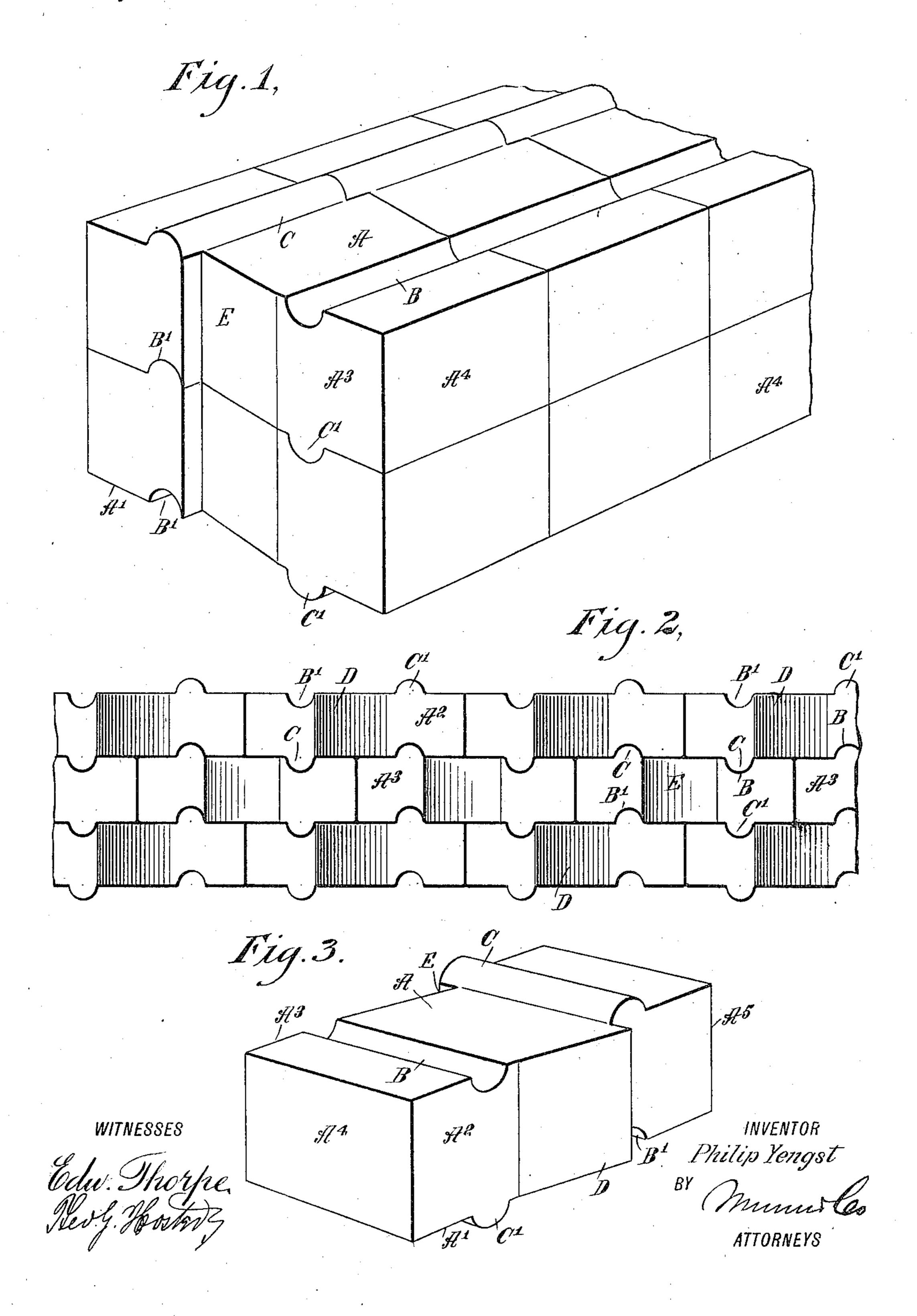
P. YENGST.
INTERLOCKING BRICK.
APPLICATION FILED OCT. 14, 1909.

