No. 637,332.

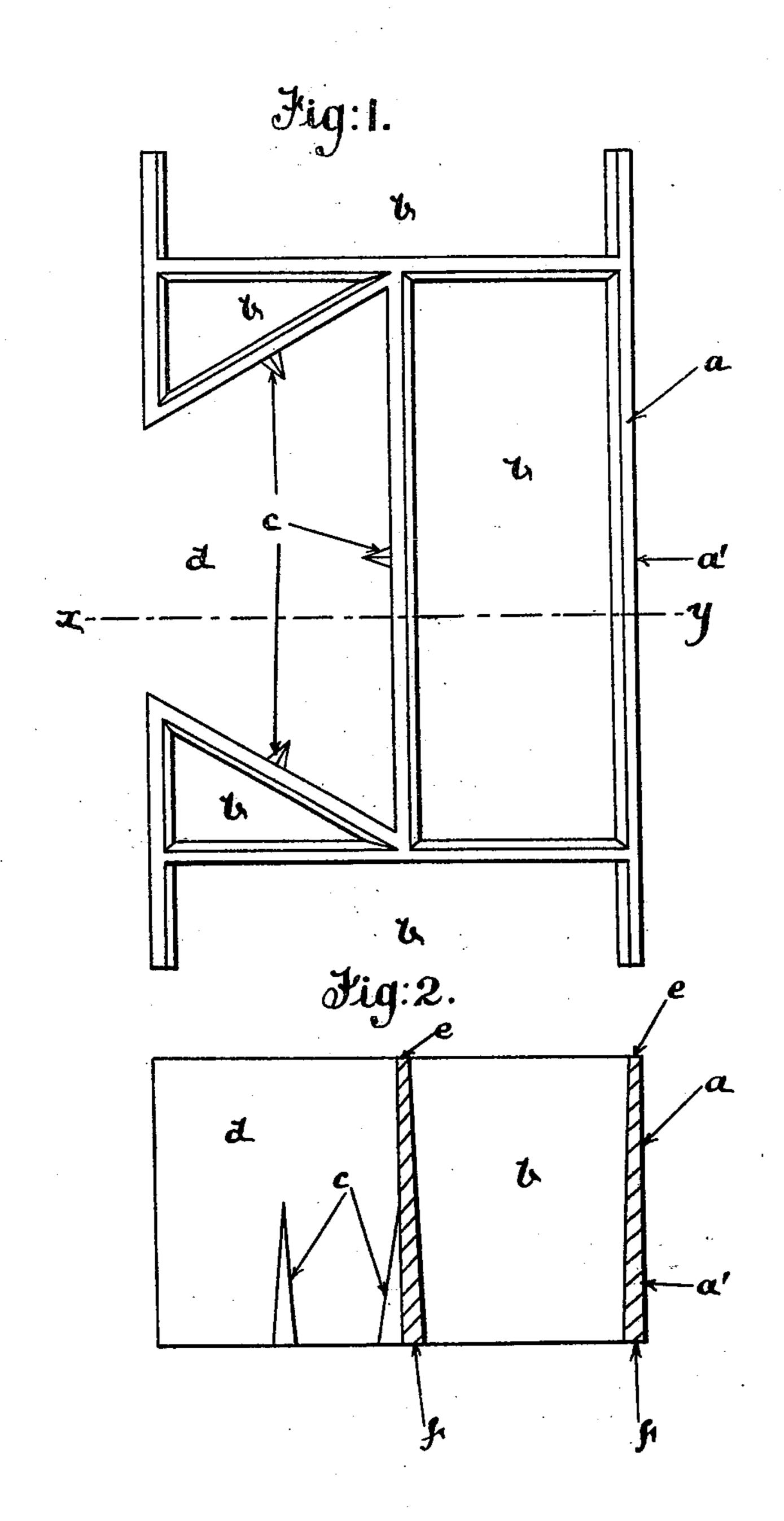
Patented Nov. 21, 1899.

