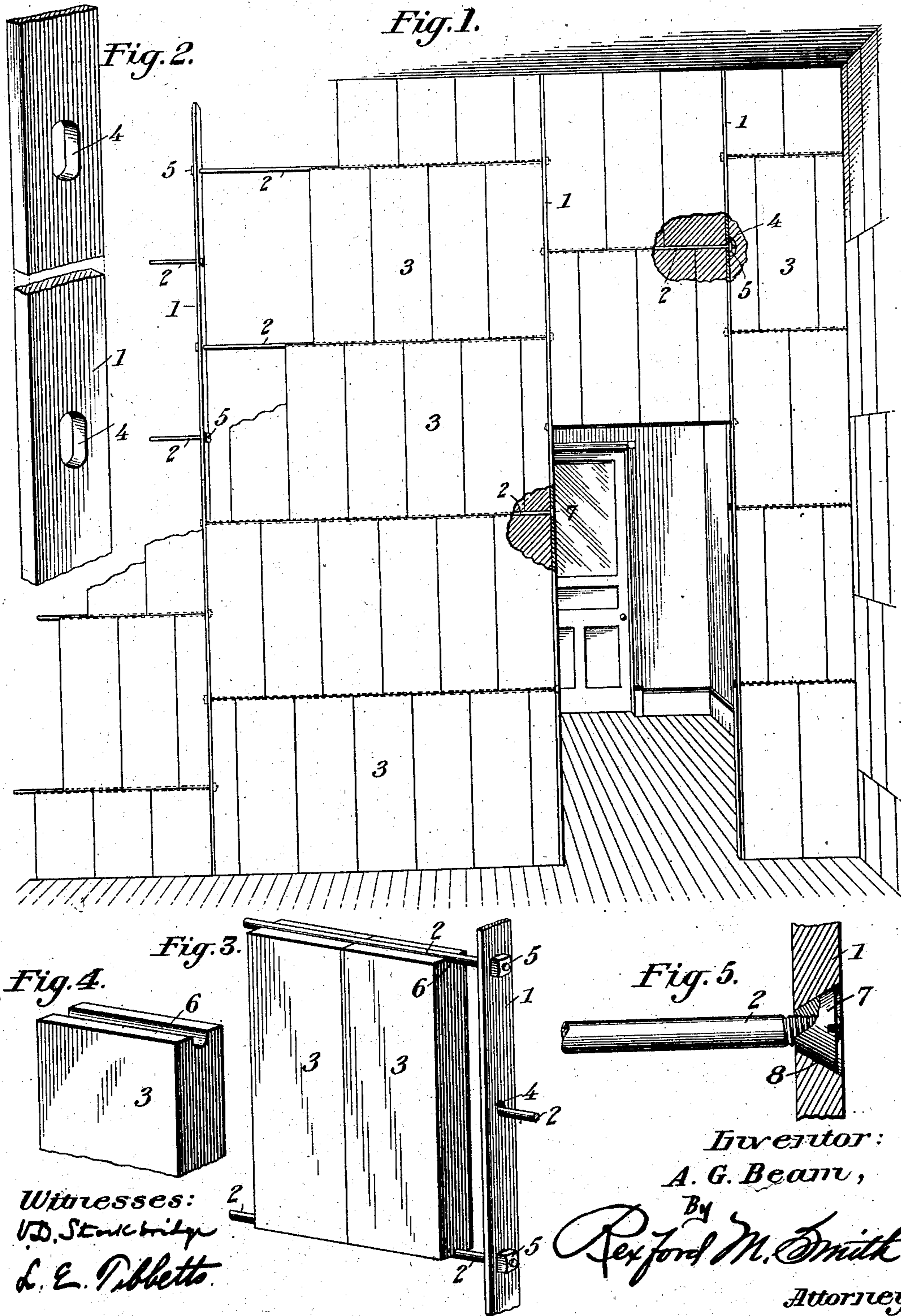


No. 683,195.

Patented Sept. 24, 1901.

A. G. BEAM.
FIREPROOF PARTITION.
(Application filed Apr. 20, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

ANDREW G. BEAM, OF NEW YORK, N. Y.

FIREPROOF PARTITION.

SPECIFICATION forming part of Letters Patent No. 683,195, dated September 24, 1901.

Application filed April 20, 1901. Serial No. 56,699. (No model.)

To all whom it may concern:

Be it known that I, ANDREW G. BEAM, a citizen of the United States, residing at New York, in the county of New York and State

5 of New York, have invented a certain new and useful Fireproof Partition, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to fireproof partitions; and the object in view is to provide means whereby a thoroughly fireproof partition may be expeditiously erected, the construction of the partition admitting of the provision at any desired points of doorways,

10 windows, transoms, and the like. A partition constructed in accordance with the present invention may, if desired, be made of comparatively slight thickness, so as to economize space to the maximum extent, while at

15 the same time securing a rigid, durable, and effective construction.

