Filthoff & Tingley,

Drain-Tile Mold.

No. 77,969. Patented May 19, 1868.

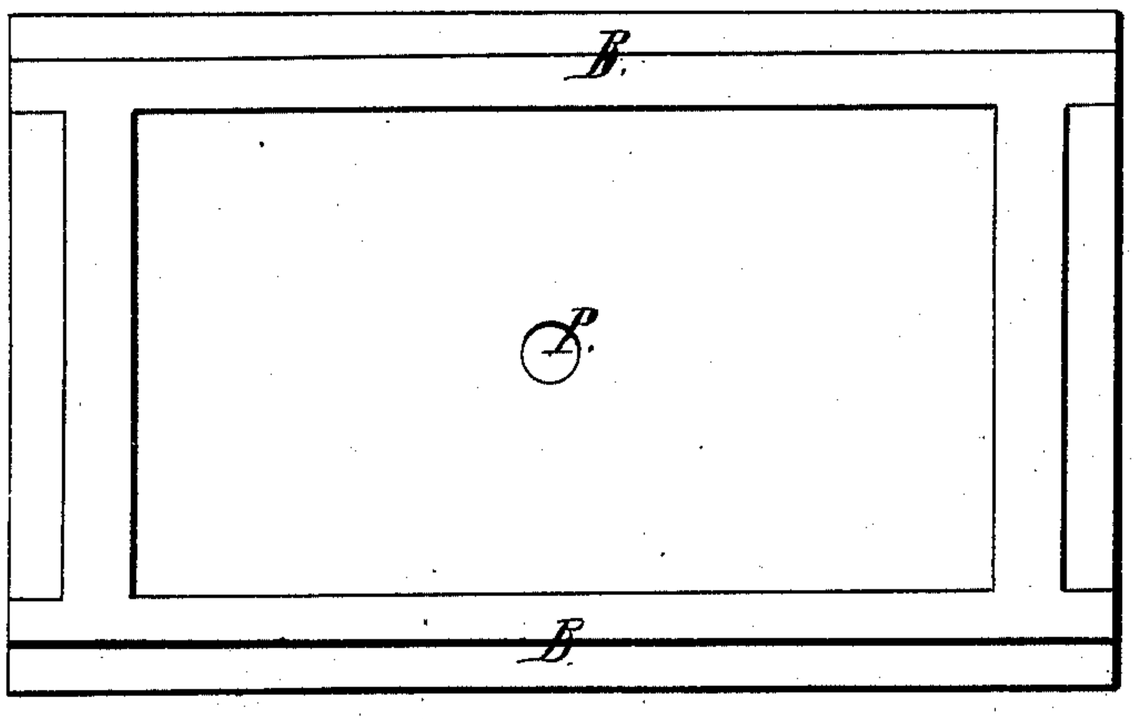


Fig: 1

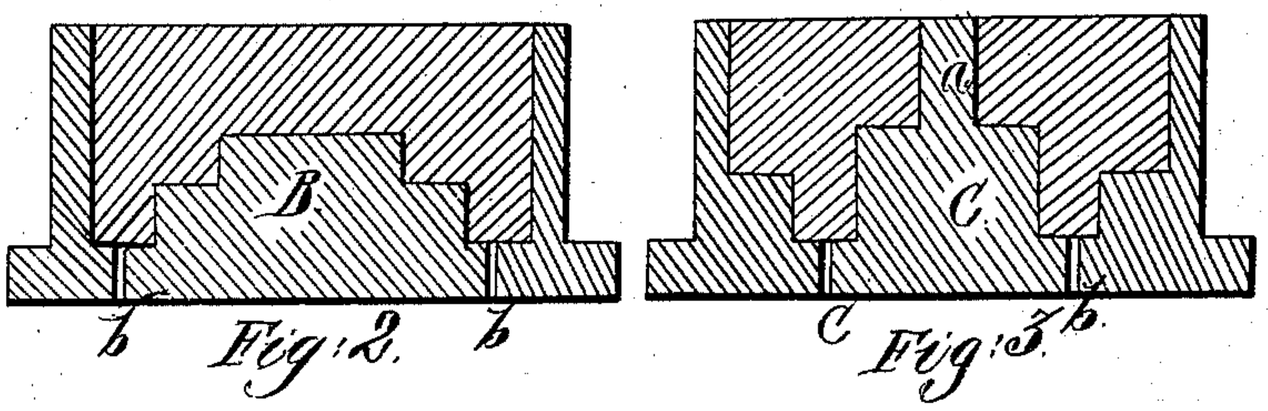
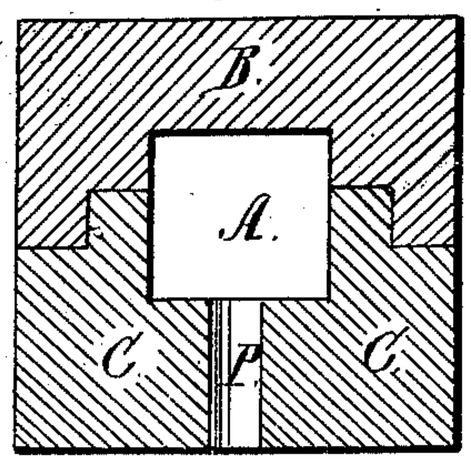


