

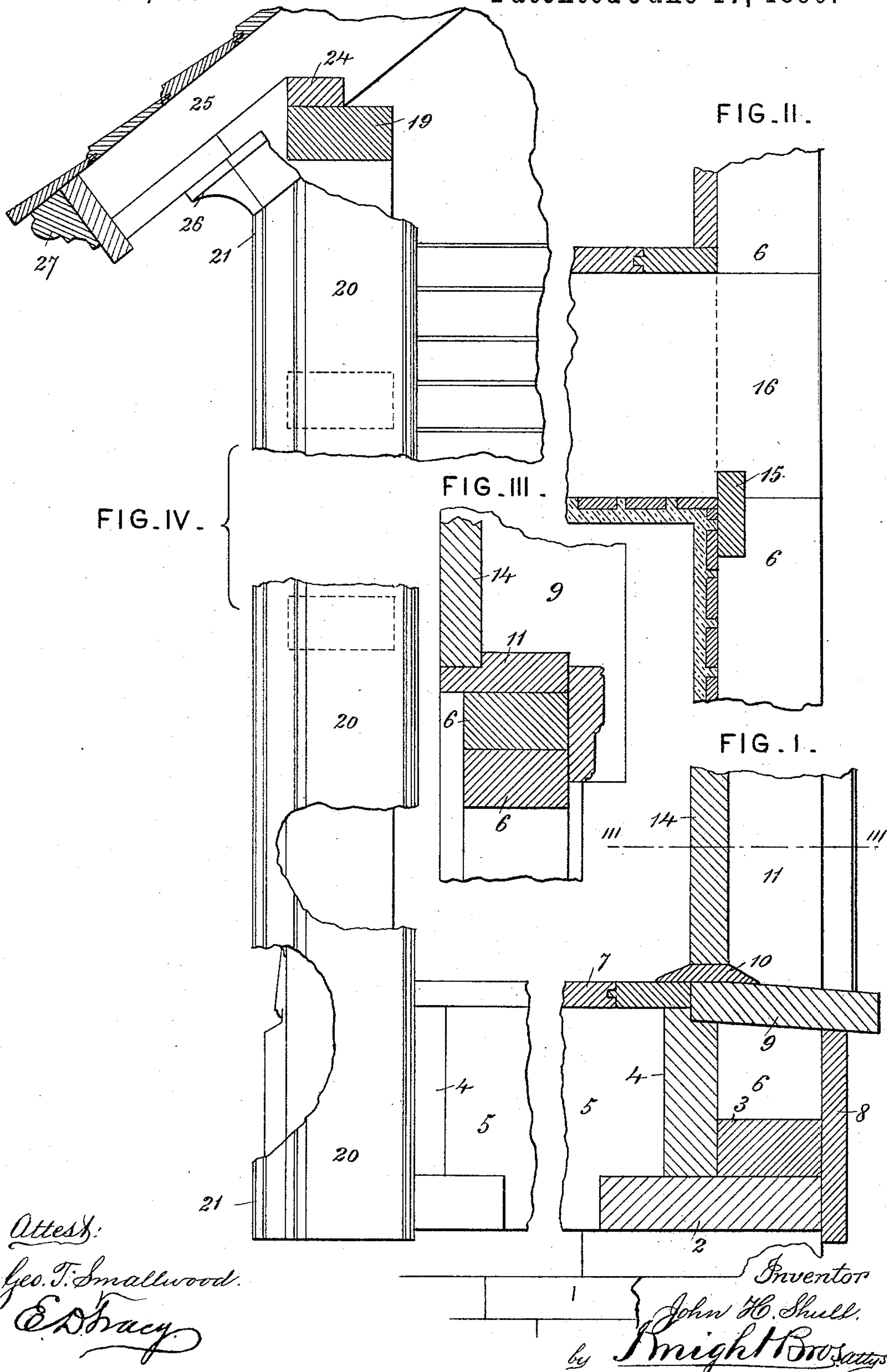
(No Model.)

3 Sheets—Sheet 1.

J. H. SHULL.
FRAME HOUSE.

No. 430,489.

