

No. 682,274.

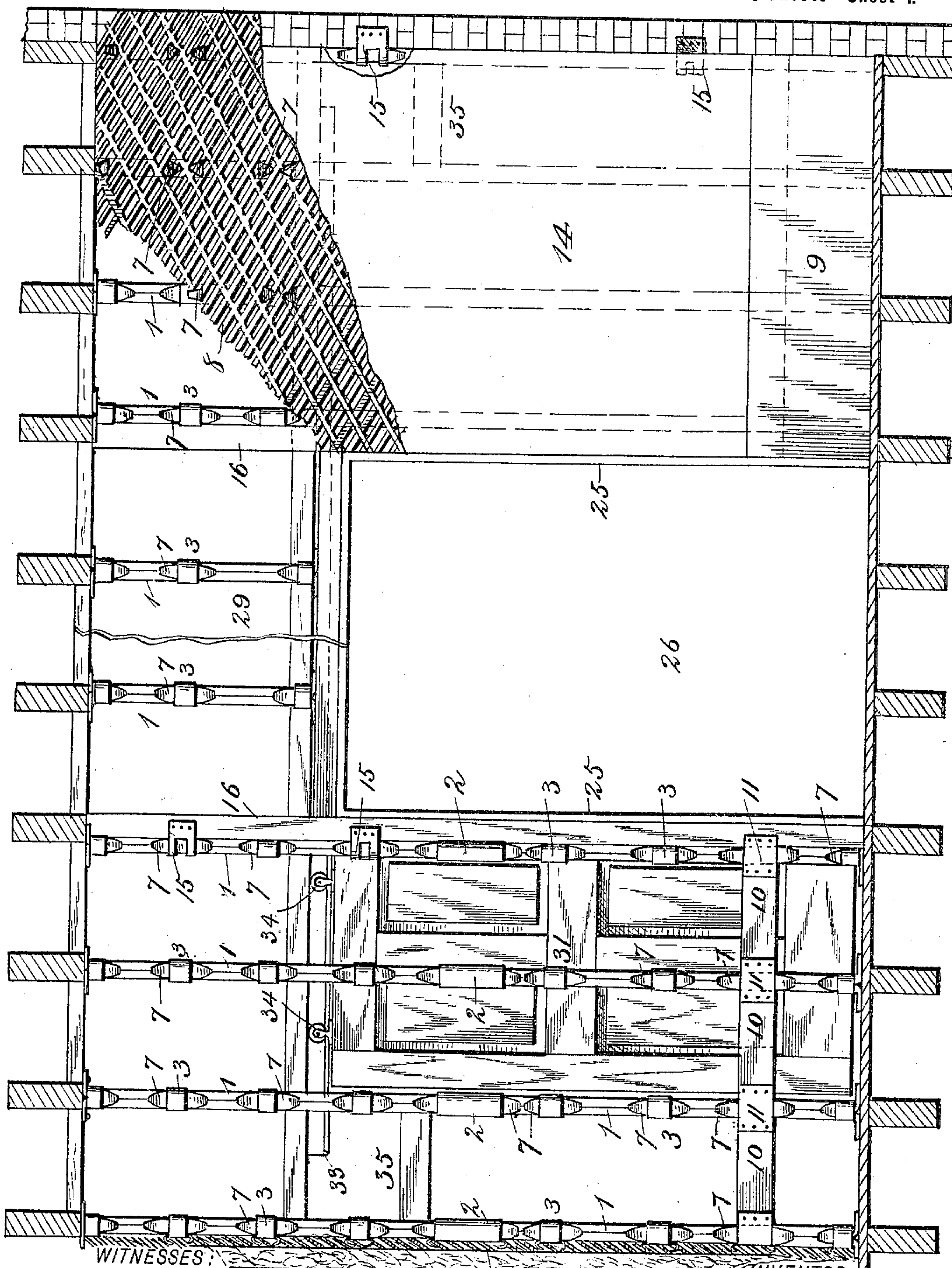
Patented Sept. 10, 1901.