One of the most valuable features of the invention resides in the particular relation which exists between the studs, stringer-rods, and fireproof blocks or tiles, whereby the erection of the partition and the assembling of the several parts thereof may be conveniently and practically accomplished in a neat and ready manner.

20 With the above and other objects in view, the nature of which will appear more fully hereinafter, the invention consists in the novel construction, combination, and arrangement of parts hereinafter fully described, illustrated, and claimed:

In the accompanying drawings, Figure 1 is a perspective view illustrative of a partition partially formed in accordance with the present invention, showing a doorway, parts being broken away in section to show certain details of construction. Fig. 2 is a broken perspective view of one of the studs. Fig. 3 is a detail perspective view illustrating the relation existing between the studs, stringer-rods, and blocks or tiles. Fig. 4 is a fragmentary perspective view of one end of a block or tile grooved for engagement with one of the stringer-rods. Fig. 5 is a detail section illustrating the application of a flush-seating nut

25 to one of the studs and stringer-rods.

Similar numerals of reference designate cor-

responding parts in all the figures of the drawings.

Referring to the drawings, 1 designates a series of studs extending from the ceiling to the floor and which may be terminally secured to channel-bars or have any suitable provision for enabling the opposite ends thereof to be securely attached to the ceiling and floor, respectively. The studs are connected by means of stringer rods or bolts 2, which form the support for a series of fireproof blocks or tiles 3, arranged in abutting order side by side and in parallel horizontally-extending rows, as illustrated in Fig. 1.

In carrying out the present invention each of the studs 1 is provided with a longitudinal series of longitudinally-elongated slots or apertures 4 for the reception and a limited amount of play of the opposite ends of the stringer rods or bolts 2, which when brought to the final adjustment are permanently and rigidly secured in place by means of terminal nuts 5, applied to the opposite threaded ends of said rods or bolts. It is also preferred to arrange the stringer rods or bolts 2 alternately or in staggered relation to each other, as shown in Fig. 1, so that the rows of blocks or tiles 3 will bear a corresponding relation to each other. The fireproof blocks or tiles 3 are provided in their opposite upper and lower edges with longitudinal grooves 6, semi-circular or semicylindrical in cross-section, the said grooves being adapted to receive the stringer rods or bolts 2, as best illustrated in Fig. 3. In this manner the opposite ends of each of the blocks 3 is securely held by the stringer rods or bolts and prevented from displacement. The object in providing the elongated slots 4 in the studs is to allow for a sufficient raising and lowering of the stringer-rods to admit of the insertion of the blocks 3 and the subsequent dropping of the stringer-rods into the grooves in the upper ends of the blocks. This greatly facilitates the construction of a partition and the assembling of the parts thereof and enables a partition to be quickly set up. After completion the blocks are permanently secured and locked in place between the studs by means of the stringer rods or bolts, which also form supports for the blocks and tie the

studs together at opposite ends of the rows of blocks.

In order to provide a neat finish adjacent to the jambs of a door, window, or transom and the like, I employ a tapered or frusto-conical flush-seating nut 7, as shown in Fig. 5, which screws upon the threaded end of the stringer rod or bolt 2 and is received in a correspondingly tapered or flared opening 8 in the stud 1, forming a part of the jamb or frame of the door, window, or transom opening, as the case may be. From the foregoing description it will be seen that the studs are securely tied together by means of the stringer-rods and that said rods are arranged in staggered relation or alternate order, thereby more effectually bracing the frame of the structure; further, that the several rows of tiles or blocks are arranged to alternate with each other, and it will be apparent that the tiles or blocks of adjoining parallel rows may be arranged to lap joint, as shown in Fig. 1, thereby adding to the permanence and strength of the partition as a whole. It will further be seen that ample provision has been made for giving a neat flush finish adjacent to the jambs or frames of doorways and window or transom openings and the like. The parts of the partition are exceedingly simple in construction, cheap in manufacture, and may be assembled in an expeditious manner.

I do not desire to be limited to the details of construction and arrangement hereinabove set forth, and accordingly reserve the right

to change, modify, or vary the construction within the scope of the appended claims.

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

1. In fireproof partitions, the combination with parallel metal studs provided with longitudinally - extending slots, of parallel stringer-rods having their ends slidingly mounted in said slots, fireproof blocks insertible between the studs and provided in their meeting edges with grooves coextensive with such edges to receive and conceal the stringer-rods, and means for fastening the rods after they have been adjusted to the blocks.

2. In fireproof partitions, parallel metal studs, in combination with parallel stringer-rods having their ends movably mounted in openings in the studs, means for fastening one end of each rod adjacent to a door or like opening in the partition consisting of a tapered and flush-seating nut, and rows of fireproof blocks having their opposite edges grooved to engage with opposite sides of each of the stringer-rods and entirely conceal the latter, the rods forming locks for preventing lateral movement of the abutting edges of the blocks, substantially as described.

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

ANDREW G. BEAM.

Witnesses:

THOMAS MURRAY,
G. D. JONES.