

No. 714,948.

Patented Dec. 2, 1902.

G. RADER.
FIREPROOF CEILING.
(Application filed Feb. 14, 1902.)

(No Model.)

Fig: 1.

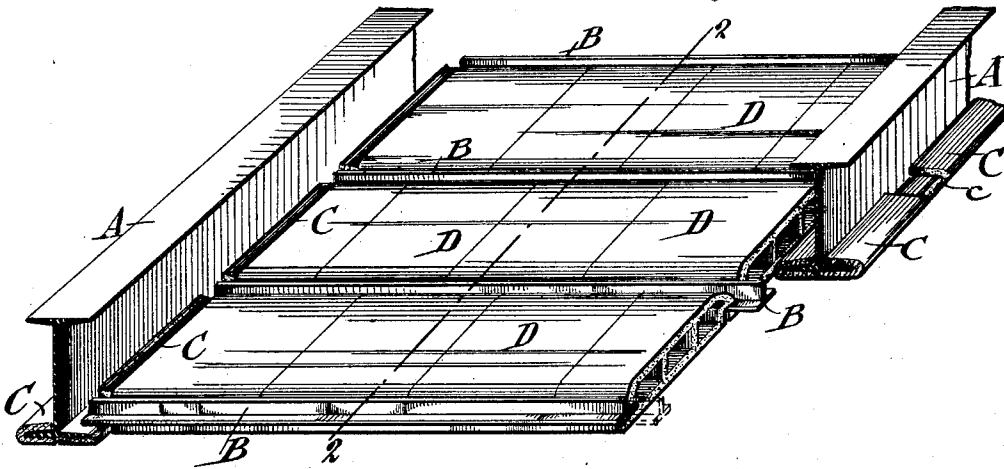


Fig: 2.

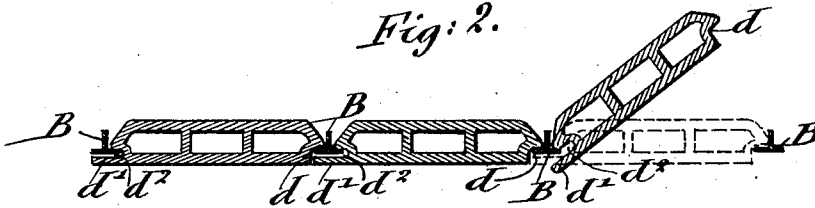


Fig: 3.

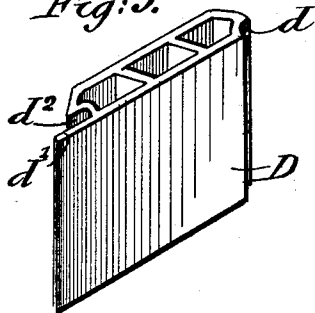
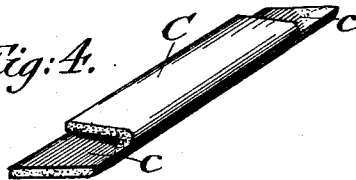


Fig: 4.



WITNESSES:

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FIREPROOF CEILING.

SPECIFICATION forming part of Letters Patent No. 714,948, dated December 2, 1902.

Application filed February 14, 1902. Serial No. 94,097. (No model.)

To all whom it may concern:

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

This invention relates to an improved fireproof ceiling of simple construction and which is capable of being readily built without requiring any false frames or centers and in which the beams and other metallic parts are fully protected from fire.

The invention consists of a fireproof ceiling which comprises I-beams, T-bars supported transversely between said I-beams and resting on the base portions thereof, spacing-pieces of V-shaped cross-section arranged on the base of said beams, said spacing-pieces being recessed at one end for receiving the ends of the T-bars, and ceiling-blocks of rectangular shape, each ceiling-block being provided at one end with a projecting tongue, a recess above said tongue and an inclined portion, and at the opposite end with a rabbeted lower portion.

In the accompanying drawings, Figure 1 is a perspective view of part of my improved fireproof ceiling, being suitably cut away in order to show the construction thereof. Fig. 2 is a vertical longitudinal section on line 2-2, Fig. 1, showing the T-bars and the ceiling-blocks supported thereon and showing one of the ceiling-blocks as being placed in position. Figs. 3 and 4 are perspective views, respectively, of one of the ceiling-blocks and one of the spacing-pieces.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A A represent the I-beams of the ceiling, and B represents the T-bars, which are placed in position transversely between the I-beams in such a manner as to rest on the bases of the same. The T-bars are arranged at a certain distance from each other between the spacing-pieces C on the bases of the I-beams A A. The spacing-pieces C are V-shaped in cross-section and are arranged endwise on each half of the

bases of the beams, so as to cover the upper and lower surfaces of the bases of the same. The ends of the spacing-pieces are recessed at their upper part, as at *c*, so as to provide for the seating of the base of the T-bars, supported in inverted position, with their horizontal portions upon the bases of the I-beams. Between the T-bars are placed the ceiling-blocks D, which are formed of fireproof material and are each provided at one end with a recess or rabbet *d*, which rests on the base of the T-bar, while the opposite end of each ceiling-block is provided with a projecting tongue *d'* of sufficient width, so as to extend over the under side of the T-bar and protect the same from fire. Above the tongue *d'* is arranged a recess *d²*, that receives half of the base of the T-bar, and the edge of the block above the recess *d²* is inclined or beveled at an angle of about forty-five degrees to the bottom of the block, as shown clearly in Fig. 3. By reason of this inclination the ceiling-block can be readily dropped into proper position by holding the ceiling-block at an incline and placing its inclined edge almost against the vertical web of the T-bar, so that the recess *d²* can engage the base of said bar, as shown in Fig. 2, and then the block is lowered until its rabbeted edge *d* rests upon the adjacent T-bar. When in this position, the projecting tongue *d'* extends over the under side of the T-bar to the recessed edge *d* of the adjacent ceiling-block. When all the ceiling-blocks are placed in position, concrete or other material is placed over the same, so as to form a substantial and reliable fireproof ceiling. The ceiling-blocks as thus constructed can be placed directly in position without requiring any false frame or similar means.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A fireproof ceiling, consisting of I-beams, T-bars supported transversely between said I-beams and resting on the base portions thereof, spacing-pieces of V-shaped cross-section arranged on the base of said beams, said spacing-pieces being recessed at one end for

receiving the ends of the T-bars, and ceiling-
blocks of rectangular shape, each ceiling-
block being provided at one end with a pro-
jecting tongue, a recess above said tongue and
5 an inclined portion, and at the opposite end
with a rabbeted lower portion, substantially
as set forth.

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

GUSTAVE RADER.

Witnesses:

PAUL GOEPEL,
C. BRADWAY.