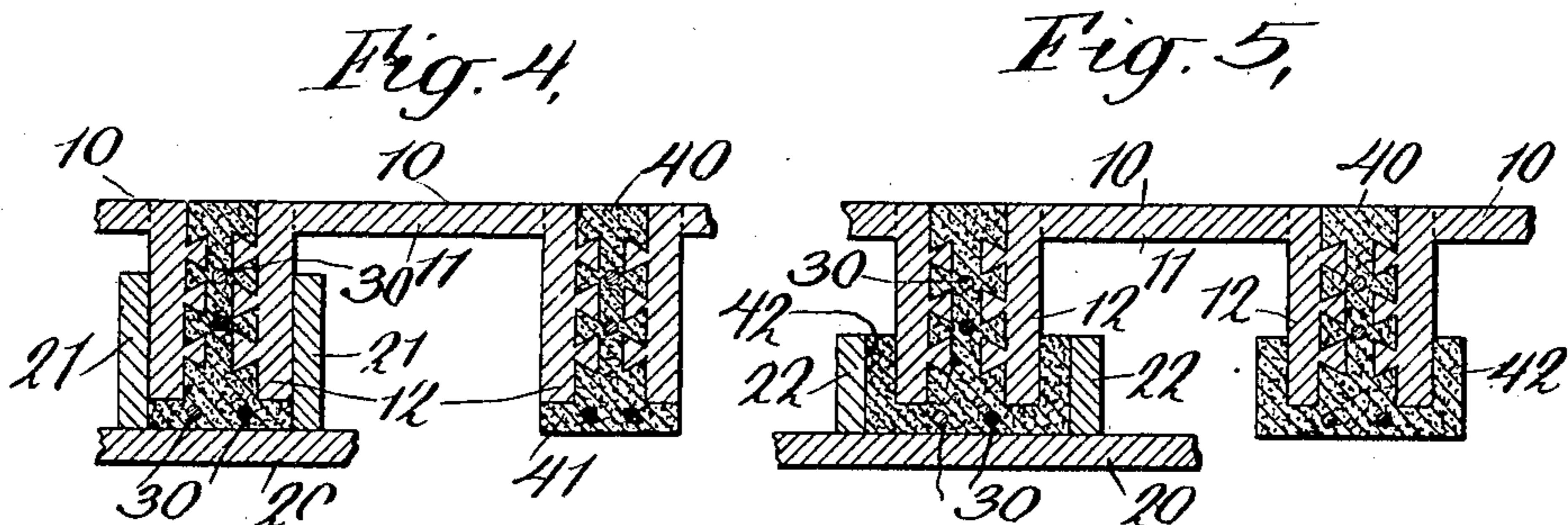
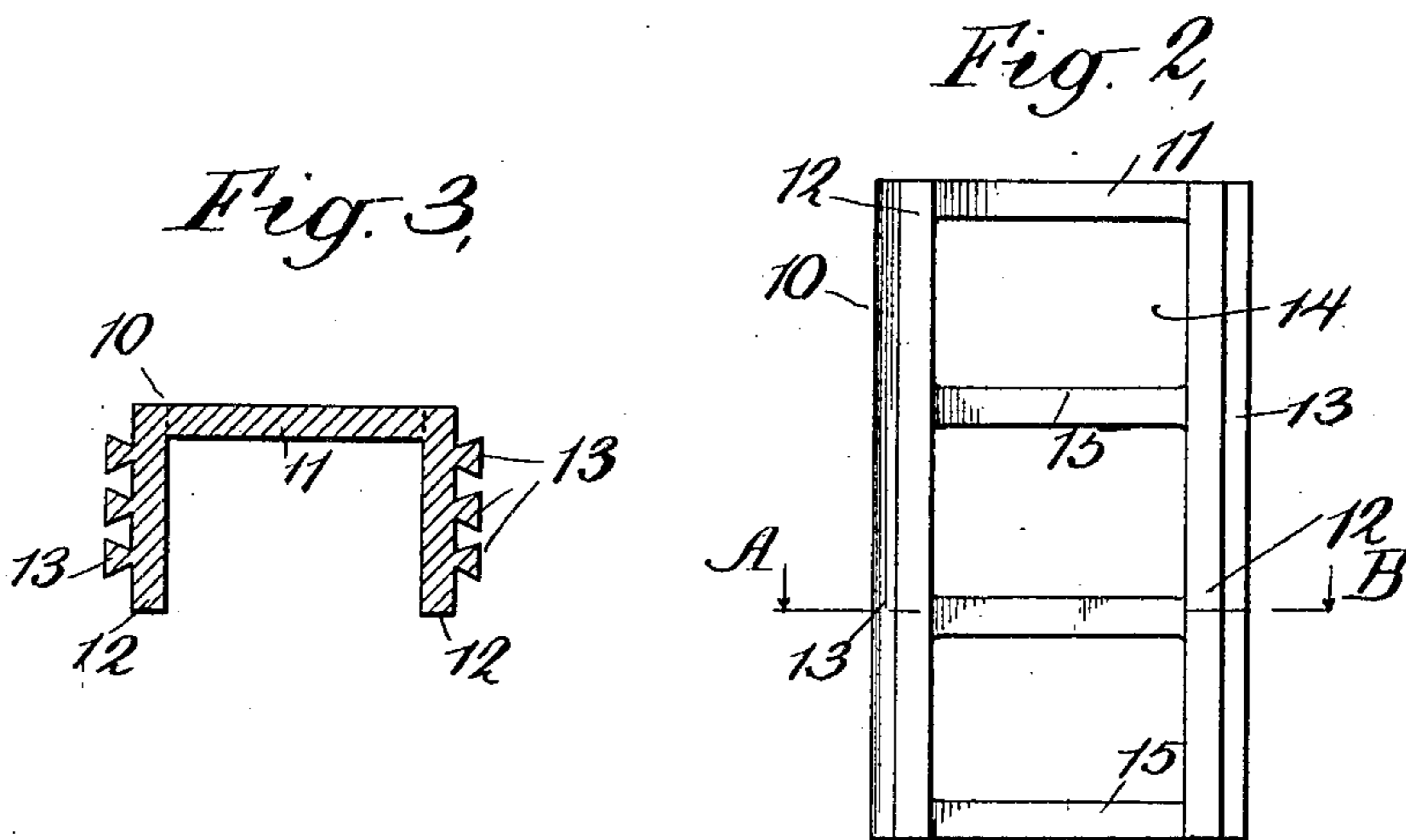
