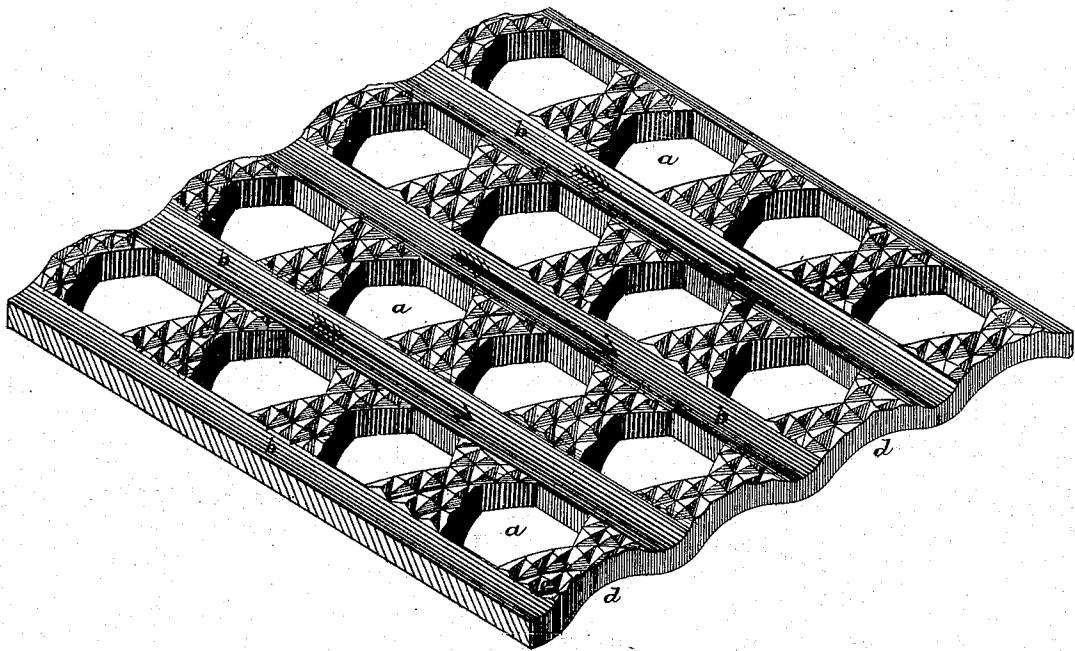


P. Fitzgerald.

Vault Cover.

N^o 58,240.

Patented Sept. 25, 1896.



Witnesses:

*James H. Layman
Hullward*

Inventor:

*P. Fitzgerald.
By Richard M. O'Connell*

UNITED STATES PATENT OFFICE.

FREDERICK FITZGERALD, OF CINCINNATI, OHIO.

IMPROVED VAULT-COVER.

Specification forming part of Letters Patent No. 58,240, dated September 25, 1866.

To all whom it may concern:

Be it known that I, FREDERICK FITZGERALD, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Vault-Covers; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification.

This is an improvement in the cast-iron plates, which in the side pavements of cities are employed to close over or cover the sunk areas or vaults in front of houses; and my invention consists in giving such plates a form which more perfectly secures the desiderata of strength, drainage, sure footing, and adequate protection to the lights.

The accompanying drawing represents in perspective a small portion or fragment of a cover embodying my invention.

a represent a series of hexagonal openings, composing tiers or ranges separated by concave channels or gutters, *b*.

The portions *c*, which intervene between the consecutive openings in the range, are formed convex or crowning, and are grooved diagonally, so as to be composed of a congeries of pyramidal elevations.

The openings *a* may either be filled with glass or be left open. The red arrows show the

direction of the water-shed toward the street. A vertical section of the cover, taken parallel with the street, displays a series of corrugations, *d*.

The diagonally-scored or channeled swells or eminences *c* serve the purpose of completely conducting off the water into the gutters *b*, which in turn conduct it immediately to the pavement proper. The said eminences also serve to afford a sure foot-hold for the wayfarer, and further serve to fend or guard the lights from being worn, scratched, or fractured by the heels of persons walking over them, or by the wheels of trucks. They also, being convex above and concave below, form a component part of the corrugations before spoken of, by which great stiffness and strength are secured to the plate.

I claim herein as new and of my invention—

The vault-cover or sidewalk-plate, having the gutters *b*, the diagonally-scored and convex eminences *c*, and corrugations *d*, as and for the purpose set forth.

In testimony of which invention I hereunto set my hand.

FREDERICK FITZGERALD.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.