

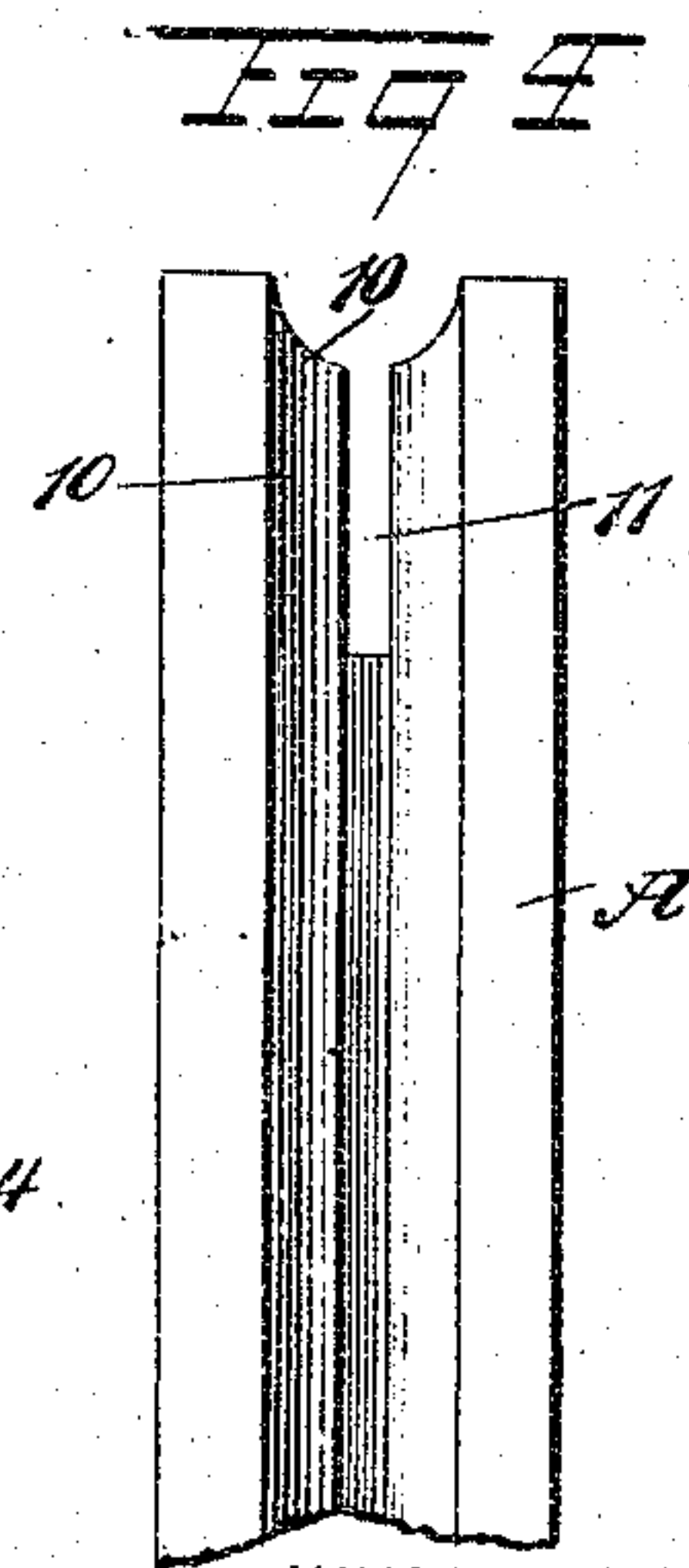