Patented June 17, 1890.



(No Model.)

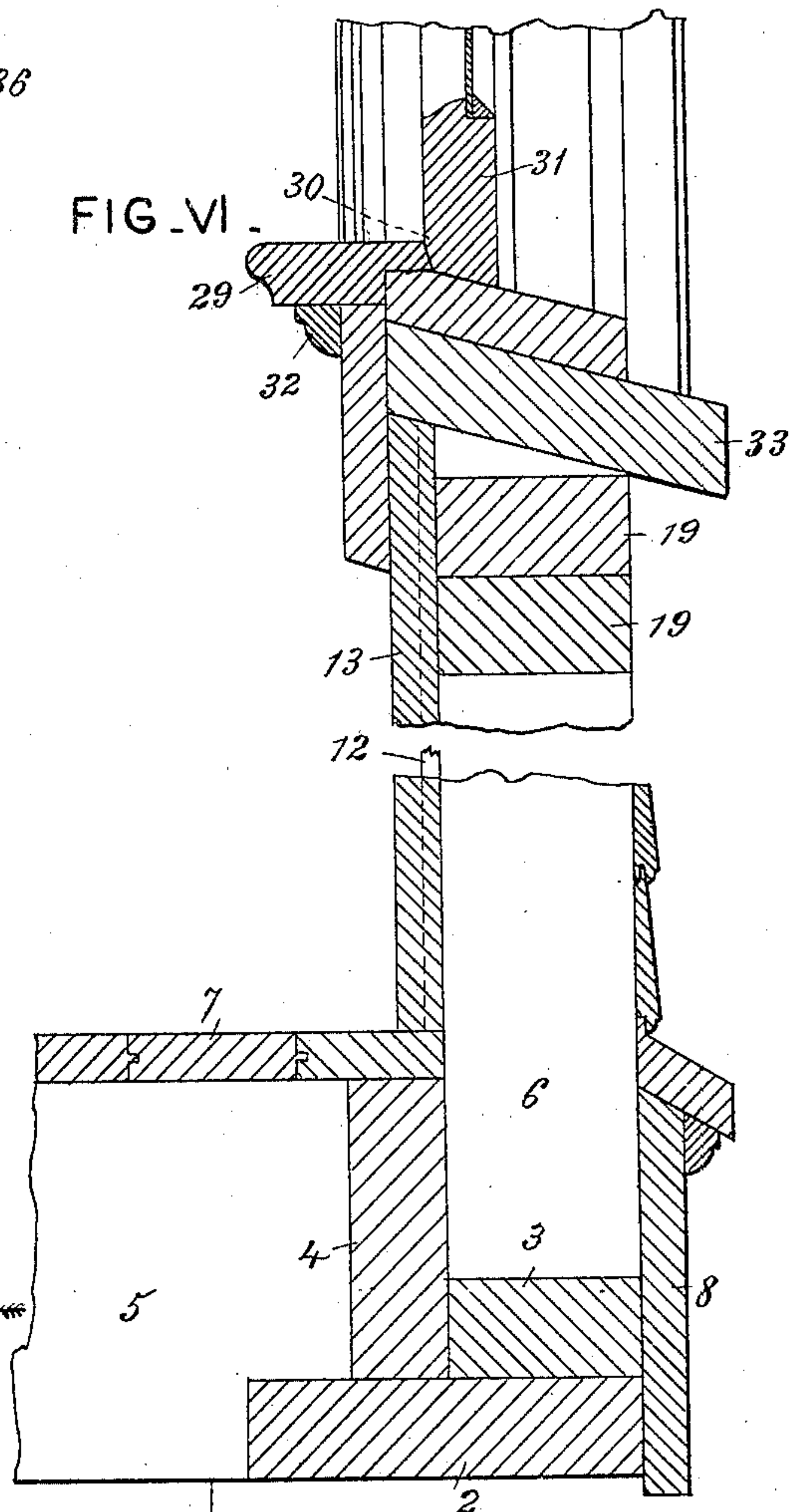
