

(No Model.)

P. SMITH.

FIRE PROOF PARTITION.

No. 377,175.

Patented Jan. 31, 1888.

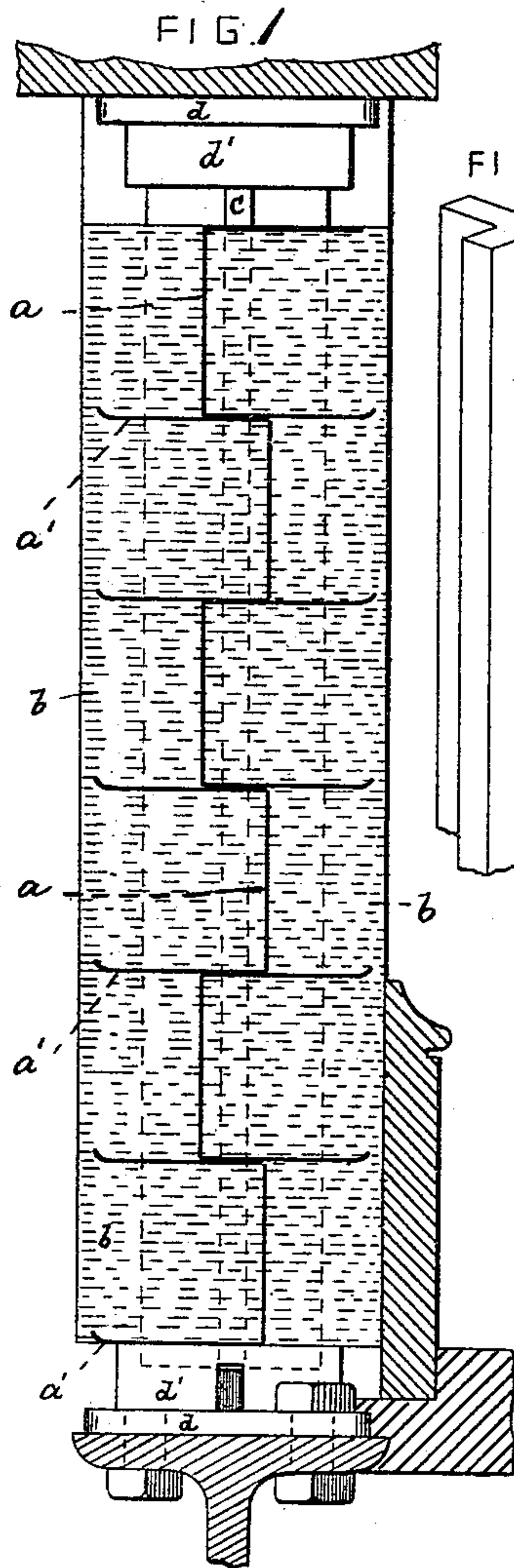


FIG. 3

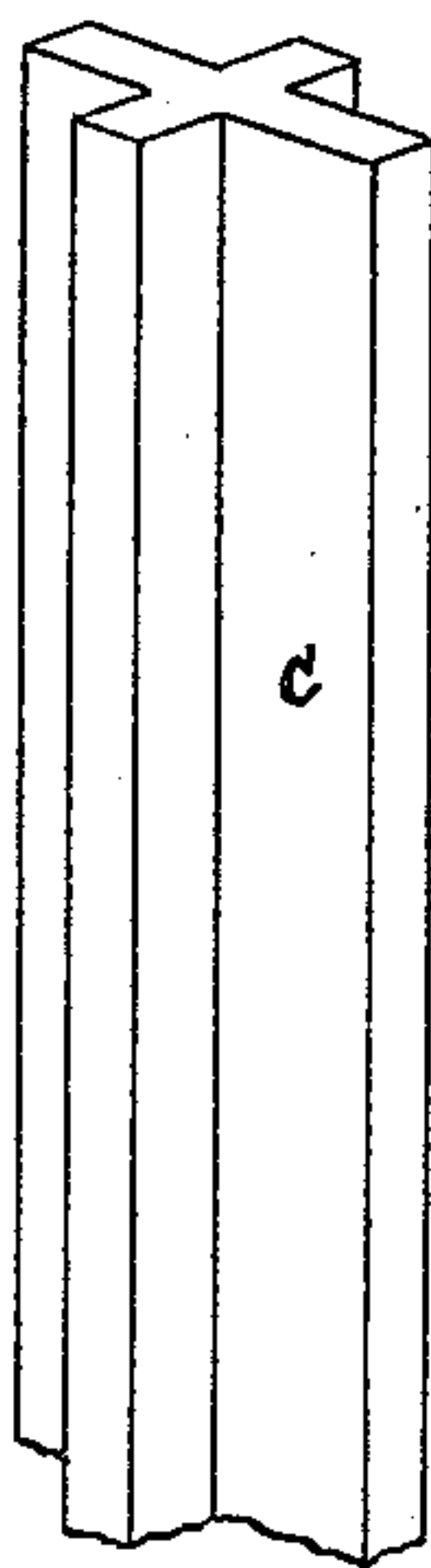


FIG. 2

