N. ELLERY.

REINFORCED BRICK MASONRY.

APPLICATION FILED OCT. 5, 1906.

917,028. Patented Apr. 6, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

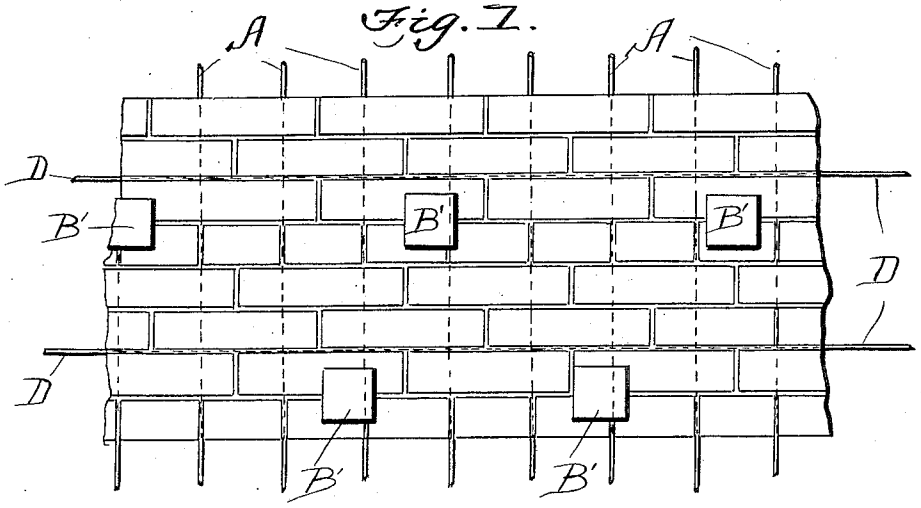


Fig. 2.

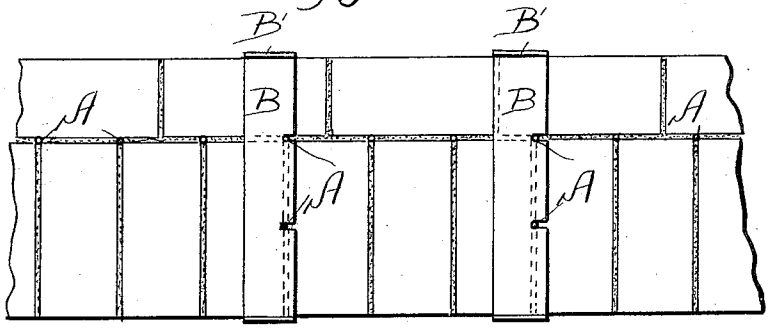


Fig. 3.

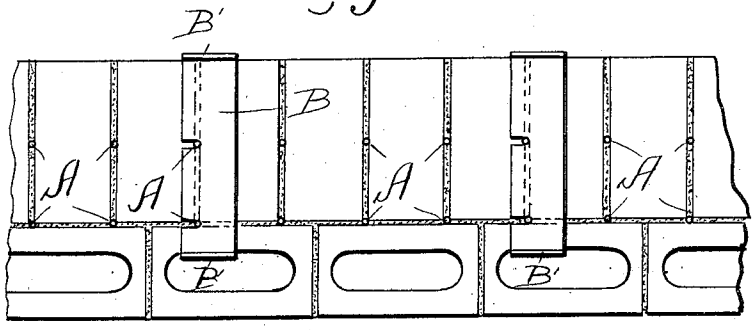
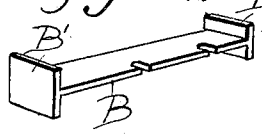


Fig. 4.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 5.

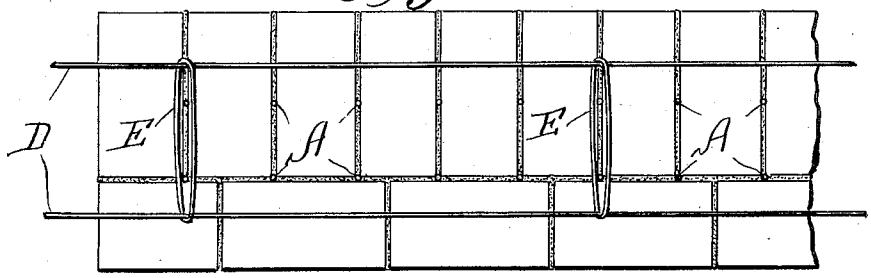


Fig. 6.

