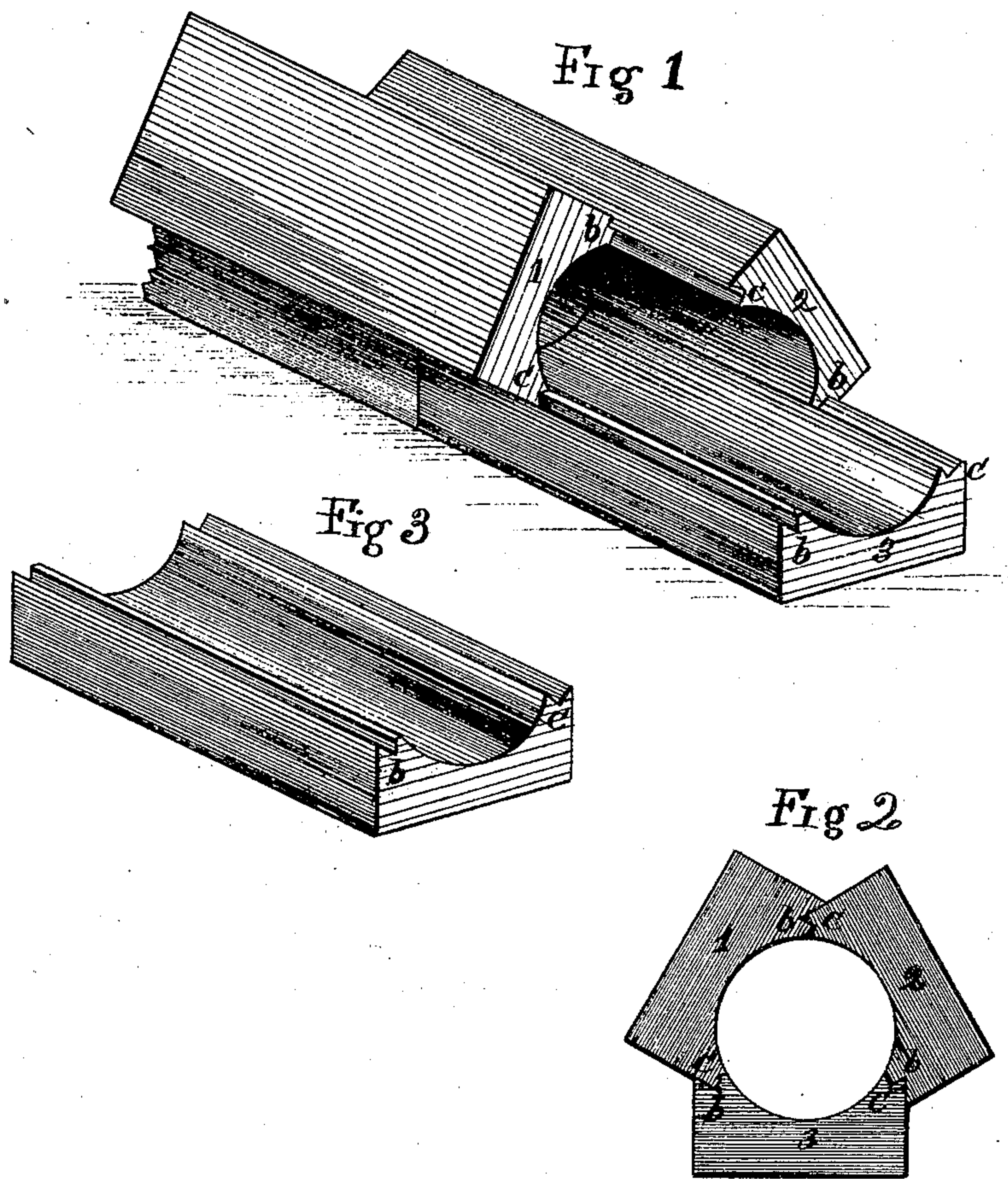


*F. E. Scott,*

*Drain Tile.*

*No. 104,213.*

*Patented June 14, 1870.*



WITNESSES.

*A. S. Studey,*  
*S. Dickinson*

INVENTOR.

*Francis E. Scott*  
*By Joseph Ridge*  
*His attorney*

# United States Patent Office.

FRANCIS E. SCOTT, OF CENTREVILLE, INDIANA.

*Letters Patent No. 104,213, dated June 14, 1870.*

## IMPROVED DRAIN-TILE.

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

*To all whom it may concern :*

Be it known that I, FRANCIS E. SCOTT, of Centreville, in the county of Wayne and State of Indiana, have invented a new and useful Improvement in Drain-Tile; and I do hereby declare the following to be a full description thereof, reference being had to the accompanying drawing, in which—

Figure 1 is a view showing how different sections are united;

Figure 2 is a cross-section; and

Figure 3, a single brick.

My invention relates to a method of forming drain-tile of three bricks in a section, by which advantages are obtained over the usual plan of forming tile.

With tile-brick designed for two-bricks to the section, in order to give the channel the proper size and form, it is necessary to make the concavity of the channel surface deep, and, unless the brick is made too large and heavy, it follows that it is quite thin centrally, being thus liable to warp in the process of making, and become useless, this objection being obviated with brick designed for three to the section.

The peculiarities of form of a brick for a three-brick section according to my invention, consist in a concave surface on one side of said brick, and grooves at each side of said concave surface, by which latter the bricks are locked or held together.

The grooves by which the bricks are locked or held together in forming a section, in the accompanying example, are angular, the angles at each side of the concave surface being different, but yet corresponding with each other in such a manner that the peculiarities of one groove or set of angles are adapted to the peculiarities of the opposite groove or set of angles in

forming a section of three bricks; hence each brick has the same peculiarities.

The bottom angle of the groove at *c* is a right angle.

At *b*, the bottom angle is an acute angle.

The outer angle at *c* is adapted to the cavity of groove *b*, and the inner angle of groove *b*, which is a right angle, is adapted to the cavity of groove *c*. Thus the outer face of groove *b* overlaps the outside surface of the adjacent brick.

At the side *b* of the brick a narrow space is left between the concave and the groove *b*, which makes a right angle of the inner angle of groove *b*.

The above-described manner of forming the section of tile so locks the bricks together that a pressure at any point on the section serves to unite them more firmly, instead of spreading them apart.

The different sections forming the continuous tile are united by alternate overlapping of the bricks, as shown in fig. 1.

Having thus fully described my said invention,

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

The improved drain-tile herein shown, consisting of the three concave sections 1 2 3, provided at their respective locking-edges with the grooves or channels formed as shown at *b* and *c*, and adapted and combined together in the manner and for the purposes herein set forth.

FRANCIS E. SCOTT.

Witnesses :

JOSEPH RIDGE,  
A. L. STUDY.