

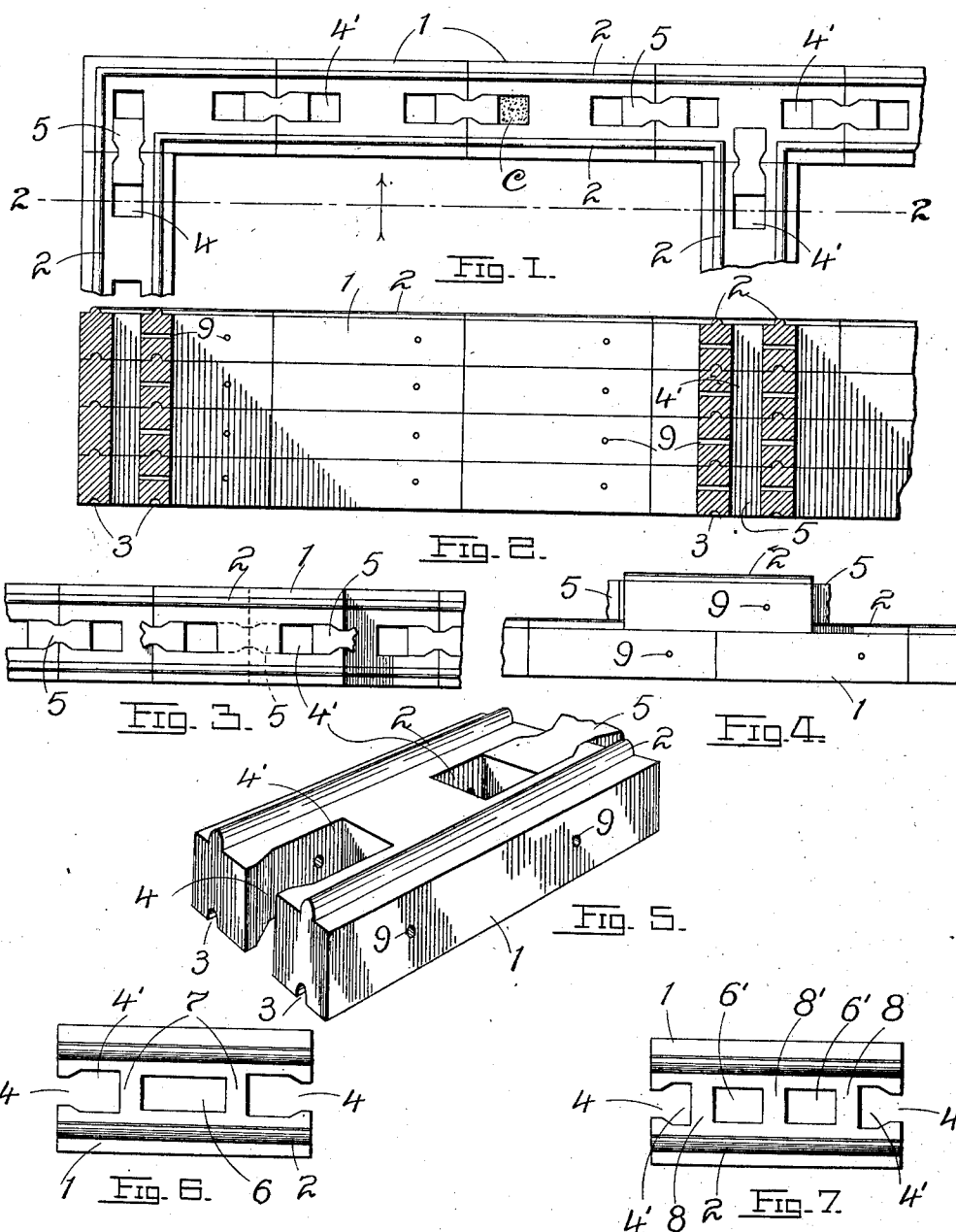
No. 729,023.

PATENTED MAY 26, 1903.

E. H. VORDTRIEDE.
BUILDING BRICK.

APPLICATION FILED FEB. 26, 1903.

NO MODEL.



WITNESSES:

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ERNEST HENRY VORDTRIEDE, OF ST. LOUIS, MISSOURI.

BUILDING-BRICK.

SPECIFICATION forming part of Letters Patent No. 729,023, dated May 26, 1903.

Application filed February 26, 1903. Serial No. 145,261. (No model.)

To all whom it may concern:

Be it known that I, ERNEST HENRY VORDTRIEDE, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Building-Bricks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in building-bricks to be made of any suitable material; and it consists in the novel construction of brick more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a top plan of a section of wall, showing my brick applied thereto. Fig. 2 is an elevation of the wall and a part in section on line 2 2 of Fig. 1. Fig. 3 is a plan showing a bond made by overlapping the bricks of successive layers. Fig. 4 is a side elevation of Fig. 3. Fig. 5 is a perspective of the main form of my improved brick, and Figs. 6 and 7 are plan views of two modifications.