S. E. RABBITT.  
FIREPROOF PARTITION FOR BUILDINGS.

(Application filed June 20, 1901.)

(No Model.)

3 Sheets—Sheet I.



WITNESSES:

Frank L. Ourand  
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Fig. 1

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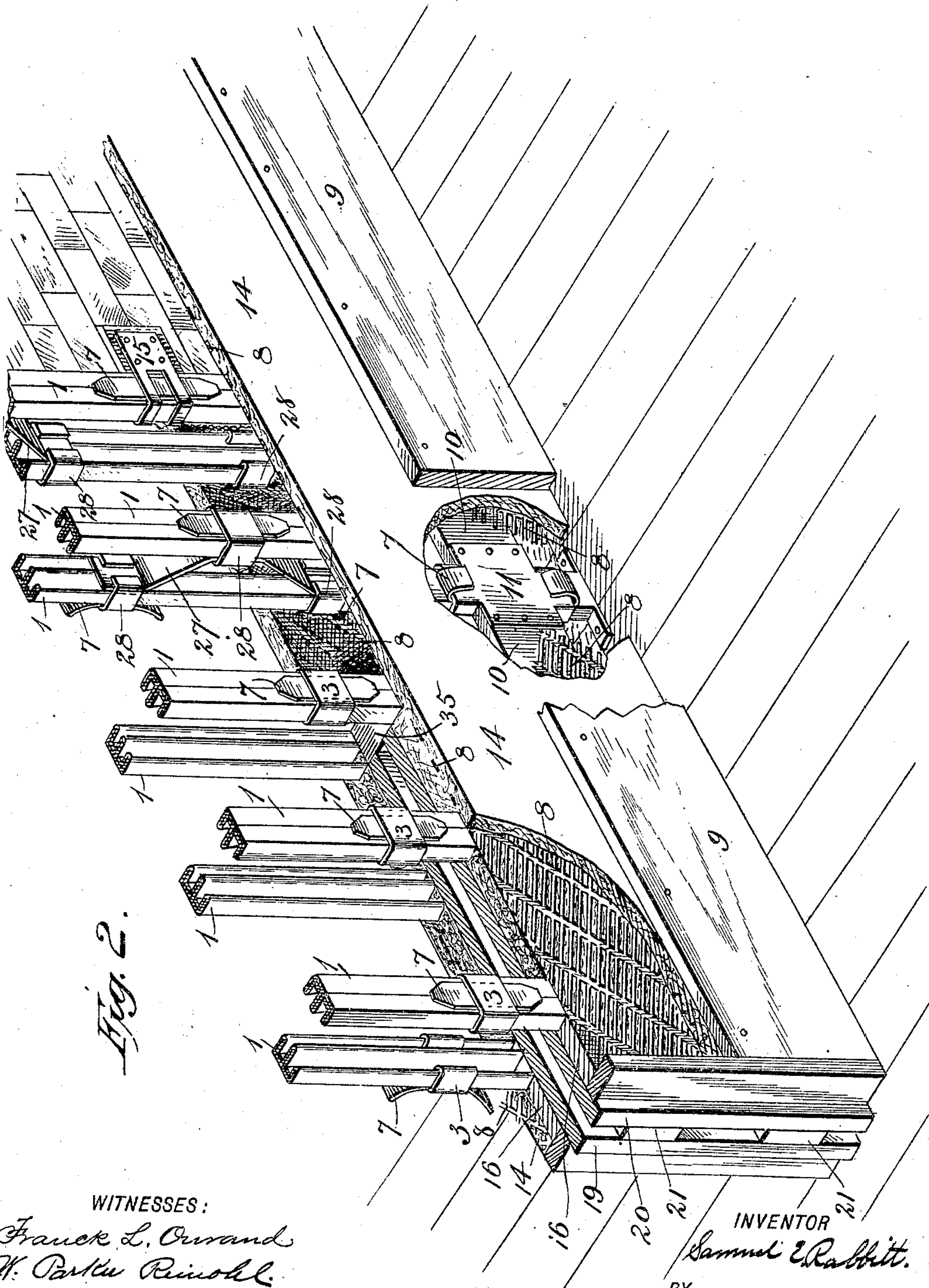
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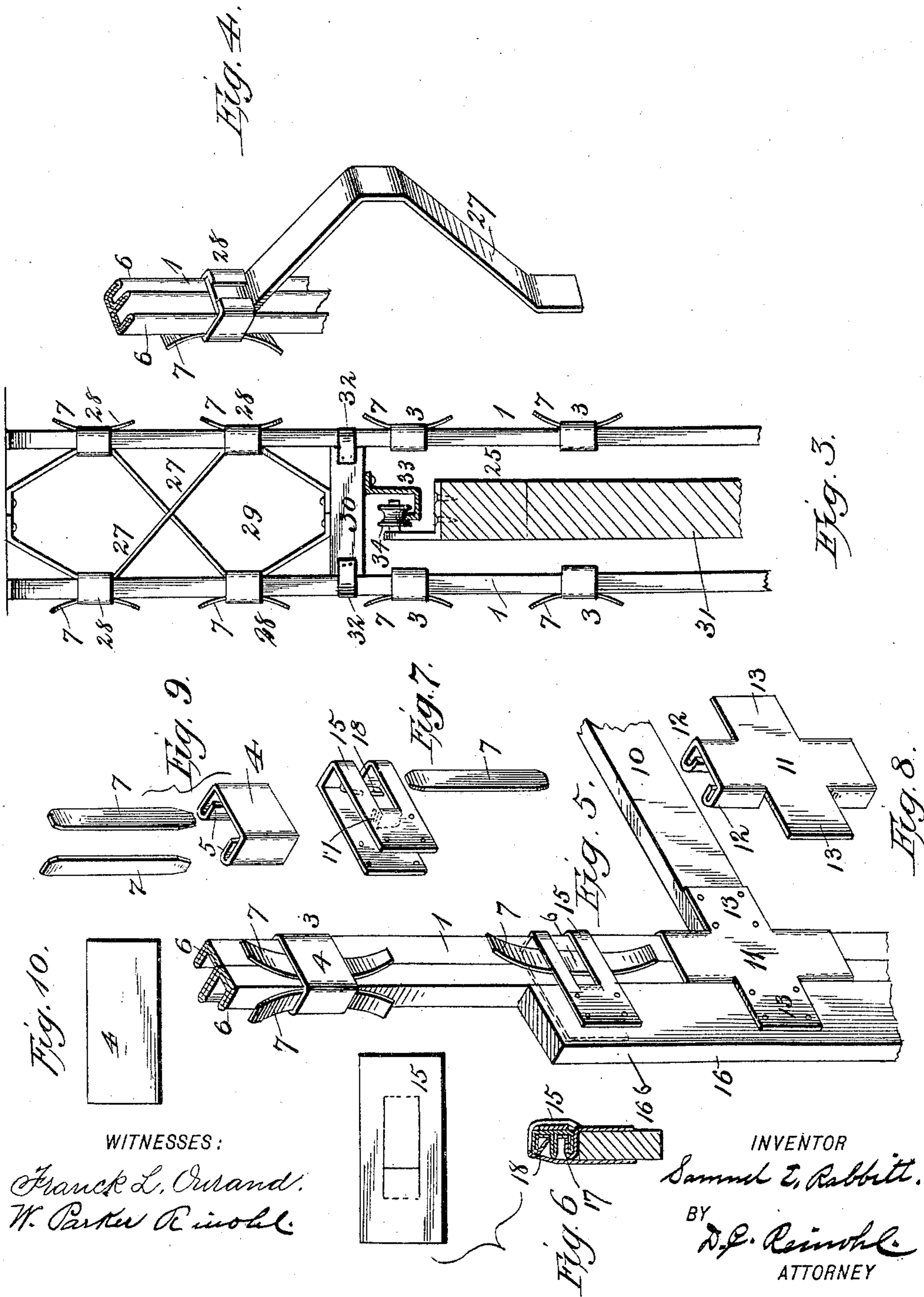
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3 Sheets—Sheet 3.





