

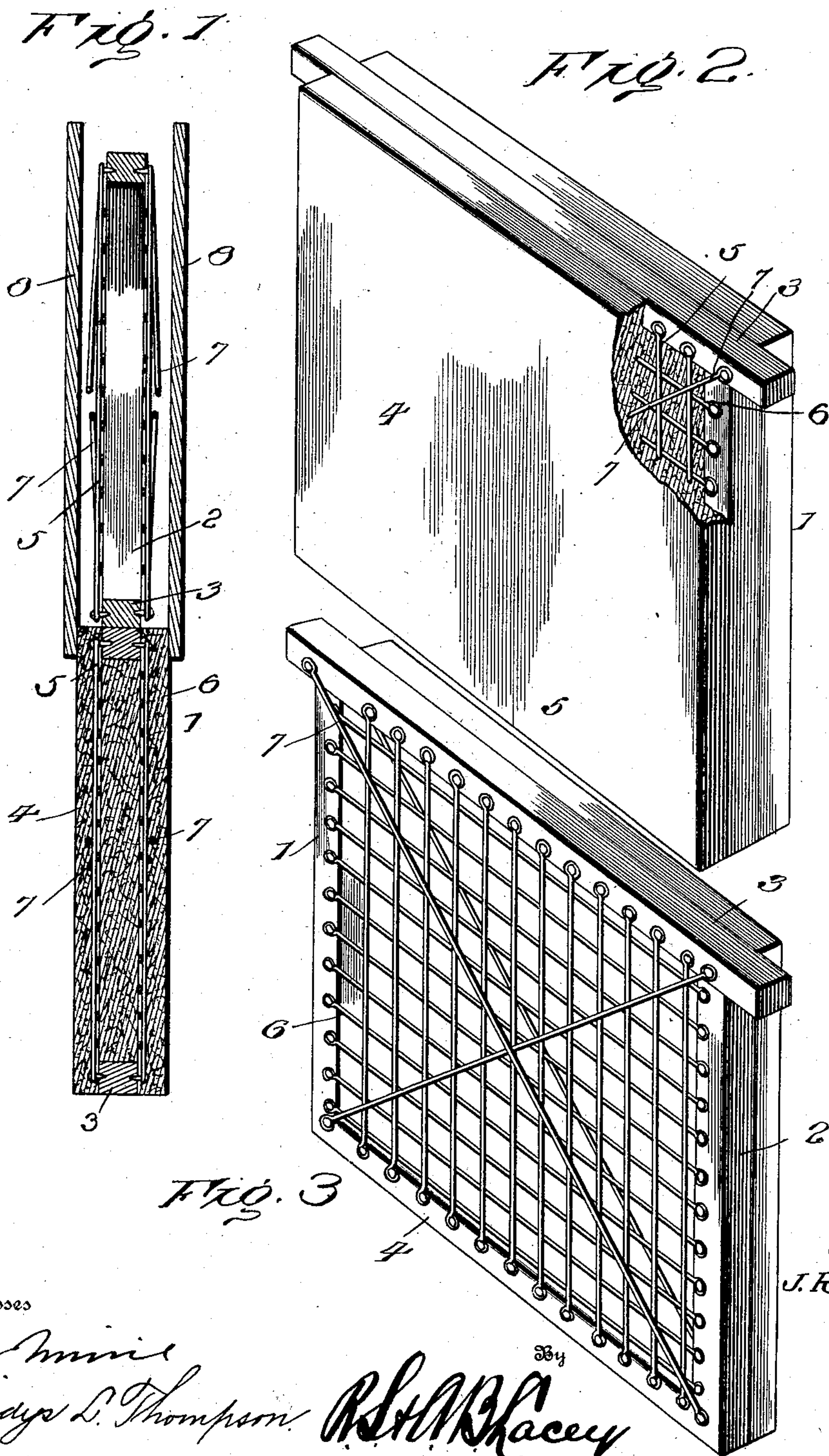
No. 721,747.

PATENTED MAR. 3, 1903.

J. ROEMER.
CONSTRUCTION OF BUILDINGS.

APPLICATION FILED MAY 10, 1902.

NO MODEL.



UNITED STATES PATENT OFFICE.

JOSEPH ROEMER, OF SANTA MARIA, CALIFORNIA.

CONSTRUCTION OF BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 721,747, dated March 3, 1903.

Application filed May 10, 1902. Serial No. 106,743. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ROEMER, a citizen of the United States, residing at Santa Maria, in the county of Santa Barbara and State of California, have invented certain new and useful Improvements in the Construction of Buildings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to walls constructed of concrete and like self-setting material capable of use in the construction of buildings, the purpose being to acquire strength, durability, and to provide an embedded bond of novel formation and efficiency to hold the structure even though the wall should crack.

The invention consists of the novel structural features, which hereinafter will be more fully described and claimed and which are shown in the annexed drawings, in which—

Figure 1 is a vertical transverse section showing a portion of a concrete wall embodying the invention and the former and bond in position for another portion or section of the wall. Fig. 2 is a perspective view of a section of concrete wall embodying the invention, a corner portion being broken away to show more clearly the frame and a part of the meshy bond attached thereto. Fig. 3 is a perspective view of the frame and meshy bond applied to opposite sides thereof.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In accordance with this invention a frame comprising uprights 1 and 2 and upper and lower beams 3 and 4 is provided, and a meshy bond is attached to each side of the frame, said frame and the attached meshy bond being embedded in the concrete wall 4, as illustrated most clearly in Figs. 1 and 2. The meshy bond may be of any open-work material so long as spaces are provided for the passage of the material from one side to the other of the bond. The frame may be of any size, according to the section of wall to be constructed, and the meshy bond is applied to opposite sides thereof. The frame may be constructed either of wood or metal, or a combination of the two materials, and the end por-

tions of the upper beam 3 project beyond the uprights to be engaged by any convenient support to hold the frame in position during the formation of the wall.

While the meshy bond may be of any construction, it is preferred to form it of wires spaced apart any desired distance and arranged to cross one another and attached at their ends to corresponding frame-bars. The wires 5 are vertically arranged and are secured to the beams 3 and 4 by nails or other means, and the wires 6 extend horizontally and are attached to the uprights 1 and 2. To give additional strength, diagonal wires 7 extend from opposite corners of the frame.

The frame is set up and is inclosed by sides 8, which constitute a former and serve to retain the concrete in place. The frame, with the meshy bond attached thereto, occupies a central position between the sides 8, and the space between said sides is filled in with concrete, thereby embedding the frame and the meshy bond, the concrete passing through the spaces formed between the several wires or openings of the meshy bond. After the concrete has set the former or sides 8 are removed, as indicated in the lower part of Fig. 1, and another frame is placed in position and the former set up, as indicated in the upper part of Fig. 1, preliminary to constructing the next section or portion of the concrete wall. This operation is repeated until a wall of desired height and length is constructed.

Having thus described the invention, what is claimed as new is—

In a concrete wall, a frame embedded therein and comprising parallel uprights and upper and lower beams, the upper beam having the end portions thereof extended to project beyond the aforesaid uprights, crossed wires disposed upon opposite sides of the frame and at right angles to each other, said wires being secured at their ends to corresponding frame-bars, diagonal strengthening-wires secured to the frame and adapted to bear against and support the aforesaid meshy bond against outward pressure, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH ROEMER. [L. S.]

Witnesses:

L. T. JETER,

M. E. ARMSTRONG.