No. 824,563. PATENTED JUNE 26, 1906.

L. MILLET.

WALL STRUCTURE.

APPLICATION FILED APR. 12, 1905.

Fig. 1.

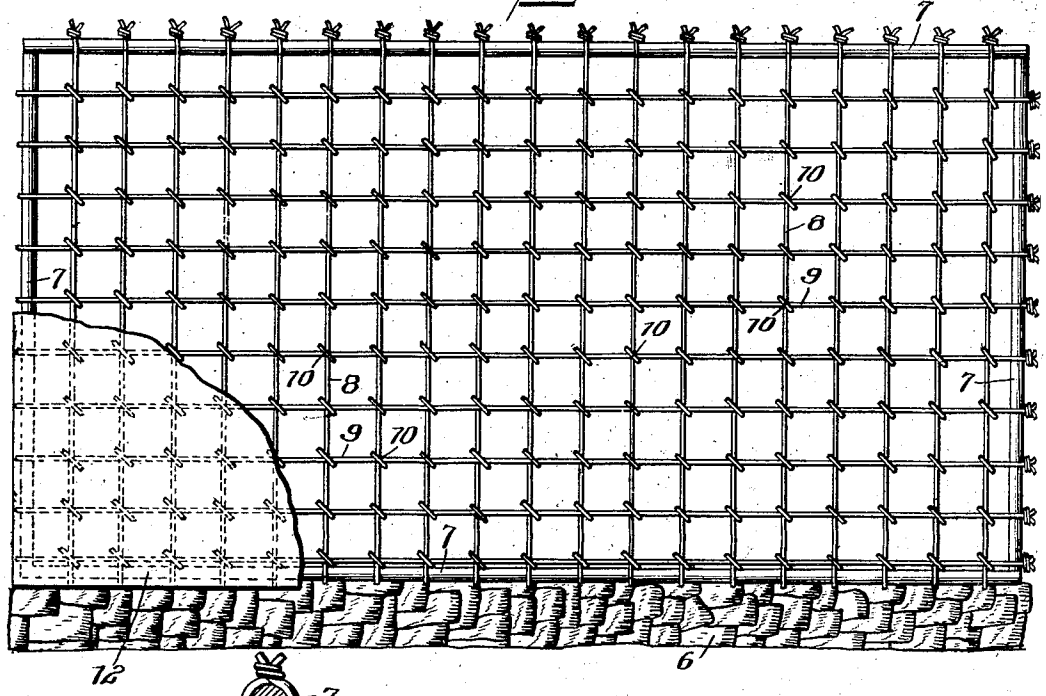


Fig. 2.

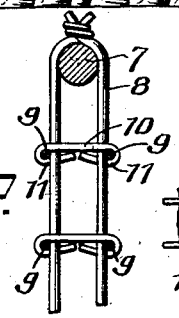


Fig. 3.

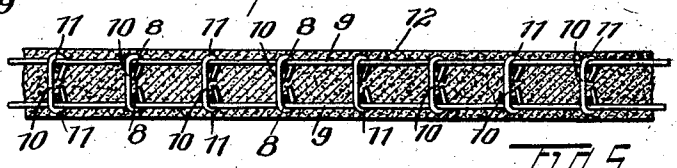


Fig. 4.

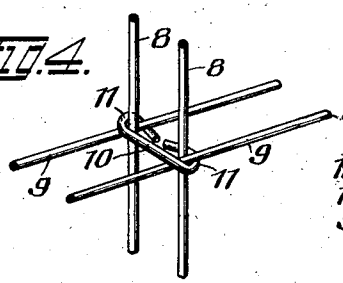
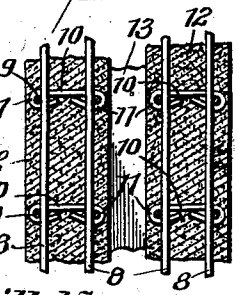
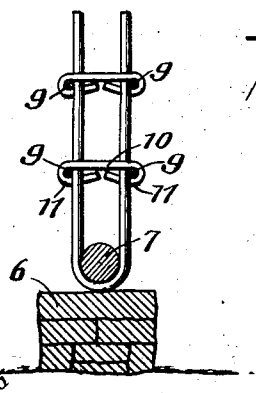


Fig. 5.