# UNITED STATES PATENT OFFICE.

SAMUEL E. RABBITT, OF WASHINGTON, DISTRICT OF COLUMBIA.

## FIREPROOF PARTITION FOR BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 682,274, dated September 10, 1901.

Application filed June 20, 1901. Serial No. 65,308. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL E. RABBITT, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Fireproof Partitions for 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.

My invention relates to the construction of buildings, has especial reference to partitions, has for its object a fire, rat, germ, and vermin proof structure, presenting a solid composite partition of metal and plastic material, preferably cement, which shall be as thin as practicable to secure strength and rigidity, and consists in certain improvements in construction, which will be fully disclosed in the following specification and claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents an elevation of a partition embodying my invention, showing on part thereof the stud-ding in position without the lathing applied, a double partition or pocket for a sliding door, the lathing, and the plastic material applied to the studding on another part thereof; Fig. 2, a perspective, on an enlarged scale, showing the manner of constructing a double partition and pocket for a sliding door; Fig. 3, a vertical transverse section of the partition before the metallic lathing is applied, showing the lateral braces between the studs above the door-opening and the door suspended, as it appears after the partition has been completed. Fig. 4 is a perspective, on an enlarged scale, showing part of one stud and a lateral brace secured thereto. Fig. 5 is a perspective showing a stud with several different clips attached; Fig. 6, a transverse section, on a reduced scale, through the stud, the clamp, and the post on line 6 6, Fig. 5. Fig. 7 is a perspective of one of the clips for securing the door-frame to the metallic stud adjacent thereto; Fig. 8, a like view of a clip for securing a washboard-base strip to the studs; Fig. 9, a like view of a clip for securing wire lathing or expanded metal to the studs, and Fig. 10 is a plan view of the blank from which the latter clip is made.

Reference being had to the drawings and the designating characters thereon, 1 indicates metallic studs, preferably of the form shown, described, and claimed in my application for a patent filed April 20, 1901, Serial No. 56,735; but any other approved form of stud may be used.

The studs are in two sections connected by a coupling 2 and are provided with adjustable clips 3, which in this instance consist of a band 4, having inwardly-bent flanges 5 to engage the side ribs 6 of the metallic stud, and one or more separate straps 7, which are inserted between the band 4 and the stud to engage the metallic lathing. The construction and the application of this clip are clearly shown in Figs. 5 and 9 in enlarged views, and the general application of the clips to the studs and the lathing is shown in Fig. 1. The clips are loose on the studs, so that they may be readily adjusted thereon to suit the interstices in the lathing, through which the straps 7 are inserted and bent back upon the lathing, as shown at the upper right-hand corner of Fig. 1 and at the left end of the same figure, in which a partition at a right angle to that shown in elevation is shown secured to the latter by the straps of the clips 3 engaging the metallic lathing 8.

To provide a base for the washboard 9, strips of wood 10 are secured between the studs 1 by clips 11, which are provided with flanges 12, bent to engage the side ribs 6 of the studs, and with arms 13 to engage the ends of the strips 10, and are secured thereto by nails, and thereby forms an effectual base embedded in the plastic material 14 and to which the washboard is secured, as shown in Fig. 2.

