

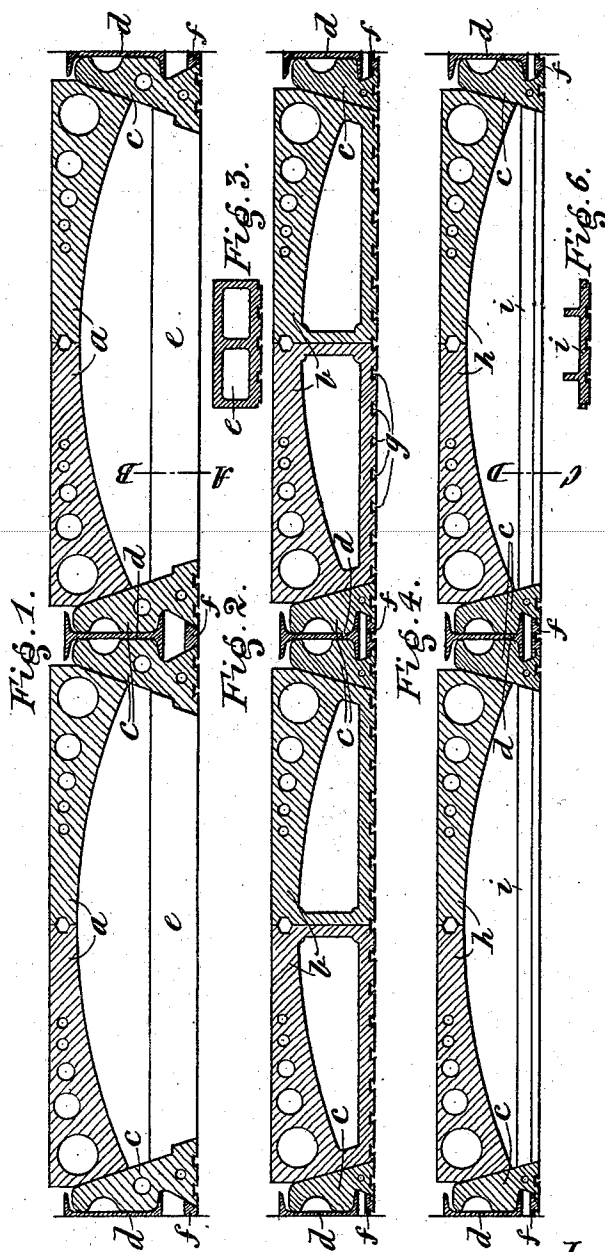
(No Model.)

2 Sheets—Sheet 1.

J. H. BLAKESLEY.
FIREPROOF GIRDER AND JOIST.

No. 503,642.

Patented Aug. 22, 1893.



Witnesses.

J. Holgate Ballen.

Arthur Ramsey

Inventor.

John Holmes Blakesley

per John Pitt Bayly,
Attorney.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 5.

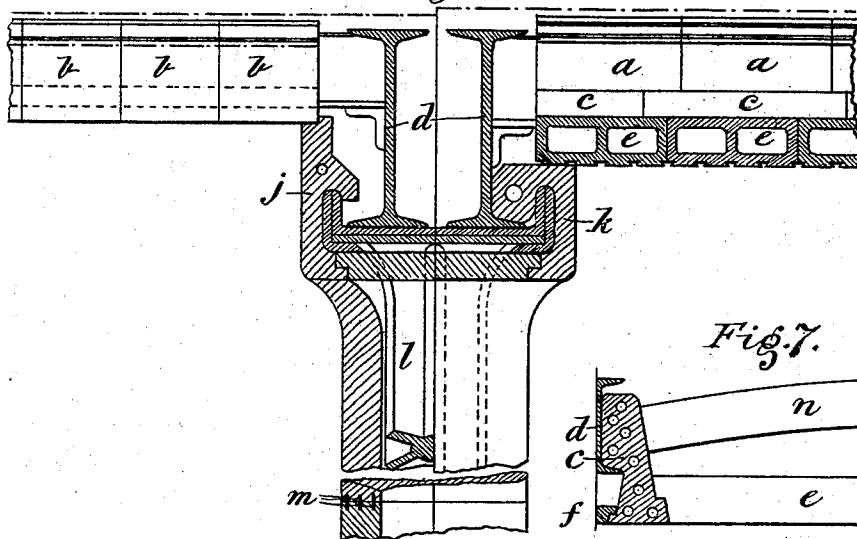


Fig. 7.

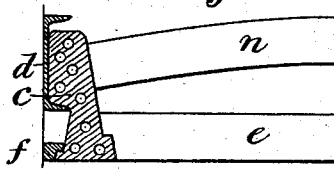


Fig. 8.