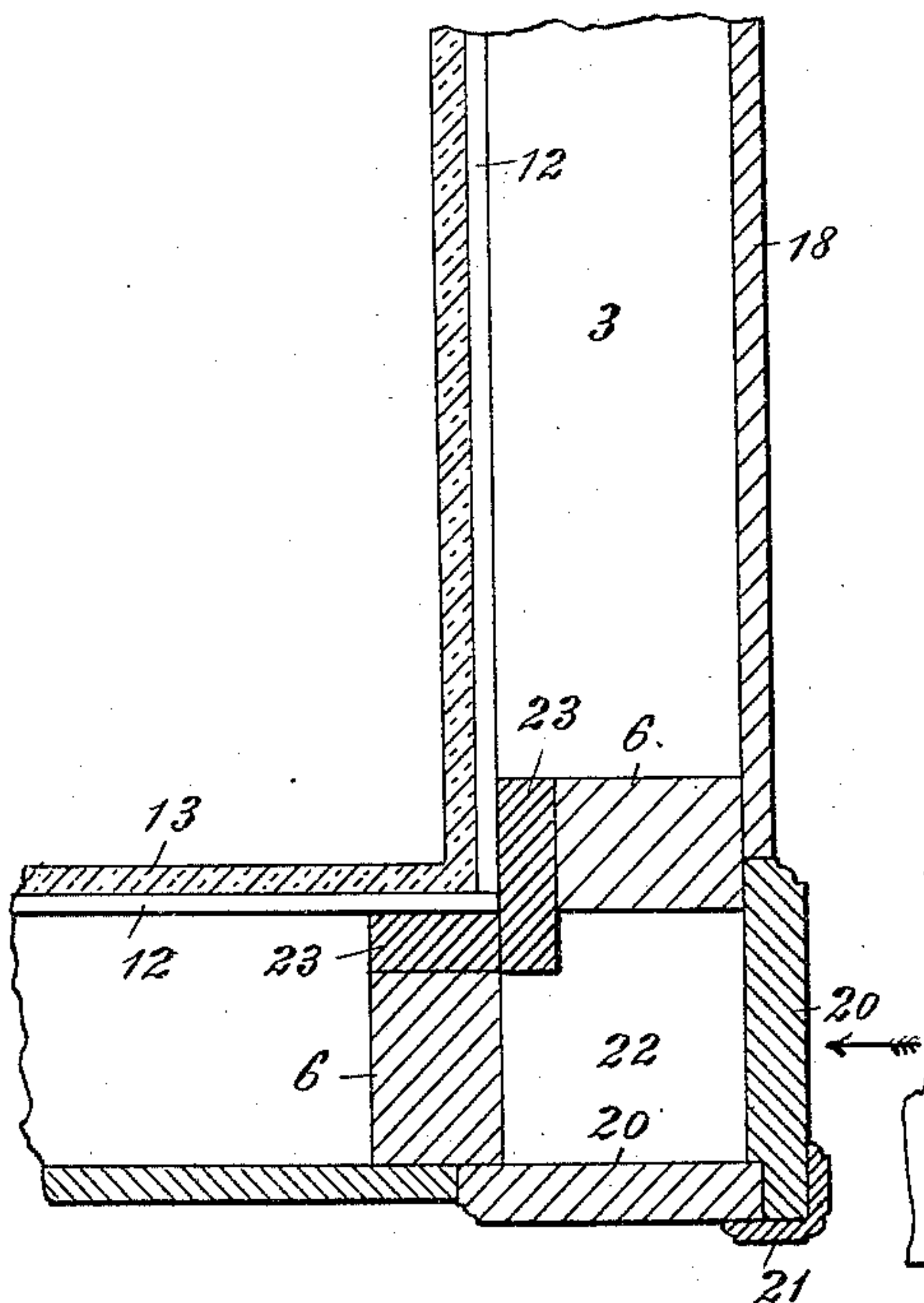
