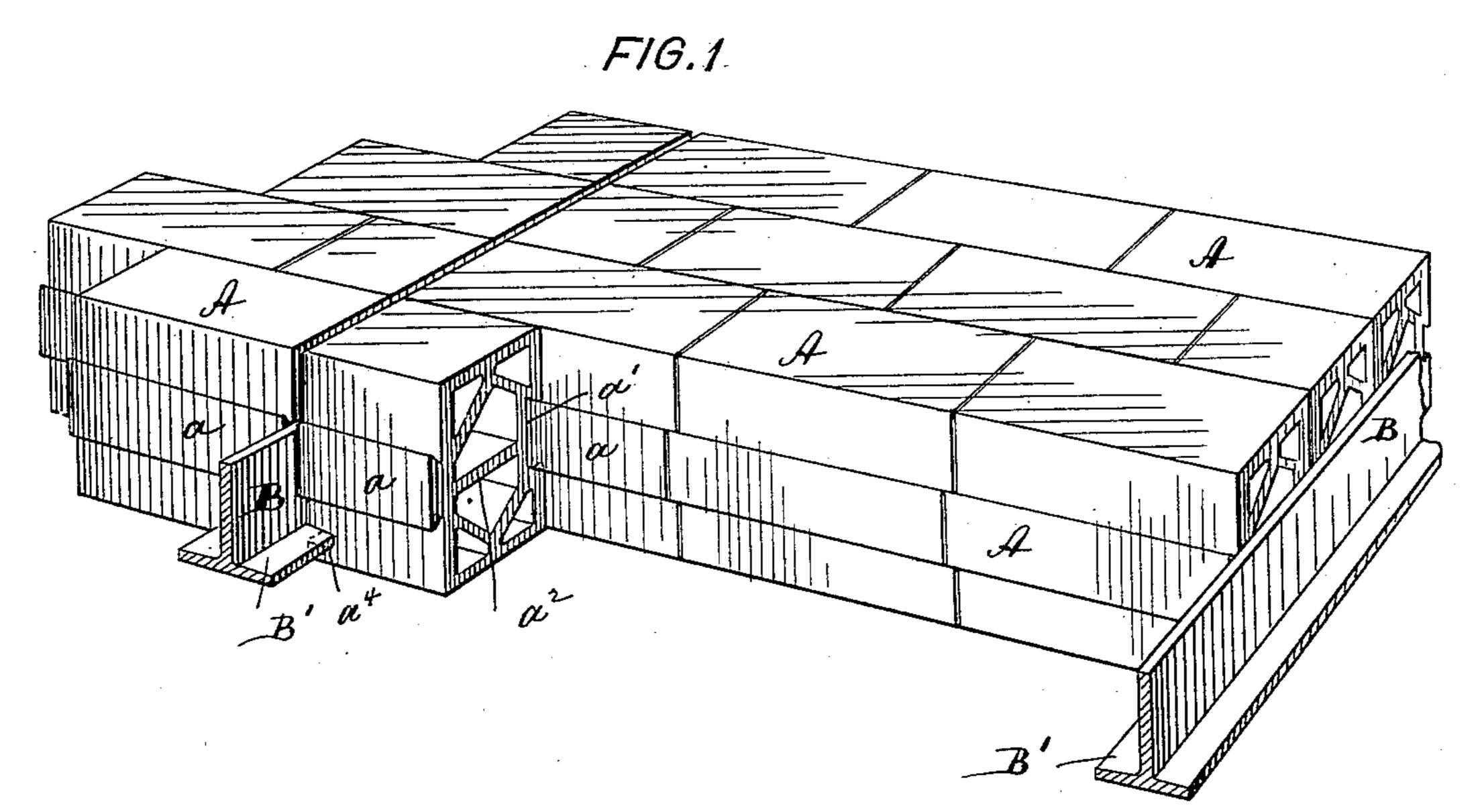
