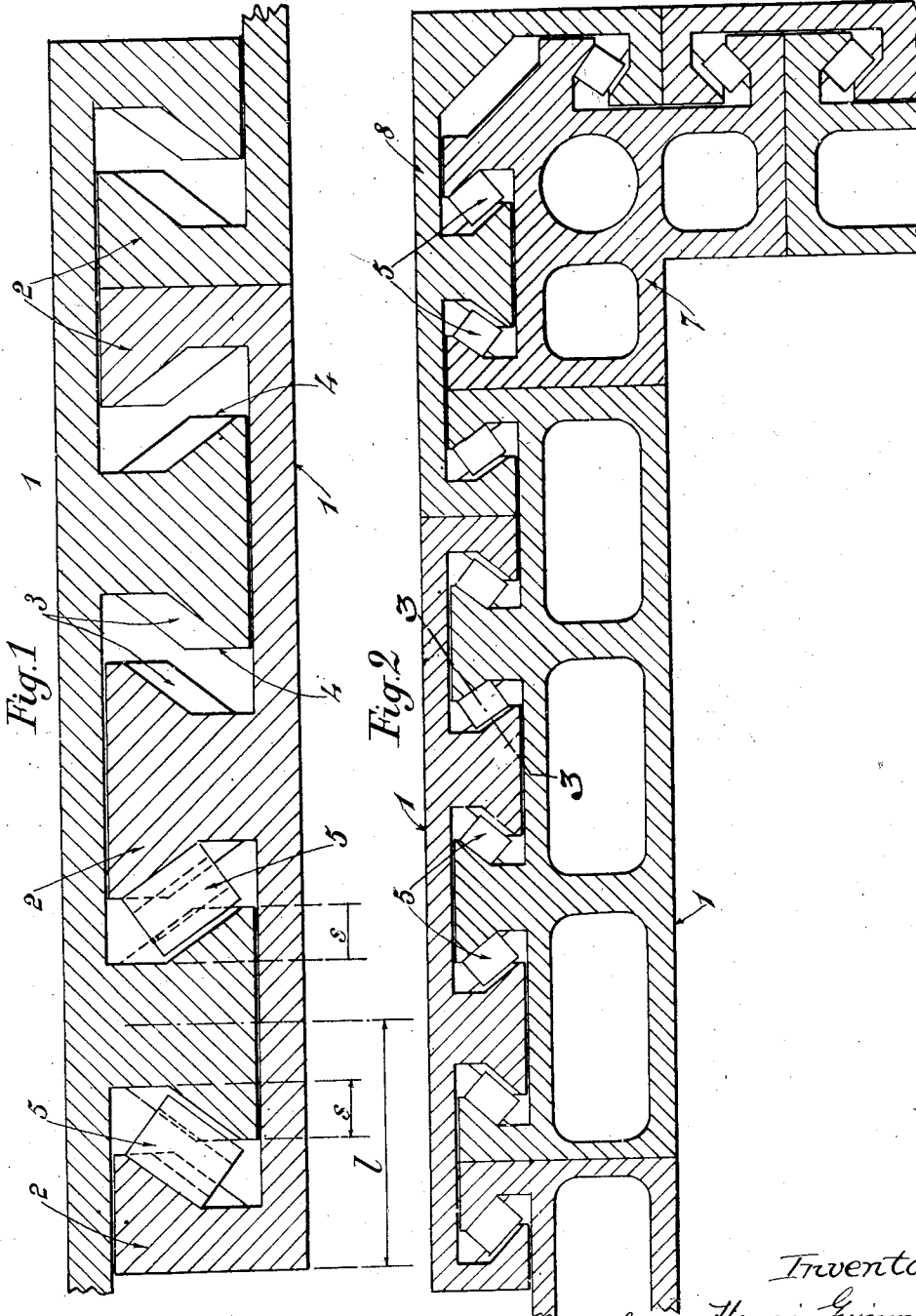


L. H. GUIMONNEAU.
BUILDING WALL.
APPLICATION FILED JAN. 22, 1920.

Patented Aug. 23, 1921.

2 SHEETS—SHEET 1.

1,388,181.



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Patented Aug. 23, 1921.

2 SHEETS—SHEET 2.

1,388,181.