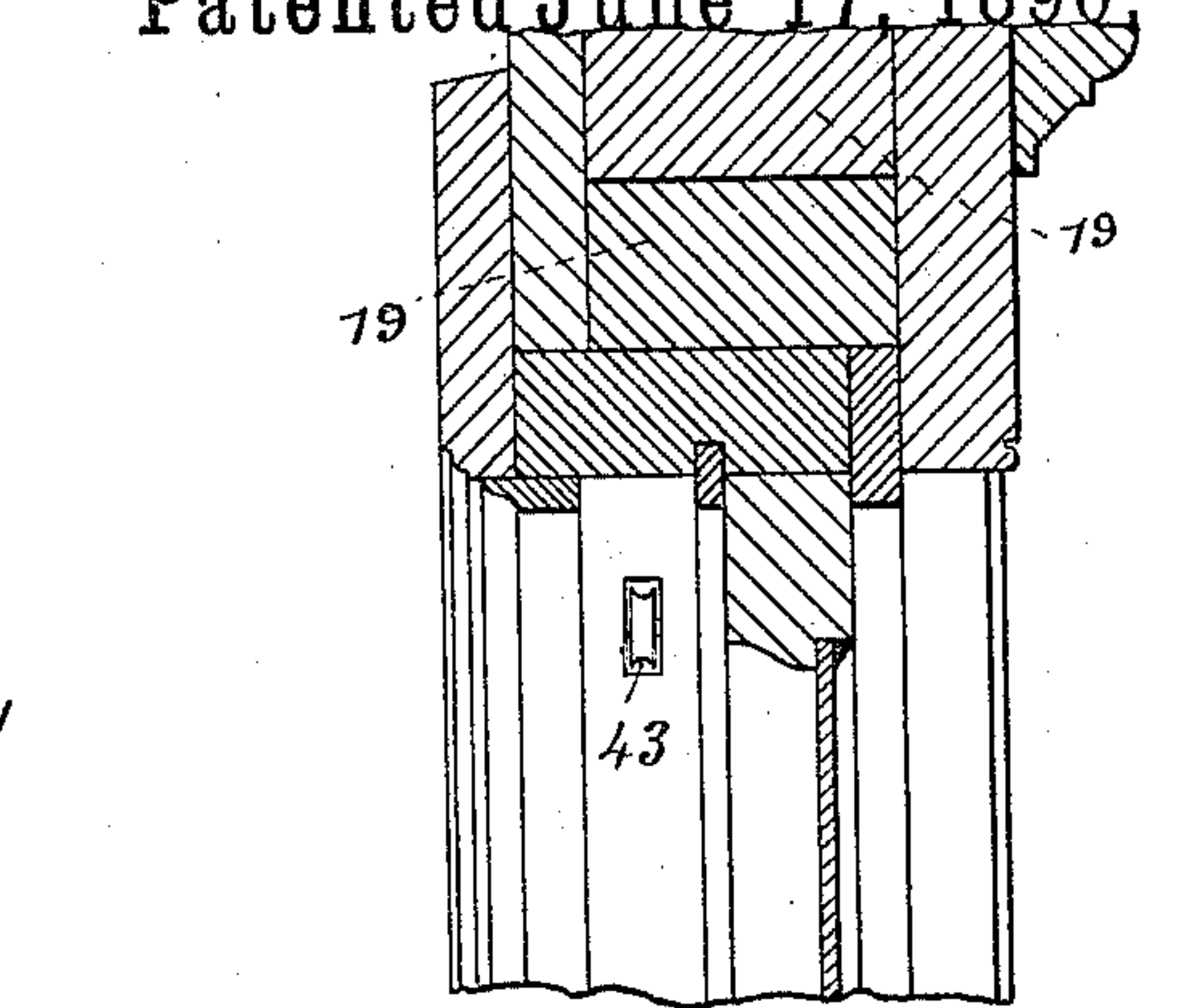
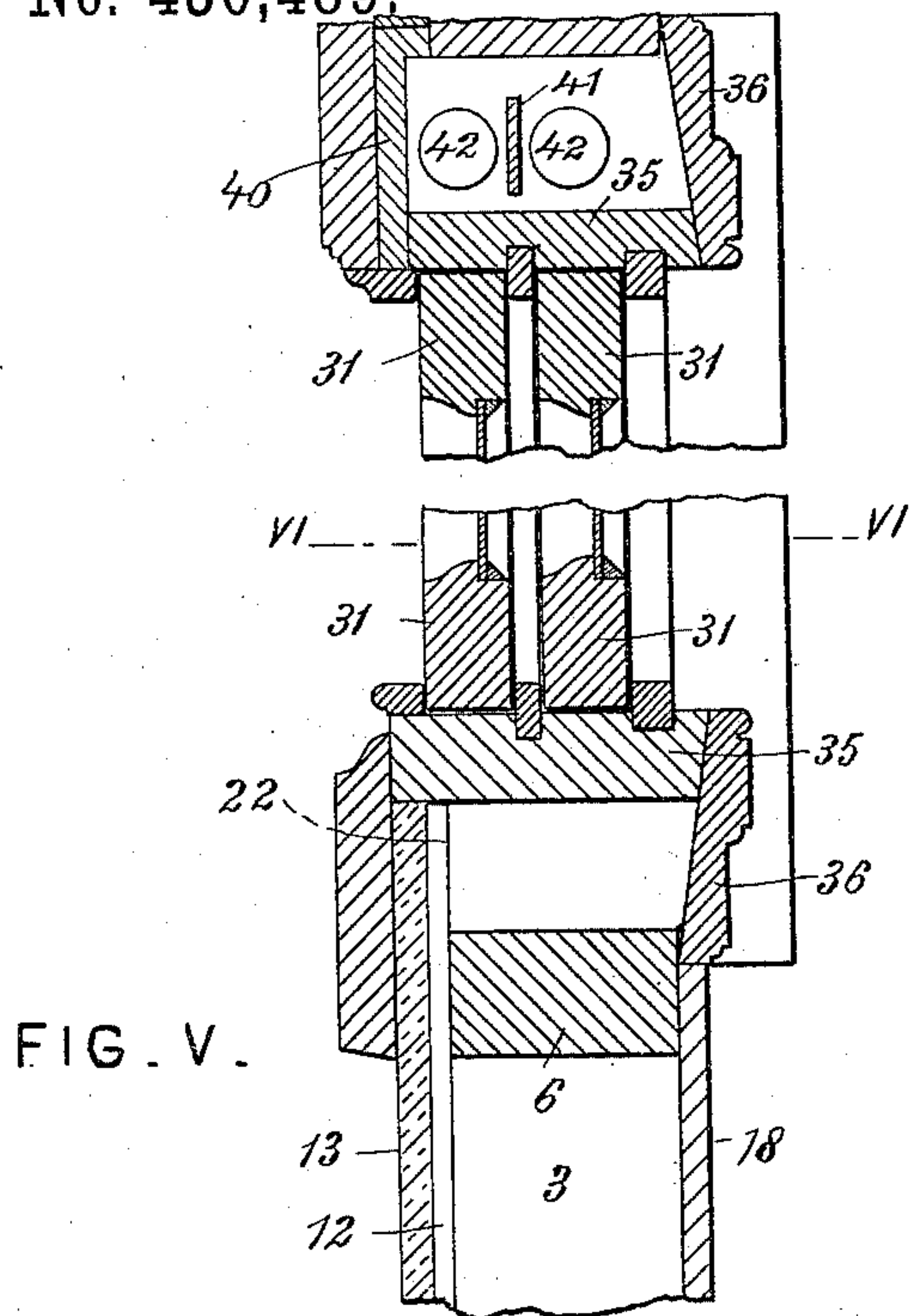
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FRAME HOUSE.

