

(No Model.)

G. SANDBLOM.
FIREPROOF CEILING AND FLOOR.

No. 535,958.

Patented Mar. 19, 1895.

FIG. 3.

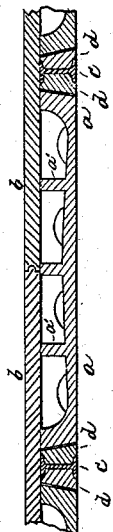


FIG. 4.

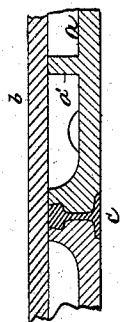


FIG. 5.

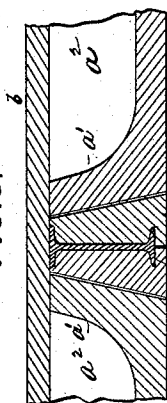


FIG. 6.

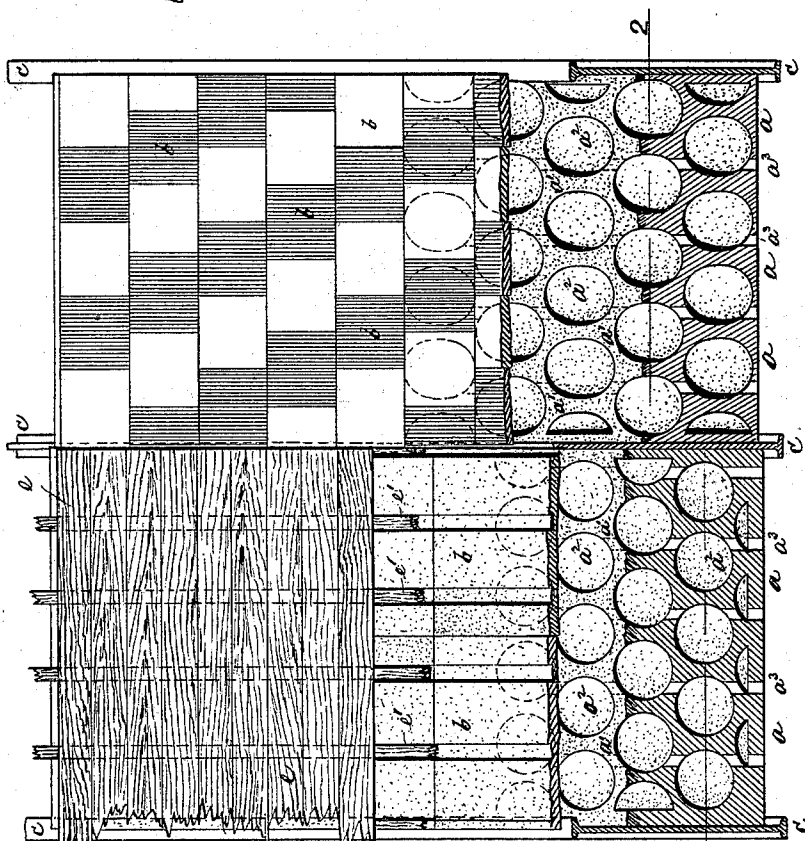
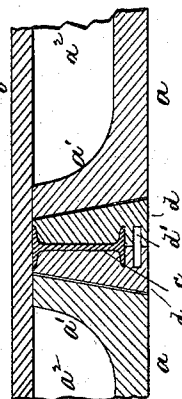
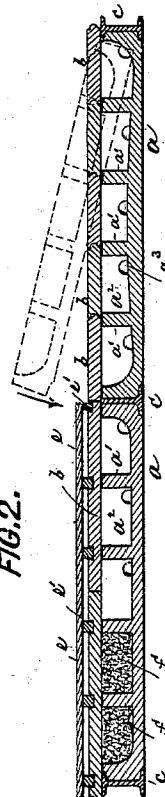


FIG. 2.



Witnesses:

John Becker
William Schulz

FIG. 1.

Inventor:

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UNITED STATES PATENT OFFICE.

GUSTAV SANDBLOM, OF NEW YORK, N. Y.

FIREPROOF CEILING AND FLOOR.

SPECIFICATION forming part of Letters Patent No. 535,958, dated March 19, 1895.

Application filed February 2, 1895. Serial No. 537,043. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV SANDBLOM, a citizen of Sweden, and a resident of New York city, New York, have invented an Improved Fireproof Ceiling, of which the following is a specification.

This invention relates to a fire proof ceiling and floor which is of simple construction, may be readily put up and is a good non-conductor of heat and sound.

In the accompanying drawings: Figure 1 is a plan partly in section of a fire proof ceiling constructed according to my invention. Fig. 2 is a cross section on line 2, 2, Fig. 1. Figs. 3 to 6 are vertical sections through modifications.

My improved ceiling is composed of fire proof material such as concrete, clay or terracotta, and consists of a base plate *a*, and a superposed top plate *b*. The base plate *a*, has a continuous bottom which may be either flat or arched and from which rises a continuous net work of ribs or flanges *a'*, between which the sockets or cells *a''*, are formed. These cells may have a round, oval or polygonal shape according to option and may be filled with coal ashes *f*, or a similar poor conductor. The ribs *a'*, may be perforated horizontally as at *a'''*, for the admission of pipes or wires. The base plates *a*, are supported upon the flanges of **I** or **T** beams or girders *c*, either directly (Fig. 2) or by means of intervening abutments *d*, (Figs. 3, 5 and 6.)

Upon the upper edge of the ribs *a'*, is supported the top plate *b*, which may be either continuous to extend over a number of cells (left hand side Fig. 1) or sectional to cover but one of such cells (right hand side Fig. 1). The continuous plate is designed as a foundation for an additional wooden flooring *e*, supported by joists *e'*, let into grooves of the top plate. The sectional top plate is to be used without a wooden superstructure and is composed of tiles which may have either a

plain or a mosaic or other ornamental surface. The top plate *b*, may be cemented to the flanges *a'*, and thus the entire ceiling forms a compact structure which is **I**-shaped in vertical section.

It will be seen that the ceiling constructed in the above described manner is simple, practical and strong and that it may be readily put up.

In Fig. 3 the edges of the base plate *a*, are beveled and are supported upon the beveled edges of the abutments *d*, that are in turn supported by the girders *c*.

In Fig. 4 the girders *c*, are shown to be composed of ordinary **T** rails, which construction may be employed if the ceiling is to be thin.

In Fig. 5 the abutments *d*, extend below the lower flange of the girders so as to protect the same, and in Fig. 6 an air space *d'*, is formed within the lower extensions of the abutments.

What I claim is—

1. A fire proof ceiling and floor composed of girders, a base plate supported thereon and having upwardly projecting connected ribs to form intervening cells and of a top plate supported upon such ribs, substantially as specified.

2. A fire proof ceiling and floor composed of girders, a base plate supported thereon and having upwardly projecting ribs and intervening cells, a fire proof filling within such cells and a top plate supported upon the ribs, substantially as specified.

3. A fire proof ceiling and floor composed of girders, tapering abutments supported thereon, a ribbed base plate supported upon the abutments and a superposed top plate, substantially as specified.

GUST. SANDBLOM.

Witnesses:

WILLIAM SCHULZ,
F. V. BRIESEN.