W. HERBST & E. DIECKMANN.

FIREPROOF FLOOR CONSTRUCTION.

APPLICATION FILED MAY 12, 1908.

908,001.

Patented Dec. 29, 1908.

2 SHEETS—SHEET 1.

Fig. 1.

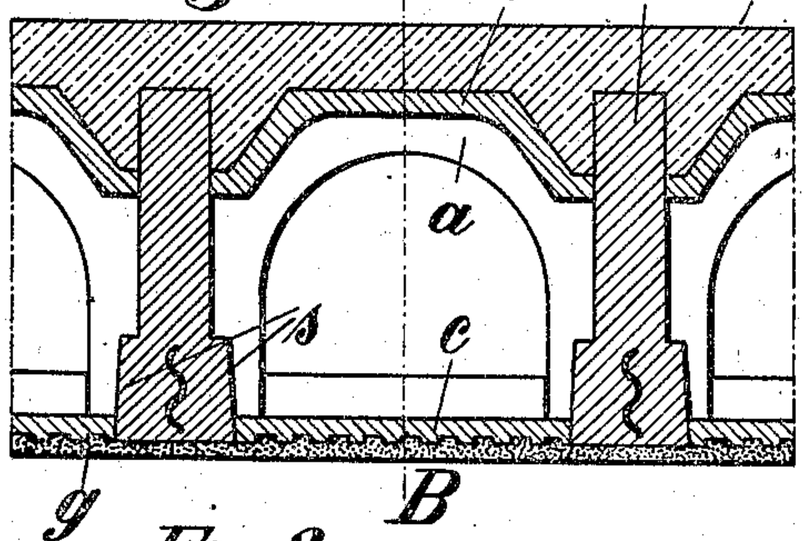


Fig. 2.

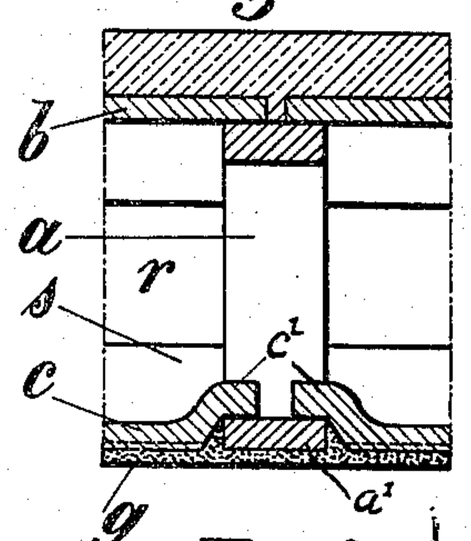


Fig. 3.

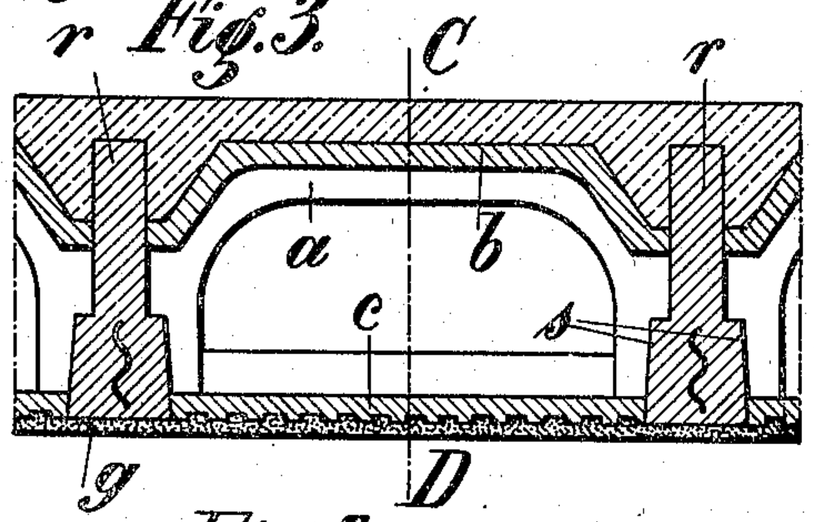
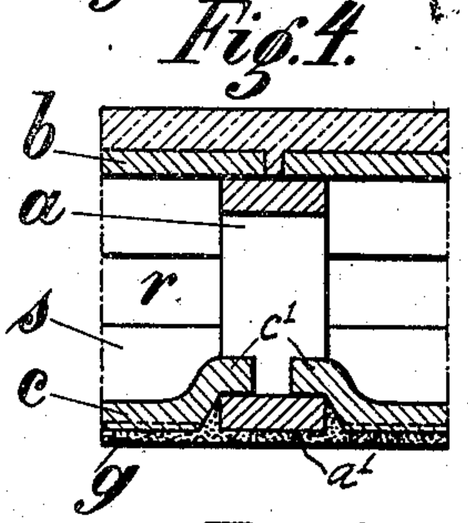