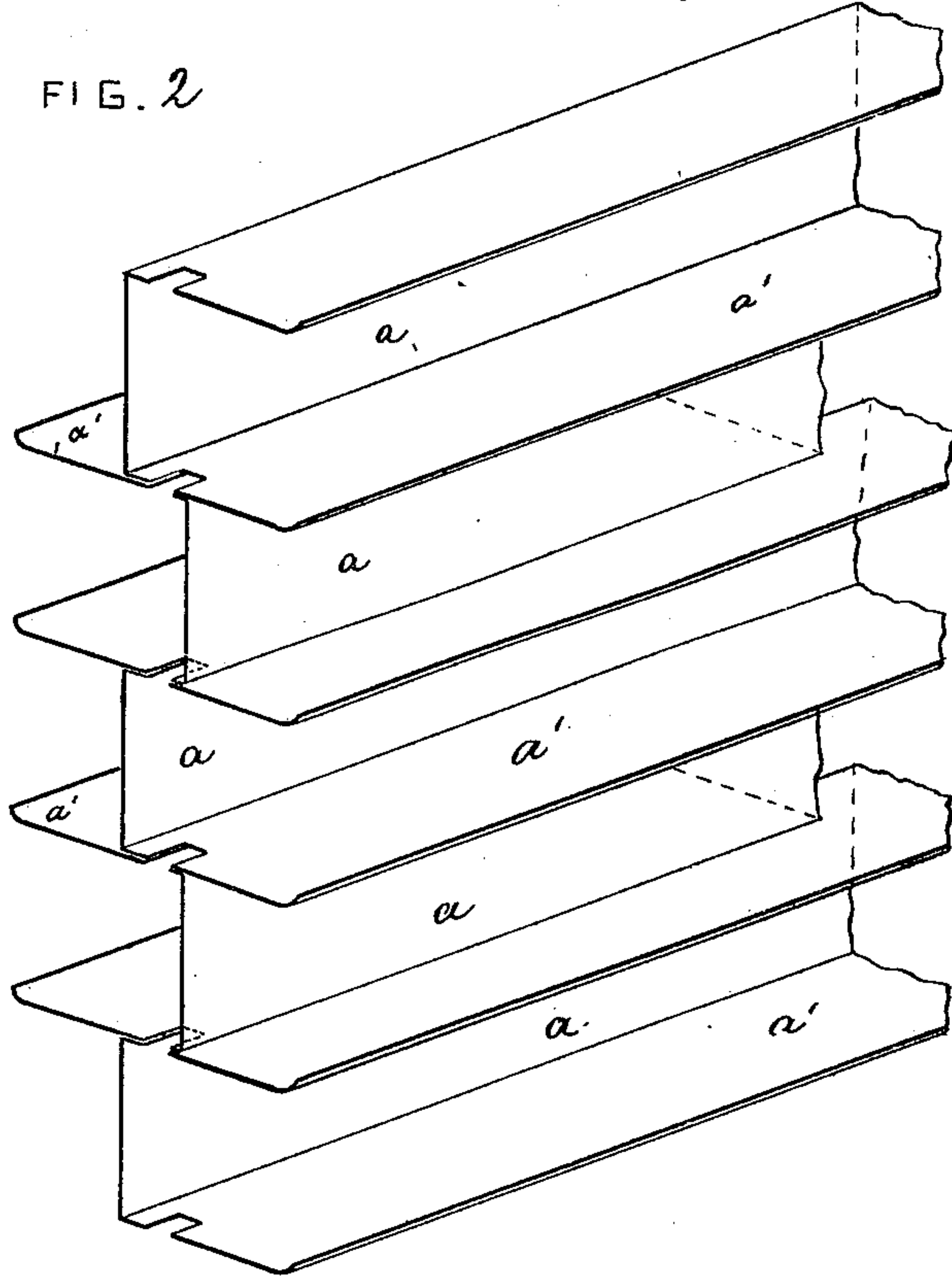


FIG. 5

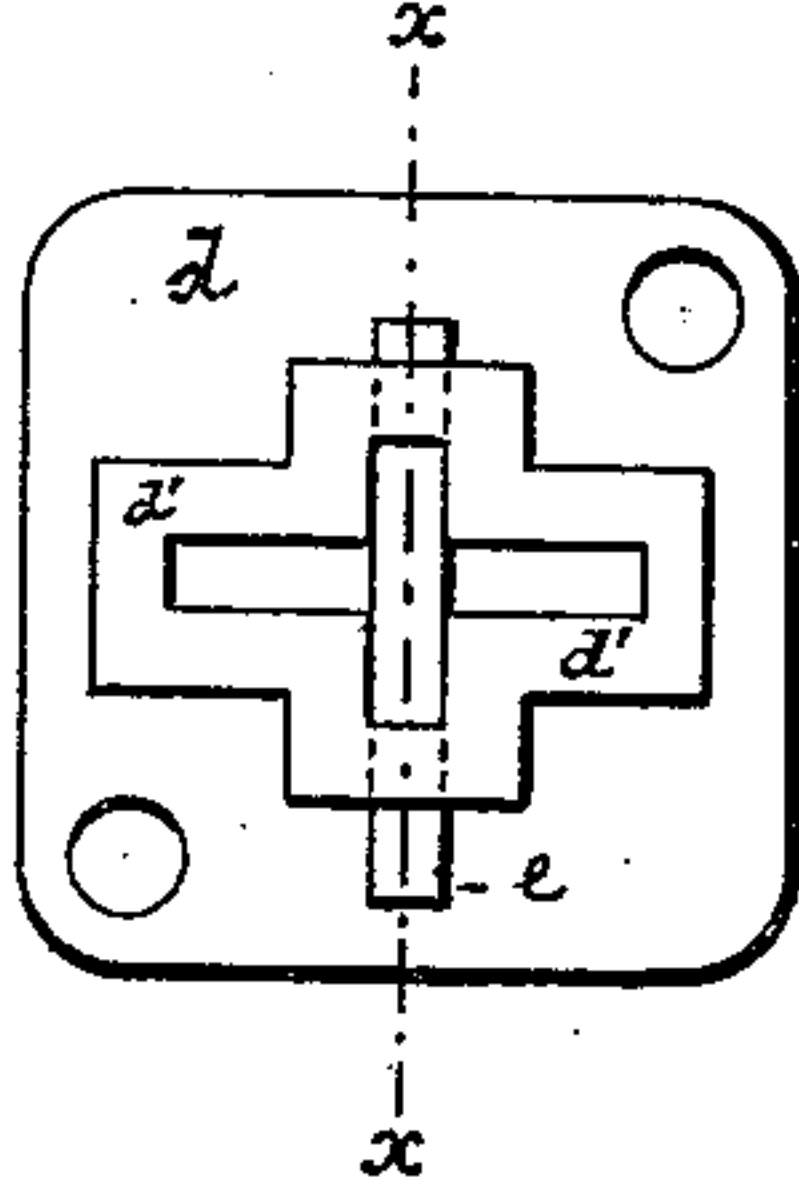