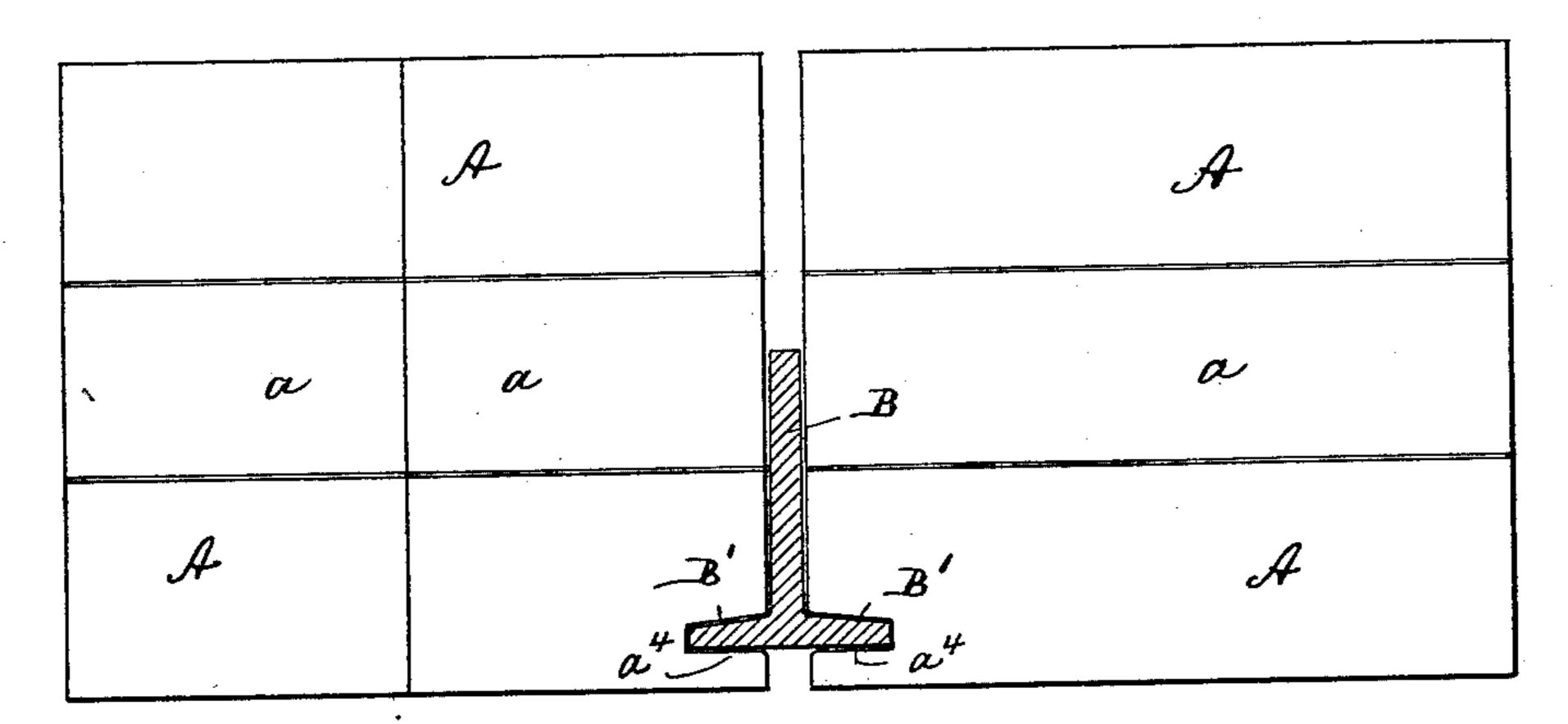
## B. HAFFNER. BUILDING BLOCK.