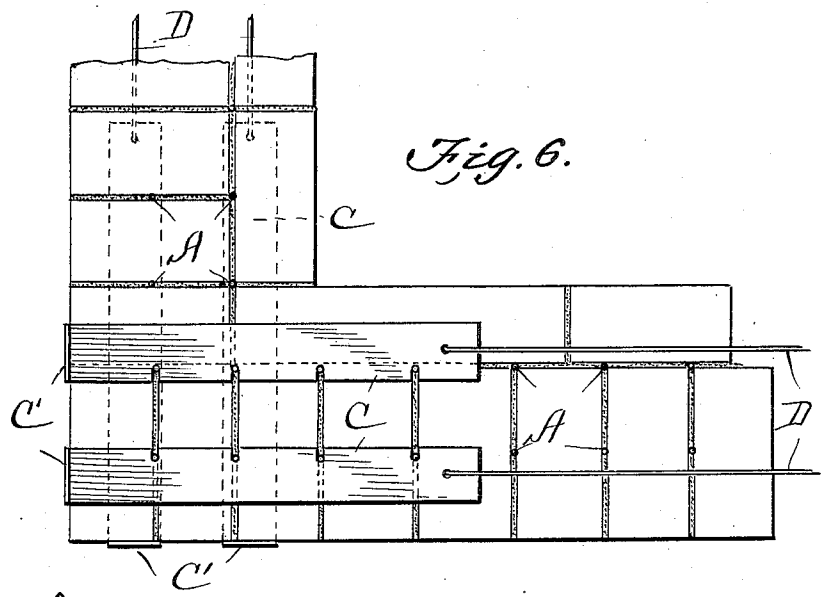


Fig. 7

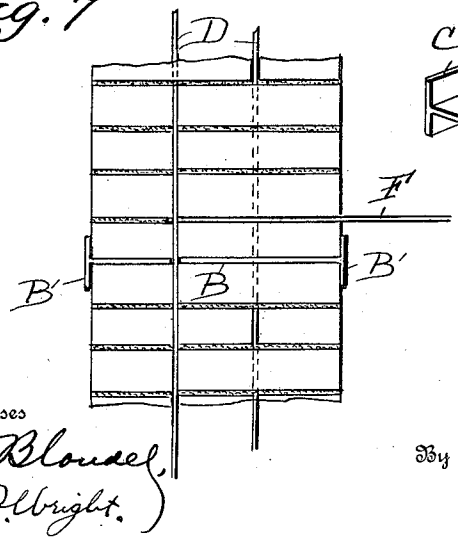
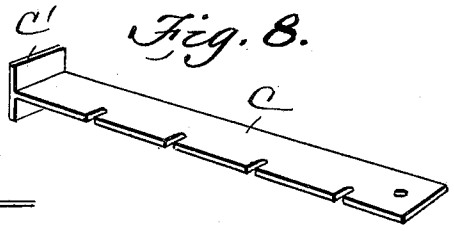


Fig. 8.



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NATHANIEL ELLERY, OF SACRAMENTO, CALIFORNIA.

REINFORCED BRICK MASONRY.

No. 917,028. Specification of Letters Patent. Patented April 6, 1909.

Application filed October 5, 1906. Serial No. 337,655.

To all whom it may concern:

Be it known that I, NATHANIEL ELLERY, a citizen of the United States, residing at Sacramento, in the county of Sacramento and State of California, have invented a new and useful Improvement in Reinforced Brick Masonry, of which the following is a specification.

This invention relates to reinforced brick or stone masonry, the object being to provide means for reinforcing a brick or stone wall, so that the wall will be held perfectly true and one which will be capable of resisting other forces than those creating an even compressive stress.

With these objects in view, the invention consists in the novel features of construction, hereinafter fully described and pointed out in the claims.

In the drawings forming a part of this specification:—Figure 1 is an outside view of a wall constructed in accordance with my invention. Fig. 2 is a horizontal sectional view of the same. Fig. 3 is a horizontal sectional view through a wall provided with a press brick face. Fig. 4 is a perspective view of one of the plates used in reinforcing the wall. Fig. 5 is a sectional view through the wall showing the means of securing the longitudinal wire together. Fig. 6 is a horizontal sectional view of a corner of a wall showing the means of securing the horizontal wires together. Fig. 7 is a plan view of the wall showing means of securing the wall to an anchorage. Fig. 8 is a perspective view of the corner tie plate used to fasten the longitudinal wire.

In constructing a wall in accordance with my invention double rows of vertical wires A are inserted between the mortar which wires may have their ends knotted so as to prevent the same from slipping between the same. These wires are spaced apart according to the width of the walls and in a very narrow wall, only one wire is adapted to be used and may be placed apart vertically of the wall any distance desired, but preferably between every row of bricks.

Notched plates B provided with flanged ends B′ are adapted to be arranged transversely through the wall between every three or four layers of bricks at any suitable distance apart, the notch of the plates fitting the vertical wires A, and the flanged ends fitting up against the inner and outer faces of the wall. When a pressed brick face is used one of the flanged ends of the plate B will fit in the opening of the brick so as to prevent the same from showing.

Plates C are arranged between the layers of the brick at the corners of the wall, one running longitudinally of a wall, and the other longitudinally of the other wall, having flanged ends C′, bearing against the face of the wall and provided with notches adapted to fit over the vertical wires. Openings are formed in the ends of the plates in which are secured the knotted ends of longitudinal wires D, which are connected together by loops E about every four feet.

In Fig. 7 I have shown wires F connected to the vertical wire A for anchoring the wall.

From the foregoing description it will be readily seen that I have provided very novel and simple means for reinforcing a brick or stone wall that is capable of standing more than the ordinary wall, and one which can be constructed at a small cost.

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

1. In a wall, a plurality of vertical wires, and a plurality of horizontal plates, each plate having a series of notches, said notches receiving the vertical wires, and horizontal wires attached to horizontal plates, loops connecting said wires, substantially as described.

2. In a wall, a plurality of vertical wires, horizontal plates notched intermediate their ends and adapted to co-act with the vertical wires, horizontal wires connected to the horizontal plates and loops for connecting adjacent horizontal wires, as set forth.

3. The combination with a brick wall, of pairs of vertical and longitudinal wires arranged between the bricks of the walls, plates having flanged ends arranged transversely between said bricks having notched edges to receive the vertical wires and provided with openings to which the longitudinal wires are connected, and loops connecting said adjacent longitudinal wires.

4. The combination with a brick or stone

wall, of plates provided with flanged ends arranged between the bricks or stones of the wall at the corners, said plates being provided with notches and openings, wires arranged in the mortar between the bricks or stones having their ends secured in the openings of said plates, and connecting said plates and vertical wires arranged in the mortar between the bricks or stones fitting in the notches of said plates.

NATHANIEL ELLERY.

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