Witnesses

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UNITED STATES PATENT OFFICE.

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WALL STRUCTURE.

No. 824,563. Specification of Letters Patent. Patented June 26, 1906.

Application filed April 12, 1905. Serial No. 255,217.

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 Wall Structure, of which the following is a specification.

The present invention relates to improvements in cementitious or composite wall structures.

The object is to provide a novel structure of this character that can be readily and cheaply built, is strong and durable, being efficiently reinforced, so that it is not liable to break or crack, and, furthermore, is capable of use in a variety of ways and may be ornamented as desired.

A simple form of the structure is illustrated in the accompanying drawings, wherein—

Figure 1 is a view in elevation of the framework and showing a corner of the wall complete. Fig. 2 is a vertical sectional view through the same. Fig. 3 is a horizontal sectional view of a portion of the completed wall. Fig. 4 is a detail perspective view of a portion of the reinforcing-webbing; and Fig. 5 is a vertical sectional view through a slightly-modified form of structure, showing a double wall or one provided with an air-space.

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

In the embodiment illustrated a suitable foundation 6 may be employed, on which is placed a supporting-frame comprising angularly-disposed rods, bars, pipes, or the like, (designated 7.) About the opposite supporting-bars are passed upright and horizontal wires 8 and 9, which are thus crossed and form spaced reinforcing-webs having open meshes. These webs are connected by tie-wires 10, bridging the space between the webs and having their terminal portions 11 wrapped about the crossed wires at their points of intersection. A wall-body 12, of cement or cementitious nature, fills the space between the webs surrounding the ties 10, filling the meshes of the reinforcing-webs and covering the outer faces of said webs, thus forming a solid body strengthened and reinforced by spaced metal webs and ties. This body may also be made to cover and include the supporting-frame or the latter may be removed, in which case the projecting wires are secured to their usual wall-frame.

In case a double wall is desired the usual studding 13, as shown in Fig. 5, may be employed, and the above wall structure illustrated and described in the first four figures applied to the opposite sides of said studding, as shown, said wall structure being similar in all respects, as will be evident. It will thus be seen that a novel structure is provided having the durability of cement and the strength of the metal reinforcements, said reinforcements being disposed contiguous to both faces of the wall and also extending across the same. The structure, moreover, is comparatively inexpensive to manufacture and can be readily built either with or without the use of a mold. It is also capable of use in a variety of ways, not only for exterior building-walls, but for partitions, ceilings, roofs, and the like.

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, the combination with spaced supporting-webs, each of said webs being formed of crossed wires, of ties extending across the space between and directly connecting the webs, said ties each having their ends secured to the wires of both webs at their crossing-points, and cementitious material covering the webs.

2. In a structure of the class described, the combination with spaced supporting-webs formed of crossed wires, of ties connecting the webs and secured to the wires thereof at their crossing-points, and a cementitious wall-body filling the space between the webs, the meshes, and covering the outer faces of said webs.

3. In a structure of the class described, the combination with spaced meshed supporting-webs formed of crossed wires, of tie-wires bridging the space between the webs and

having their terminals wrapped about the wires of said webs at their points of crossing, and cementitious material covering the webs.

4. In a structure of the class described, the combination with a supporting-frame, of crossed wires extending about the frame and secured thereto, forming spaced meshed webs, and a cementitious wall-body covering the webs.

5. In a structure of the class described, the combination with a supporting-frame comprising angularly-disposed bars or rods, of crossed wires extending about the opposite bars or rods forming spaced open-meshed webs, tie-wires bridging the space between the webs and having their terminals wrapped about the wires at their points of crossing, and a solid cementitious wall-body filling the space between the webs and covering the outer faces of said webs.

6. In a structure of the class described, the combination with a supporting-frame including spaced bars or rods, of wires extending continuously around the spaced bars or rods forming spaced webs, and cementitious material covering the webs.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

LIBERTY MILLET.

Witnesses:
F. E. Du Sault,
E. L. Millet.