No. 719,243. PATENTED JAN. 27, 1903.

L. MILLET.

MATERIAL FOR THE CONSTRUCTION OF BUILDINGS, &c.

APPLICATION FILED OCT. 25, 1901.

NO MODEL.

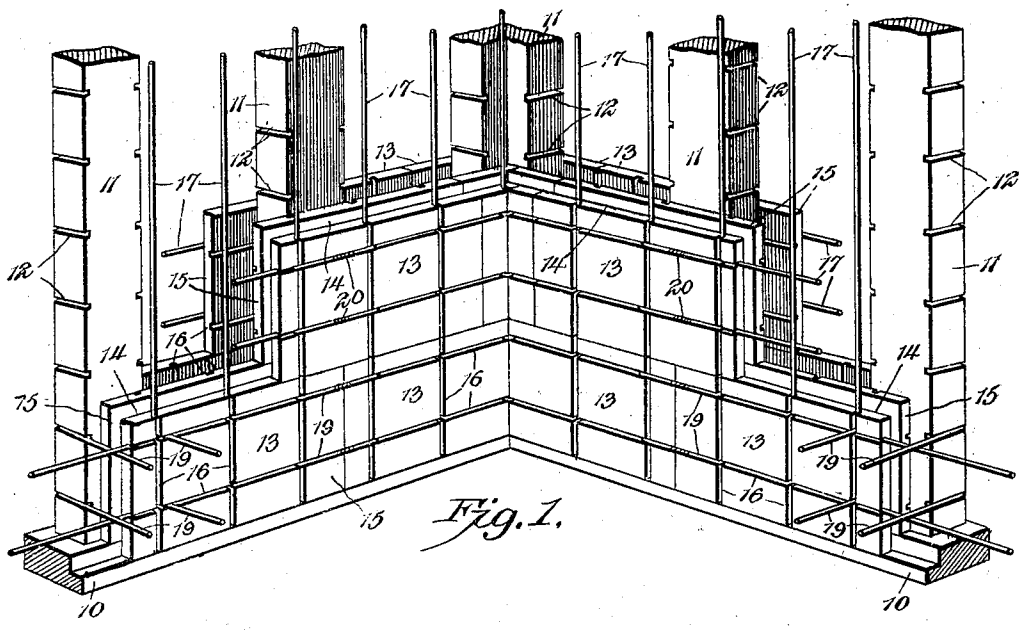


Fig. 1.

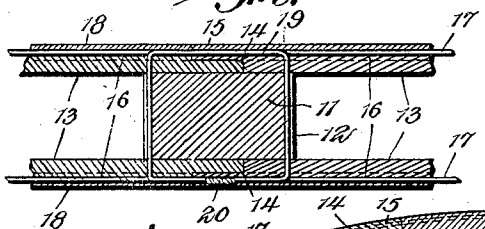


Fig. 2.

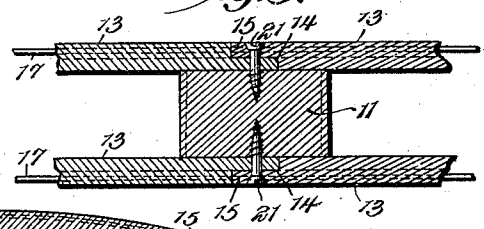


Fig. 3.

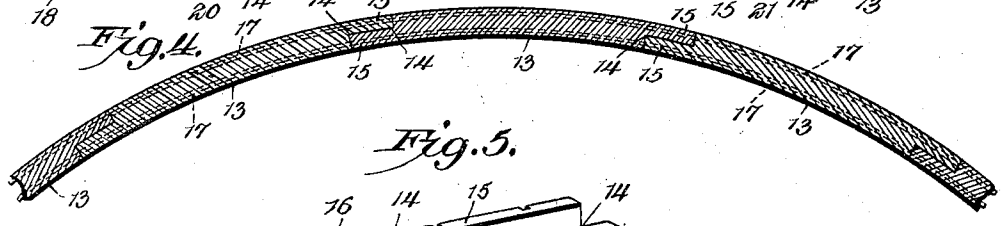


Fig. 4.

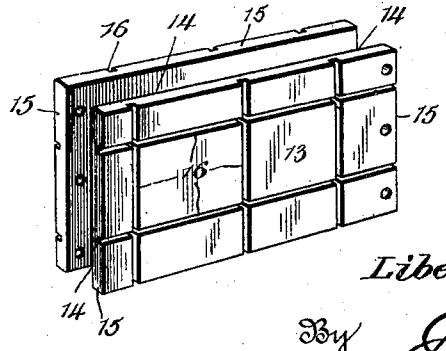


Fig. 5.

Witnesses
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UNITED STATES PATENT OFFICE.

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MATERIAL FOR THE CONSTRUCTION OF BUILDINGS, &c.

SPECIFICATION forming part of Letters Patent No. 719,243, dated January 27, 1903.

