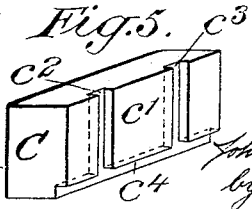
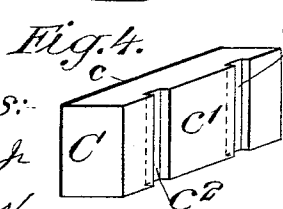
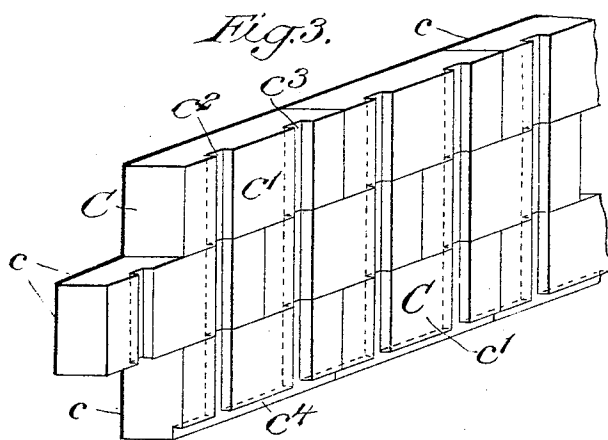
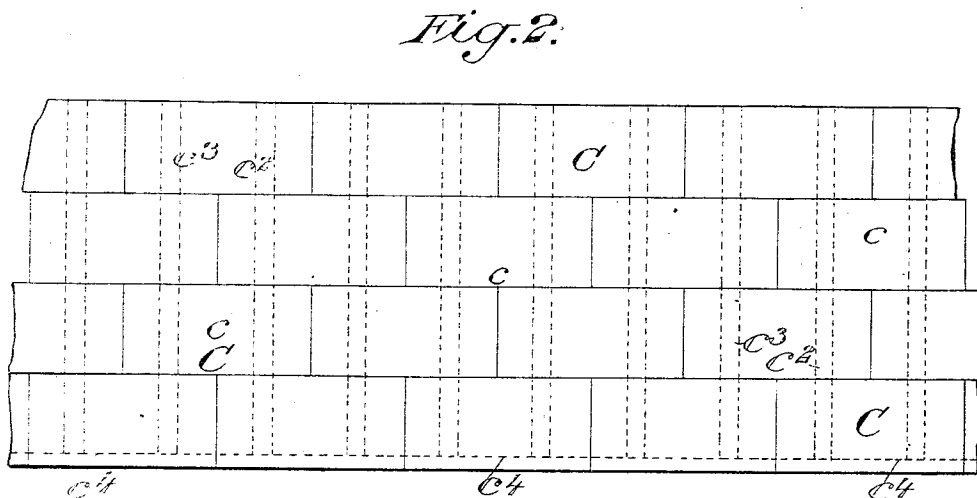
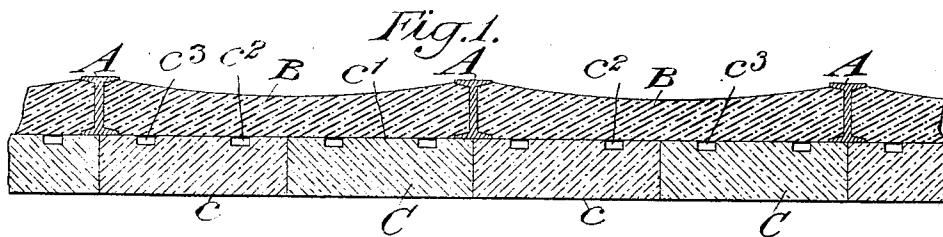


J. F. BOORAEM.

BRICK.

(Application filed May 18, 1898.)

(No Model.)



Witnesses:
George Barry Jr.
Edward Vieser!