Fig. 4.



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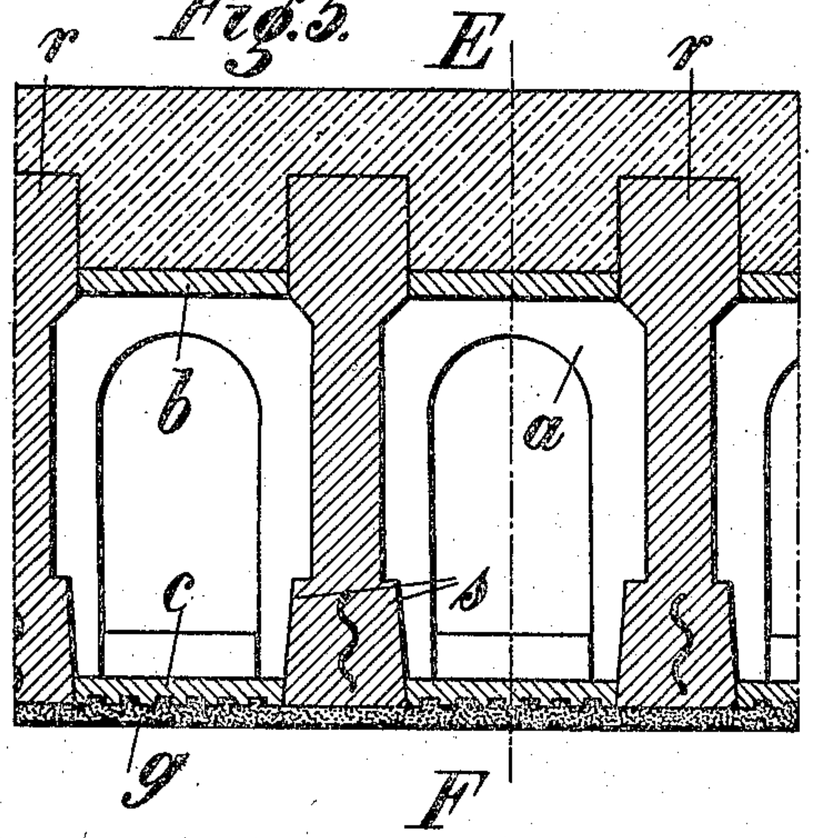
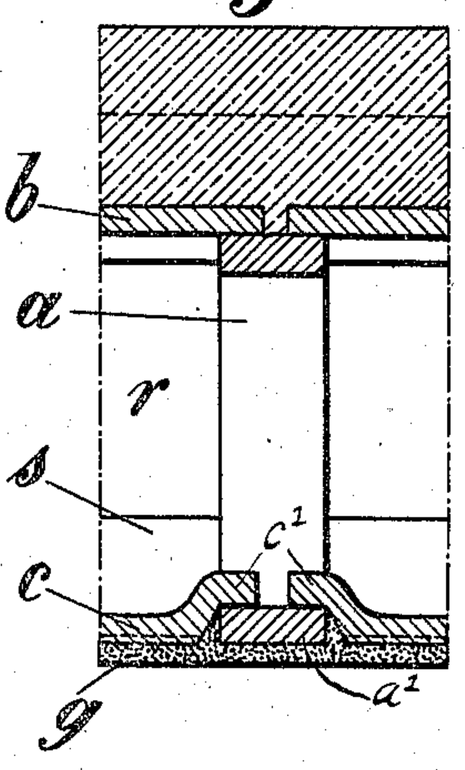


Fig. 6.



Witnesses:
August Miner.
W. R. Schulz.

Inventors:
Wilhelm Herbst &
Emil Dieckmann
per Drach & Bissell, Attorneys.

