June 17, 1924. 1,498,182

L. LINDSAY

BUILDING CONSTRUCTION

Filed Jan. 25, 1923

Fig. 1.

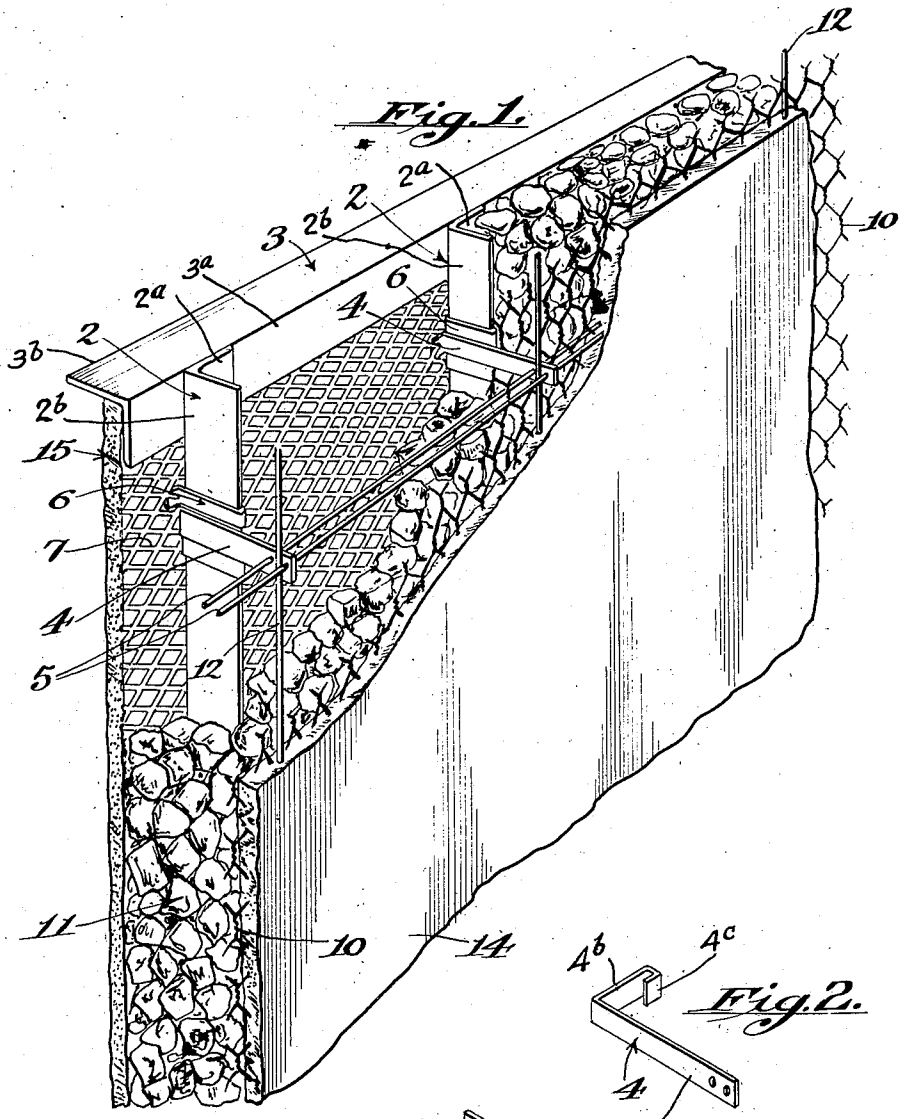
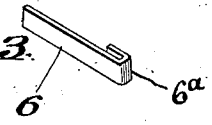


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

LYCURGUS LINDSAY, OF LOS ANGELES, CALIFORNIA.

BUILDING CONSTRUCTION.

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To all whom it may concern:

Be it known that I, LYCURGUS LINDSAY, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Building Constructions, of which the following is a specification.

This invention relates to building construction and more particularly to stucco and cement structures.

It is an object of the present invention to provide a building construction enabling the use of studding elements as a support for reinforcing and as primary mold elements to be permanently embedded in plastic cementitious material. It is another object to provide a mold chamber for the reception of a cellular filler to accomplish the production of a wall of various thicknesses irrespective of the dimensions of the studding elements.

An important object of this invention is to provide means for preventing the transfer of moisture through stucco or plastered walls.

