

No. 867,251.

PATENTED OCT. 1, 1907.

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

Fig. 1.

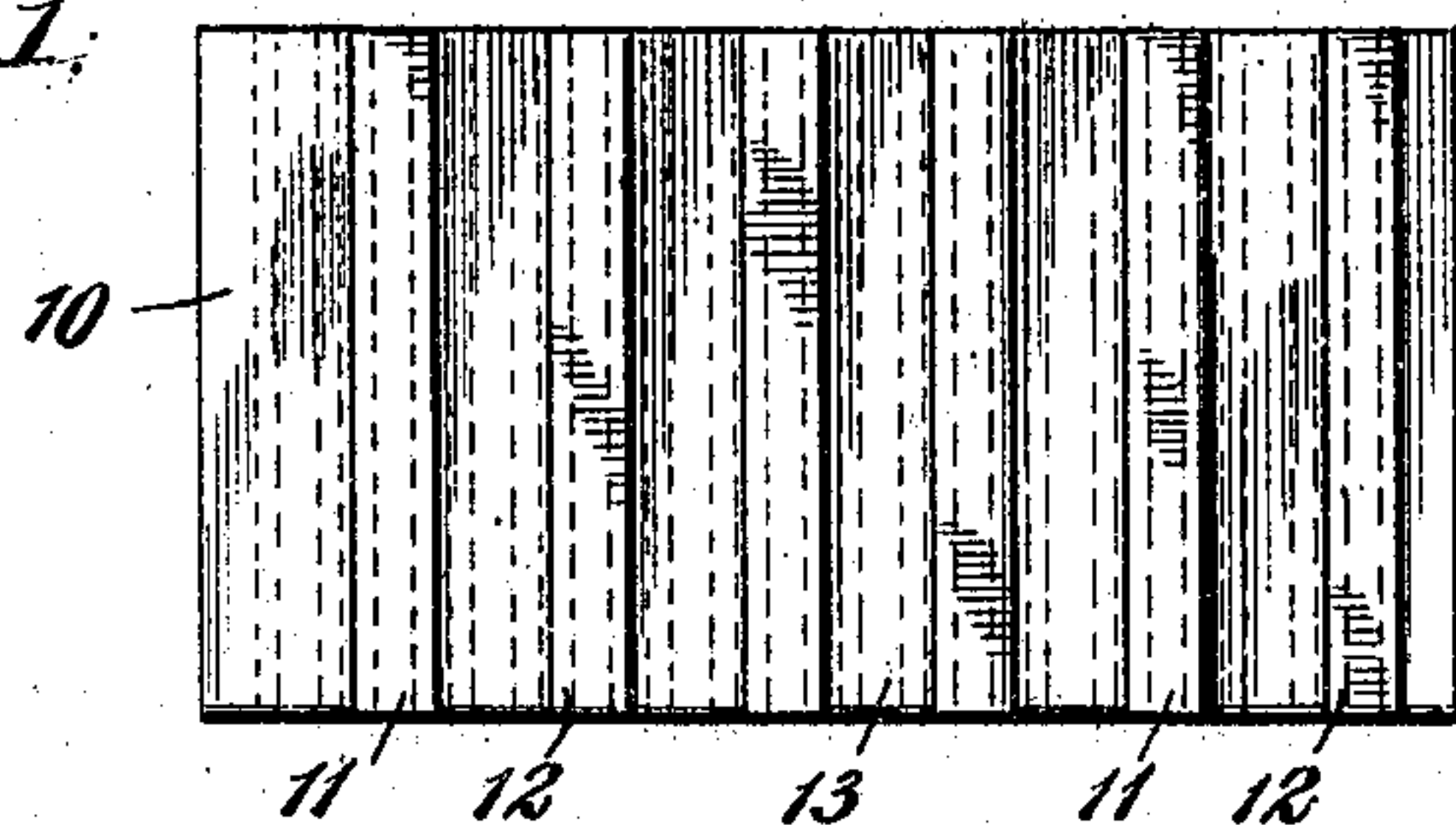


Fig. 2.

