No. 791,265. PATENTED MAY 30, 1905.

A. L. A. HIMMELWRIGHT.

FIREPROOF STRUCTURE.

APPLICATION FILED AUG. 10, 1904.

Fig 1.

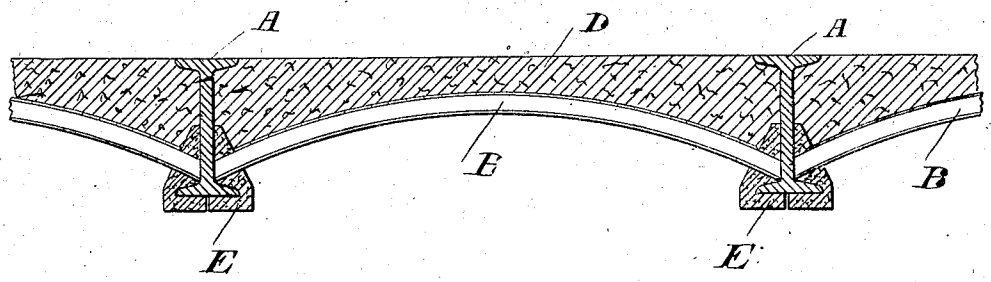


Fig 2.

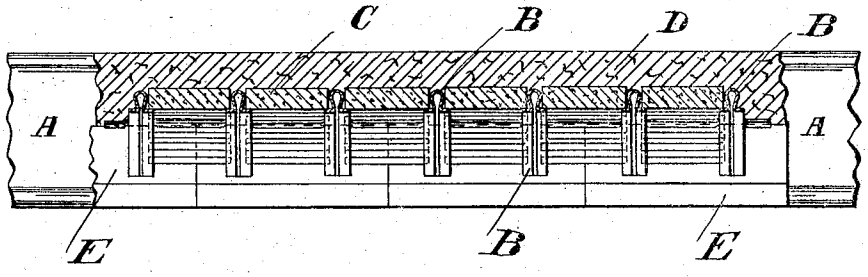
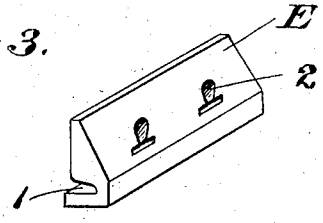


Fig 3.



Witnesses
J. A. Isaacs.
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UNITED STATES PATENT OFFICE.

ABRAHAM L. A. HIMMELWRIGHT, OF NEW YORK, N. Y., ASSIGNOR TO THE ROEBLING CONSTRUCTION COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

FIREPROOF STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 791,265, dated May 30, 1905.

Application filed August 10, 1904. Serial No. 220,178.

To all whom it may concern:

Be it known that I, ABRAHAM L. A. HIMMELWRIGHT, a citizen of the United States, residing at New York, county of New York, and State of New York, have invented certain new and useful Improvements in Fireproof Structures, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to an improved floor construction of that class employing metal bars between the beams by which the fireproof floor material is supported, the object of the invention being to provide a simple and convenient fireproof covering for the lower portions of the beams, with the metal floor members supported directly by the lower flanges of the beams and held in place by the beam protection.

The construction embodying the invention will first be described in connection with the accompanying drawings, forming a part of this specification, and the features forming the invention will then be pointed out in the claims.

In the drawings, Figure 1 is a section transversely to the beams of a fireproof floor embodying all the features of the invention applied in their preferred form. Fig. 2 is a sectional elevation of the same longitudinally of the beams, the section being taken at the crown of the arch. Fig. 3 is a perspective view of one of the skewbacks or beam-protection blocks.

Referring to the drawings, A represents the beams, shown as of the common **I** form, and B the metal bars extending from beam to beam and supporting the fireproof floor. These bars are shown as similar to those of patents granted to John W. Rapp, Nos. 537,483, 557,147, and 631,941, and the main portion of the floor is shown as formed in the same manner—that is, by supporting-blocks C on the inverted-**T** bars B and filling in concrete D on the blocks to the depth required.

In the present construction, however, the lower portions of the beams are provided with a fireproof protection consisting of the skewbacks or fireproof blocks E. These blocks E are blocks of suitable length previously molded from fireproof plastic material and are provided with longitudinal grooves 1, fitting around the bottom beam-flange, and with transverse openings 2, through which the bars B pass, these openings 2 being of such position and form as to permit the bars B to rest directly upon the bottom flanges of the beams.

It will be seen that the construction secures a very simple and efficient combined floor and beam protection in which the metal floor-bars are efficiently supported without danger of breaking the skewbacks and the bars and skewbacks are held in proper position by each other in constructing the floor.

While certain features of the invention are limited to a construction of the general class shown employing **T**-bars for supporting a block or block and concrete floor, it will be understood that the broader features of the invention as defined by the claims may be embodied in constructions of other classes.

What I claim is—

1. The combination with flanged beams, of previously-formed fireproof blocks covering the lower portions and bottoms of the beams and having openings for floor-bars, arched metal floor-bars passing through the openings in said blocks and resting on the bottom flanges of the beams, and a fireproof floor supported by said bars.

2. The combination with flanged beams, of previously-formed fireproof blocks covering the lower portions and bottoms of the beams and having openings for floor-bars, **T**-bars passing through the openings in said blocks and resting on the bottom flanges of the beams, and a concrete filling between the beams supported by said **T**-bars and blocks.

3. The combination with flanged beams, of previously-formed fireproof blocks covering

the lower portions and bottoms of the beams and having openings for floor-bars, arched T-bars passing through the openings in said blocks and resting on the bottom flanges of the beams, fireproof blocks between and supported by the T-bars, and a concrete filling between the beams on said blocks.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ABRAHAM L. A. HIMMELWRIGHT.

Witnesses:
S. WINTHAL,
C. J. SAWYER.