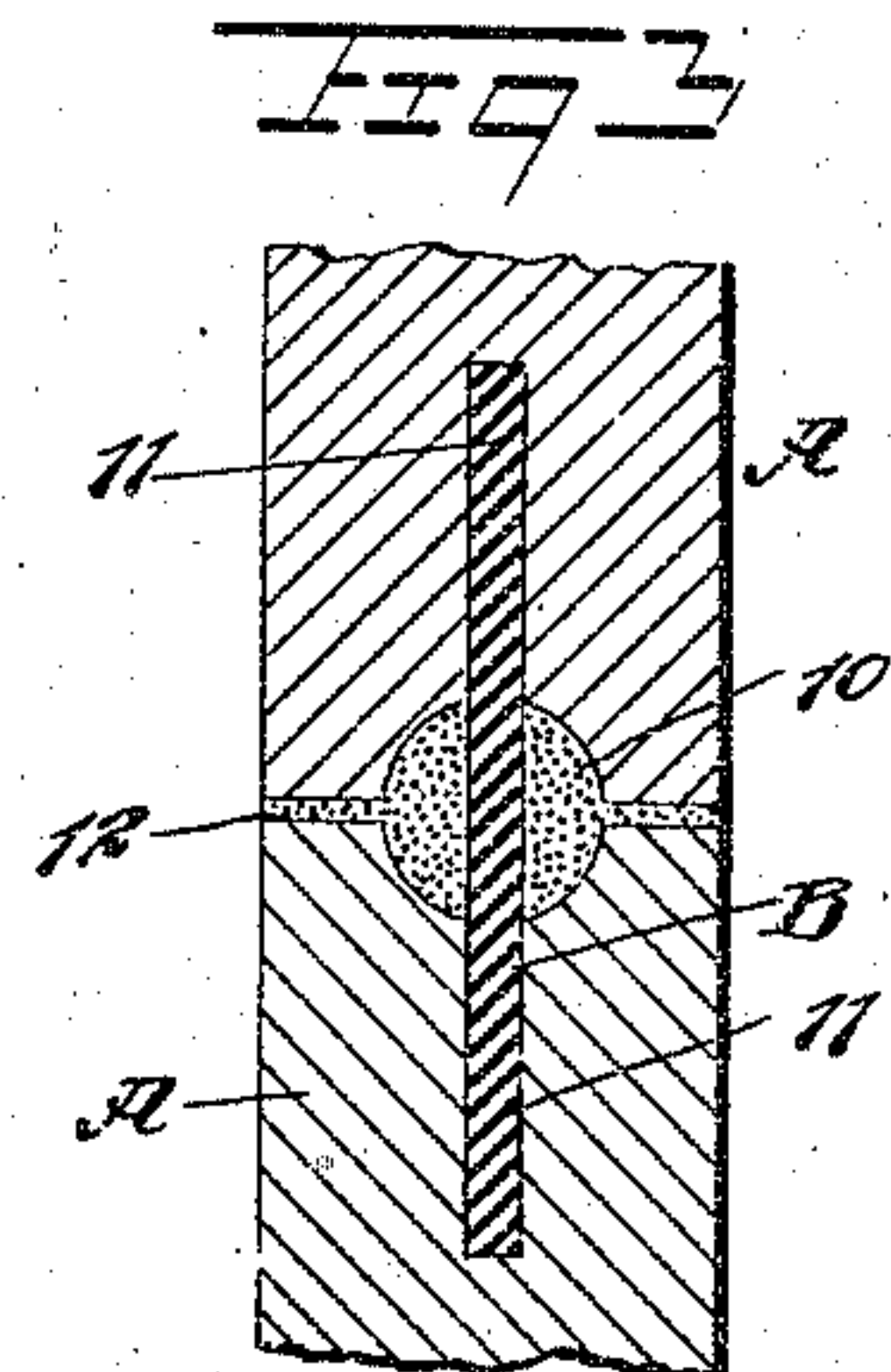
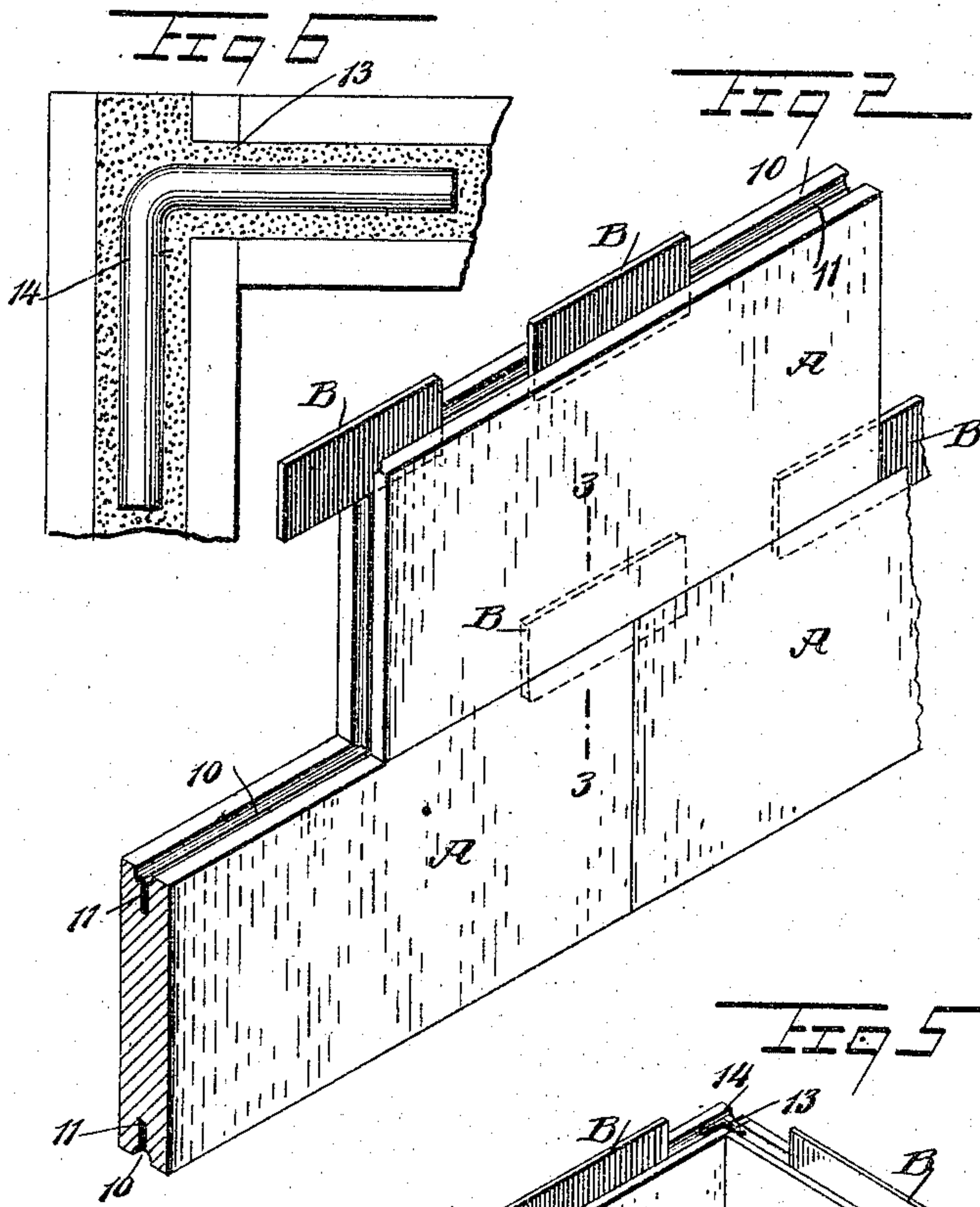
