No. 781,746. PATENTED FEB. 7, 1905.

R. B. SHELDON & C. H. NESSELROAD.

FIREPROOF BLOCK.

APPLICATION FILED MAY 17, 1904.

Fig. 1.

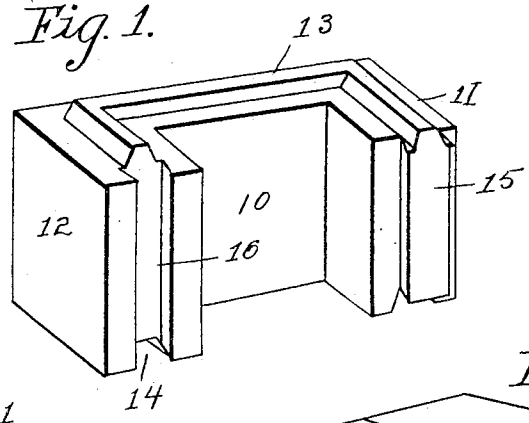


Fig. 2.

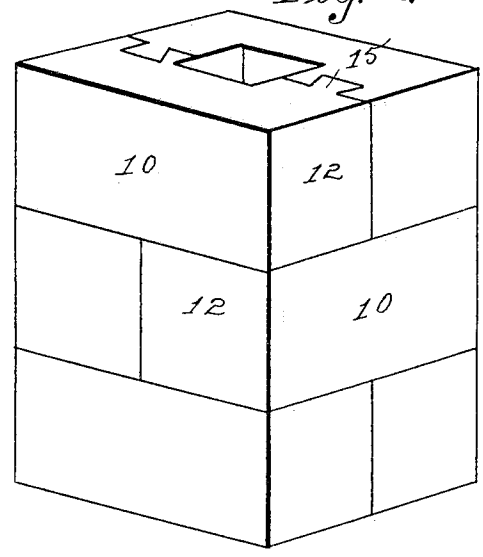


Fig. 3.

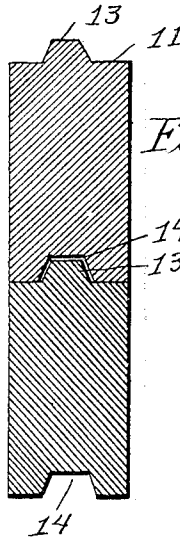
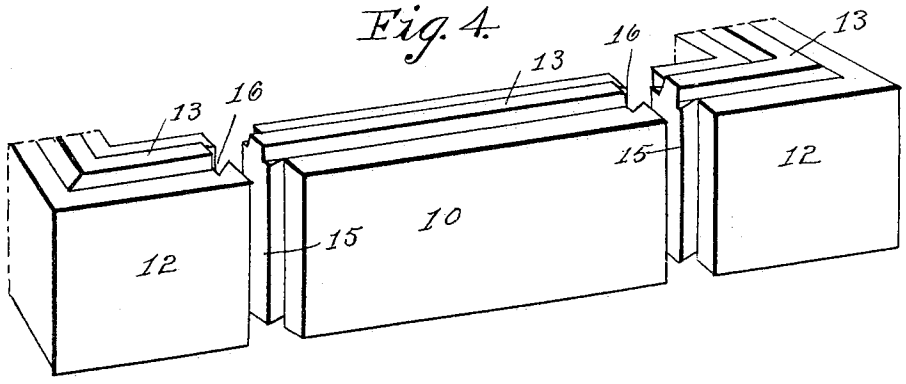


Fig. 4.



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By Orwig & Lane Attys

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UNITED STATES PATENT OFFICE.

RICHARD B. SHELDON AND CHARLES H. NESSELROAD, OF STUART, IOWA.

FIREPROOF BLOCK.

SPECIFICATION forming part of Letters Patent No. 781,746, dated February 7, 1905.

Application filed May 17, 1904. Serial No. 208,399.

To all whom it may concern:

Be it known that we, RICHARD B. SHELDON and CHARLES H. NESSELROAD, citizens of the United States, residing at Stuart, in the county of Guthrie and State of Iowa, have invented a certain new and useful Fireproof Block, of which the following is a specification.

The objects of our invention are to provide a building-block of fireproof material which can be so united with adjacent blocks that the joints between the blocks will be absolutely fireproof, and these joints are so constructed that they will be absolutely tight and fireproof even though the blocks separate slightly from one another.

A further object is to provide building-blocks particularly adapted for use in chimneys which can be constructed in a single mold, owing to the fact that all of the corner-blocks are built exactly alike—that is, the tenon is always on the same side of the block and the groove in the block is always on the same side of it. These blocks are so constructed that they can be easily connected with each other.

