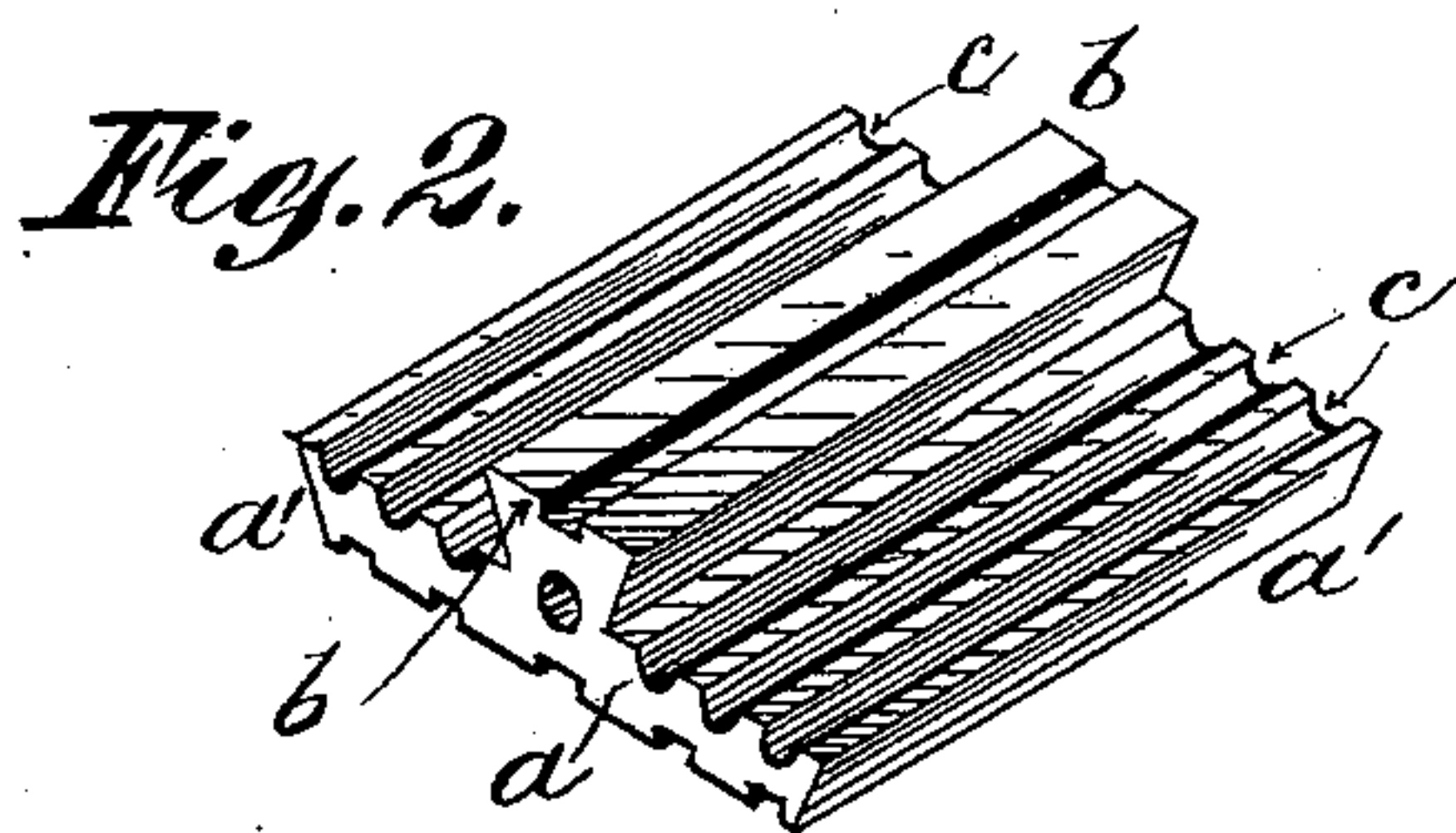
