

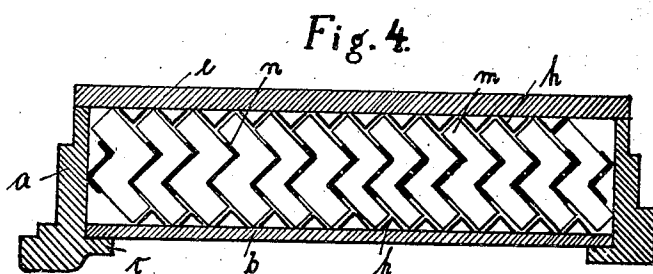
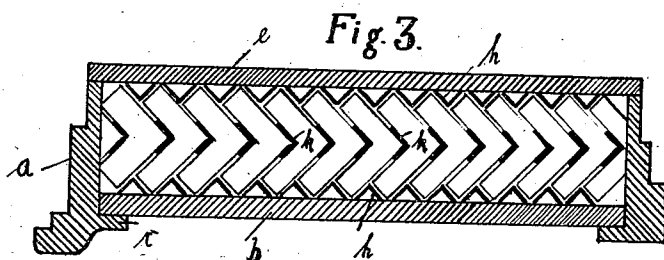
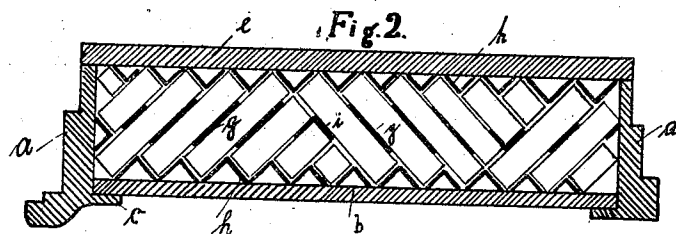
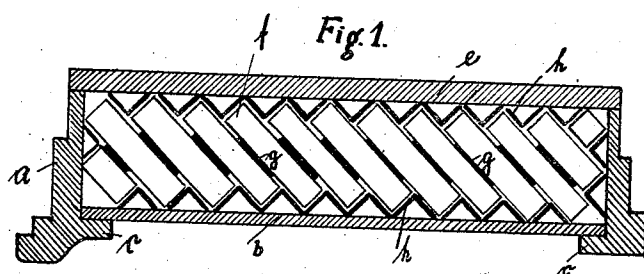
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H. TAEGEN

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BRICKWORK WALL FOR SAFES, STRONG ROOMS, AND THE LIKE

Filed March 13, 1924



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UNITED STATES PATENT OFFICE.

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BRICKWORK WALL FOR SAFES, STRONG ROOMS, AND THE LIKE.

Application filed March 13, 1924. Serial No. 699,093.

To all whom it may concern:

Be it known that I, HANS TAEGEN, residing at Berlin-Grünwald, Germany, have invented certain new and useful Improvements in Brickwork Walls for Safes, Strong Rooms, and the like, of which the following is a specification.

This invention relates to improvements in brickwork walls for safes, strong rooms and the like for keeping money, valuables, documents and the like.

It is already known to construct the walls or doors for safes and the like of a block of brickwork of hard clinker stones, such as are employed for facing brickwork buildings, within a metal frame or metal skeleton, an iron insertion being provided between the bricks, which connects the front- and back-covering of the walls or doors.

The object of my invention is to still further improve such reinforced brick or stone constructions. In order to render a chiseling through of such a wall still more difficult the bricks or stones are according to my invention obliquely disposed within the wall or at an angle to the front and rear of it and the iron insertions or reinforcements are so arranged in the joints of the brickwork, that in an attempt to drive a chisel through the wall the chisel always encounters the iron reinforcement and thus further progress is prevented or at least rendered extremely difficult.

The drawing affixed to this specification and forming part of it shows four embodiments of my invention by way of example.

The same letters of reference indicate similar parts throughout all the figures of the drawing.

Referring to the drawing it will be seen that the door or wall consists of a frame or casing *a*, of steel or iron, a front cover *b* of steel abutting against internal projections *c* of the frame *a* and the brick filling in the cavity enclosed by the rear cover *e*. It will be seen that this construction is common to all the examples illustrated.