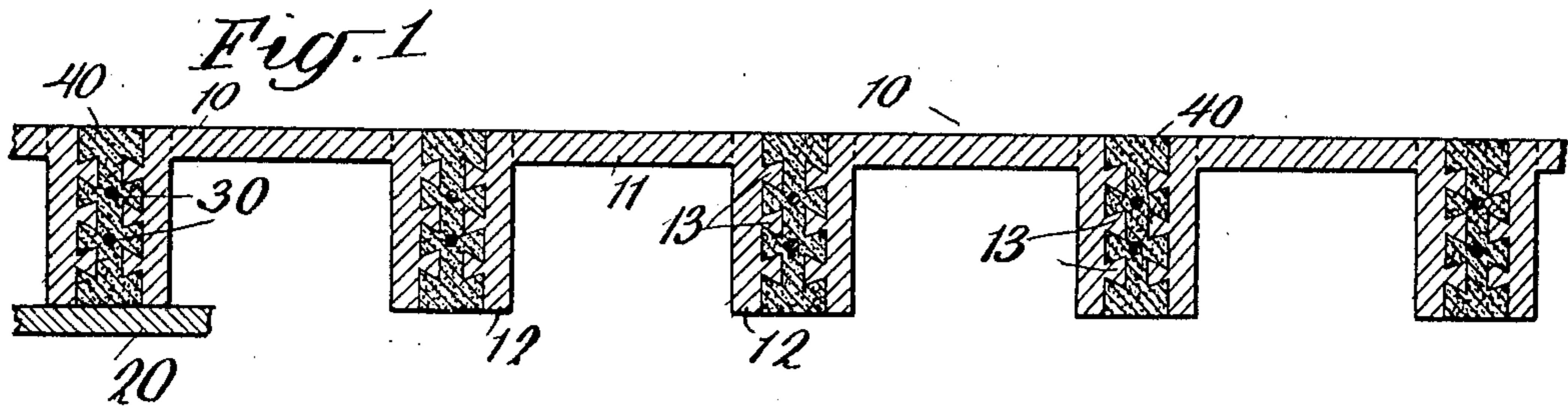