Fig. 4

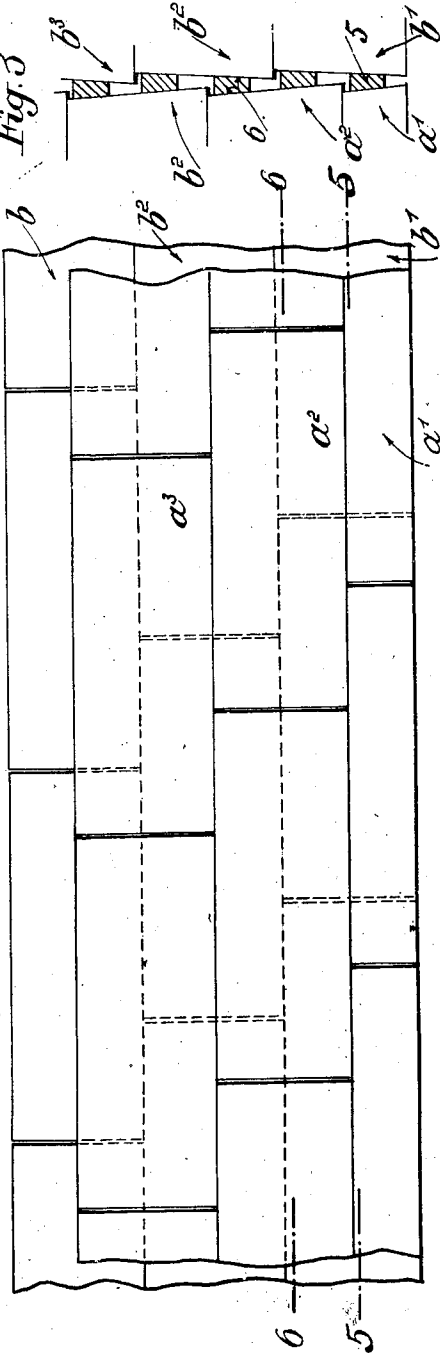


Fig. 3

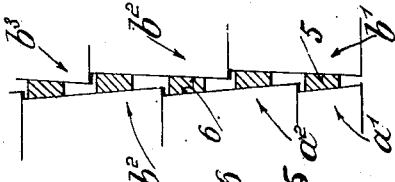


Fig. 5

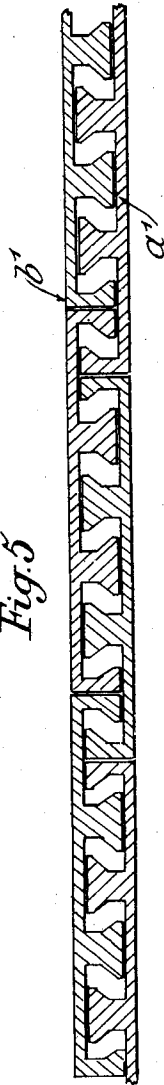
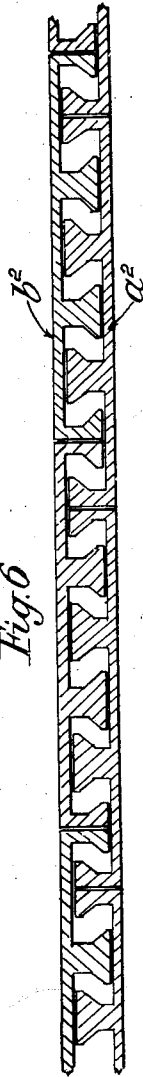


Fig. 6



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UNITED STATES PATENT OFFICE.

LOUIS HENRI GUIMONNEAU, OF LE RAINCY, FRANCE.

BUILDING-WALL.

1,388,181.

Specification of Letters Patent. Patented Aug. 23, 1921.

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To all whom it may concern:

Be it known that I, LOUIS HENRI GUIMONNEAU, a citizen of the Republic of France, residing at 6 Allée de Gagny, Le Raincy, Seine and Oise, in the Republic of France, have invented new and useful Improvements in Building-Walls, of which the following is a specification.

This invention relates to a dismountable wall built without using mortar. According to this invention, molded blocks or slabs of a thickness adapted to form one part of that of the wall to be built are provided on one side with dovetail tenons which are placed between similar tenons on similar blocks oppositely arranged and adapted to form the other part of the thickness of the wall, the laterally inclined faces of said dovetail tenons being also inclined vertically so as to provide between adjacent tenons on opposite blocks downwardly tapering chambers into which downwardly tapering wedges are dropped so as to lock the blocks together. The design of the blocks is such that in building the wall the joints may be staggered in the vertical as well as in the horizontal direction.

In the annexed drawings, given by way of example:

Figure 1 is a sectional plan view showing part of a wall constructed with blocks provided with three tenons.

Fig. 2 is a sectional plan view showing at a smaller scale the corner of two walls at right angles, each block comprising four tenons.

Fig. 3 is a vertical section on line 3—3 of Fig. 2.

Fig. 4 is a side view at a still smaller scale of a portion of a wall seen from inside.

