

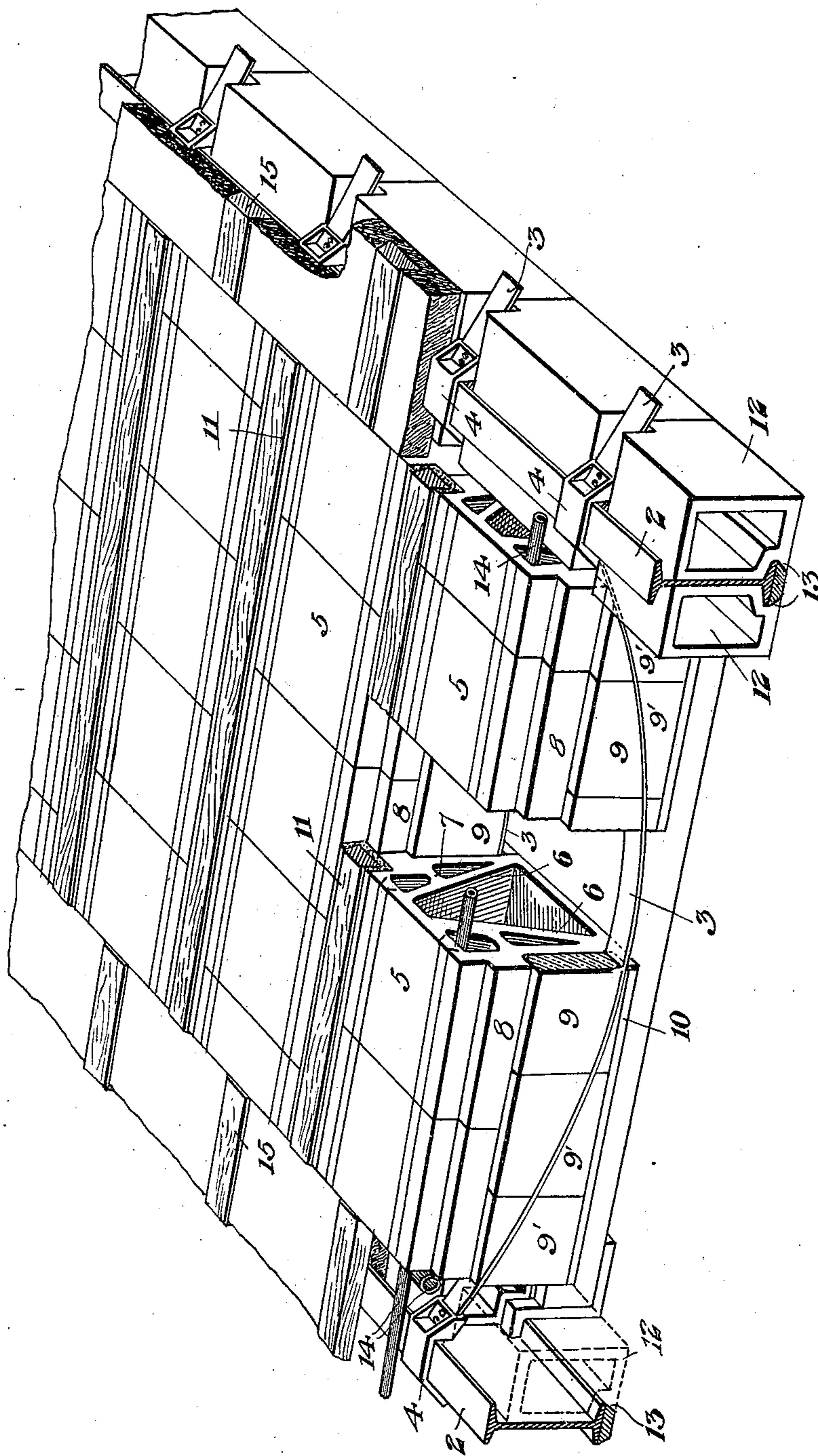
No. 652,743.

Patented July 3, 1900.

C. F. BUENTE.
TILE FLOOR CONSTRUCTION.

(Application filed Oct. 21, 1899.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES F. BUENTE, OF ALLEGHENY, PENNSYLVANIA.