A further object is to provide a tenon which extends around the entire upper portion of the block and is designed to enter into a mortise in the lower portion of the block immediately above it.

Our invention consists in the construction, arrangement, and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in our claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of one of the blocks. Fig. 2 is a perspective view of a portion of a chimney with our blocks in it. Fig. 3 is a vertical sectional view of two of the blocks mounted one above the other. Fig. 4 is a modified form of the building-block, showing that these blocks may be made of any shape and are as well adapted for use in walls as in chimneys.

Referring to the accompanying drawings, we have used the reference-numeral 10 to indicate the body portion of the block, having the flanges 11 and 12 extending at right angles from each end of the body portion and parallel with each other. Extending around the top portion of the block—that is, throughout the entire length of the body portion and of the flanges 11 and 12—is the tenon 13, so shaped as to enter and fit tightly within a groove 14 in the bottom of the block, which is to be placed immediately above the tenon 13. The groove 14 is so shaped as to receive the tenon within it and make a fireproof joint between the blocks. On the flange 11 and extending vertically of its outer face is a dovetailed tenon 15. In the outer face of the flange 12 is a dovetailed groove 16. Said groove is so shaped and of such size that one of the tenons 15 will enter said groove when it is slid into it from the upper or lower portion of said groove. There are two blocks constructed exactly alike to form a complete square, such as is necessary for the chimney shown in Fig. 2. Each of the blocks has the dovetailed tenon 15 and the dovetailed groove 16 therein, and each has the groove 14 and the tenon 13, so that when the blocks are connected with each other the tenon 15 of one block will enter the dovetailed groove 16 of the other block and the dovetailed groove 16 of the first-mentioned block will receive the tenon 15 of the second-mentioned block. Thus it will be seen that the parts will be held firmly in position relative to each other. However, in practical use a slight amount of mortar is placed on the tenons 15 before they are slipped into their mating grooves 16. When one block is constructed in the manner above set out and is held together by tenons and grooves 15 and 16, respectively, another block is constructed by using the two parts or two blocks to form a single complete block, and said block is placed upon the first-mentioned block, so that the groove 14 will receive the tenon 13 on the block first constructed, and as in practical use there is mortar spread upon the tenon 13 before the block placed above it is put in position an absolutely tight joint will be made between the blocks, as well as between the two parts of the complete block. In order to make the chimney or wall more solid and the parts thereof held in position more rigidly relative to each other, the body portions 10 of the up-

per blocks are placed immediately above the flanges 11 and 12 of the blocks immediately beneath it, thus holding said flanges firmly in position relative to each other and also preventing any opening from being made by a slight separation of said flanges between the adjacent parts of the tenons 13.

In building a wall or in building a chimney of large size intermediate blocks comprising a straight body portion and having the dovetailed tenons 15 at one end, the dovetailed groove 16 at the other end, the tenon 13 at the top, and the groove 14 at the bottom are used, so that the wall may be constructed of any desirable length by the use of these intermediate blocks. The size, shape, and construction of these blocks may be varied, and different kinds of material may be used in the construction, so long as some fireproof material forms the body of the material used and so long as my particular form of joint for connecting the parts of the block together and the blocks with each other to hold said blocks one upon the other. In building a chimney a finishing-block made of a single piece of material is preferably used, which has simply the groove 14 in its bottom portion, so that when this block is placed upon the top portion of the uppermost block held together by the dovetailed tenon and groove the groove in the bottom portion will receive the tenon 13, and it will cover up the slight amount of space between the dovetailed tenons and grooves, and thus prevent water or any foreign substances getting between the parts of the blocks, and thus prevent the deterioration of the material used when the blocks are connected with each other.

Having thus described our invention, what we claim, and desire to secure by Letters Patent of the United States therefor, is—

1. In a building-block made of fireproof material, a body portion, a flange connected with each end of the body portion and at right angles thereto, a dovetailed tenon on the outer face of one of the flanges, a dovetailed groove in the other of said flanges, a tenon on the top of the body portion and the flanges and extending throughout their entire length, and a groove in the lower part of the body portion and the flanges extending throughout their entire length.

2. In a structure made of fireproof material, a series of fireproof blocks, each having a body portion, a flange at right angles to each end of the body portion, a dovetailed tenon on the outer face of one of the flanges, a dovetailed groove in the other of said flanges, a tenon extending throughout the entire length of the body portion and the flanges, a groove extending throughout the entire length of the lower part of the body portion and the flanges, the tenons of one of the blocks of the series being designed to enter the grooves in mating blocks in the series.

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