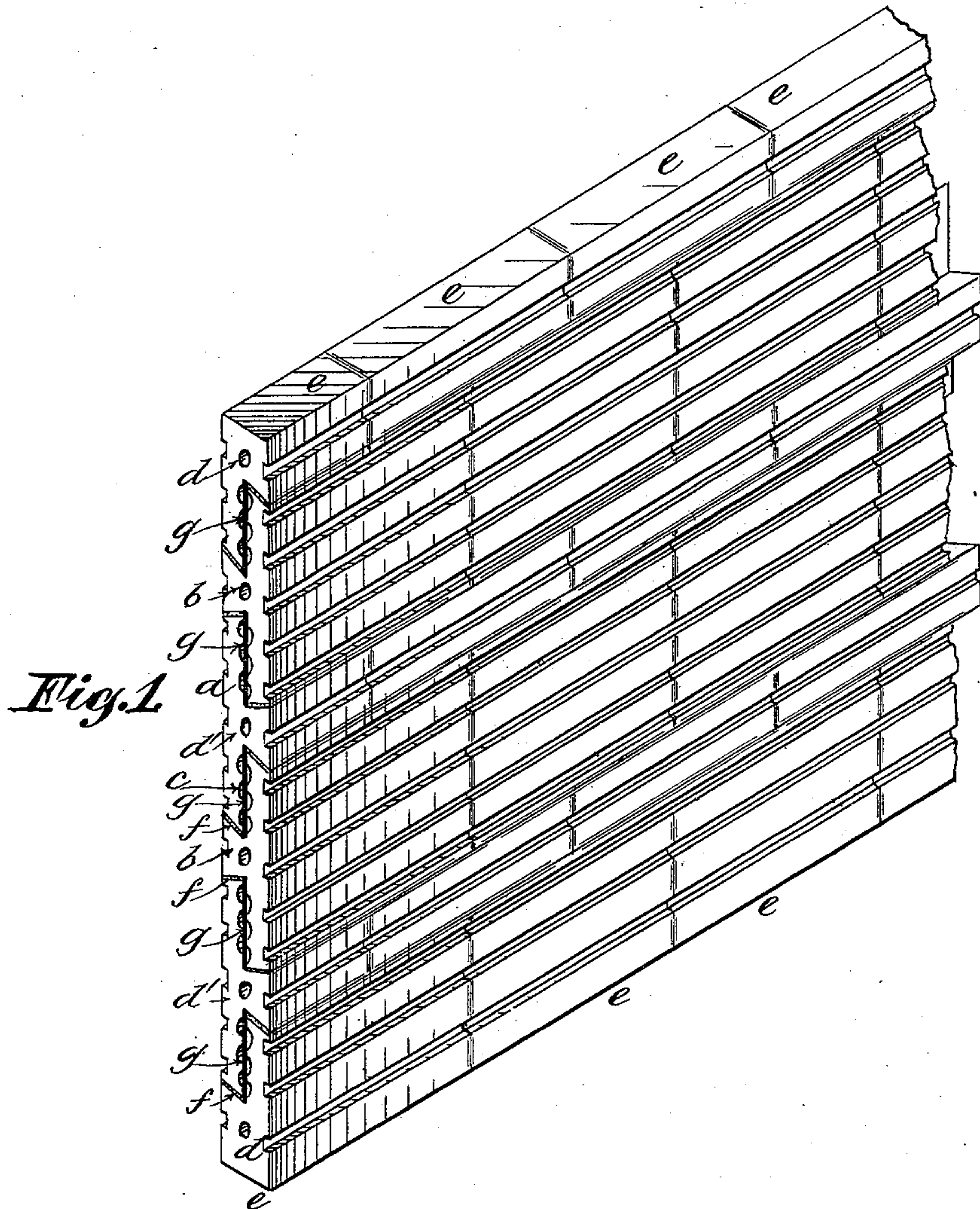