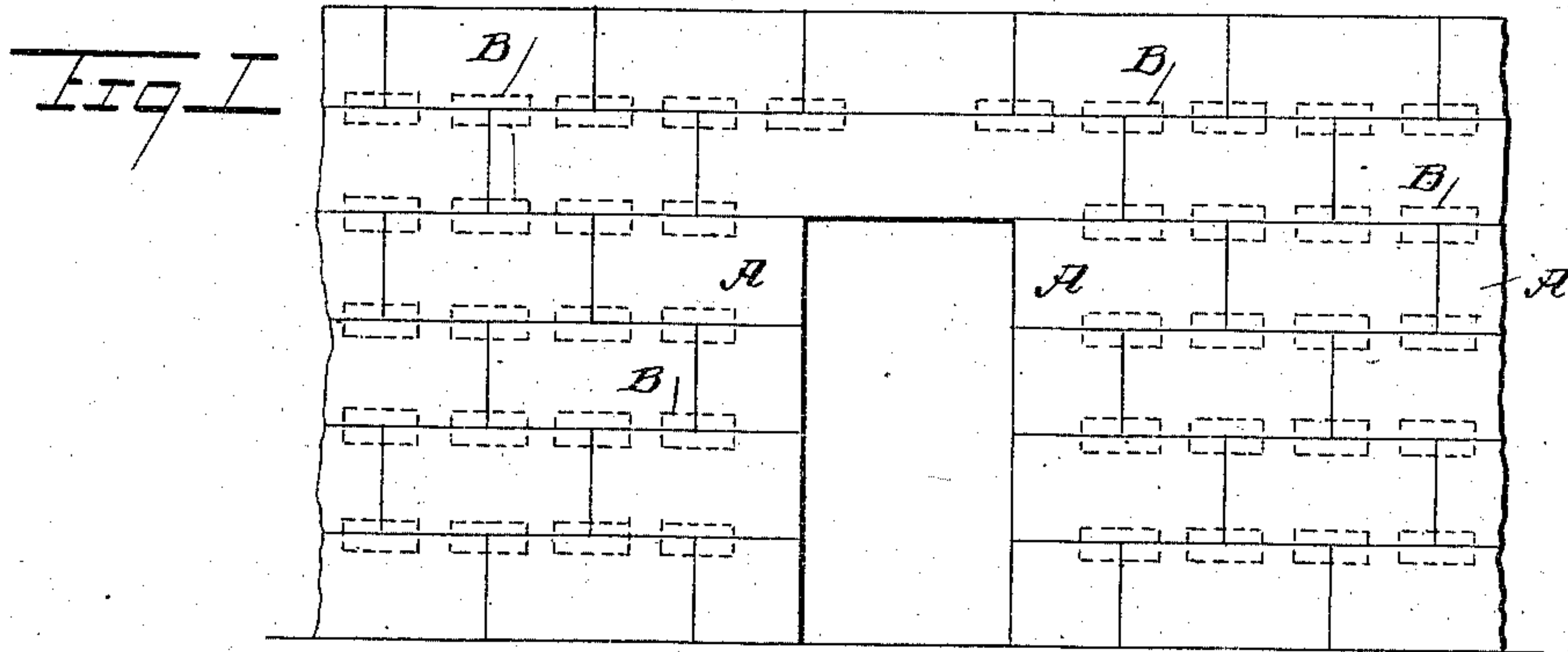
No. 652,051.