Referring to Fig. 1 of the drawing it will be observed that the individual bricks *f* composing the brickwork are obliquely disposed within the frame *a*. In the joints between the bricks and at about their middle flat irons *g* are disposed. In addition hereto angle irons *h* may be inserted into the triangular spaces left between adjacent

bricks in front as well as in the back. In an attempt to drive a chisel through such a wall it is first necessary to fuse or cut through the front wall *b* and to fuse or remove the angle iron *h* before the brickwork is reached. In trying to cut through the brickwork the reinforcement *g* is reached at about the middle of the brickwork and it is impossible to proceed any further, as it would be necessary to chisel obliquely round the corner of the flat iron *g*.

Referring to Fig. 2, it will be seen that the bricks are alternately disposed obliquely in one or the other direction, the angles thus produced between the ends of the bricks being filled up by smaller bricks. Otherwise the reinforcement is effected in the same manner as in Fig. 1 by flat irons *g* and angle irons *i* and at the faces angle irons *h* may again be placed into the triangular recesses between the corners of the bricks.

Referring to Fig. 3, it will be observed that in this modification bricks shaped like arrow heads are employed and the reinforcement is effected by inserting angle irons *k* into the joints at the central points of the bricks.

Fig. 4 illustrates a still further modification with Z-shaped bricks *m* and Z-shaped reinforcement irons *n* inserted into the joints where the points of the individual bricks meet. The Z-shaped irons may of course be replaced by two angle irons, as shown in some places in this figure.

Many other modifications will suggest themselves to persons skilled in the art. The essential feature of my invention is, however, that a straight layer of masonry from the front to the back of the wall is obviated and the stones or bricks are so disposed within the wall or are so shaped that it is possible to prevent a chisel from being forced straight through the wall without encountering after some time the reinforcement placed into the joints and thus to prevent or render difficult any further progress. In this manner it is possible to construct a brick wall of 4 to 6 inches thickness which is extremely strong and cannot be broken through by ordinary tools.

My invention is not only applicable to the walls of ironclad boxes or rooms, such as safes and strong rooms, but also to ordinary safes, wall safes and other receptacles for

keeping valuables, and for all building constructions carried out in highgrade brickwork and which must be made at least 10 inches thick to offer some kind of safety, while according to my invention a thickness of 4 inches suffices for most cases, so that the substructure required for carrying the great weight of brickwork strong rooms may be made considerably lighter or be omitted altogether.

In some cases, for instance in cupboards and the like for storing valuables, it may be desirable to make the frame work for the bricks as well as the outer and inner cover or at least part of them not of metal but of wood.

What I claim as my invention and desire to secure by Letters Patent is:

1. In brickwork walls in combination, obliquely disposed bricks and steel reinforcements arranged in the joints between said bricks at about the middle of said wall.

2. In brickwork walls in combination, angularly shaped bricks and angle iron reinforcements arranged in the joints between said bricks at about the middle of said wall.

3. In brickwork walls in combination, obliquely disposed bricks, steel reinforcements, arranged in the joints between said bricks at about the middle of said wall and angle irons disposed in the triangular spaces at the front and back of said wall.

4. In brickwork walls in combination, angularly shaped bricks, angle iron reinforcements arranged in the joints between said bricks at about the middle of said wall and angle irons disposed in the triangular spaces at the front and back of said wall.

5. In a structure in combination, a frame, a front cover within said frame, obliquely disposed bricks in the cavity of said frame, steel reinforcements arranged in the joints between said bricks at about the middle of said bricks and a rear cover adapted to close said frame.

6. In a structure in combination, a frame, a front cover within said frame, angularly shaped bricks in the cavity of said frame angle iron reinforcements arranged in the joints between said bricks at about the middle of said brick wall and a rear cover adapted to close said frame.

7. In a structure in combination, a frame, a front cover within said frame, obliquely disposed bricks in the cavity of said frame, steel reinforcements arranged in the joints between said bricks at about the middle of said brick wall angle irons disposed in the triangular spaces at the front and back of said brick structure and a rear cover adapted to close said frame.

8. In a structure in combination, a frame, a front cover within said frame, angularly shaped bricks disposed in the cavity of said frame, angle iron reinforcements arranged in the joints between said bricks at about the middle of said wall, angle irons disposed in the triangular spaces at the front and back of said brick structure and a rear cover adapted to close said frame.

In testimony whereof I affix my signature.

HANS TAEGEN.

Witnesses:

WLAD. ENDERS,
REYER S. AUSPEN.