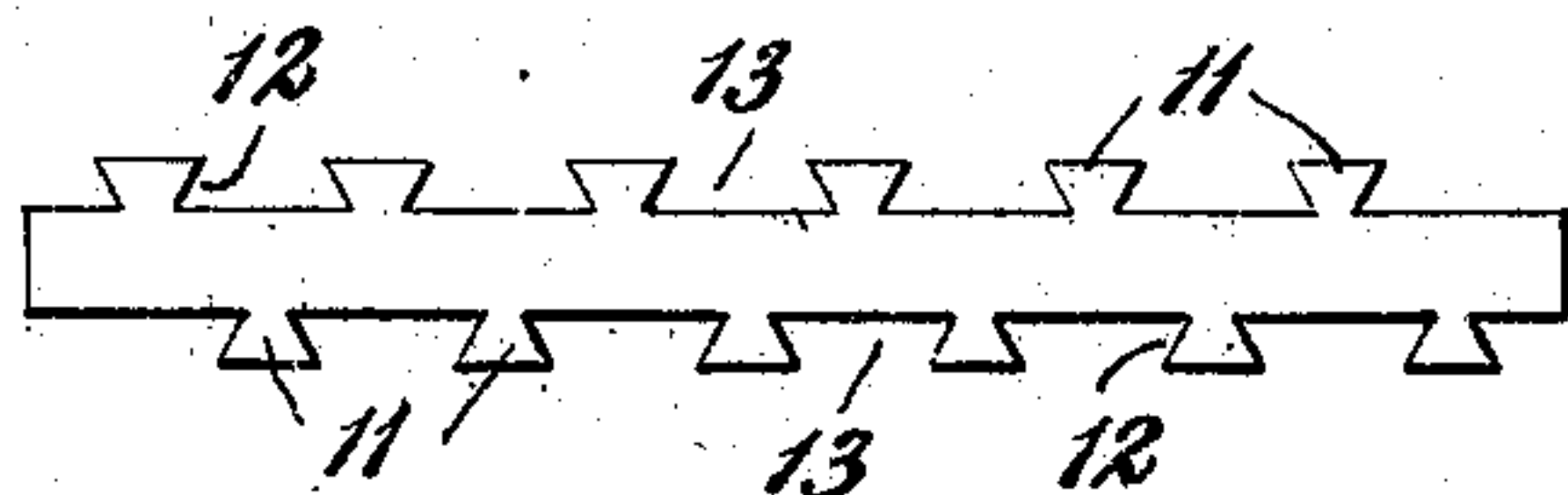
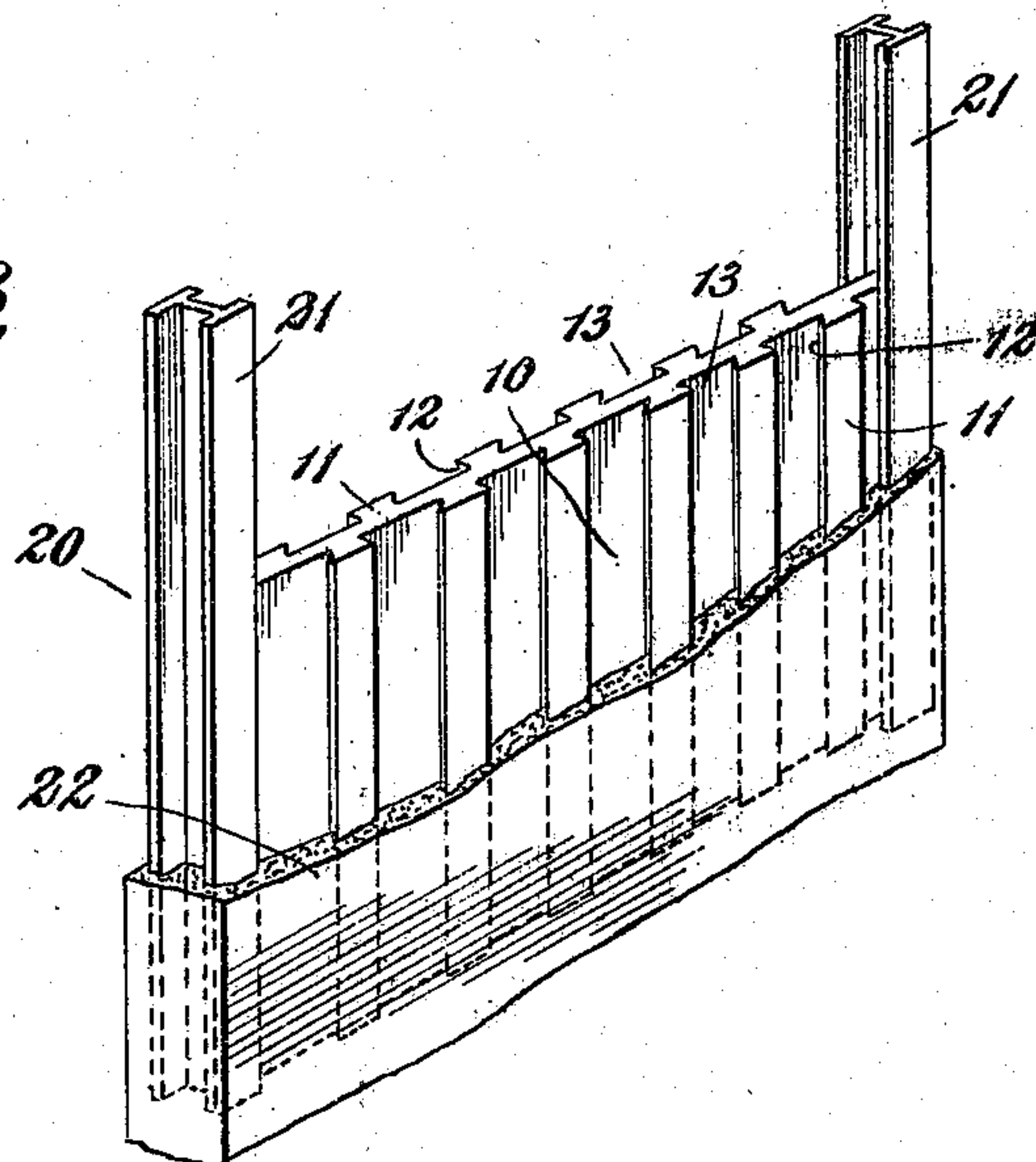