FIG. 6

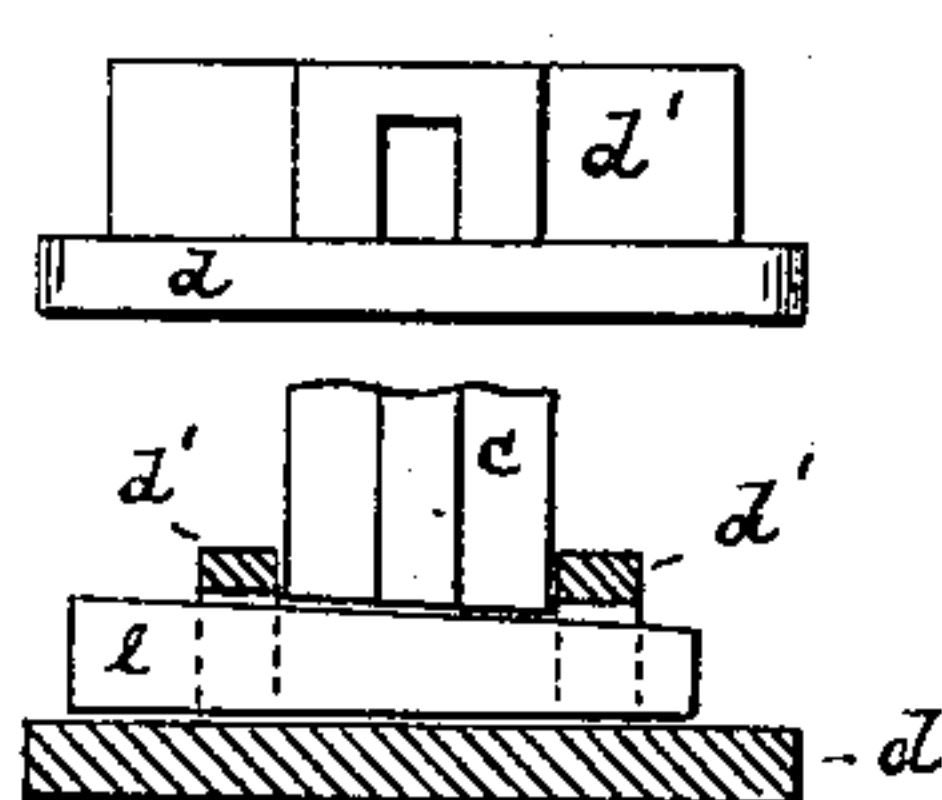
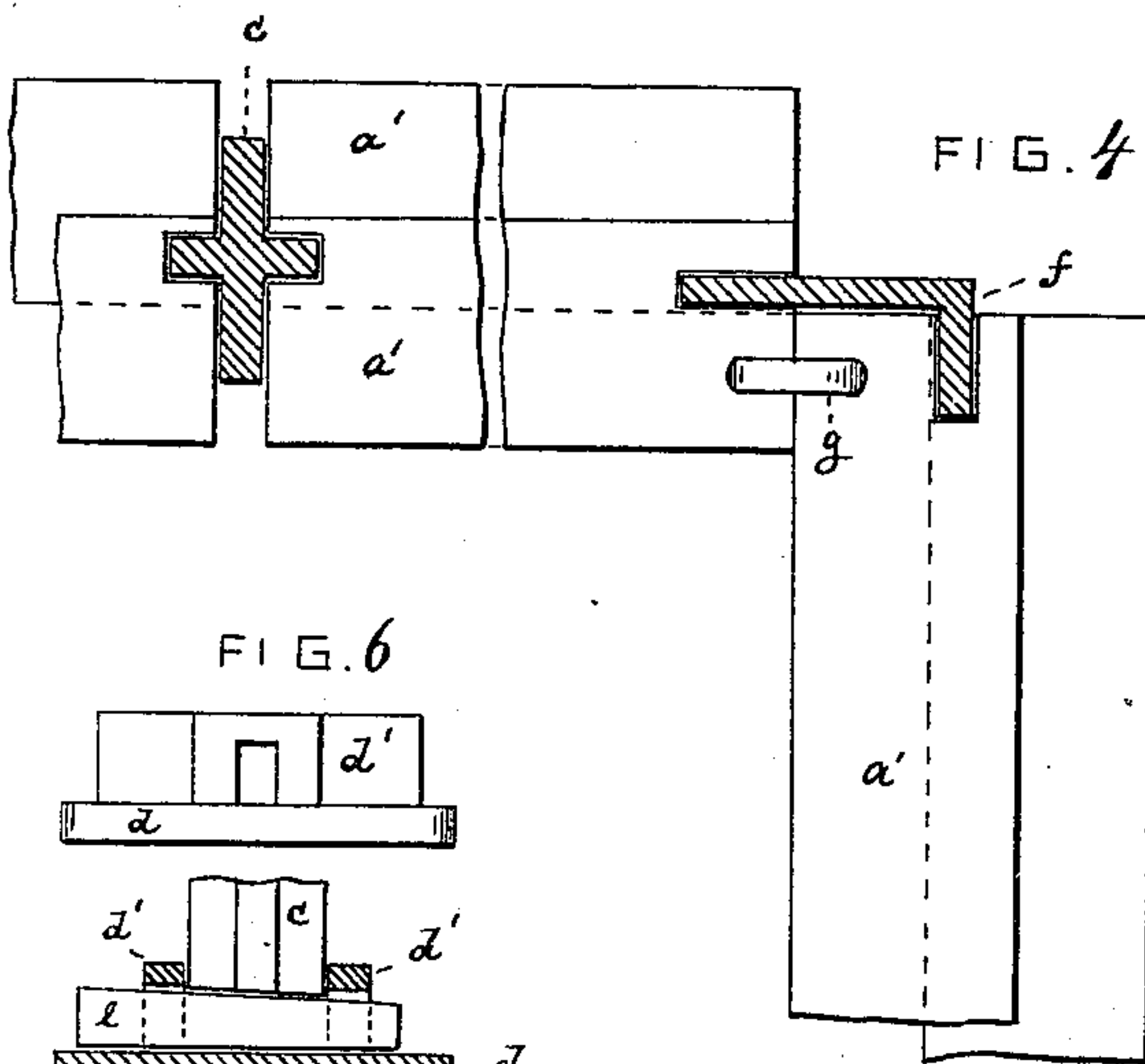