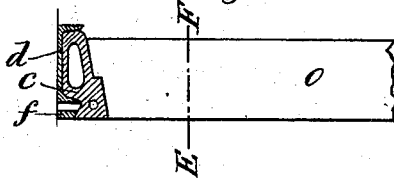
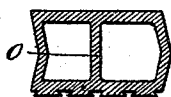


Fig. 9.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN HOLMES BLAKESLEY, OF LONDON, ENGLAND.

FIREPROOF GIRDER AND JOIST.

SPECIFICATION forming part of Letters Patent No. 503,642, dated August 22, 1893.

Application filed October 25, 1892. Serial No. 449,997. (No model.) Patented in England November 28, 1891, No. 20,740.

To all whom it may concern:

Be it known that I, JOHN HOLMES BLAKESLEY, civil engineer, a subject of the Queen of Great Britain, residing at 39 Victoria Street, in the city of Westminster, London, England, have invented new and useful Improvements in Fireproof Floors, Roofs, Girders, Joists, and the Like, (for which I have obtained a patent in Great Britain, No. 20,740, bearing date November 28, 1891,) of which the following is a specification.

My invention relates to improvements in fire-proofing girders, joists, or any like part of the metallic materials usually used in the erection of public or private buildings. The fire-proofing material is divided into segments ranging horizontally into segments resting on skew-backs with one or more steps, the said skew-backs being supported by the flanges of the girders or joists, by which means the fire-proofing can be put up after the main structure is erected, to carry the superincumbent weight. I attain these objects by the illustrations in the accompanying drawings, in which—

Figure 1, is a transverse section of the blocks, tiles and skew-backs fitted to girders. Fig. 2, is a transverse section of a combination of the blocks and tiles, with skew-backs fitted to girders. Fig. 3, is a section on line A B. Fig. 4, is a transverse section of the blocks, tiles and skew-backs fitted to girders. Fig. 5, is a longitudinal section of Figs. 1, and 2, with the vertical section of stanchion attached to girders. Fig. 6, is a section of the tile on line C D. Fig. 7, is a half span of a block, tile, skew-back and girder partly in transverse section. Fig. 8, is a partly transverse section of a flat tile fitted to a skew-back. Fig. 9, is a section on line E F.

Various parts of the figures are broken off for want of space.

Like letters refer to like parts throughout the views.

The fire-proofing material *a*, *e*, *b*, *h*, and *i*, *n* or *o*, is divided into segments resting on skew-backs *c* with one or more steps, the said skew-backs *c* being supported by the flanges of the girders or joists *d*, by which means the fire-proofing can be put up after the main structure is erected to carry the superincumbent weight.

My invention is constructed with suitable skew-backs *c* grooved to receive the flanges

of the girders or joists *d*, the same running parallel to and covering the aforesaid girders or joists *d*, with the division filled in with a block or key *f*. Between the skew-backs *c* resting on the upper portion I drop into place, for fixing, the blocks *a*, *h* or *n*, slightly arched, or straight as *o* in Figs. 8 and 9 (the skew-back being provided with a step), and at the base of the said skew-backs *c* I attach a flat tile *e* or *i* with grooves *g*, whose office is simply to support the plaster ceiling underneath, and also to keep a large air space between the tiles *e* or *i* and the blocks *a*, *h*, or *n*, by which great lightness and great powers of ventilation are secured. The blocks act either as girders or arches. Any design of perforation may be used in either the blocks, tiles or skew-backs. If preferable the block and tile *b* may be constructed in one as in Fig. 2, with grooves *g* on the under surface to support the plaster ceiling.

The fire-proof casing in all parts is made of fire-clay, terra-cotta, or any other suitable fire-proof material, and the spaces are where required, filled or leveled with concrete in the usual way indicated by long dotted lines in Fig. 5, or can be covered with asphalt or any other material as desired.

It will be understood that the foregoing is given by way of illustration and that the shapes, perforations, materials and parts may be varied in many ways within the scope of my invention.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In fire-proofing, the combination of the perforated blocks, tiles and skew-backs with blocks or keys, constructed of fire-clay or of any other fire-proofing material to render floors, roofs, girders and joists fire-proof, substantially as herein described.

2. In fire-proofing, the combination of the perforated block and tile in one, with the skew-backs and blocks or keys, constructed of fire-clay or of any other fire-proof material to render floors, roofs, girders and joists fire-proof, substantially as herein described.

JOHN HOLMES BLAKESLEY.

Witnesses:

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