Fig: 2.

Fig: 3.

Fig: 4.



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HENRY FELTHOFF AND LUCAS D. TINGLEY, OF PRINCE WILLIAM, INDIANA.

Letters Patent No. 77,969, *dated May* 19, 1868.

IMPROVEMENT IN MOULDS FOR MAKING DRAIN-TILES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, HENRY FELTHOFF and LUCAS D. TINGLEY, of Prince William, in the county of Carroll, and State of Indiana, have invented a new and useful Improvement in Drain-Tiles; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan view of mould and tile.

Figures 2 and 3 are transverse sections of the upper and lower moulds, with tiles shown therein.

Figure 4 is a transverse section of the upper and lower tiles, shown as put together to form the drain.

Like letters in the figures of the drawings indicate like parts.

Our improvement relates to a new and improved tile, and method of making, by moulding the same, it being designed for the purpose of building drains for conveying water under the surface of the ground.

It consists of two moulds, in each of which is moulded a tile of such form that the grooves and joints thereof are in shape or construction the exact converse of each other, in order that when the tiles moulded therein are placed as designed to form the trough, the joints or projections upon the one resting upon the earth fit closely into the grooves of the one upon it, while those of the latter are similarly adapted to the former; whereby they thus conjointly form a quadrilateral object, having a smooth exterior and interior surface, while forming a trough for the conveyance of water, which trough is incapable of being displaced or disarranged by lateral pressure beneath the earth's surface, and which tiles, when moulded, are like burnt brick in a brick-kiln.

A represents the trough or drain, formed by the union of two tiles, whose joints or projections fit into the grooves or interstices of each other.

B represents mould for upper tile, having grooves or interstices therein, of such corresponding shape and size as that the tiles moulded therein, groove into and closely fit those formed in the mould C.

C represents a mould for lower tile, having grooves or joints therein of such conformation and size as to be adapted for grooving into and closely fitting those tiles formed in the mould B.

B′ and C′ represent the tiles joined together.

P represents an aperture in the lower tile, formed by the pin *a* in the mould C, through which water enters into the drain, after having descended from the surface of the earth, or from a greater altitude than that where the drain is laid in the earth. And thus it flows into said drain along its entire length, and is in like manner carried off.

b b represent elongated slits in the moulds, which are designed to admit the air in the process of moulding the tiles.

The advantages which this tile (for the construction of drains) presents over those hitherto used, are, first, that they can be easily opened for the purpose of removing the sediment or dirt which often collects in drains, and, by choking them up, defeats the object for which they were laid.

And again in the facility with which, having performed their office at one point, they can be removed to another. Besides which, as drains have hitherto been constructed, they have merely received the water at the point of their greatest altitude, and conveyed it to that of their greatest depression, without rendering any service whatever along the route through which the drain may have been laid, whereas, drains built of tiles constructed as aforesaid, are formed to receive the water through the apertures therein, along their entire length, acting thus as constant drains to the land through which they extend; and further, the water will not only get into the drain through the apertures, as just above remarked, but will permeate through the joints and pores of the tiles, and thus fulfill a threefold office of accomplishing the draining of the land in a very desirable manner.

Having thus fully described our invention, what we claim therein as new, and desire to secure by Letters Patent, is—

Claim.

The arrangement of the moulds B and C with pin *p* and elongated slits *b b*, substantially in the manner and for the purpose as herein shown and described.

HENRY FELTHOFF,
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Witnesses:
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