Figs. 5 and 6 are horizontal sections on lines 5—5 and 6—6 of Fig. 4, illustrating the manner of laying the blocks in accordance with the invention.

As shown in Fig. 1, each block or slab 1 of a suitable thickness to form a part of the thickness of the wall is provided on one face with a plurality of projections or tenons 2 extending parallelly to the small sides of the slab from the bottom face to the top face and at right angles to the general plane thereof. These tenons may have the general shape of dovetails the larger bases of which are all in the same plane parallel to the other flat face of the block and they are spaced at an equal distance apart from each

other. The inclined faces 3 of each dovetail tenon are not perpendicular to the upper and lower faces of the block. Said inclined faces are also slightly inclined with respect to the vertical line so that the area of the horizontal section of the tenon is greater at the bottom than at the top. However the two sides 4 of each tenon are perpendicular to the vertical faces of the blocks, *i. e.* the lateral projection *s* remains constant throughout the entire height of the block.

The tenons provided at the ends of each block have only one inclined lateral face 3, the other lateral face being that of the slab itself whereas the intermediate tenons have two symmetrically inclined faces 3 tapering or converging upwardly, the width of these intermediate tenons being double that of the end tenons.

The blocks thus designed are oppositely arranged with the tenons of one block placed in the dovetail recesses between two adjacent tenons of the opposite block. Hence the opposite blocks are staggered in the longitudinal direction of the wall, the end face of one block projecting with respect to the end face of the cooperating block preferably for a length *l* equal to half the distance between the center line of a double or symmetrical tenon of one block to the nearest end face of said block.

The lower layers of blocks comprise a row of standard blocks such as described, placed either internally or externally, and a row of special blocks oppositely arranged with their tenons placed between the tenons of the opposite blocks, the special blocks having half the height of the standard blocks but being otherwise similar to the latter. The next layers of blocks comprise blocks of normal height so that the horizontal joints in the inner pile of blocks are in staggered relation with respect to the outer pile as shown particularly in Figs. 3 to 6 in which a^1 indicates the first layer of half-blocks and b^1 the first layer of standard blocks, a^2 , a^3 etc. the successive layers superimposed upon the layer a^1 and b^2 , b^3 , etc., the successive layers superimposed upon the layer b^1 . As each successive layer of blocks is laid, wedges 5 are inserted or dropped into the downwardly tapering chambers formed by each pair of oppositely inclined faces 3 on the opposite blocks. The wedges 5 are constituted by rectangular blocks or bricks comprising two beveled faces 6 the inclination

of which corresponds to that of the afore-
said faces 3 and their thickness being such
that, when dropped, these wedges are
stopped at a suitable height by the inclined
5 faces 3 of the blocks.

As a matter of course the last layer of
blocks will comprise half blocks similar to
the blocks a^1 so that the top faces of the two
piles are at the same level.

10 The blocks are also staggered in the longi-
tudinal direction in both piles as clearly
seen from Figs. 4 to 6. After laying the
layer of half-blocks a^1 and the opposite
layer of standard blocks b^1 and inserting the
15 wedges 5, the next layer of blocks a^2 are
laid so that the joints thereof are in stag-
gered relation with respect to the blocks a^1 .
Similarly the blocks b^2 are laid in staggered
relation with respect to the blocks b^1 and
20 so on. The joints are thus staggered both
in the vertical and in the horizontal direc-
tion.

The inner and outer blocks may be made
of different materials. As shown in Fig. 2,
25 they may also be made of different widths.
The corners are constructed in a similar
manner by means of special blocks 7 and 8
(Fig. 2).

Having now described my invention,

what I claim as new and desire to secure by 30
Letters Patent is:

1. A dismountable wall which comprises in
combination blocks with vertically and hori-
zontally staggered joints, provided on one
face with a plurality of tenons which are 35
placed between the tenons of similar blocks
oppositely arranged and which have in-
clined faces adapted to form with the oppo-
site inclined faces of the opposite blocks
downwardly tapering chambers and wedges 40
with correspondingly inclined faces insert-
ed in said chambers.

2. A dismountable wall which comprises
in combination blocks with vertically and
horizontally staggered joints, provided on 45
one face with a plurality of dovetail tenons
which are placed between the tenons of simi-
lar blocks oppositely arranged, the inclined
faces of said dovetailed tenons being also
inclined with respect to the vertical line and 50
forming with the inclined faces of the oppo-
site blocks downwardly tapering chambers
and wedges with correspondingly inclined
faces inserted in said chambers.

In testimony whereof I have signed my 55
name to this specification.

LOUIS HENRI GUIMONNEAU.