The present invention is an improvement on the construction of brick shown and described in United States Letters Patent issued to me June 5, 1900, numbered 650,919, said improvement contemplating such a qualification of the original design as to insure therefor certain advantages not possessed by the patented construction. The present brick insures the formation of vertical continuous open spaces through the entire wall, open spaces for reduction in the weight of the brick and for the production of an air-mantle, for strengthening and fortifying walls by filling some or all of the air-passages with cement, for the accommodation of wires, gas and water pipes, for ventilation and general air circulation, and for other purposes not herein specified, but fully apparent from a detailed description of the invention which is as follows:

Referring to the drawings, 1 represents the body portion of the brick, the same being provided on one face and adjacent to the sides or longitudinal edges thereof with ribs or ridges 2 2 and on the opposite face with grooves 3 3, corresponding in position relatively to such face to the ridges 2 2. Like in the patented brick referred to the ribs

and grooves effect a bond between any two bricks against displacement in a direction at right angles to said ribs and grooves. Disposed along each of the vertical end faces of the brick between the ribs is a composite recess having an outer dovetail portion 4 and an inner extension 4', which, while preferably rectangular, may be of any convenient contour. When two such bricks are assembled, a key or plug 5 is inserted into the adjacent dovetailed sections, thereby establishing between them a bond insuring against displacement of the brick in a direction parallel to the ribs and grooves. A wall constructed by superposing the full length of one brick over the brick immediately beneath it will thus result in the production of a series of air-passages formed by the superposition of the portions 4' of the consecutive bricks, such air-passages forming a flue available for the several purposes enumerated above. The depth of the recess 4 4' is so proportioned as to take up one-third the length of the brick. This makes it possible to lay the brick with a lap-joint, as seen in Figs. 3 and 4, and yet have the recesses of the several layers in communication, at the same time permitting the key to be applied in the manner indicated.

As shown in the modification illustrated in Fig. 6, that portion of the body included between the adjacent ends of the portions 4' 4' of the recesses may be provided with a central opening or air-space 6, more or less contracted, so as not to unduly weaken the brick, this arrangement resulting in the production of a rib 7 on each side of such central air-space.

As an example of still another modification, Fig. 7, an air-space 6' may be disposed on either side of the center of the brick, thereby leaving a rib 8 8 between such air-space and the terminal recess and a central rib 8' between the two air-spaces. These modifications in other respects do not differ from the main form covered by Figs. 1 to 4, but show the manner in which such main form may be qualified for specific purposes, for it is apparent that in many cases not only a very light brick is desirable, but a brick which will result in a maximum number of air-spaces to become available for the various purposes above specified.

In Fig. 1 I have shown one of the air-spaces filled with a column of cement C to illustrate one of the purposes which such air-space may be made to subserve. This cement column is availed of for purposes of strengthening the wall where necessary. The brick may be provided with air-ducts 9, extending from the recesses 4' to the adjacent side of the brick.

In the modifications shown in Figs. 6 and 7 the key may fill the entire composite recess or only the dovetailed portion, according to the requirements of construction of the wall to be put up.

Having described my invention, what I claim is—

1. A brick having formed along one of the vertical faces thereof a composite recess comprising an outer dovetail portion for the reception of a suitable key, and an inner extension serving as an air-space, substantially as set forth.

2. A brick comprising a body portion, ribs or ridges disposed along one face thereof adjacent to two opposite edges of said face, grooves similarly disposed along the opposite face, and composite recesses formed along the vertical faces between the ribs and grooves, and comprising each a dovetailed outer portion for the reception of a key, and an inner extension serving as an air-space, substantially as set forth.

3. A brick comprising a body portion, ribs or ridges, disposed along one face thereof adjacent to the longitudinal edges of the brick, grooves similarly disposed along the opposite face, and composite recesses formed along the vertical faces of the brick between the respective ribs and grooves, and comprising each an outer dovetailed portion for the reception of a key, and an inner extension for purposes of an air-space, substantially as set forth.

4. A brick comprising a body portion, ribs or ridges disposed along one face thereof ad-

50 adjacent to the longitudinal edges of the brick, grooves similarly disposed along the opposite face, and composite recesses formed along the vertical faces of the brick between the respective ribs and grooves and extending one-third the length of the brick, and comprising each an outer dovetailed portion for the insertion of a key, and an inner extension serving as an air-space or other available purpose, substantially as set forth.

55 5. A brick comprising a body portion, ribs or ridges disposed along one face thereof adjacent to the longitudinal edges of the brick, grooves similarly disposed along the opposite face, composite recesses formed along the vertical faces of the brick between the respective ribs and grooves, and comprising each an outer dovetailed portion for the reception of a key and an inner extension, and one or more openings formed in the body of the brick between the bases of the recesses, substantially as set forth.

6. A brick having formed along one of the vertical faces thereof and at each end of the brick, a composite recess comprising an outer dovetailed portion for the reception of a locking-key and an inner extension serving as an air-space, and one or more spaces formed in the body of the brick between the adjacent inner ends of the recesses, substantially as set forth.

7. A brick having formed along one of the vertical faces thereof a composite recess comprising an outer dovetail portion for the reception of a suitable key and an inner extension serving as an air-space, and ducts leading from the recess to the adjacent vertical wall of the brick, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ERNEST HENRY VORDTRIEDE.

Witnesses:

EMIL STAREK,
G. L. BELFRY.