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Patented June 17, 1890.



Attest:
Geo. T. Smallwood.
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(No Model.)

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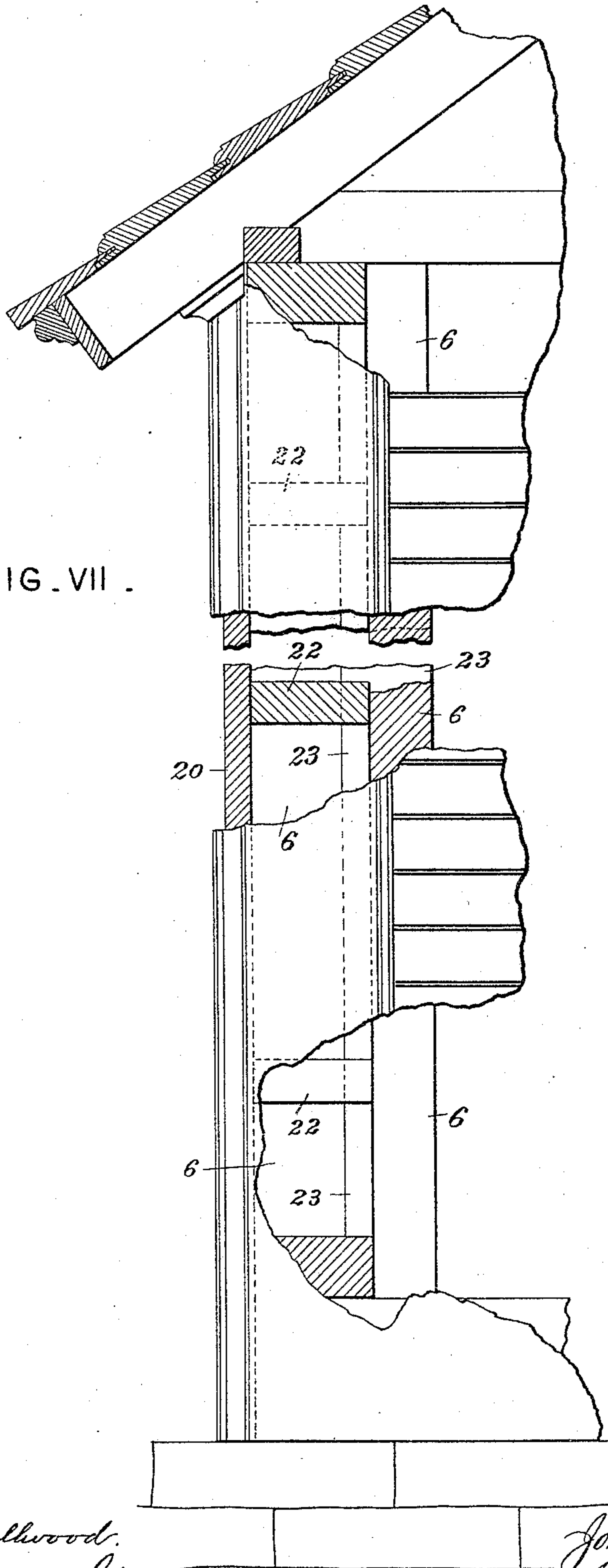
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FIG. VII.



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UNITED STATES PATENT OFFICE.

JOHN H. SHULL, OF FINDLAY, OHIO.

FRAME HOUSE.

SPECIFICATION forming part of Letters Patent No. 430,489, dated June 17, 1890.

Application filed May 25, 1889. Serial No. 312,020. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. SHULL, a citizen of the United States, residing at Findlay, in the county of Hancock and State of Ohio, have invented certain new and useful Improvements in the Construction of Frame Houses, of which the following is a specification.

The objects of my invention are to effect a stronger and more economical construction of the principal parts of a frame structure and to improve the appearance of the whole.

My invention relates to the construction of sills and parts supported thereby and upper joists; also, to the construction of corner-posts, window-frames, and trimmings for same, and to other details of construction.

My invention consists, first, of a sill constructed of a broad base-piece lying flat upon the wall or foundation, and having a spacing bearing-piece for the ends of the studding along one side and a longitudinal ridge-piece placed against the inner edge of the spacing-piece and forming a socket for the studding, a bearing, and an abutment for the joist, and a bearing for the door-sill and flooring, said spacing and ridge pieces together being of such width and thickness, respectively, as to leave a broad bearing-space for the end of the joist on the inner side, and the spacing and base pieces being flush on the outside for attachment of sill-boards.

My invention consists, secondly, in corner-posts and window-frames constructed with spacing-blocks interposed between the studding and the jambs, facing or siding at suitable distances apart, the sides, jambs, and studding being nailed to said blocks, and the blocks being so located in weight-frames as not to interfere with the free up-and-down movement of the weights. In the construction of corner-strips an L-shaped seamless strip is secured over the corner to cover the joint on frieze, corner-boards, and sill-boards.