Patented June 19, 1900.

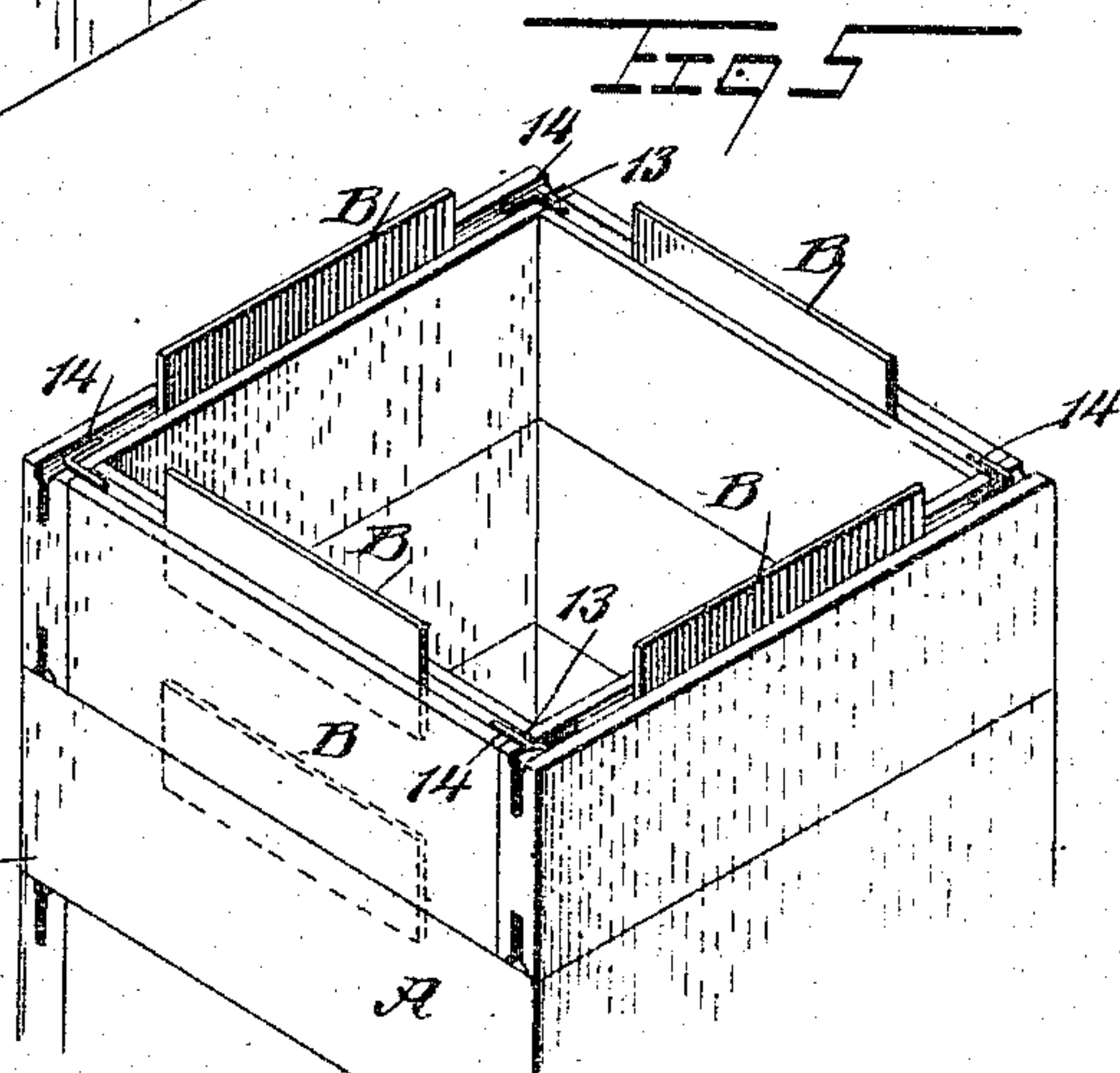
J. STREIFLER.
FIREPROOF STRUCTURE.