(Application filed Feb. 19, 1901.)

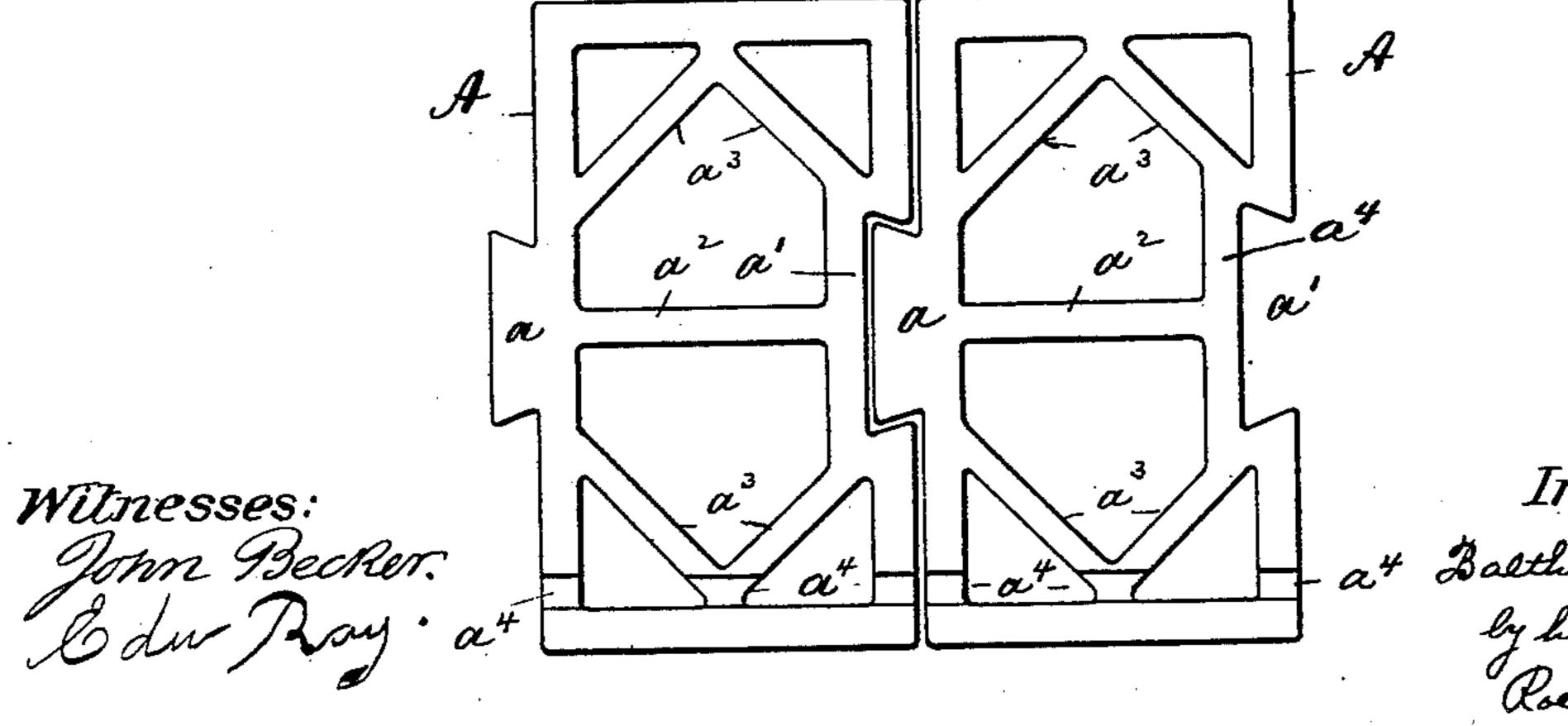
(No Model.)



F/G.2.



F/G.3.



Balthasar Haffner by his actionary

## United States Patent Office.

BALTHASAR HAFFNER, OF MAURER, NEW JERSEY.

## BUILDING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 677,351, dated July 2, 1901.

Application filed February 19, 1901. Serial No. 47,898. (No model.)

To all whom it may concern:

Be it known that I, Balthasar Haffner, a citizen of the United States, and a resident of Maurer, Bergen county, New Jersey, have invented certain new and useful Improvements in Building-Blocks, of which the following is a specification.

This invention relates to an improved fireproof building-block for ceilings and floors to which is light and of superior strength.

In the accompanying drawings, Figure 1 is a perspective view of portion of a ceiling and floor containing my improved block. Fig. 2 is a side elevation of a pair of adjoining blocks, and Fig. 3 an end view of the same.

The blocks A, constructed of fireproof material, are made hollow and of oblong shape. At the center one of the long sides of the block is set back, as at  $a^4$ , to form a groove zo a', and the other long side is projected outward to form a corresponding tongue a. The upper and lower edges of the groove, as well as of the tongue, are beveled, so that the tongue of any one block will interlock with 25 the groove of the adjoining block, Fig. 3. From the upper and lower ends of the setback section  $a^4$  and of the base of tongue adiagonal braces  $a^3$  extend toward the top and bottom of the block. These braces will not 30 only increase the load - carrying strength of the block, but they will reinforce the weak points formed at the junction of the receding section  $a^4$  with the side of the block. To take up lateral strain, a horizontal brace  $a^2$ 35 extends transversely across the block between tongue and groove.

Into one end of the block A there is cut a notch or notches  $a^4$ , adapted to receive the flange or flanges B' of beam B. This notch  $a^4$  lies in a plane parallel to the groove a', but 40 extends in a direction at right angles thereto. The tongues a and grooves a' are respectively of such a width that the former may be introduced into the mouth of the latter, Fig. 3, the intimate union being formed by means 45 of mortar or cement. In use row after row of blocks A are built up between the beams B in the manner indicated in Fig. 1, the adjoining rows being interlocked by means of the tongues and grooves and being arranged 50 to break joints. In this way a ceiling and floor is formed which is of superior strength and in which all the parts are connected in a very firm and reliable manner.

What I claim is—

A hollow fireproof building-block having a receding section to form a groove, an opposite outwardly-projecting section to form a tongue, and diagonal braces extending from the ends of the receding section and tongue 60 respectively to the top and bottom of the block, substantially as specified.

Signed by me at New York city, county and State of New York, this 18th day of February, 1901.

## BALTHASAR HAFFNER.

Witnesses:

WILLIAM SCHULZ,. F. v. Briesen.