

J. RYER.
Vault-Covers.

No. 148,852.

Patented March 24, 1874.

Fig. 1.

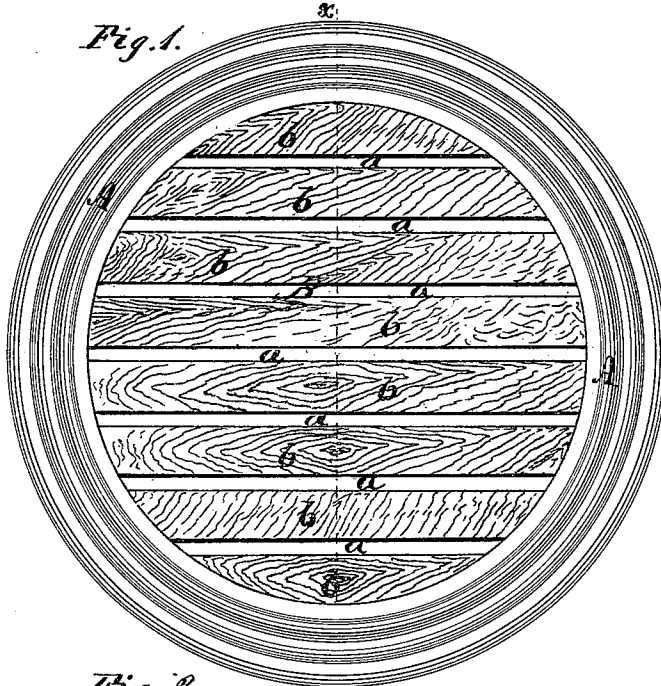


Fig. 2.

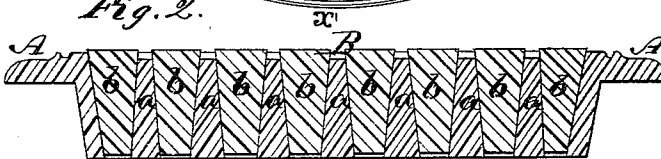
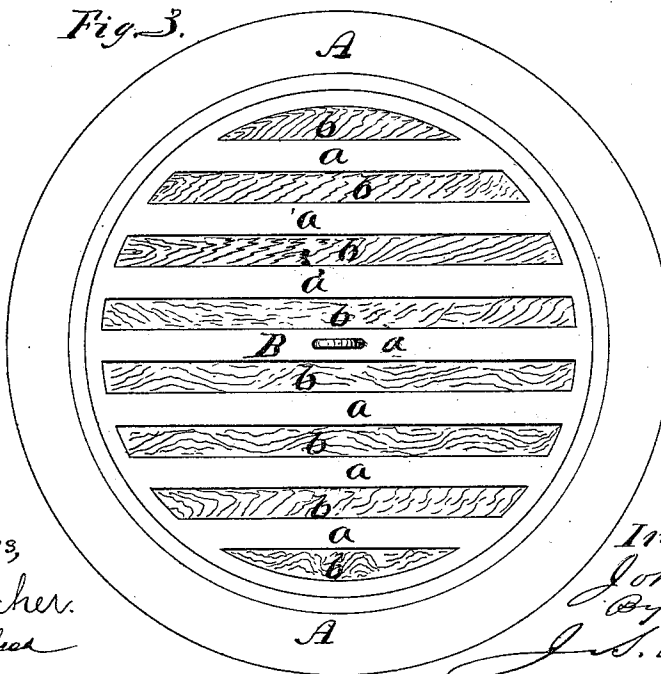


Fig. 3.



Witnesses,
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Chas. R. Douglas

Inventor,
John Ryer,
By his atty.
J. S. Brown.

UNITED STATES PATENT OFFICE.

JOHN RYER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN VAULT-COVERS.

Specification forming part of Letters Patent No. **148,852**, dated March 24, 1874; application filed December 16, 1873.

To all whom it may concern :

Be it known that I, JOHN RYER, of Brooklyn, in the county of Kings and State of New York, have invented an Improved Vault-Cover; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings making part of this specification—

Figure 1 being a top view of the improved vault-cover; Fig. 2, a vertical section thereof in a plane indicated by the line *x x*, Fig. 1; Fig. 3, a bottom view of the same.

Like letters designate corresponding parts in all of the figures.

The special purposes of my improved vault-cover are twofold: First, to prevent the liability of slipping thereon, while furnishing an even surface to tread upon; second, to provide a means of readily ventilating the vault thereby.

The vault-cover consists of a cast-iron frame or body, composed of a thin horizontal outer flange or rim, *A*, to sustain the cover on the pavement around the vault-hole, and a deeper middle part, *B*, having parallel cross-bars *a a*, and intermediate spaces, into which are inserted blocks *b b*, of wood. The upper surfaces of the bars *a a* are a little lower than the upper surface of the surrounding flange *A*; and the spaces between are somewhat wedge-shaped, or narrower at the bottom than at the top. The wooden blocks *b b* are also somewhat wedge-shaped, so that they will fit and press more and more tightly into the spaces and exclude water. They are inserted with the end of the grain upward, and to such a depth that their upper surfaces are flush with the upper surface of the flange *A*, or a little higher.

Thus a surface of wood is presented to the feet, thereby offering very little liability to slip thereon. These blocks are narrow, generally not exceeding one inch in thickness, so that, when removed, the spaces left in the cover thereby are not wide enough to afford access through them, or to prevent walking on the cover with safety and convenience.

In order to ventilate the vault beneath, one or more or all of the blocks are removed, and still a good surface to tread upon is left, and one not liable to slip upon, the bars *a a* being slightly sunk below the surface of the surrounding flange *A*, which also may be grooved or otherwise roughened to prevent slipping thereon. The blocks are held securely in place by their wedge shape, and yet are readily removed by driving against from below. They are easily and cheaply replaced when worn too much or injured, and the whole cover is simple and cheap in construction.

What I claim as my invention, and desire to secure by Letters Patent, is—

The vault-cover herein described, consisting of the horizontal outer flange *A*, middle part *B* of slightly-sunken parallel bars *a a*, and the blocks *b b*, of wood, wedged into the intermediate spaces, substantially as and for the purposes herein specified, as an improved article of manufacture.

Specification signed by me this 16th day of December, 1873.

JOHN RYER.

Witnesses:

J. S. BROWN,
CHAS. A. RYER.