## A. GRAYSON & W. J. SPRATLY.

BRICK.

(Application filed June 12, 1899.)

(No Model.)



Witnesses:-Benjamin black Charles. H. Briggs Villiam James Spratty.

For Alfred, Grayson.

per: E. Eaton.

Their Attorney.

## United States Patent Office.

ALFRED GRAYSON AND WILLIAM JAMES SPRATLY, OF LONDON, ENGLAND.

## BRICK.

SPECIFICATION forming part of Letters Patent No. 637,332, dated November 21, 1899.

Application filed June 12, 1899. Serial No. 720, 253. (No model.)

To all whom it may concern:

Be it known that we, ALFRED GRAYSON and WILLIAM JAMES SPRATLY, subjects of the Queen of Great Britain, and residents of Hamson ersmith, London, England, have invented certain new and useful Improvements in Bricks, of which the following is a full, clear, and exact specification.

This invention consists of a new or improved brick or frame for building and other purposes, the object being to provide a ready means for the insertion of wood and other material into the brick or frame, so as to enable the desired object to be fixed thereto, and also insulate the material, such as wood or inflammable matter, from the action or heating effect of a chimney in the event of the brick or frame being employed in this position.

For purposes of illustration we will now re-20 fer to the annexed drawings, in which—

Figure 1 is a plan view of an improved brick or frame; Fig. 2, cross-section through line X Y in Fig. 1.

a is the frame, formed of metal, such as cast-25 iron, and it will be seen that it is so shaped as to provide the chambers or inclosures bbb. The top edge of the frame a, as shown at e in Fig. 2, is not so wide as the bottom edge, as shown at f in Fig. 2, or, in other words, the 30 sides or parts of the frame are tapered. This tapering is for the purpose of locking or more securely holding the brick or frame in the cement or other suitable material when in position. The block of wood or material is driven 35 into the space marked d and is caused to be effectually retained therein through the action of the tapering wedge-shaped projections c. These projections c are placed at the required part of the frame, and their action is 40 to expand the material when being driven into this space d against the sides thereof from the top of the frame and so securely lock it therein. If this brick is placed, for instance, in the case of a chimney so that the 45 side a is toward the interior of the chimney it will be seen that the required article will be fixed to the block which is driven into the space d, and this block will be insulated

through the cement which will enter the cham-

50 bers or recesses b b b and prevent the action

of the heat which might arise from the inside of the chimney acting directly upon the block aforesaid. Of course the length and size of the pieces c will be varied as required and the number increased, and these pieces c may be 55 cast integral with the brick or frame or may be attached thereto in any convenient manner.

The principal feature of our invention is to dispense with the necessity of knocking a hole in the wall and inserting a wooden plug there- 60 in, as this is never secure, and also in the event of the plug projecting—for instance, in the case of a chimney, into the interior there- of—there is a danger of fire, whereas by our invention when once the brick or frame car- 65 rying the block of wood is inserted in position the block of wood is insulated and cannot be withdrawn without the removal of the brick or frame. This insertion may take place during the course of building if the parts in which 70 the blocks are required are known.

Although we have mentioned cement for the purpose of filling the recess or inclosures b, it will be readily understood that we may employ in place thereof a suitable fire-proof 75 material.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A frame for use as a brick consisting of 80 suitable material as metal and composed of tapering walls inclosing a dovetail-shaped space for the insertion of a block of wood or other suitable material for the purpose set forth.

2. A frame for use as a brick consisting of suitable material as metal and composed of tapering walls inclosing a space of dovetail shape for the insertion of a block of wood or other suitable material in combination with 90 means secured to said walls for retaining said block in said space.

In testimony that we claim the foregoing we have hereunto set our hands this 25th day of May, 1899.

ALFRED GRAYSON.
WILLIAM JAMES SPRATLY.
Witnesses:

JAMES FLEMING,
BENJAMIN CLARK.