989,467.

Patented Apr. 11, 1911.



## UNITED STATES PATENT OFFICE.

## PHILIP YENGST, OF NEW YORK, N. Y.

## INTERLOCKING BRICK.

989,46%.

Specification of Letters Patent. Patented Apr. 11, 1911.

Application filed October 14, 1909. Serial No. 522,549.

To all whom it may concern:

Be it known that I, Philip Yengst, a citizen of the United States, and a resident of the city of New York, Laurel Hill, borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Interlocking Brick, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved interlocking brick, more especially designed for use as a fire brick in the lining of boiler furnaces and the like, and arranged to insure a secure and firm interlocking of successive courses as well as interlocking of the bricks in the same course, to hold the same from shifting in any direction. For this purpose each brick is provided on each face with a transverse groove and a transverse ridge, of which the ridge on one face is directly opposite the groove on the other face.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of a number of interlocked bricks; Fig. 2 is a face view of part of a wall formed of interlocked bricks; and Fig. 3 is a perspective view of one of the bricks.

The brick, made of fire clay or other suitable material, has the faces A, A', the sides 35  $A^2$ ,  $A^3$  and the ends  $A^4$ ,  $A^5$ . The face A is provided near one end with a transverse. groove. B and near the other end with a transverse ridge C, of approximately the same shape in cross section as that of the 40 groove B. The other face A' of the brick is provided with a similar transverse groove B' and a transverse ridge C', but the latter is directly opposite the groove B and the groove B' is directly opposite the ridge C. 45 The centers of the grooves and ridges B, C and B', C' are spaced about one-fourth of the length of the brick from the ends Ai, A<sup>5</sup>, so that when the bricks are interlocked, that is with the ridges C, C' of one brick 50 engaging the corresponding grooves B, B' on bricks of the next course, then the bricks in the successive courses break joints, as indicated in Fig. 2. However, the bricks may

be laid one on top of the other, as indicated in Fig. 1, without the bricks breaking 55

joints.

The side A<sup>2</sup> of each brick is provided with a lateral enlargement D, the said enlargement preferably having at one end a shoulder approximately perpendicular to the edge 60 of the brick and inclining and merging at an angle at the other end into the edge of the brick, as plainly indicated in Fig. 3, and the opposite side  $\Lambda^3$  is provided with a recess E, similar in shape to the lateral en- 65 largement D. The enlargement D and the recess E of each brick extend between the corresponding groove B and the ridge C' and the ridge C and the groove B', as plainly indicated in Fig. 3, so that adjacent bricks in 70 one course have their enlargements D interlocking with the recesses E to hold the bricks against lengthwise displacement. The ends A<sup>4</sup>, A<sup>5</sup> of each brick are plain and each brick is of approximately the same rectangular 75 shape as the bricks now used for the same purpose.

By reference to Fig. 2 it will be noticed that in alternate courses the bricks are reversed to interlock and to break joints.

From the foregoing it will be seen that the bricks readily interlock in the same courses, and the bricks in successive courses are likewise interlocked to insure the formation of an exceedingly secure wall or lining, 85 in which the bricks are not liable to fall out, as is so frequently the case in linings of ordinary bricks as heretofore constructed.

Having thus described my invention, I claim as new and desire to secure by Letters 90 Patent:

A brick of the character specified, having on one side edge intermediate the ends of the brick a lateral enlargement provided at one end with a shoulder substantially perpendicular to the brick edge and merging with the brick at the other end at an angle to the edge and having a recess on the opposite edge in alinement with the enlargement and shaped to fit the enlargement of the adjacent brick, said brick having on each of its opposite faces a transverse ridge and a transverse groove, the ridge on one face being opposite and in alinement with the groove on the other face and being of approximately the same cross section as the

groove, the said ridge and groove being on opposite sides of the center of the brick and being approximately half way between the said center and the adjacent end, and the enlargement and the recess being between the ridges and the grooves.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

PHILIP YENGST.

Witnesses:
MARTIN McDonald,
CHARLES RUDDEN.