(Application filed Apr. 18, 1900.)

(No Model.)



WITNESSES:
H. Walker
John Streifler



INVENTOR
John Streifler.

BY *M. M. M.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN STREIFLER, OF NEW YORK, N. Y.

FIREPROOF STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 652,051, dated June 19, 1900.

Application filed April 18, 1900. Serial No. 13,329. (No model.)

To all whom it may concern:

Be it known that I, JOHN STREIFLER, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and useful Improvement in Fireproof Structures, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a perfect fireproof construction for dumb-waiters, elevator-shafts and partitions, and to so utilize metal tongues that they will effectually hold the parts of the structure together at the joints and between the joints, which tongues are completely concealed within the structure.

Another purpose of the invention is to so attach the sections of the fireproof structure to each other and to the tie-plates or tongues that an ample and slightly cement connection may be conveniently and economically made between all of the parts and to provide a means whereby the abutting ends of slabs or blocks used in the construction of small dumb-waiter shafts may be quickly and perfectly tied together or connected, especially where each face of the shaft is built up of single slabs or blocks placed one on the other.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of a portion of a fireproof structure constructed in accordance with my invention. Fig. 2 is a perspective view of a few blocks placed together in accordance with my invention. Fig. 3 is a vertical section taken practically on the line 3 3 of Fig. 2. Fig. 4 is a longitudinal edge view of a portion of a block utilized in carrying out the invention. Fig. 5 is a perspective view of a portion of a small dumb-waiter shaft, illustrating the application of the improvements thereto; and Fig. 6 is a horizontal section through a corner portion of the shaft shown in Fig. 5, but drawn on an enlarged scale.