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2 SHEETS—SHEET 2.

Fig. 7.

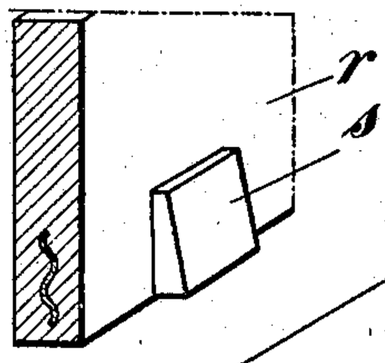


Fig. 9.

Fig. 8.

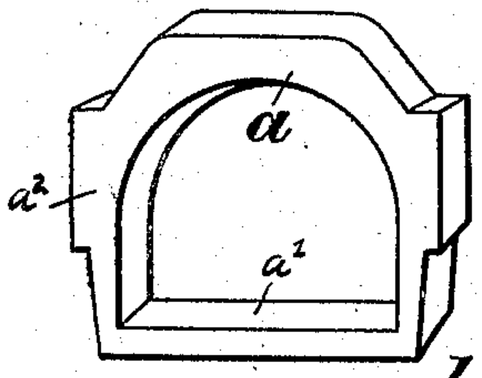


Fig. 10.

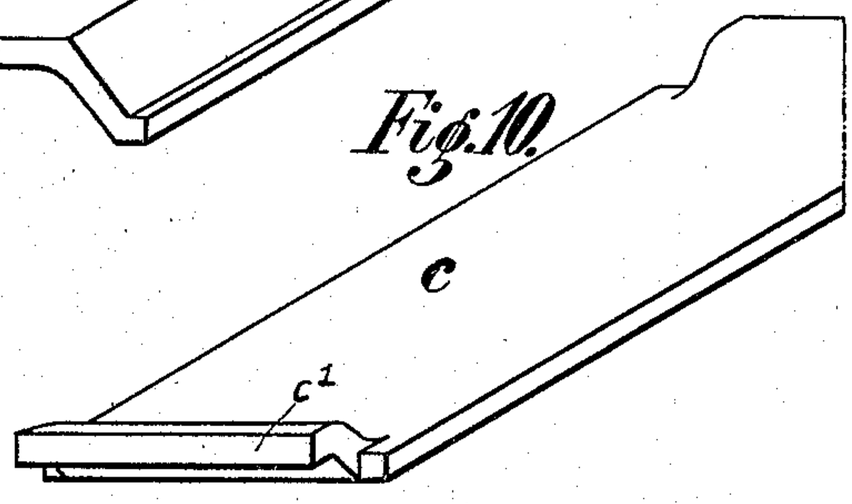


Fig. 11.

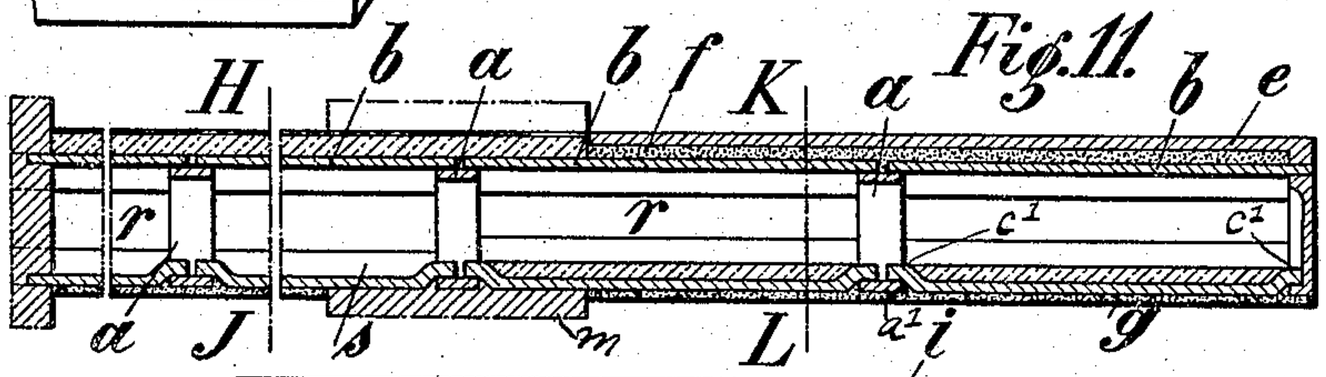


Fig. 12.