Application filed October 25, 1901. Serial No. 80,004. (No model

To all whom it may concern:

Be it known that I, LIBERTY MILLET, a citizen of the United States, residing at Hagerman, in the county of Lincoln and State of Idaho, have invented a new and useful Improvement in Wall Structures, of which the following is a specification.

The present invention relates to certain improvements in wall structures designed for use in various ways—as, for instance, buildings, dams, tunnels, and the like.

The primary object of the invention is to provide a fireproof structure which is extremely stable and durable and at the same time is comparatively inexpensive, said structure eliminating the necessity of wood, which is constantly increasing in price and besides is subject to fire. The preferred means for accomplishing this object is illustrated in the accompanying drawings and described in the following specification.

In said drawings, Figure 1 is a perspective view of a portion of a wall constructed in accordance with the present invention. Fig. 2 is a detail sectional view through the same. Fig. 3 is a sectional view illustrating a slight modification of the structure. Fig. 4 is a view of another modification, showing the structure employed in tunnel-work. Fig. 5 is a perspective view of one of the tiles.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

When the invention is to be employed for ordinary building purposes, the construction shown in Figs. 1, 2, and 3 is preferably employed. A suitable base or sill 10 is provided, upon which are placed studs 11, said studs preferably having transverse grooves 12 in their opposite side faces, as shown in Figs. 1 and 2. Sheathings are secured to the opposite faces of these studs, said sheathings being formed of separate tiles 13, the form of which is clearly illustrated in Fig. 5. It will be seen that they are rectangular in form and have their various edges rabbeted, as shown at 14, the rabbets of the opposite edges extending in from the opposite sides of the tile to provide oppositely-projecting flanges 15. The opposite side faces of the tile have longitudinally and transversely disposed grooves 16. In use these tiles are placed against the studs 11 with the flanges 15 in overlapping relation, so as to form a tight and practically air-proof joint. Binder-wires 17 are arranged in the grooves of the outer faces of the sheathing thus formed and securely fasten the tiles together. The grooves are afterward filled with cement, as 18, which completely covers the binder-wires and protect them from moisture. At the same time the exposed faces of the sheathings will be entirely smooth and unbroken. The preferred means for securing the sheathings to the studs is shown in Figs. 1 and 2. Fastening-wires 19 pass through both sheathings and are seated in the transverse grooves of the studs, said binder-wires having their ends twisted together, as shown at 20. Instead of this arrangement ordinary screws 21 may be employed, as shown in Fig. 3, which screws are passed through the overlapping flanges of the tiles and pass directly into the studs. In case the structure is to be employed as a sheathing for tunnels the same construction of tile is used; but in this case the binder-wires are seated in the grooves in both faces of said tiles, as clearly shown in Fig. 4. By this means it will be seen that a comparatively simple structure is provided which may be employed in various relations and that no wood need be used in the same, as the studs may be of the same material as the tiles, which are of any suitable earthen substance properly burned and glazed, if desired. The binder-wires are seated within the grooves of the tiles and covered with cement, so that not only is a smooth surface presented, but said wires are protected from the deleterious influences of the elements. Furthermore, because of the peculiar construction of the tiles they may be used with either side out indiscriminately, and consequently can be properly positioned much quicker than if one side only could be employed.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a structure of the class described, a plurality of sheathing-tiles having alined grooves in their side faces, and binders extending across the tiles and seated in the grooves.

2. In a structure of the class described, a plurality of sheathing-tiles having alined grooves in their side faces, binders extending across the tiles and seated in the grooves, and a filling arranged in the grooves and covering the binders.

3. In a structure of the class described, a plurality of sheathing-tiles having their edges abutted and provided with transversely and longitudinally disposed alined grooves, and binder-wires extending across the several tiles and seated in the alined grooves thereof.

4. In a wall structure, the combination with sheathing-tiles, the edges of which are arranged in overlapping relation, said tiles having grooves in their faces, of binders located in said groove.

5. In a wall structure, the combination with sheathing-tiles, the edges of which are arranged in overlapping relation, said tiles having grooves in their faces, of binders located in said grooves, and a filling arranged in the grooves and covering the binders.

6. In a wall structure, the combination with sheathing-tiles, the edges of which are arranged in overlapping relation, said tiles having longitudinal and transverse grooves in their outer faces, of binder-wires located in the grooves, and a cement filling arranged in the grooves and covering the binder-wires.

7. In a wall structure, the combination with studding, of sheathing-tiles located against the opposite sides of the studding, said tiles having grooves in their outer faces, binder-wires located in the grooves, means for filling the grooves and covering the wires, and fastening devices for securing the sheathings to the studding.

8. In a wall structure, the combination with studding, of sheathing-tiles located against the opposite sides of the studding, and fastening-wires passing through both sheathings and engaging the studs.

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

LIBERTY MILLET.

Witnesses:
H. A. SECOR,
J. P. MCMEEKIN.