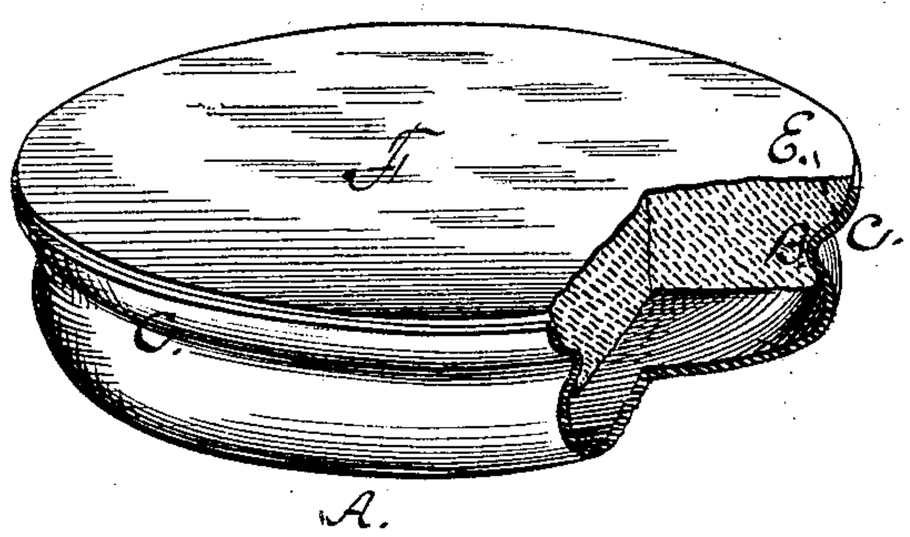
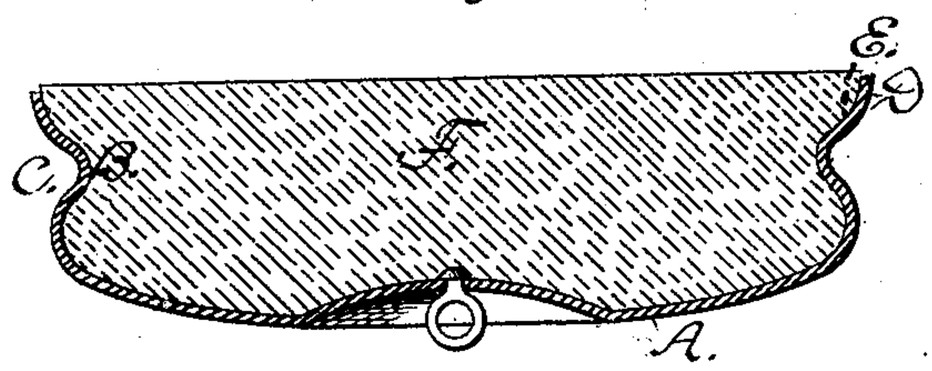


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN PRICE AND JOHN E. MURPHY, OF NEW YORK, N. Y.

IMPROVEMENT IN VAULT-COVERS.

Specification forming part of Letters Patent No. **149,246**, dated March 31, 1874; application filed February 24, 1874.

To all whom it may concern:

Be it known that we, JOHN PRICE and JOHN E. MURPHY, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Vault-Covers, of which the following is a specification:

This invention has for its object to simplify and cheapen the construction of vault-covers, composed partly of metal and partly of india-rubber. To this end the invention consists in a cast-metal shell or frame forming the body of the cover, and designed to retain in position an elastic filling-block of india-rubber, said filling-block being made of a diameter somewhat larger than the internal diameter of the shell or frame, so that when inserted into the same by pressure the rubber will expand laterally and be secured firmly in position.

In the drawings, Figure 1 is a perspective view of a vault-cover with a portion of the outer shell broken away to show the elastic filling-block. Fig. 2 is a section of a vault-cover provided with a filling-block extending to the base of the cover.

The shell or frame A, forming the body of the vault-cover, is cast of metal in one piece, and while it may be of any desired form or configuration, it is preferably made of a cylindrical form. The shell is cast with an internal circumferential rib, B, forming a corresponding external groove or depression, C, and above said rib the shell is flared outward to the rim D to form a supporting-shoulder, E, for the filling-block F. The latter is made of india-rubber, and is of a diameter somewhat larger than the internal diameter of the shell A, so that when it is forcibly inserted into the same it will be compressed to enter the shell; and then the elasticity of the rubber causes it to expand or spring outward under the circumferential rib, and to otherwise fill the entire, or nearly the entire, internal space of the shell, as shown in Figs. 1 and 2, thus securing the filling-block in position without the aid of other fastening devices. The portion of the filling-block which is located above the rib B is made larger in diameter than the remainder of the block, and is beveled to a suitable extent to rest upon the corresponding flared or beveled mouth or supporting shoulder E below the rim D. The upper surface of the elastic filling-block is made flush with the top edge of the rim D, or it may extend slightly above the same, as may be desired. The shell or casing of the cover, when constructed with an internal rib and flared or beveled rim portion, subserves the double function of retaining the elastic filling-block, and of supporting the cover in its receiving-frame.

In certain instances we also propose to construct the shell of the cover of sheet or plate metal, which is spun or struck up into shape.

We are aware that flanges have been arranged on the interior of the shells of vault-covers for the purpose of holding cement in the shell when molded and set therein, and such we disclaim, as it is not our invention.

We claim—

An elastic rubber filling, substantially as described, in combination with a metallic shell, to form a vault-cover, as specified.

In testimony that we claim the foregoing we have hereunto set our hands this 20th day of February, 1874.

JOHN PRICE.
JOHN E. MURPHY.

Witnesses:
PETER J. GARRY,
WM. WAGNER.