

E. FLAGG.
 REINFORCED PARTITION WALL.
 APPLICATION FILED JUNE 10, 1909.

946,211.

Patented Jan. 11, 1910.

Fig. 1.

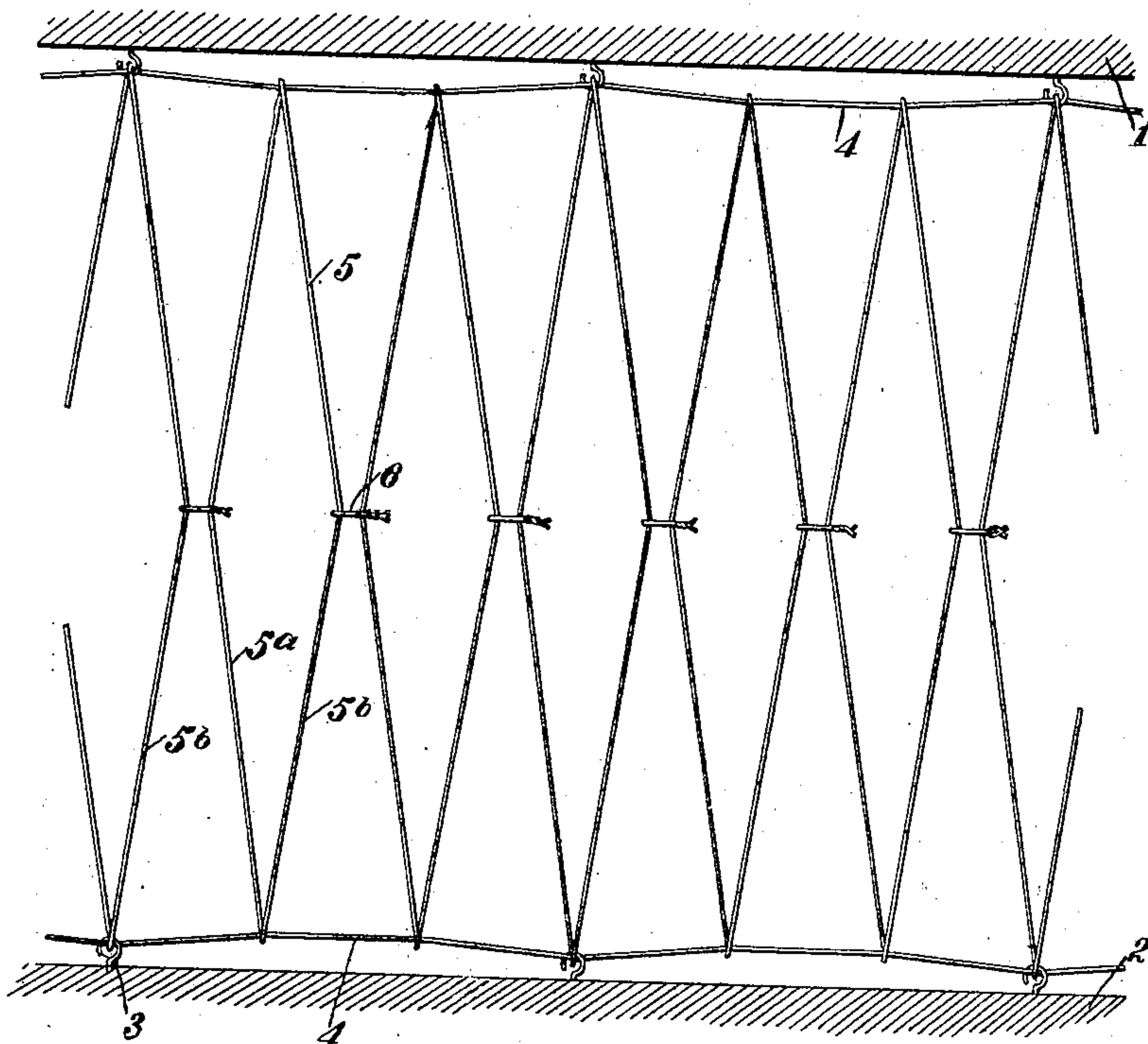


Fig. 2.