An object of the invention is to provide, in a wall structure having cementitious covering, such as Portland cement with sand, as its outside covering and an intersticed filling, means whereby the members which support the said structure during construction are removed from contact with the outer covering of the wall.

It is another object to interpose between said members and said outer covering a filler of non-capillary material.

A further object of the invention is to dispose the tension members of the wall structure as far as practicable from the neutral axis.

Other objects and advantages will be set forth in the following specification of embodiments of the invention illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective and section through a portion of a wall produced according to the present invention.

Fig. 2 is a perspective of a bracket.

Fig. 3 is a perspective of a lath fastener.

Uprights or studs 2, in this instance formed of angle iron, may be connected at their upper ends to a plate 3, which may be of angle iron and erected by any desired method. The vertical flange 3^a of the angle iron 3 extends downwardly from the inner side of the horizontal flange 3^b and fits the longitudinally extending flange 2^a of the angle iron 2 so that the transverse flange 2^b extends into the wall. To these studs are attached brackets 4 having extension arms 4^a fitting against the flange 2^b, the angle arm 4^b fitting the flange 2^a, and the hook 4^c engaging the edge of the flange 2^a. The flanges 2^a and 3^a are secured together by rivets, not shown, as by bending them to embrace the stud, as shown. These brackets are provided to support spaced rods 5.

Clips or ties 6 are also attached to the studs 2 and extend in the opposite direction from the brackets 4 and a covering of metal lath 7 is applied to the inner sides of the studs and is held thereto by clinching over the ends of the clips that protrude through the openings of the lath. The clips 6 extend alongside of the flange 2^b and have hooks 6^a to grip the edge of the flange.

In construction, a rod 5, preferably of steel, is passed through the brackets of a row, after which a covering of wire netting or screen 10 is placed in position as shown, the ends of the brackets passing through the openings in the screen. Then another rod is passed through the brackets to hold the screen 10 in place.

The space between the wire lath 7 and the screen 10 is then filled with stones 11 preferably of a substantially uniform size which have previously been coated with a mixture of cement and water and the surplus cement allowed to drain off. Vertical reinforcement bars 12, having been placed in position, the final operation is to coat each side of the wall with a covering of suitable plaster. The coverings or coats are shown at 14 and 15.

After the whole structure had hardened, there results a wall that is strong and durable. The wire lath 7 embedded in the inner coat of plastering 15 and the screen wire embedded in the outer coat of plastering, serve as reinforcements to strengthen the wall. The wall is rendered moisture proof because whatever moisture may pass through the outer cement plastering cannot pass the cementitious stone filler as there are provided no capillary passages.

As will be readily seen, this construction permits the stone filling to be continuous over the whole width and length of the wall

which would not be the case if the spaced outer screen 14 were attached directly to the edges of the studs.

Further embodiments, modifications and variations may be resorted to within the spirit of the invention as here claimed.

What is claimed is:

1. In a wall, studding members in one side of the wall, exterior and interior metallic reinforcing means carried thereby, brackets whereby one of the reinforcing means is held in spaced relation to said studding members, and a cellular mass between and supported by said exterior and interior reinforcing means.

2. In a wall, studding members having transverse, projecting brackets, a lathing base secured to the brackets in spaced relation from the near faces of the studding, and horizontal bars supported in pairs in the brackets, said base lying between the bars.

3. In a wall, studding members having transverse, projecting brackets, a lathing base secured to the brackets in spaced relation from the near faces of the studding, and horizontal bars supported in pairs in the brackets, said base lying between the bars, and upright rods between the bars.

4. The wall comprising angle iron uprights mounted with their inner flanges extending longitudinally of the wall and their transverse flanges extending into the wall, an angle iron plate secured to the upper ends of the uprights with its vertical flange fitting against the longitudinal flanges of the uprights and its horizontal flange extending inwardly from the top of the vertical flange, brackets attached to the uprights and extending outwardly beyond the edges of the transverse flanges, spaced rods mounted through the ends of the brackets and spaced from the uprights, clips attached to the uprights and extending from the uprights in the opposite direction from the brackets, metal lath fitting against the uprights, said clips extending through the lath and clinched, wire netting mounted in a plane between the spaced rods, reinforcement bars mounted outside of the wire netting between the spaced rods, cement treated stones between the metal lath and wire netting, and plaster applied to the wire netting against the stones and to the metal lath against the stones.

In testimony whereof I have signed my name to this specification.

LYCURGUS LINDSAY.