A represents blocks, which may be of any fireproof material, such as metal, cement, asbestos, or a composition of material adapted to withstand the effects or the action of fire. The blocks A are usually made rectangular, as shown, and each block is provided at the top and at the bottom with a longitudinal groove 10, centrally located, and these grooves are usually and preferably concaved or semi-circular in cross-section. Grooves 10 may be and preferably are also made in the end surfaces of the blocks. Each block is provided with a longitudinal slot 11 in the central portion of its top and bottom groove 10, and these slots extend to the end portions of the blocks. The ends of the blocks are also preferably slotted.

The slots 11 are adapted to receive plates or tongues B, which plates or tongues extend beyond the surfaces to which they are applied usually for about half their depth or transverse dimensions. Any desired number of plates or tongues B may be employed; but when several are employed they are placed near the ends of the blocks and at the central portions of said blocks, the end plates or tongues extending beyond the end surfaces of the block to which they are applied, as well as above the longitudinal surfaces in which they are received; but I desire it to be understood that a plate or tongue may be made of sufficient length to extend from end to end of a block and beyond one or both of the ends of the block, as occasion may demand.

In building a structure of blocks made as above set forth the plates or tongues B are placed in the upper or longitudinal edge of the blocks of the bottom row, and these plates are received in the slots 11 in the bottom surfaces of the blocks of the next row, and the plates or tongues B are so placed that they extend across the joints of abutting blocks in one row and into the blocks of the next upper row at points between the ends of said blocks. Prior to placing the blocks one upon the other, but after the tongues or tie-plates B have been placed in the upper surfaces of the lower blocks, the grooves 10 are filled with cement or other adhesive material, and cement is likewise placed in proper quanti-

ties upon the upper edges of the lower blocks at each side of the slot 10. Cement is then placed in like manner upon the bottom edges of the blocks to be placed upon the lower blocks to form the next row, whereupon the tie-plates or tongues B are firmly secured to the blocks of the two rows and an ample bed of mortar or cement 12 is provided between the plain opposing surfaces of the upper and lower blocks, and when the grooves 10 are continued along the end surfaces of the blocks A these end grooves are likewise filled with cement or with adhesive material. Under this construction it will be observed that a partition, a shaft, or the like may be constructed in a substantial and fireproof manner and that the tie-plates or tongues B are completely concealed. When the shaft is made up of a series of single blocks placed one upon the other, and single tie-plates or tongues B are employed, it is advisable to provide means for securing the corner portions of the structure or tying these portions together, and this is accomplished by cutting transverse grooves 13 in the inner faces of the blocks at the top and bottom near each end, as shown in Figs. 5 and 6, and placing angle-irons 14 in the grooves 10, thus connected at the corners of the structure, it being understood that the angle-irons 14 are embedded in cement or adhesive material of any suitable description.

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

1. In fireproof structures, a block having one or more of its edges grooved, and slots

produced longitudinally in the grooves, for the purpose set forth.

2. In fireproof structures, a block having its edges longitudinally grooved and the bottom portions of the grooves provided with slots, and tie-plates or tongues fitted into the said slots, the tie-plates or tongues extending beyond the edges in which they are received.

3. In fireproof structures, the combination, with a block having a longitudinal groove in its upper and in its lower edge or face, extending from end to end, and also provided with longitudinal slots extending the length of the grooves, of tie-plates or tongues adapted to enter the said slots and extend beyond the edges in which the slots and grooves are made, as specified.

4. In a fireproof structure, a shaft constructed of series of blocks having longitudinal grooves in their upper and lower edges, and slots in the said grooves extending longitudinally of the grooves, the grooves in the blocks connecting at the corners of the structure, tie-plates or tongues received in the slots of the blocks, which tie-plates or tongues extend beyond the surfaces at which they are received, and angle-irons located in the grooves in the blocks at the corners of the structure, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN STREIFLER.

Witnesses:

J. FRED. ACKER,
JNO. M. RITTER.