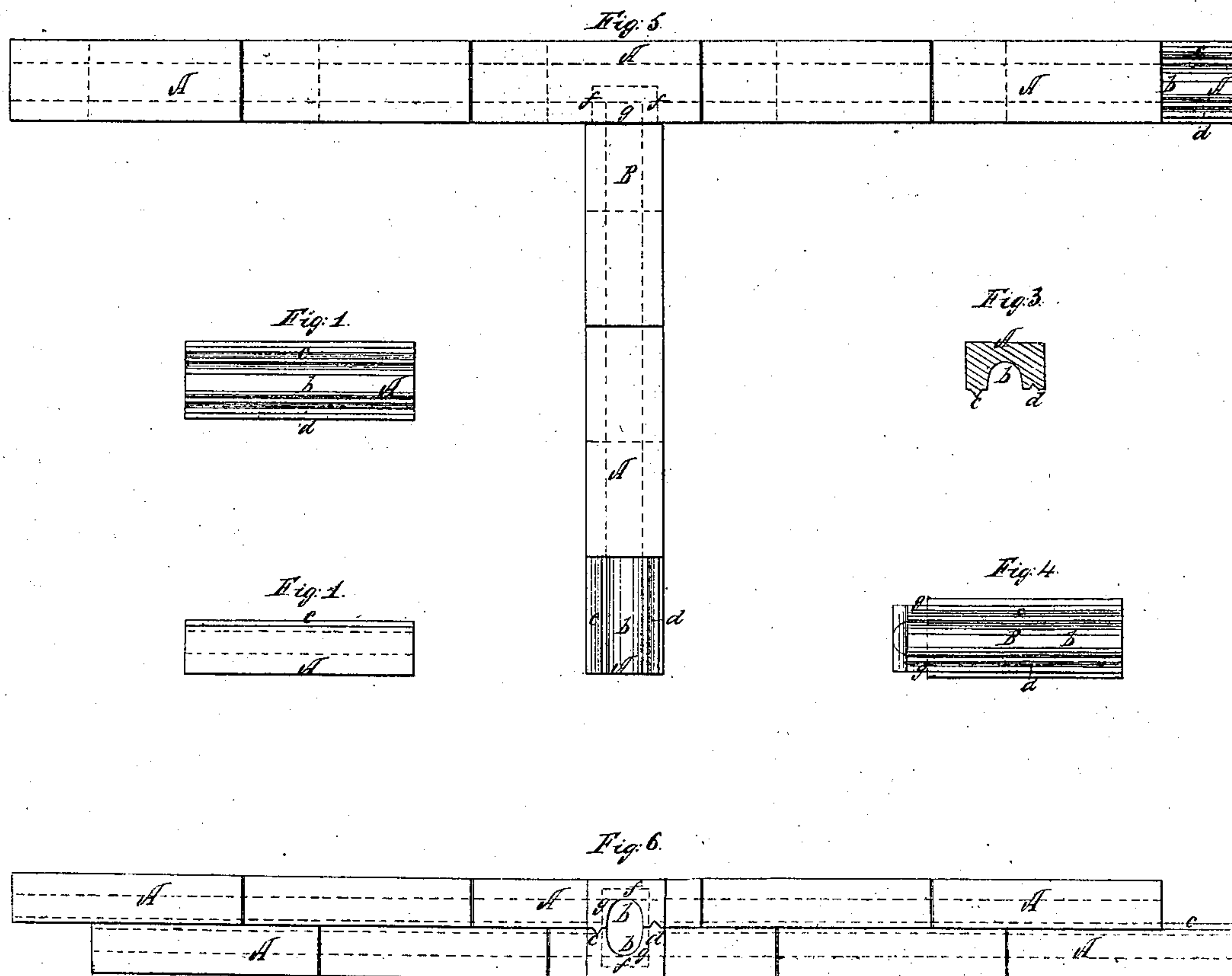


*E. W. Rowe,*

*Drain Tile.*

*N<sup>o</sup> 29,040.*

*Patented July 3, 1860.*



*Witnesses:*

*Arthur Hill*

*Dennis J. Desmond.*

*Inventor:*

*Eli W. Rowe*

# UNITED STATES PATENT OFFICE.

ELI W. ROWE, OF BREWER, MAINE, ASSIGNOR TO HIMSELF AND JONATHAN T. HANDY,  
OF SAME PLACE.

## DRAIN-TILE.

Specification of Letters Patent No. 29,040, dated July 3, 1860.

*To all whom it may concern:*

Be it known that I, ELI W. ROWE, of Brewer, in the county of Penobscot and State of Maine, have invented an Improved  
5 Drain-Tile to be used in the Construction of Hydraulic Conduits or Drains; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

10 Figure 1, denotes a top view; Fig. 2, a side elevation, and Fig. 3, a transverse section of a tile constructed in accordance with my invention. Fig. 4, is a top view of a lateral tile furnished with a semitenon to enter the semimortise or recess, made in one side  
15 of the main tile. Fig. 5, is a top view and Fig. 6, a side elevation of a range or series of main and lateral tiles as applied together in the construction of a conduit or drain and a branch or lateral leading into the same.

Each tile, A, of the main conduit is to be molded with a semicircular, semielliptic or other proper shaped channel or groove, *b*,  
25 extending lengthwise through it as shown in Figs. 1, 2, and 3. It should also be made with a tongue, *c*, and another groove, *d*, arranged at opposite sides of the main channel, *b*, as shown in the drawings. The  
30 tongue, *c*, should be of the same size of the groove, in order that when any one of the tiles is inverted and placed on another as shown in Figs. 5, and 6, each tongue of one will enter a groove of the other. Thus by  
35 forming a tongue and a groove in each tile, we are saved the necessity of molding two sets of tiles wherein one set would have tongues projecting from it on opposite sides of its channel while the other set would be  
40 provided with corresponding grooves. Fur-

thermore I construct each of such tiles, where they are to be connected with lateral conduits with a semimortise, as shown at, *f*, leading laterally out of its main channel, the same being to receive the semitenon, *g*,  
45 formed on the end of a lateral drain tile, B.

While the tongues and grooves serve to maintain in contact, two tiles when placed together so as to form a conduit, the mortise formed by the two semimortises, operates in conjunction with the tenon of the lateral tiles to keep the branch conduit in connection with the main. Each tile in other respects is formed rectangular as  
55 shown in the drawings.

This mode of constructing drain tile from clay or other plastic material is one of much value and utility, the tiles when put together being intended to break joints in such manner as to insure correct continuity of  
60 the conduits, even should the series of tiles be moved laterally by frost or other cause.

What I claim and desire to secure by Letters Patent as an improvement in drain tiles formed of clay or other plastic substances, is—

1. The tongue *c*, and groove *d*, arranged on opposite sides of and in combination with the tile substantially as and for the purpose specified.  
70

2. I also claim molding or forming the clay or plastic drain tile above described, with the tenon recess, and the tenon, for side connections in the manner and for the purpose set forth.

ELI W. ROWE.

Witnesses:

R. H. EDDY,  
F. P. HALE, Jr.