L. K. DAVIS.
BUILDING CONSTRUCTION.
APPLICATION FILED SEPT. 17, 1906.

912,819.

Patented Feb. 16, 1909.



WITNESSES:
E. W. Marshall
Jessie Hart.

INVENTOR
Lewis K. Davis
BY
E. W. Marshall
ATTORNEY

UNITED STATES PATENT OFFICE.

LEWIS K. DAVIS, OF NEW YORK, N. Y.

BUILDING CONSTRUCTION.

No. 912,819.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Application filed September 17, 1906. Serial No. 334,997.

To all whom it may concern:

Be it known that I, LEWIS K. DAVIS, a citizen of the United States, and a resident of the city of New York, in the county of New York and State of New York, United States of America, have invented certain new and useful Improvements in Building Construction, of which the following is a specification.

My invention relates to an improvement in systems of building construction and its object is to provide a simple and inexpensive fire-proof construction for floors or other structures.

I will describe my invention in the following specification and point out the novel features thereof in the claim.

Referring to the drawings, Figure 1 represents an elevation in cross-section of a floor made according to my invention. Fig. 2 is an inverted plan view of a tile which I use for carrying out my invention. Fig. 3 is a sectional end view of the tile shown in Fig. 2. Figs. 4 and 5 are sectional elevations of portions of floors made according to modifications of my invention.

Like characters of reference designate corresponding parts in all of the figures.

10 designates a tile in the form of an inverted rectangular trough having a flat body portion 11 and side portions 12, 12 which extend vertically from the sides of the body portion 11. This tile may be made with the body portion hollow as shown at 14 for the sake of lightness. In this case the top or body portion of the tile will be a ribbed surface, the ribs being designated in the drawings by 15. The tile may be constructed of any suitable material such, for example, as vitrified clay. I prefer to have it salt-glazed. The sides 12, 12 are provided with flaring projections 13, 13. In the drawings these projections are shown in the form of parallel ribs extending along the entire length of the tile.

In using tiles of the above-described form for the construction of a floor a plurality of them are laid side by side, as shown in Fig. 1, with intervening spaces between adjacent tiles. The tiles are laid in longitudinal rows and the tiles in adjacent rows may be staggered. The bottom of the intervening spaces between adjacent rows of tiles may be closed by a board or plank 20. These spaces

are then filled with concrete or cement in a semi-liquid condition. I prefer to use metallic reinforcement in conjunction with this concrete filling, such, for example, as steel rods 30, 30 embedded in the concrete. The concrete is allowed to harden after which the board may be removed. It will then form a portion of the structure itself. The concrete will cling to the sides of the tiles, and because of the flaring shape of the projecting ribs 13, 13, will securely lock and hold the tiles together.

In the modification illustrated in Fig. 4 I have shown the bottom plank 20 placed a small distance beneath the bottom portion of the sides 12, 12 of the tile with other boards or planks 21, 21 placed against the inside portion of the sides of the tile so that a body of the concrete filling will extend under the sides of the tiles as shown.

In Fig. 5 planks 22, 22 are shown placed within the inside portion of the sides of the tiles but slightly removed from them. In this case the concrete filling will extend under and around the sides 12, 12 of the tiles as shown at 42 in this Fig. 5.

A floor constructed according to this invention has great strength. Its extreme simplicity and ease of setting up give advantages to this construction not found in other devices of this class, and the structure thus formed is light and inexpensive and absolutely fire-proof. I have shown this construction as used in forming a floor, but it is obviously applicable to other structures.

In another application for Letters Patent filed by me on May 19th, 1906, Serial No. 317,729, I have shown a building tile with flaring projections upon its sides for forming binding surfaces. The tiles of the peculiar form shown in the present application are a by-product from the manufacture of the tiles shown in the former application, as they are cut out of opposite sides of the first disclosed tiles to form projecting portions which are arranged to overlap in adjacent tiles.

What I claim is.—

A floor comprising a plurality of tiles of salt-glazed ceramic material set in parallel rows, said tiles having thin flat skeleton body portions with flanges depending at right angles from two opposite edges thereof, and parallel flaring ribs projecting from the

outer surface of said flanges; and interlocking bodies of reinforced concrete between the two flanges of adjacent tiles, said concrete bodies fitting into the spaces between
5 the flaring projecting ribs, thereby binding the tiles together and forming girder like portions of the floor.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEWIS K. DAVIS.

Witnesses:

ELLA TUCH,

ERNEST W. MARSHALL