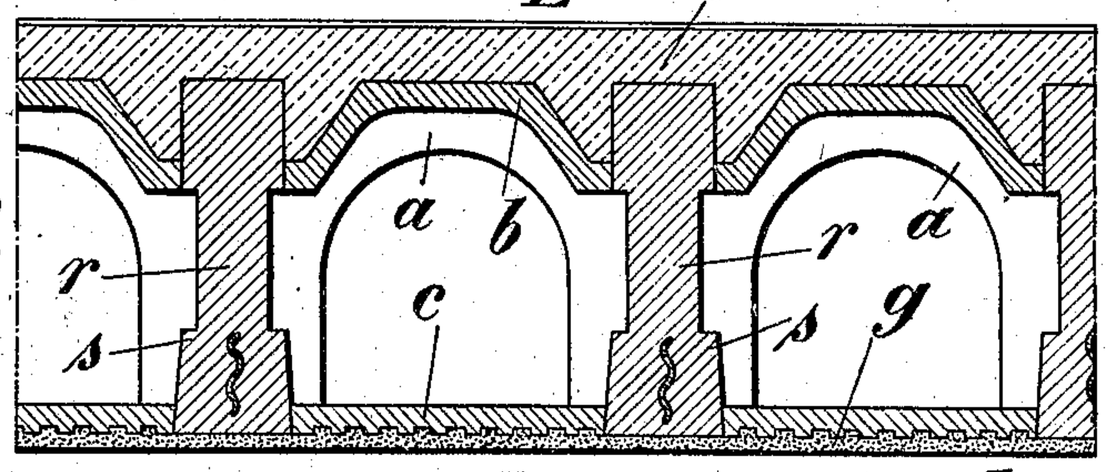
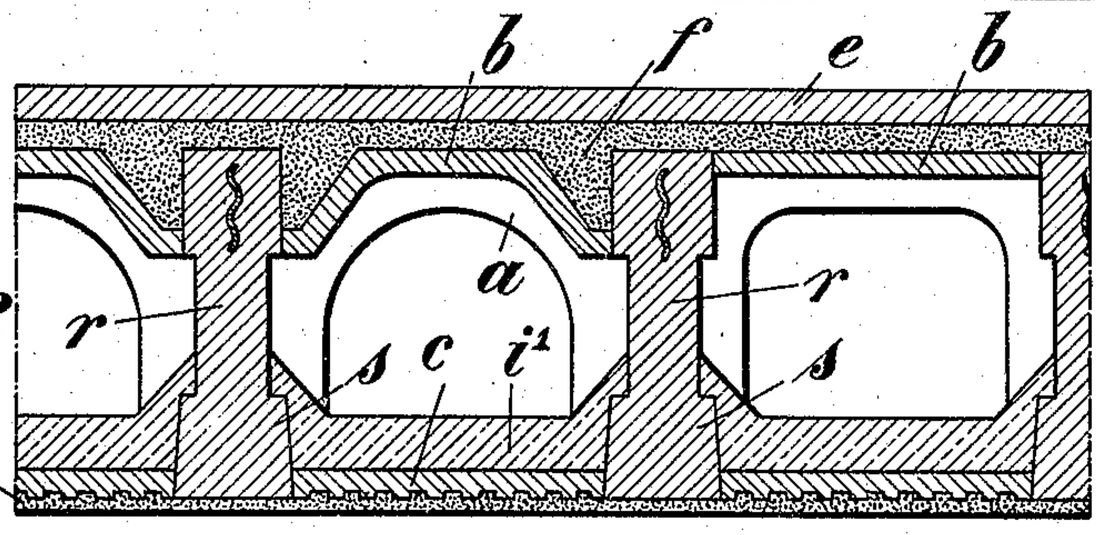


Fig. 13.



Witnesses:
August Riner.
W. R. Schulz.

Inventors:
Wilhelm Herbst &
Emil Dieckmann
per Drach & Briesen, Attorney

UNITED STATES PATENT OFFICE.

WILHELM HERBST, OF BERLIN-STEGLITZ, AND EMIL DIECKMANN, OF BARMEN-UNTERBARMEN, GERMANY.

