

(No Model.)

G. RADER.  
FIREPROOF FLOOR.

No. 587,556.

Patented Aug. 3, 1897.

FIG. 1.

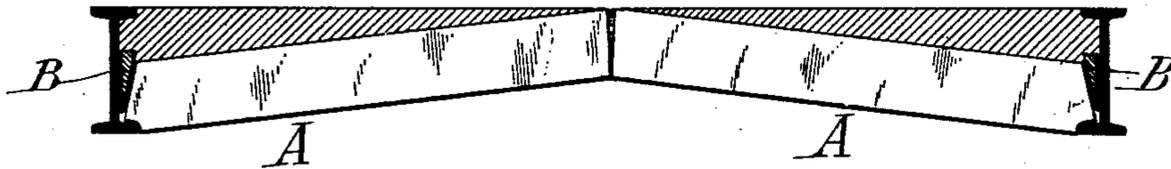


FIG. 2.

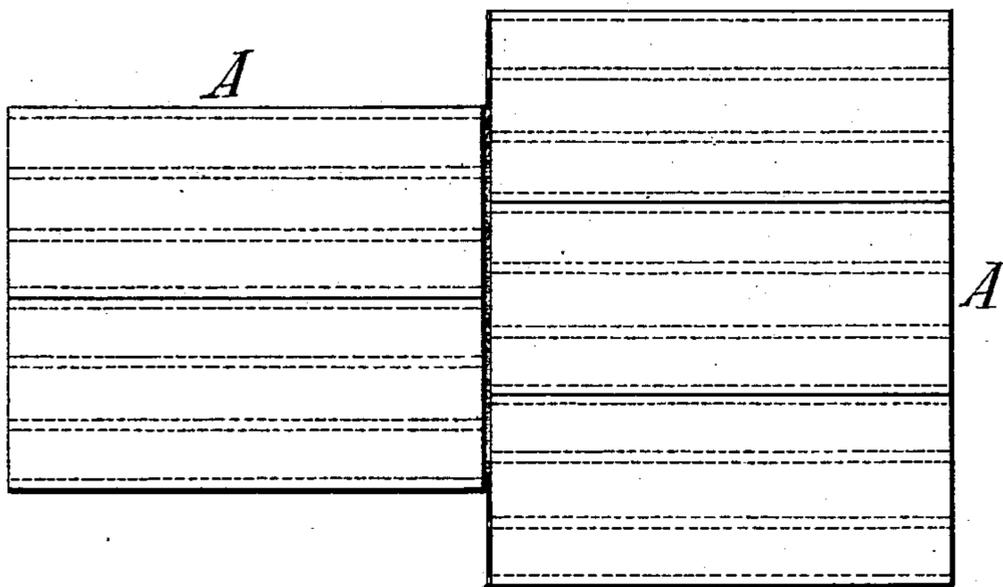


FIG. 3.

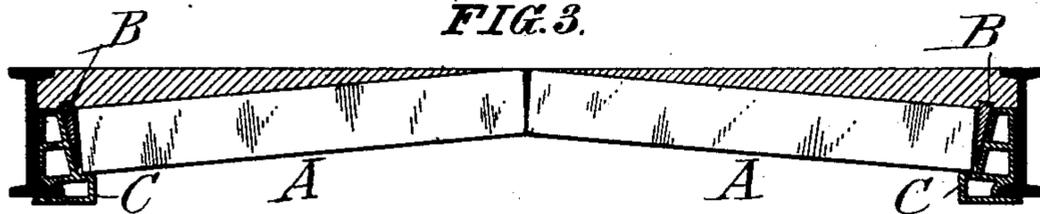
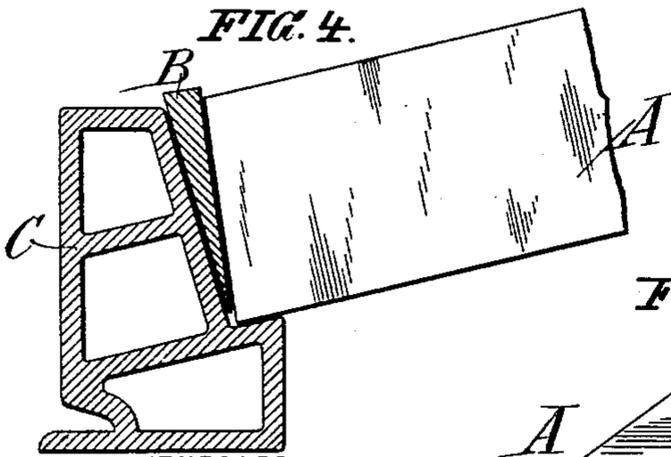


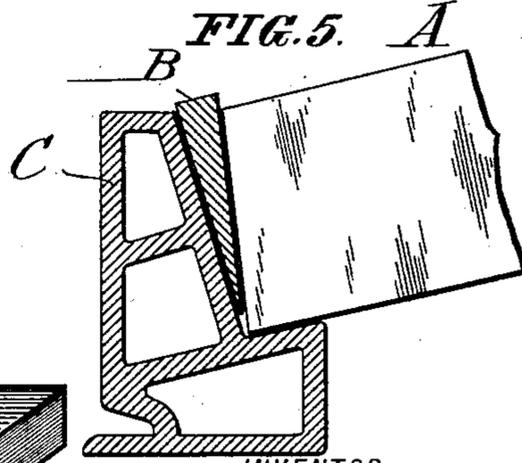
FIG. 4.