In the construction of fireproof partitions in which metallic studs are used great difficulty is encountered in securing a base for the washboard, and wedging and other means have been resorted to only to find that the base would not endure the driving of nails without loosening the base. The construction described effectually overcomes this difficulty and provides a practical way of securing the base so that it cannot be displaced or loosened. Another difficulty has been found in securing the post of a door-frame to the stud adjacent thereto to prevent the frame



becoming loose and the jar of the door breaking the plaster. To overcome this, I provide clips 15, which are placed at suitable intervals on the stud to secure the post 16 rigidly thereto. This clip 15 is provided with flanges 17 and 18, cut out of the body of the metal and bent to engage the side ribs 6 of the stud, as shown in Figs. 6 and 7, and the ends of the clips engage and are secured to the post 16. The flanges 17 and 18 secure the clip to the stud, so that the clip cannot move laterally, and the clip secures the post to the stud by the ends of the clip embracing the sides of the post. This clip is also used to secure a stud to a brick wall, as shown on the right-hand side of Fig. 1.

To provide a smooth inner surface for each partition in the pocket in which a sliding door works, false doors or dummies 19 and 20 are employed and are pushed into the pocket, separated, and held against the inner faces of the studs 1, as shown in Fig. 2, by strips or wedges 21, when the plastic material 14 is applied to the metallic lathing 8 and driven through its interstices until it packs against the false doors, when it is allowed time to set, after which the false doors are removed and a smooth inner surface of the partition is provided.

To stiffen the double partitions beyond the door-pockets 25 and above the door-opening 26, vertical and lateral metallic braces 27 are inserted zigzag or crossed alternately and secured to the studs 1 by clips 28, (also provided with straps 7,) which braces effectually resist lateral movement of the partitions, and in the space 29 above the door the braces extend to and are secured to the ceiling above at one end and to the rail-support 30 at the opposite end, as shown in Fig. 3, whereby the weight of the door 31 is partly sustained by the braces 27. The rail-support is also secured to the studs 1 by clips 32 or in any other manner. The rail 33 is secured to the rail-support in the usual way, and the door is provided with rollers 34, which engage the rail.

In the rear of each door-pocket 25 transverse blocks 35 are inserted between opposite studs 1 to form a stop for the door and prevent its being pushed in too far, as shown in Figs. 1 and 2, and in which, Fig. 1, one of the doors 31 is shown in a pocket in the skeleton partition.

Having thus fully described my invention, what I claim is—

1. A partition consisting of metallic studs extending from a floor to a ceiling provided with base-boards between and secured to the studs by clips, and metallic lathing secured to the studs; in combination with plastic material embedding the studs and the lathing.

2. A partition consisting of metallic studs, a door-frame having a member secured to a stud by clips engaging the stud and embracing the sides of said member, and metallic lathing secured to the studs; in combination with plastic material embedding the studs and the lathing.

3. A double partition consisting of metallic studs, vertical and lateral zigzag or crossed metallic braces between the studs of the two partitions and secured thereto by clips, and metallic lathing secured to the studs; in combination with plastic material embedding the studs and the lathing.

4. A double partition consisting of metallic studs, vertical and lateral metallic braces between the studs of the two partitions and secured thereto, a track-rail support engaged by one end of said braces, metallic lathing secured to the studs, and plastic material embedding the studs and the lathing.

5. A double partition consisting of studs, a track-rail support between the studs, braces secured at one end to the ceiling above and at the opposite end to said track-rail support and secured to the studs intermediate its ends, lathing secured to the studs, and plastic material embedding the studs and the lathing.

6. A clip for securing metallic lathing, consisting of a body-piece having flanges to engage a metallic stud, and a separate strap engaging the body.

7. A clip for securing metallic lathing, consisting of a body-piece having flanges to engage a metallic stud, parts extending beyond the stud to engage another member of the partition, and a separate strap engaging the body for securing lathing to the stud.

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

SAMUEL E. RABBITT.

Witnesses:

D. C. REINOHL,  
W. PARKER REINOHL.