(No Model.)

G. LIEBAU.
WALL OR PARTITION.

No. 564,205.

Patented July 21, 1896.



Witnesses:
D. W. Gardner.
M. Fisher

Inventor:
Gustav Liebau
by Theodore Carragan
his Atty.

UNITED STATES PATENT OFFICE.

GUSTAV LIEBAU, OF NEW YORK, N. Y.

WALL OR PARTITION.

SPECIFICATION forming part of Letters Patent No. 564,205, dated July 21, 1896.

Application filed July 25, 1895. Serial No. 557,088. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV LIEBAU, a subject of the Emperor of Germany, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Walls and Partitions, of which the following is a specification.

This invention relates to certain new and useful improvements in walls and partitions, and to the bricks or building-blocks used in the construction thereof, the object being to produce a light thin fire and sound proof wall which shall combine said qualities with strength and rigidity.

To these ends, therefore, my said invention consists in a brick or building-block comprising a comparatively thin body having flaring sides, and a comparatively thick longitudinal dovetail tongue or projection; in modifications of such bricks or blocks for the upper and lower courses and for the ends of a wall; in a wall or partition constructed of such bricks or blocks; and in the details of construction, all as hereinafter more particularly described, and pointed out in the claims.

Referring to the accompanying drawings, forming a part hereof, in the figures of which like parts are similarly designated, Figure 1 is a perspective view of a wall or partition constructed in accordance with my invention, and showing the modifications of the bricks referred to; and Fig. 2 is a perspective view of a brick.

The brick or building-block is formed of any usual and well-known material, such as earth, clay, "plaster-boards," "terra-cotta lumber," wood, &c., and preferably consists of the comparatively thin and wide body *a*, having the flaring sides *a'*, and the comparatively narrow longitudinal dovetail tongue or projection *b*, extending above the body *a* to a height greater than the thickness of said body. I also prefer to provide said body on its broad or tongue side with a series of channels *c*, semicircular or of other contour, and for a purpose to be presently explained.

In the construction of walls and partitions obviously the top and bottom courses should be flush and level, and as the wall is laid in bond the bricks next to the main walls, &c.,

on alternate courses should be but half the length of the bricks used in the body of the wall, and for these purposes the brick shown in Fig. 2 may be sawed or broken off, or a special form of brick may be made, as shown at *d* and *d'* in Fig. 1. As there shown, the bricks *d* are formed with one straight or flush edge *e*, and the bricks *d'* are but half the length of the bricks used in the body of the wall; both, however, in other respects conforming to the construction already described.

In laying the wall or partition, as shown in Fig. 1, the bricks are oppositely disposed on each course, with the dovetail sides of the tongue or projection *b* of one brick engaging the flaring sides *a'* of the bodies of the bricks on the courses above and below, thereby making four joints or points of union, *i. e.*, one on each of the flaring sides and one on each side of the dovetail tongue, thus producing a firm mechanical union, keying all portions of the wall together, and rendering mortar or cement unnecessary. I, however, prefer to use mortar, cement, or other binding material *f*, applying the same between the dovetailed sides of the tongue *b* and the flaring sides *a'* of the bodies of the bricks, as clearly shown.

As the tongues *b* are preferably thicker than the bodies *a*, when the bricks are flush on their outer faces, there will remain interior spaces between such bricks, in which spaces may be inserted strips *f* of felt, paper, wood, or analogous insulating material, which not only prevents the passage of sound from one side of the structure to the other, but also equally prevents the passage of heat and cold. The attainment of both of these objects is also enhanced by the grooves or channels *c*, which preferably do not coincide, as shown, thus distributing the dead-air space over a wider area. Said channels further serve to make the bricks and the walls much lighter, and where this is a desideratum the bricks may be hollow or perforated.

Upon the face of the tongue *b*, and upon the opposite and narrow face of the body *a*, may be formed longitudinal grooves or channels *h*, to afford a hold for the plaster, when used, or in which wooden strips may be in-

sented, to which wainscoting or other work may be secured. This, however, I do not claim as part of my invention.

It should be understood that the use of the mortar or other binding material and the felt or other insulating strips may be dispensed with when desired; that the tongues and bodies may be of equal thickness; that the bricks may be flush on either or both faces; also that the bricks may be completely laid in mortar, cement, &c., and that other changes and alterations may be made without in any way departing from the principle and scope of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. A brick or building-block comprising a comparatively thin body having flaring sides and a comparatively thick longitudinal dovetail tongue or projection, substantially as described.

2. A brick or building-block comprising a body having flaring sides and grooves or channels on its broad face; and a longitudinal dovetail tongue or projection on said face, substantially as described.

3. A wall or partition composed of courses of bricks, each comprising a comparatively thin body having flaring sides and a comparatively thick longitudinal dovetail tongue or projection adapted to engage the flaring sides of the bricks oppositely arranged on the courses above and below, and be flush with

the outer faces thereof, thereby producing interior spaces between the bricks, substantially as described.

4. A wall or partition composed of courses of bricks, each comprising a comparatively thin body having flaring sides and grooves or channels on its broad face; a comparatively thick longitudinal dovetail tongue or projection adapted to engage the flaring sides of the bricks oppositely arranged on the courses above and below, and be flush with the outer faces thereof, thereby producing interior spaces between the bricks; and cement or other binding material between the dovetail tongues and flaring sides, substantially as described.

5. A wall or partition composed of bricks, each comprising a comparatively thin body and a comparatively thick tongue or projection, adapted to lie between the bodies of the bricks on the courses above and below, and be flush with the outer faces thereof, thereby producing interior spaces between the bricks, and strips of felt, paper, wood or analogous insulating substance within said spaces, substantially as described.

Signed at New York, in the county of New York and State of New York, this 19th day of July, A. D. 1895.

GUSTAV LIEBAU.

Witnesses:

HENRY SMITH,
FREDERIC CARRAGAN.