FIREPROOF FLOOR CONSTRUCTION.

No. 908,001. Specification of Letters Patent. Patented Dec. 29, 1908.

Application filed May 12, 1908. Serial No. 432,549.

To all whom it may concern:

Be it known that we, WILHELM HERBST and EMIL DIECKMANN, both citizens of Germany, and residents, respectively, of Berlin-Steglitz and Barmen-Unterbarmen, Germany, have invented new and useful Improvements in Fireproof Floor Construction, of which the following is a specification.

This invention relates to a fire proof floor construction which is strong, light, simple, and permits the parts to be readily assembled and fitted.

In the accompanying drawings: Figure 1 is a longitudinal section of a floor construction embodying my invention; Fig. 2 a cross section on line A—B, Fig. 1; Fig. 3 a longitudinal section of a modification; Fig. 4 a cross section on line C—D, Fig. 3; Fig. 5 a longitudinal section of a further modification; Fig. 6 a cross section on line E—F, Fig. 5; Fig. 7 a detail of one form of floor beam; Fig. 8 a detail of one form of transverse hollow block; Fig. 9 a detail of one form of top plate; Fig. 10 a detail of one form of bottom plate; Fig. 11 a cross section of a further modification of the floor construction; Fig. 12 a section on line J—H, Fig. 11, and Fig. 13 a section on line K—L, Fig. 11.

A series of parallel longitudinal beams or ribs *r*, made preferably of cement or iron beton, are provided at each side with a lower ledge *s*. These ledges may extend either over the entire width of beams *r*, or over but part of the same, the latter construction being shown in Fig. 7. Upon the opposed ledges of adjoining beams are supported a number of spaced transverse hollow blocks *a*, made of cement or other suitable material. These blocks are provided with an integral base a', and laterally extending projections a^2, adapted to rest upon ledges *s*, so that in this way the blocks are securely seated upon the beams. Upon adjoining blocks *a*, are supported top plates *b*, while upon the bases a', of such blocks are supported base plates *c*, having flanges c', that overlie such bases. Plates *b*, *c*, may be composed of suitable material, such as ash beton, burnt or baked clay, and also of elastic metal, wire netting, etc.

Beams *r*, project with their upper ends into a beton layer *i*, which unites with the beams to form an integral structure adapted to sustain the floor weight. The bottom plates *c*, carry a layer of ceiling plaster *g*.

In Figs. 3 and 4, the blocks *a*, are somewhat longer than those shown in Figs. 1 and 2, so that the construction is adapted more particularly for roofs or floors made to bear light weight.

In Figs. 5 and 6, beams *r*, are arranged in close proximity to each other, and blocks *a*, are correspondingly shortened.

In Fig. 11, the beams *r*, extend beyond the front wall *m*, of the building, while the beton layers *i*, i', are carried by plates *b*, *c*, respectively, according to static conditions.

In Fig. 13, there is carried by plates *b*, a filling *f*, of sand or ashes, upon which the floor layer *e*, is supported, while beton layer i', is supported on bottom plates *c*, and embeds the lower ends of beams *a*.

We claim:

1. A fire proof floor construction, comprising a series of longitudinal iron beton beams, spaced transverse blocks supported thereon, top plates and bottom plates supported by the blocks, and a beton layer embedding the upper ends of the beams, substantially as specified.

2. A fire proof floor construction, comprising a series of longitudinal iron beton beams, spaced transverse blocks supported thereon, top plates and bottom plates supported by the blocks, a first beton layer embedding the upper ends of the beams, and a second beton layer embedding the lower ends of the beams, substantially as specified.

3. A fire proof floor construction, comprising a series of longitudinal beams having ledges, spaced hollow blocks having integral bases and projections engaging the ledges, top plates supported upon the blocks, a beton layer supported on the top plates and bottom plates supported upon the integral bases, substantially as specified.

Signed by us at Barmen, Germany, this 27th day of April 1908.

WILHELM HERBST. [L. S.]
EMIL DIECKMANN. [L. S.]

Witnesses to the signature of Wilhelm Herbst:

JOS. H. LEUTE,
TERESA CATHURANI.

Witnesses to the signature of Emil Dieckmann:

OTTO KÖNIG,
WILHELM FRIEDERICHS.