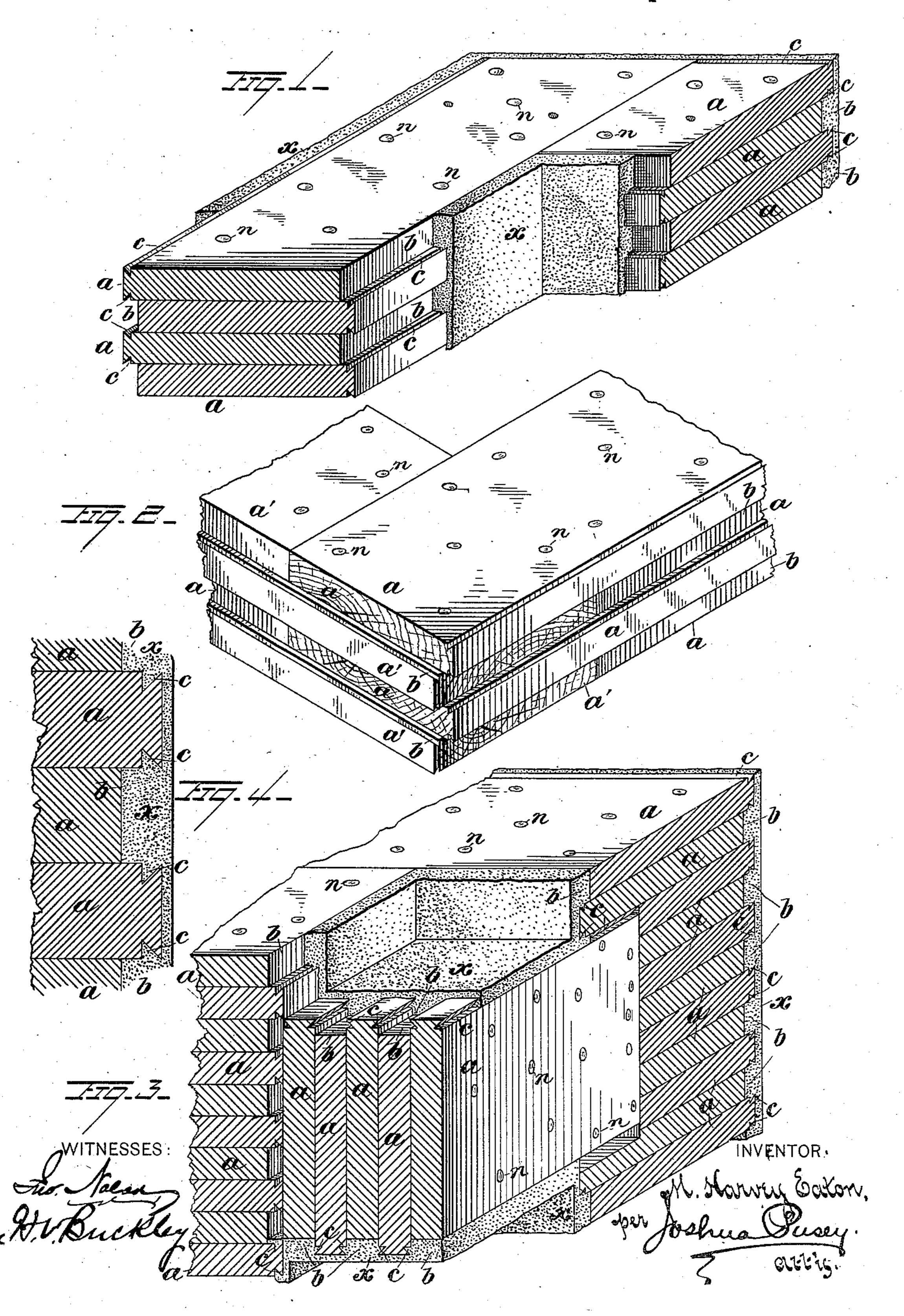
## M. H. EATON.

## CONSTRUCTION OF BUILDINGS.

No. 381,767.

Patented Apr. 24, 1888.