WITNESSES:

*Prüfung von Bauteilengestaltung*  
*Geo. W. Jachel*

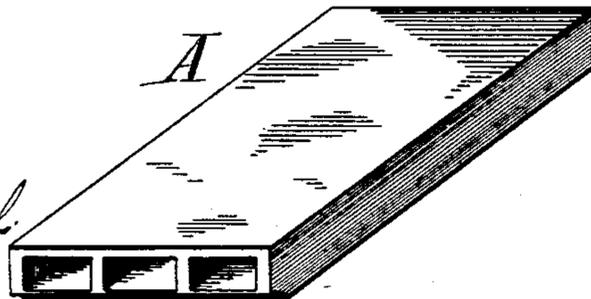
FIG. 5.



INVENTOR

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BY *Guiseppi Regner*  
ATTORNEYS.

FIG. 6.



# UNITED STATES PATENT OFFICE.

GUSTAVE RADER, OF NEW YORK, N. Y.

## FIREPROOF FLOOR.

SPECIFICATION forming part of Letters Patent No. 587,556, dated August 3, 1897.

Application filed April 17, 1897. Serial No. 632,593. (No model.)

*To all whom it may concern:*

Be it known that I, GUSTAVE RADER, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Fireproof Floors, of which the following is a specification.

This invention relates to an improved fireproof floor for buildings in which the floor is so constructed that it can be laid without the use of any centers or scaffolds by means of hollow fireproof blocks in which the wearing distance between the beams is readily compensated by means of wedge-keys or skewbacks, or both, so that a strong effective fireproof floor is obtained; and the invention consists of a fireproof floor formed of hollow blocks supported on the beams and held in position by means of wedges or skewbacks, said blocks being located so as to break joint, so that those along one side of the center break joint with those along the other side of the same, whereby they can be placed in position without the employment of scaffolds.

In the accompanying drawings, Figure 1 represents a vertical transverse section of my improved fireproof floor, showing the simplest application of the same. Fig. 2 is a top view of the same. Fig. 3 is a vertical transverse section of the floor with the blocks shown as supported on skewbacks. Figs. 4 and 5 are vertical transverse sections, drawn on a larger scale, of different sizes of skewbacks; and Fig. 6 is a perspective view of one of the blocks.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a number of fireproof hollow blocks which are made of such a size that two of them span the width between two adjacent beams, they being supported at their outer ends on the base of the beams, and their inner ends are made to abut, as shown in Fig. 1. The outer ends of the hollow blocks are preferably recessed, so as to fit to the base of the beams, the smaller inequalities in the ends of the blocks being taken up by means of wedges B, while the joint at the inner ends of the blocks is closed by a suitable fireproof cement. The blocks A A are supported between the beams at a slight angle of inclination to the same, so as

to form a nearly flat arch. The floor is formed by placing two adjacent blocks in position between the beams in such a manner that the blocks at one side of the center break joint with the blocks supported at the other center line of the arch between the beams, as shown in Fig. 2. By thus dropping alternately a block at one side and then at the other side the block last dropped is supported in position by the block at the other side of the same, so that all the blocks between the beams can be placed in position without the use of center scaffolds. The wedges B are driven in between the outer ends of the blocks and the webs of the beams and take up any irregularities in length produced by the burning of the blocks in the kiln.

When the distance between the beams is greater or smaller than certain limits, the same size of blocks A are used, but in this case skewbacks C are interposed between the beams and the outer ends of the blocks, as shown in Fig. 3, so that the difference in the width between the beams is taken up. Several sizes of skewbacks may be made, either larger or smaller, as shown, respectively, in Figs. 4 and 5, so that with the same size blocks any distance between the beams can be readily provided for. The wedges B are then interposed between the inclined upper part of the skewbacks and the outer ends of the blocks. When skewbacks are used, they are provided, in the usual manner, with flanges over the lower part of the base of the beams, so as to protect them against the direct action of fire and furnish thereby a protection to the same.

The space above the blocks is filled up in suitable manner with cement or other material on a level with the top of the beams, and the space below the blocks is closed by a ceiling of any approved construction.

By the construction described a very reliable fireproof floor is obtained which can be quickly placed in position and which forms a comparatively cheap yet reliable construction for fireproof structures.

Having thus described my invention, what I claim is—

1. A fireproof floor consisting of beams, hollow blocks supported on the base of said beams

and abutting at their inner ends, wedges interposed between the outer ends of the blocks and the beams, the blocks at one side of the center line between the beams being made to  
5 alternate with the blocks at the other side of the same, substantially as set forth.

2. A fireproof floor consisting of beams, skewbacks supported on said beams, inclined hollow blocks resting on said skewbacks and  
10 abutting at their inner ends, and wedges in-

terposed between the outer ends of the blocks, and the skewbacks, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GUSTAVE RADER.

Witnesses:

GEO. W. JAEKEL,  
CARL KABLE.