Inventor:
John Francis Booraem
by attorneys
Morrill & Stuart

UNITED STATES PATENT OFFICE.

JOHN FRANCIS BOORAEM, OF NEW YORK, N. Y.

BRICK.

SPECIFICATION forming part of Letters Patent No. 616,652, dated December 27, 1898.

Application filed May 18, 1898. Serial No. 681,006. (No model.)

To all whom it may concern:

Be it known that I, JOHN FRANCIS BOORAEM, a citizen of the United States, and a resident of the borough of Brooklyn, in the city and State of New York, have invented a new and useful Improvement in Bricks, of which the following is a specification.

My invention relates to an improvement in bricks, and relates more particularly to bricks which are intended for use in building walls in subways or other places where dampness is liable to occur from soakage or from any other causes.

The object of my invention is to provide the fronts of the bricks with any suitable facing impervious to moisture and the backs of the bricks with coinciding channels for carrying off the moisture which is held back by the said impervious facing and for preventing the moisture from collecting and backing up, and thus defacing the face of the wall by stalactitic growth and drip at joints.

A further object is to provide the bricks in the lower row of the wall or in any intermediate row with a horizontal channel, which communicates with the vertical channels for conveying the moisture to any suitable outlet.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents a transverse horizontal section through a portion of a wall and its backing—such, for instance, as that used in the construction of a subway. Fig. 2 is a front view of the same. Fig. 3 is a perspective view looking at the back of a portion of a wall formed of my improved bricks, showing clearly the arrangement and location of the vertical channels and a single horizontal channel in the bottom row of bricks communicating with the vertical channels. Fig. 4 is a perspective view looking toward the back of a brick having the vertical channels only, and Fig. 5 is a similar view of a brick having both the vertical channels and the horizontal channel.

A designates a series of I-beams between which the backing B, of concrete or other suitable material, is located.

C designates one of my improved bricks,

which bricks are here arranged in bonded order to form a wall in front of the backing. The front of the brick C is covered with any suitable facing *c*, impervious to moisture, which facing is preferably an enameled surface. The facing *c* serves to hold back any moisture which would accumulate and otherwise penetrate through onto the face of the brick.

The back *c'* of the brick has one or more vertical grooves therein. In the present instance I have shown a pair of vertical grooves *c² c³*, one near each end of the brick. These grooves are so arranged that when the wall is constructed of the bricks arranged in bonded form the grooves in one brick will correspond with the grooves in the adjacent bricks above and below, so as to form continuous channels from the top to the bottom of the wall.

Each of the bricks located in the bottom row of the wall or in any intermediate row, where desired, has in its back a horizontal groove *c⁴*, extending the length thereof and communicating with the vertical grooves *c² c³*. This horizontal groove *c⁴* serves to carry off the moisture, which runs down the vertical grooves to suitable outlet-gutters placed at any desired point, which gutters are not shown herein.

The wall, as above described, is particularly valuable for use in connection with subways or other places where there is more or less liability of dampness collecting at back of outer wall, which would otherwise gradually soak through and discolor facing with chemical deposits or vegetable growth.

What I claim is—

1. A wall composed of bricks arranged in bonded form, having their fronts provided with a facing impervious to moisture, each of the said bricks being provided with a pair of vertical grooves in its back, one near each end, the said grooves being so arranged that the vertical groove near one end of any brick will coincide with the vertical groove near the other end of the next adjoining brick immediately above or below the said brick, whereby a continuous vertical channel is formed in the wall, substantially as set forth.

2. A brick having its front covered with a

facing impervious to moisture and its back
provided with a horizontal groove extending
the entire length of the brick and one or
more vertical grooves communicating there-
5 with, substantially as set forth.

In testimony that I claim the foregoing as
my invention I have signed my name, in pres-

ence of two witnesses, this 9th day of May,
1898.

J. FRANCIS BOORAEM.

Witnesses:

FREDK. HAYNES,
C. S. SUNDGREY.