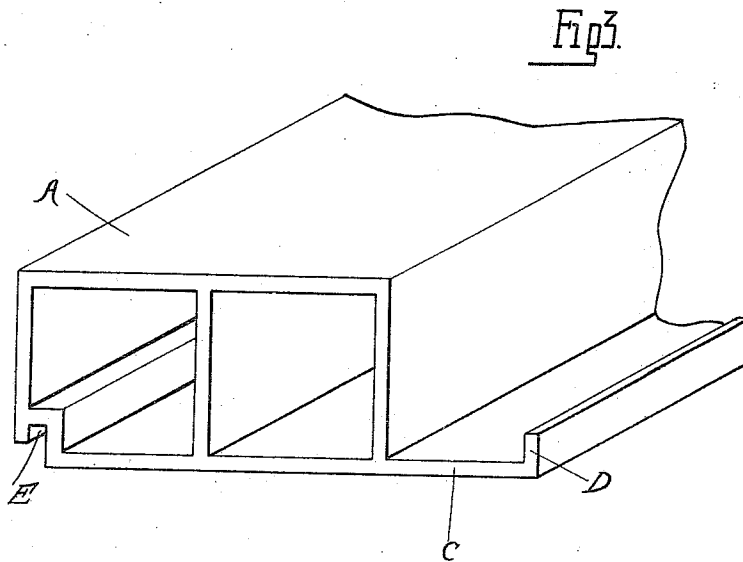
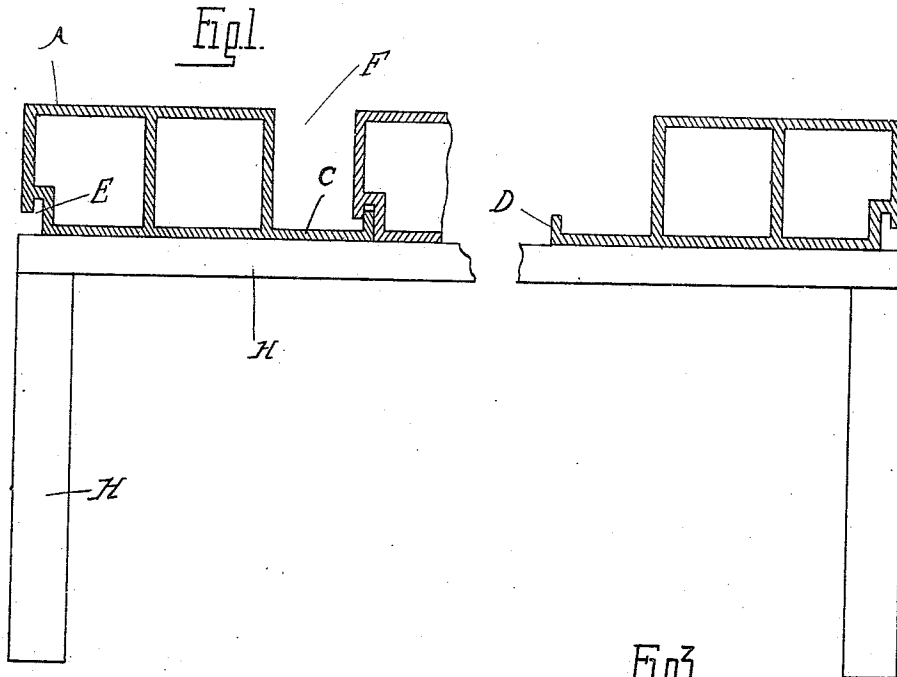


F. S. ROBINSON.
 REINFORCED CONCRETE CONSTRUCTION.
 APPLICATION FILED MAY 9, 1908.

979,564.

Patented Dec. 27, 1910.
 2 SHEETS—SHEET 1.



Witnesses
R. Hod
James P. Barry.

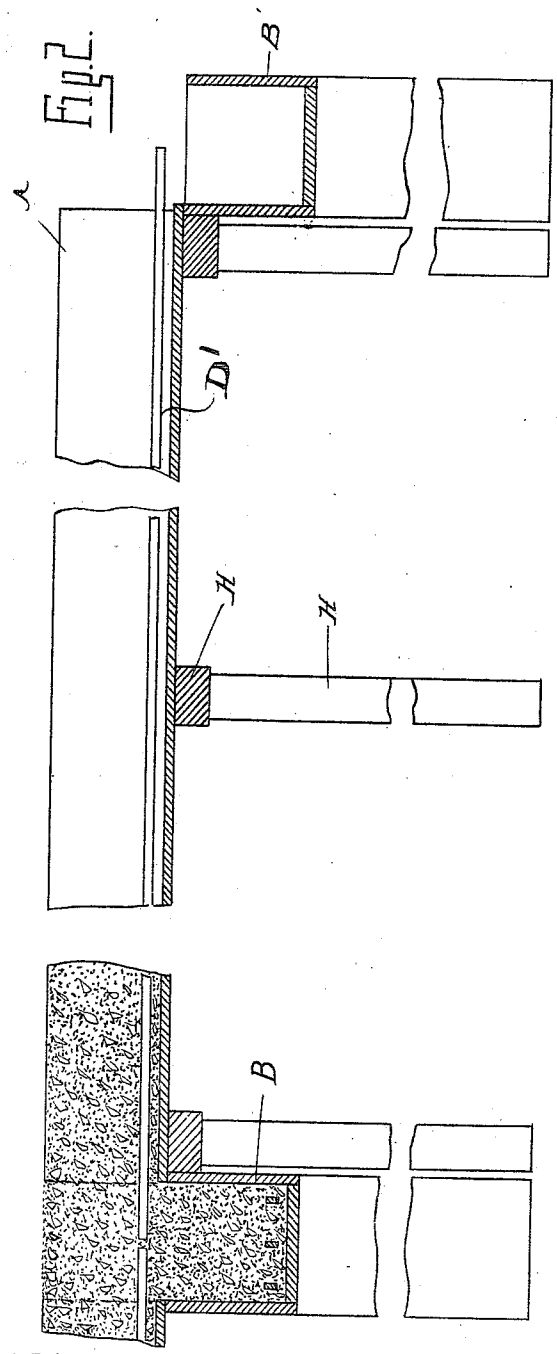
Inventor
Frank S. Robinson.
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Atty's