Fig. 3.



WITNESSES:

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BUILDING CONSTRUCTION.

No. 867,251.

Specification of Letters Patent.

Patented Oct. 1, 1907.

Application filed September 17, 1906. Serial No. 334,998.

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, 5 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 10 simple and inexpensive fire-proof and moisture-proof construction for walls or other structures.

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

15 Referring to the drawings, Figure 1 is a side elevation of a plate or tile which I use in carrying out my invention. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view of a portion of a wall or similar structure made according to my invention, with, however, cer- 20 tain of the parts broken away to more clearly show its construction.

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

10 designates a ribbed plate or tile of suitable material, such, for example, as vitrified clay. 11, 11 designate ribs which project from either side of this tile 10. They are constructed as clearly shown in Fig. 2 with inwardly flaring sides, that is, with their outside width greater than their width at the lines where they join 30 the plate proper. Thus each of these ribs is made with undercut edges 12, 12 between which grooves 13, 13 are formed. The tiles 10 are preferably salt-glazed to render them impervious to moisture. By placing the projecting ribs on one side of the plate between the projecting ribs on the opposite side of the plate, the tile 35 plate may be made thin and light and yet have considerable strength.

20 designates a portion of a wall of my novel construction.

4 21, 21 designate I beams of standard form.

22 designates the body of the wall which is of concrete or similar substance.

In constructing a wall according to my invention, a plurality of tile plates 10 are placed edge to edge. They may be placed between light I beams as shown 45 which will serve to hold the tiles in place and to stiffen the completed wall. The frame-work for the wall thus formed may then be covered with concrete or other material and allowed to harden. I find that it is often preferable to first construct a form about the I beams 50 and the tiles for the finished wall and to then pour the concrete in a plastic or semi-liquid condition into this form. The concrete will be held firmly onto the sides of the tiles because of the projecting ribs of the shape which I have shown which causes both sides of the 55 plates to form holding or binding surfaces for the concrete.

It may be seen that the simplicity of this construction makes it a cheap one to install. The tile and its supporting beams form sufficient reinforcement for 60 the concrete to make a comparatively thin wall of considerable strength. The glazed tile within the wall makes the wall impermeable and thus removes one of the objectionable features of concrete walls. Plaster may be put over the concrete surfaces formed as above 65 described, or if desired plaster may be applied directly to the ribbed tiles.

Of course, if desired, the plates 10 may be provided with flaring ribs on only one side.

What I claim and desire to secure by Letters Patent 70 of the United States is:

A wall comprising a plurality of solid thin flat tiles of ceramic material, said tiles having parallel flaring ribs projecting from opposite surfaces of the tile, the ribs on one surface of the tile being between those on the opposite 75 surface of the tile; metallic I-beams receiving the opposite vertical edges of the tiles between the flanges of said beams, and a body of concrete surrounding said tiles and beams and forming the outer surfaces of the wall and binding the tiles and beams together. 80

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.