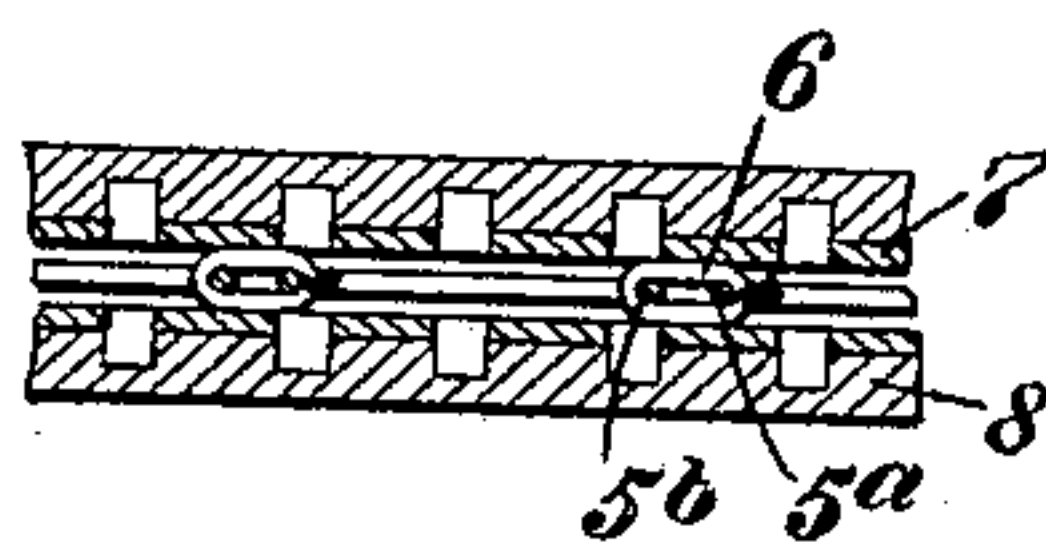
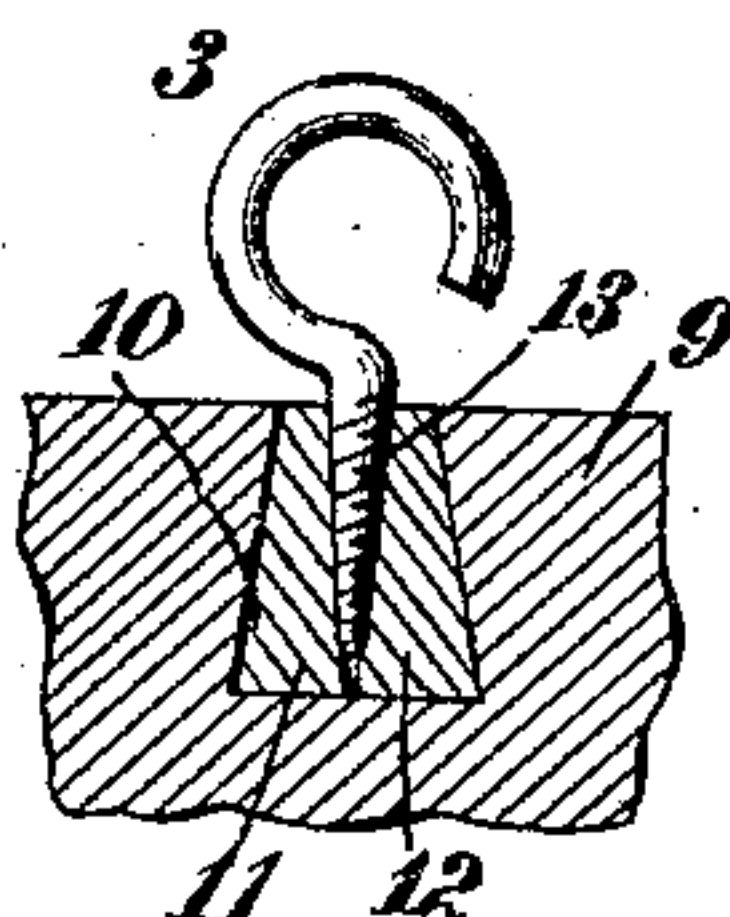


Fig. 3.



WITNESSES

J. H. Myers
T. D. Chamber

INVENTOR

Ernest Flagg
 BY *Munroe*
 ATTORNEYS

UNITED STATES PATENT OFFICE.

ERNEST FLAGG, OF NEW YORK, N. Y.

REINFORCED PARTITION-WALL.

946,211.

Specification of Letters Patent.

Patented Jan. 11, 1910.