## United States Patent Office.

M. HARVEY EATON, OF PHILADELPHIA, PENNSYLVANIA.

## CONSTRUCTION OF BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 381,767, dated April 24, 1888.

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To all whom it may concern:

Be it known that I, M. HARVEY EATON, a citizen of the United States, residing in the city and county of Philadelphia, and State of 5 Pennsylvania, have invented certain new and useful Improvements in the Construction of Buildings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of which—

Figure 1 is a perspective view of a section of two contiguous walls of a building constructed according to my invention. Fig. 2 is a like view showing more clearly the manner of interlocking the boards constituting the 15 walls at corners or angles. Fig. 3 is a similar view of a section of flooring and walls. Fig. 4 is a sectional view, enlarged, of a portion of one side of a wall, showing the manner in which the plaster or cement is secured.

The nature of this invention is a novel manner of constructing wooden buildings from boards, whereby certain advantages are se-

cured, as hereinafter explained.

In carrying out my invention I take a series 25 of ordinary boards, a, and beginning at the foundation lay the one upon the other flatwise, securing them together as I proceed by nails n, which may be long enough to extend through two or more of the boards. The main 30 walls or partitions of the structure as it proceeds are tied together at the corners or angles by overlapping and nailing together the alternate boards of the contiguous walls. The ends of the intermediate board of each wall will 35 thus abut against the side of the board of the other wall. This is seen in Fig. 2, where amarks the boards of the one wall, and a' those of the other.

I construct and interlock the partitions of 40 the building in the same manner as the main walls.

The flooring (see Fig. 3) is made by nailing the boards together flatwise in the same man-45 that they are placed vertically instead of horizontally, as clearly seen in said figure.

The roof of the structure may be made in the same manner as the flooring, although it is preferable to make the roof double pitched, in 50 which case the boards are interlocked at the angle or apex in a manner similar to that above described as to the vertical walls.

In order to provide a means for holding the plaster or cement x, with which the walls of the building may be coated both within and 55 without, as also the partitions, floors, and ceilings in superposing the boards, I offset the alternate ones, as shown clearly in the drawings, and thus there are formed longitudinal grooves b, both externally and internally in 60 the walls, and both on top and on the under side of the floorings. (See Fig. 3.) I prefer, however, to have such grooves dovetailed, so as to afford a firm hold for the plaster x; and this I accomplish by making an angular groove, 65 c, on both sides near the edge or edges of the boards. It will thus be seen that when the boards are laid, as shown and described, the plastering will be held by a series of dovetails. This is shown quite clearly in Fig. 4, although 70 obvious in Figs. 1 and 3.

It will be seen that a building constructed according to my invention, as hereinbefore described, will be very strong and solid, and not, comparatively speaking, expensive. As 75 the boards nailed together form a practically integral body, the most ordinary lumber may be used, as the weak spots of a board are counteracted by the strength of the others. When, however, the building is protected by a suit- 80 able coating of plaster or cement, x, it both within and without becomes practically fireproof, wet-proof, and vermin-proof, and a good non-conductor of sound, and constitutes a very durable structure. The floors are firm, strong, 85 and solid, and no space is left for rats, mice, &c., as is the case in buildings of usual con-

struction.

Having thus described my invention, I claim as new and wish to secure by Letters Patent—90

1. A building having its walls and partitions constructed of a series of ordinary boards laid one upon the other flatwise and secured together by nails, the angles or corners of said walls being interlocked in such manner as to 95 ner as the main walls, the only difference being | leave no openings or spaces between the boards, substantially as shown and described.

2. A building having its walls constructed of a series of boards provided with longitudinal grooves adjacent to their edges and nailed to 100 gether flatwise, said boards being alternately offset so as to form dovetail grooves on both sides of said walls and nailed together, substantially as and for the purpose set forth.

3. The hereinbefore-described fire-proof building, the same having its walls, partitions, floors, and roof constructed of a series of boards laid and nailed close together flatwise, 5 the angles or corners of the walls and the partitions being interlocked in such manner as to leave no spaces or openings between the boards, said boards being grooved and alternately offset, as shown, and the walls, &c., provided with 10 a coating of plaster or other suitable fire-proof

material on each side thereof, substantially as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature this 5th day of September, A. D. 1887.

M. HARVEY EATON.

 $\mathbf{Witnesses}$ : JNO. NOLAN, GEO. W. REED.