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2 SHEETS—SHEET 2.



Witnesses
W. D. Ford
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UNITED STATES PATENT OFFICE.

FRANK S. ROBINSON, OF DETROIT, MICHIGAN.

REINFORCED CONCRETE CONSTRUCTION.

979,564.

Specification of Letters Patent.

Patented Dec. 27, 1910.

Application filed May 9, 1908. Serial No. 431,863.

To all whom it may concern:

Be it known that I, FRANK S. ROBINSON, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Reinforced Concrete Constructions, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates generally to reinforced concrete constructions, and more particularly to structures in which the framework is a monolithic reinforced concrete construction, other portions of the structure being formed of preformed members positioned and supported by said frame-work. A specific example of such is a floor construction in which the girders and beams are monolithic reinforced concrete, and the spans between the beams are filled with tile or other preformed members.

It is the object of the present construction to simplify and expedite the construction of the structure avoiding the necessity of an elaborate false work or temporary support. To this end, one of the features of the invention is the means employed for molding and temporarily supporting portions of the reinforced concrete frame-work; further in the peculiar construction of a tile or preformed structural element which is used in combination with the frame; and, further, in the peculiar construction, arrangement and combination of parts as hereinafter set forth.

In the drawings—Figures 1 and 2 are vertical sections in planes at right angles to each other through a floor construction embodying my invention; and Fig. 3 is a perspective view of one of the tiles.

Heretofore in the construction of floor structures of the type above referred to it has been customary to first prepare a very complete false work comprising mold boxes for the girders and beams of the frame work, and an intermediate flooring for temporarily supporting the tiles. With my improved construction, it is only necessary to provide mold boxes for the girders or main members of the frame work, and a skeleton support for the structure intermediate these members which is formed in the following manner.

A are preformed tile members, which are preferably of a length to span the space between the mold boxes B B' for the main

girders of the frame. These tile members are formed of a hollow box-like construction, and are provided at one edge with a laterally extending flange C having a hook or rib D at the end thereof adapted for engagement with a corresponding channel E formed on the opposite edge of the tile. The structure is such that two tiles, when arranged side by side with the edge D in engagement with the grooves E, will form therebetween a channel F, and this channel is properly positioned for receiving the reinforced concrete cross beam between the girders. Thus in building the structure the tiles may be placed in position before the formation of either the girders or the beams. The metallic reinforced members, such as D', are then placed in position in the channels F, after which the concrete may be filled in and allowed to stand until hardened. It will be observed that the tiles A form the molds for the cross beams, and these cross beams may form a monolithic or integral structure with the girders. All that is necessary in the way of additional support is a skeleton frame, such as H, which will support the load until the cement has hardened.

The tiles A are preferably formed of fire-proof cementitious material and for lightness preferably contains a large percentage of wood fiber.

What I claim as my invention is:

1. A building construction comprising pre-formed span members having therebetween closed bottom channels, the base of the channel being formed by an extension of the bottom wall of one of said members, said extension terminating in a vertical flange and the adjacent span member having a U-shaped socket with which said flange engages.

2. A building construction comprising pre-formed span members having therebetween closed bottom channels, the sides of said channels being formed by the side walls of the adjacent span members and the base of the channel being formed by an extension of the bottom wall of one of said span members, said extension having an interlocking engagement with the adjacent span member beyond the plane of the side wall of the last-mentioned span member.

3. A building construction comprising pre-formed span members having therebetween closed bottom channels, the sides of said

channels being formed by the side walls of the adjacent span members and the base of the channels being formed by an extension of the bottom wall of one of said span members, said extension terminating in an upwardly projecting flange, and an inverted U-shaped socket formed in the other span member beyond the plane of the side wall

of the latter with which said flange has an interlocking engagement.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK S. ROBINSON.

Witnesses:

NELLIE KINSELLA,
HARRY W. GALVIN.