My invention may be fully understood by referring to the accompanying drawings, in which—

Figure I is a vertical section through sill, floor, and door-sill, showing how constructed and the manner of placing and connecting joist, studding, sill-board, door-frame, and

floors with sill. Fig. II is a vertical sectional view showing the manner of mounting the upper joist. Fig. III is a horizontal section on the line III III, Fig. I. Fig. IV is an elevation, partly in section, showing the outer construction of one corner of a house. Fig. V is a horizontal section on the line IV IV, Fig. VI, showing also a section of the corner-post in the same plane. Fig. VI is a vertical section on the line VI VI, Fig. V. Fig. VII is an elevation, partly in section, showing the construction of the corner-post and looking in the direction of the arrow, Fig. V.

1 represents the foundation of a house.

2, 3, and 4 represent the base-piece, spacing-piece, and ridge-piece, respectively, of my improved sill, said pieces being placed in the relative positions heretofore specified.

The studding 6 is of equal width with the spacing-piece and is securely seated upon said spacing-piece and against the ridge-piece, its forward edge being flush with corresponding parts of pieces 2 3, so that the sill-board 8 may be securely nailed to each. The joist 5 abuts against the inner face of the ridge-piece 4, being tenoned and seated on an ample space left on the base-piece 2 not taken up by pieces 3 4.

7 is the flooring, which is nailed to both the joist and ridge piece, whose upper edges are flush, said flooring being first brought against the studding. In placing the door-frame the tread 9 is dropped into the ridge-piece 4 sufficiently to bring the upper surface of the tread level with the flooring, and the weather-strip 10 is then placed over the seam.

11 is the door-jamb, and 14 the door. The studding 6 is preferably doubled at the door-jambs, as shown in Fig. III.

In mounting the upper joists the joist-beam 15 is gained into the studs 6, so as to form a rigid seat for the joist 16, which is gained out so as to drop over the joist-beam about one inch. Thus a durable connection is secured for the upper joist and side, which braces the latter in both directions, as shown in Fig. II.

In mounting the rafters the plates 19 are doubled and a heel-strip 24 mounted thereon, against which the heel of the rafter 25 can rest, as shown in Fig. IV.

Referring now to Figs. V and VII, 22 rep-

resents horizontal square spacing-blocks placed at intervals, one above the other, and in constructing a corner two pieces of the studding 6 6 are secured to the blocks in vertical planes at right angles to each other. To the outer faces of these blocks are attached the corner-boards 20, which are rabbeted together and have their seam covered by a strip 21 of peculiar construction. This strip is molded and has two sides at right angles, the whole being sawed out of a single piece. The studding 6 at the corners is made one inch narrower than the intermediate studding, so as to admit an inner corner-frame 23, formed of two vertical boards. This corner-frame is not fastened to the studding in any manner, but simply placed in position and held by the lathing 12 and superposed plastering 13. The object and advantage of the structure are that the studding is allowed to shrink without the usually-resulting cracking of the plaster. The weather-boarding 18 is joined neatly with the molded edge of the corner-boards, and both being fastened to the same piece the joint is prevented from opening to admit air and moisture. The same result is obtained at door and window frames.

The construction of the window-frames is as follows: To the jambs 35 are fastened the spacing-blocks 22, which furnish a solid support for the casing 36 and space the studding 6 at a uniform distance from the face of the jamb 35, making the opening for either box or corner frames the same, this opening always being eleven inches wider than the glass used in the window, and forming in connection with the jamb 35, studding 6, casing 36, and plaster-ground 40 a complete box for the weights, allowing no circulation of air through pulleys. The jamb 35 projects over the line of the outside wall, affording a direct connection with the casing and allowing the use of seven-eighths-inch lumber for casings and providing a sufficient rabbet to receive blinds, guideways, and stop for sash within a three-and-three-quarter-inch wall. The casing being secured to the jamb at an angle, rests on the studding 6 on the extreme edge, forming a perfect joint, and preventing the gaping of casings when used on green or wet studding. For this reason the outer surface of the casing 36 is stepped in planes parallel to the weather-boarding and have their edges molded to match the corner-board and edge of the weather-boards. In constructing a window-frame for weights the blocks are made slightly wider and are placed one just below the limit of the movement of the weight 42 and one just above the pulleys 43. The usual strip 41 is also provided for separating the weights.