TILE-FLOOR CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 652,743, dated July 3, 1900.

Application filed October 21, 1899. Serial No. 734,282. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. BUENTE, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Tile-Floor Constructions, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, in which the figure is a perspective view, partly broken away, showing fireproof flooring constructed in accordance with my invention.

My invention relates to the flooring or ceiling construction of fireproof buildings, and more especially to the hollow tiles used therein, and is designed to provide a construction whereby the number of different-shaped tiles will be reduced to the minimum, while little weight will bear upon the tile-bodies and the tiles may be easily and quickly secured in place.

In the drawing, 2 2 represent the usual parallel iron beams of the floor structure, between which extend downwardly-curved tie-rods 3, which are preferably of flat band form, as shown, their ends being secured in hangers 4, which fit upon the beams. The main tiles 5 are of general box form and preferably provided with internal oblique strengthening-webs 6 and supplemental webs 7, joining webs 6 and the sides. The tiles are provided on both sides with upper substantially-horizontal lugs 8, arranged to rest upon blocks 9, which in turn rest directly upon the tie-rods. The blocks 9 are preferably of the same width as the tie-rods, the lugs 8 being of about one-half this width, so that the faces of the lugs 8 of adjacent rows abut together over the blocks 9. Each main tile is provided along its lower edge with a lateral flange 10, of about twice the width of the lugs 8 and which closes the spaces between the tiles of adjacent courses. The space between these flanges and the lower face of the tie-rod is preferably filled in by blocks 9', cut similar to the blocks 9. The tiles may of course be formed with a flange 10 on each side of one-half the width shown, thus closing the lower spaces in the same way. The lugs 8, abutting together, form recesses between the adjacent courses, in which are secured wooden sleepers 11, which are preferably beveled upwardly and

are secured in the channels by liquid cement or concrete, with their faces slightly above the upper faces of the tiles. The upper faces of the tiles are preferably above the level of the supporting-beams, the upper faces of the lugs 8 being about the level of the tops of these beams.

To fill in the spaces at the ends of the main tiles and protect the beams, I provide hollow end tiles 12, having a recess 13 along one edge which fits upon the foot of the I-beam and having an upper recess or recesses to receive the curved tie-rod and hanger. These end tiles are below the level of the beams, and a space is thus left at the ends of the main tiles, in which may be laid piping 14 for gas, water, electric wires, or other purposes.

15 are wooden sleepers which extend across the I-beams and against the ends of the main tiles and are secured by concrete or tiling. These short sleepers are preferably spaced between the sides of the main tiles and staggered relatively to the sleepers 11, so that the hangers for the tie-rods may be fully protected by the filling.

The advantages of my invention result from the fact that only two shapes of tiles are necessary, the main tiles 5 all being similar, and likewise the end tiles 12. The sleepers are directly above the supporting-rods, and hence the pressure is communicated directly to these rods.

Many changes may be made in the form and arrangement of the tiles and supports without departing from my invention, since I claim—

1. A hollow tile, having upper substantially-horizontal supporting-lugs on each side, and spaces below the lugs to receive tie-rods and supporting-blocks beneath the lugs, and a lower lateral flange upon at least one side and arranged to close the space between the adjacent courses; substantially as described.

2. A hollow tile, having recesses at each side to receive sleepers, horizontal lugs below the same and recesses below the lugs arranged to receive tie-rods and supporting-blocks for the lugs, and a lower horizontal flange upon at least one side of the tile and arranged to close the spaces between the adjacent tiles; substantially as described.

3. A tile floor composed of hollow tiles hav-

ing upper horizontal lugs and separate blocks resting on the tie-rods and carrying the lugs; substantially as described.

4. A tile floor having hollow main tiles provided with horizontal lugs resting on blocks carried on curved tie-rods, and hollow end tiles extending at right angles to the main tiles and of less height; substantially as described.

10 5. A hollow tile having upper lateral lugs at each side with recesses beneath them to

receive blocks carried on tie-rods and provided upon at least one side with a lower lateral closing-flange; substantially as described.

In testimony whereof I have hereunto set my hand.

CHARLES F. BUENTE.

Witnesses:

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