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To all whom it may concern:

Be it known that I, ERNEST FLAGG, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Reinforced Partition-Wall, of which the following is a full, clear, and exact description.

This invention relates to reinforced partition walls, and the object of the invention is to produce a wall of this class which can be very easily constructed, and which can be readily formed of wire and plaster or cement.

The invention concerns itself especially with the manner of mounting and supporting the wire, and with the means for rendering the wire taut before the plaster or cement is applied. Partition walls when constructed upon studding, have a considerable thickness, and in this way considerable floor space is lost.

A partition wall constructed according to my invention can be made very thin and will give a consequent saving in floor space, at the same time being serviceable and durable.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation showing the skeleton or wire frame of the partition wall; Fig. 2 is a horizontal section taken through the finished wall; and Fig. 3 is a vertical section taken through one of the anchor bolts by means of which the frame of the wall is secured to the floor and ceiling.

Referring more particularly to the parts, 1 represents the ceiling, and 2 represents the floor, and these parts may be made of tiling or other building material. In applying my invention, I provide along the floor and ceiling a line of anchor bolts or hooks 3, and along these hooks I stretch stringers 4 of wire, or similar material. Between these stringers I form chords 5 of wire, each chord presenting two members 5^a and 5^b. After these chords have been strung between the hooks or anchor bolts 3, which are in vertical alinement, as shown, they are also strung at

intermediate points between the hooks, and I then connect the member 5^a of one chord with the member 5^b of the next or adjacent chord by means of short links 6 of wire, or similar material. The ends of these links may be twisted together by means of a pair of pliers so that as the links shorten in length, the members 5^a and 5^b are drawn together, placing them under tension, and also placing the stringers 4 under tension. In this way a framework is formed, the unit of which may be considered to be a chord of wire, the members of which are kept in tension by the links 6. After this framework or grill is set up, I attach sheets 7 of metal lath, or similar material, on one or both sides of the frame, and the body 8 of the wall is then formed out of plaster, cement, or similar material, completely embedding the grill and the metal lath, and extending from the floor to the ceiling.

The anchor bolts when set in tiles, may be of the expansion-bolt form shown in Fig. 3. Referring to this figure, 9 represents the tile in which an under-cut conical socket 10 is formed, and into this socket, a block is inserted, said block being formed in sections 11 and 12, said sections being spread apart when the threaded shank 13 of the anchor bolt enters. When these sections spread apart they wedge themselves in the socket so as to prevent the withdrawal of the anchor bolt under tension or a direct pull. When a wall is constructed as described, it presents a light but rigid framework, reinforcing the body of the wall and forming a good support for the plaster or cement.

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

1. A reinforced partition wall, comprising anchor bolts attached to the floor and ceiling, stringers formed of wire attached to said anchor bolts and running adjacent to the floor and ceiling, chords of wire connecting said stringers, and members connecting said chords at intermediate points deflecting said chords laterally and deflecting said stringers and maintaining said chords and said stringers in tension, and a cementitious material embedding said parts.

2. A reinforced partition wall, comprising anchor bolts attached to the floor and ceiling, stringers of wire attached to said anchor bolts and running near the floor and ceiling, chords disposed between said string-

ers and attached thereto, links formed of twisted wire connecting said chords together, maintaining said chords in tension and maintaining said stringers in tension, and a cementitious material embedding said parts.

3. A reinforced partition wall, comprising anchor bolts attached to the floor and ceiling, stringers attached to said anchor bolts and running near the floor and ceiling, chords of wire presenting oppositely disposed members connecting said stringers, links connecting one member of each chord with a member of an adjacent chord, deflecting said chords from a straight line and maintaining said chords in tension, deflecting said stringers laterally and maintaining said stringers under tension, and a cementitious material embedding said stringers and said chords.

4. A reinforced partition wall, comprising

anchor bolts attached to the floor and ceiling, wire stringers attached to said anchor bolts, chords presenting oppositely disposed members connecting said anchor bolts, intermediate chords connecting said stringers at intermediate points and also presenting oppositely disposed members, links connecting one member of each of said chords with a member of the chord adjacent, said links deflecting said chords laterally and deflecting said stringers laterally and maintaining said chords and said stringers under tension, and a cementitious material embedding said stringers and said chords.

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

ERNEST FLAGG.

Witnesses:

H. L. ROBINSON,
A. T. SUTCLIFFE.