29 is the inside window-stool, and 31 the lower sash of the window, which have correspondingly-beveled edges, which meet, as at 30, to insure a tight joint, which will be at once freed by lifting, as will appear by reference to Fig. VI.

32 is a strip of molding, and 33 is the sill or bottom of the window-frame.

In mounting frames the plates 19 are doubled above and below, so as to make a firm and lasting support for the frames.

In placing the cornice at the eaves the edge of the molding used should correspond in thickness with the cap 21 on the corner and furnish a stop for same. A neat joint is made between the strip 21 and molding 26, the former extending from said molding to the bottom of the sill-board. 27 is an additional strip of molding.

The advantages of my invention are obvious. The sill makes a durable and strong fastening for the studding and a vermin and weather proof base. The upper joist is mounted in such a way as to be secured in place and at the same time brace the studding and the whole sides of the house. The corners and frames are not only strong and durable, but economical and light, and several pieces of lumber are saved in the construction of each opening and corner. The whole structure affords a better opportunity for the painter to decorate.

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

1. In a frame house, a sill constructed of the broad horizontal base-piece 2, the spacing-piece 3, placed along one side of the base-piece, and the bracing ridge-piece 4, placed upon the base-piece against the spacing-piece and leaving the receptacle for the joist on the opposite side from the spacing-piece, substantially as set forth.

2. In a frame house, the combination of the base-piece, the ridge-piece resting upon the base-piece within its edges and forming with said base-piece the receptacles on opposite sides for the joist and studding, as set forth.

3. In a frame house, the combination, with joist and studding, of base-piece and the spacing and ridge pieces resting upon and forming with the base-piece the receptacles for said joist and studding on opposite sides of the ridge-piece, substantially as set forth.

4. The combination of the base-piece, the ridge-piece located within the edges of the said base-piece and forming the receptacles for joist and studding, the joist resting on the base-piece and having its upper edge flush with the ridge-piece, the flooring secured to both joist and ridge-piece, the studding made flush with the outer edge of the base-piece, and the siding secured to both base-piece and studding, whereby an air-tight and vermin-proof base is formed, substantially as set forth.

5. The combination of the base-piece, ridge-piece, joist, studding, flooring secured to the joist and ridge-piece, and siding secured to the base and studding, all substantially as set forth, forming a weather and vermin proof base, as explained.

6. In a frame building, a box for windows or corners, constructed of the studding, the casing or siding, and spacing-blocks interposed between them at suitable intervals, substantially in the manner explained.

7. A corner for frame buildings, constructed of the spacing-blocks 22, the corner-boards 20, the studding 6 on the sides opposite the corner-boards, and the corner-frame 23, placed within said studding.

8. A corner for frame buildings, constructed of the spacing-blocks 22, corner-boards 20, secured to the outer sides of the blocks, the seamless strip 21, placed over the seam in the corner, the studding secured to the inner sides of the blocks, the corner-frame 23, placed within the studding, and the lathing and plastering securing the corner-frame in position, all substantially as and for the purposes set forth.

9. In a window-frame for buildings, the combination of the jambs 35, blocks 22, studding 6, and plaster-ground facings 40 36, all substantially as and for the purpose set forth.

10. In a window-frame, the combination, with the broad jambs 35, the studding 6, and spacing-blocks between the same, of the inclined facing 36, having stepped surface parallel to the siding, substantially as and for the purpose set forth.

11. In a window-frame, the combination of the jambs 35, having pulleys 43, the spacing-blocks below near sill and above the pulleys with the studding, forming a box for sash-weight, all substantially as and for the purpose set forth.

JOHN H. SHULL.

Witnesses:

W. S. VAN HORN,
B. W. WATTERMORE.