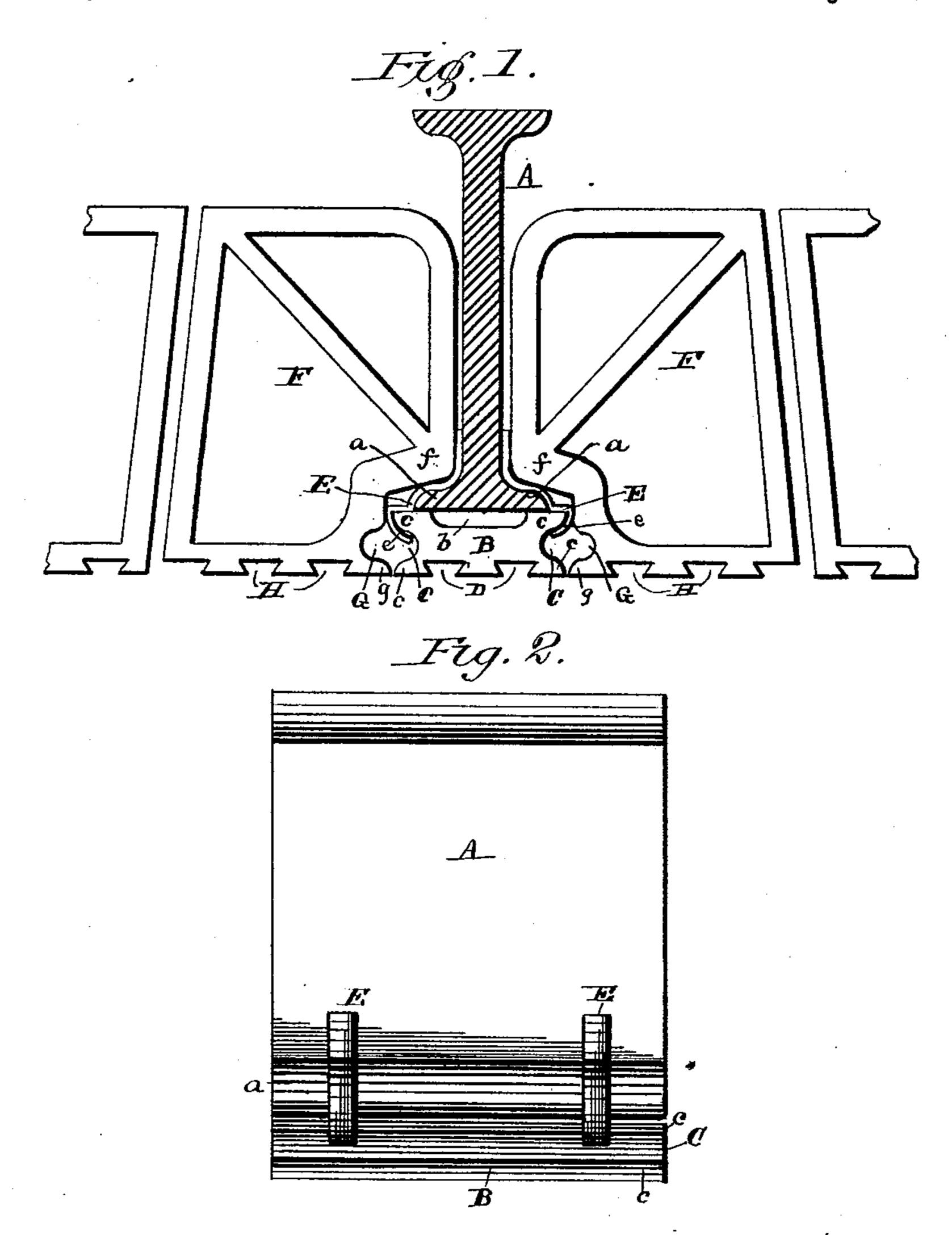
(No Model.)

## J. H. BRIGHT.

TILE CEILING.

No. 386,376.

Patented July 17, 1888.



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## United States Patent Office.

JAMES H. BRIGHT, OF ST. LOUIS, MISSOURI.

## TILE CEILING.

## SPECIFICATION forming part of Letters Patent No. 386,376, dated July 17, 1888.

Application filed February 25, 1888. Serial No. 265,247. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. BRIGHT, of St. Louis, in the State of Missouri, have invented certain new and useful Improvements 5 in Tile Ceilings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of 10 this specification, in which—

Figure 1 is a sectional elevation of a ceiling, showing my improvements. Fig. 2 is a detail side elevation of a joist and tile.

This invention relates to improvements in 15 tile ceilings; and it has for its objects to improve the construction of the tiles and supporting devices therefor, whereby the floorbeam will be protected from fire, as will be readily understood from the following descrip-20 tion, when taken in connection with the anthe appended claims.

Referring to the drawings by letter, A designates a floor-beam provided at bottom with

25 opposite outstanding flanges, a a. -

B designates a tile of greater width than the flanged portion of beam A, and formed with a central longitudinal groove or channel, b, in its upper surface, which is nearly as wide as 30 the flanged portion of the floor-beam, beneath which the tile is secured. In the edges of tile B are made the longitudinal grooves C C, forming double lips cc on the edges of the tile, and the bottom of the tile is formed with 35 dovetailed grooves or mortar-binds D, as shown. Tiles B are secured beneath and supported by floor-beams A by means of clips E E, which are bent to fit the upper surface of flanges of the floor-beams, and are also bent 40 around the upper lip, c, of the tile B, as shown at e, and thereby suspend the latter on the floor-beam. There are two or more of these clips used with every tile, one being preferably placed at each corner of the tile.

F indicates skew-tiles, which are placed on each side of joists A, and support the usual intermediate arch and key tiles. The tiles F are formed with shoulders f to fit over the flanges a, by which they are supported, and 50 they also serve to keep the clips E E in posi-

tion, so that they cannot slip outward and disengage from tiles B, as is evident. Tiles F are also provided with a groove, G, and lip g, coinciding with the grooves C and lower lip, c, of tile B. The lower face of tile F has also a 55 number of mortar-bind grooves, H.

When the parts are in position as shown, it will be seen that an air-space is left beneath the floor-beams and tile B by the channel b in the latter. The plaster, when applied to the 60 surface of tiles B and F, will press up into the grooves C and G between the tiles and form a

tight joint between the latter.

The tiles B protect the floor-beams from injury by fire, owing to their width, and the 65 tiles F, when in proper position on the floorbeams and the space between the grooves G and C filled with mortar, not only hold the clips E in position, but serve as additional supports and braces for the tiles B by reason of 70 nexed drawings, and particularly specified in | the tight mortar joint, thus adding additional strength and security to the structure.

Having described my invention, I claim— 1. The herein-described tile B, having a longitudinal channel, b, in its upper surface and 75longitudinal grooves C C in its edges, substantially as and for the purpose described.

2. The combination of the double-flanged joist A and the tile B, having longitudinal channel b in its upper surface and grooves C 80 C in its side edges, with the bent clips E E, engaging the flanges of the girder, and in the grooves of tile B, suspending the latter from the girder, and the shouldered skew-tiles holding said clips in position, all constructed and 85 arranged substantially as and for the purpose described.

3. The combination of joist A, clip E, and tiles B, having grooves C in their side edges, with the skew-tiles F, having shoulders f, and 90 grooves C, coinciding with grooves G of the tiles B when in position, as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two 95 witnesses.

JAMES H. BRIGHT.

Witnesses; JAMES L. BLAIR, F. E. G. CARR.