FIG. 7



WITNESSES

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# UNITED STATES PATENT OFFICE.

PETER SMITH, OF NEW YORK, N. Y.

## FIRE-PROOF PARTITION.

SPECIFICATION forming part of Letters Patent No. 377,175, dated January 31, 1888.

Application filed November 17, 1887. Serial No. 253,397. (No model.)

*To all whom it may concern:*

Be it known that I, PETER SMITH, of New York city, New York, have invented a new and Improved Fire-Proof Partition, of which  
5 the following is a specification.

This invention relates to a fire-proof partition, floor, or ceiling of improved construction; and it consists in the various features of improvement, more fully pointed out in the  
10 claims.

In the accompanying drawings, Figure 1 is a vertical transverse section of a partition provided with my improvement. Fig. 2 is a perspective view of the superposed metal plates. Fig. 3 is a perspective view of the post or joist.  
15 Fig. 4 is a horizontal section of two partitions joined at right angles. Fig. 5 is a top view of the flange plate supporting the post. Fig. 6 is a side view thereof; and Fig. 7, a section on  
20 line *x x*, Fig. 5.

The letters *a a* represent a series of metal plates of U-shaped form in cross-section. These plates are superposed in such a manner that the horizontal flanges *a'* of the alternate  
25 plates project in opposite directions. The flanges *a'* overlap at the center only, so that such flanges are of double thickness at the center of the partition, but of single thickness near the faces of the partition. The ends of  
30 some or all of the flanges *a'* are bent up to be more firmly grasped by the mortar *b*.

The overlapped sections of the flanges *a'* are slotted in a vertical line to receive one arm of a post or upright, *c*, which is of cross shape in  
35 horizontal section. The opposite arm of such upright *c* enters a corresponding slot in the adjoining set of superposed plates *a*, Fig. 4, and thus as many sets of plates may be connected as make up the desired length of partition. The two remaining arms of the up-  
40 right *c* separate adjoining sections of plates *a*

and form proper bearing-surfaces for the edges of flanges *a'*. At the top and bottom, or at either the top or bottom, the upright *c* enters a cross-shaped flange, *d'*, projecting from the  
45 face of a plate, *d*. The flange *d'* is slotted, Fig. 6, for the introduction of a key or wedge, *e*. This wedge is forced under the foot (or over the top) of the upright *c*, and thus securely clamps the upright in position.  
50

In Fig. 4 the mode of connecting two partitions joined at right angles is illustrated. Here L-shaped uprights *f* are used in lieu of the cruciform uprights. In addition to the uprights *f*, I employ staples *g*, the shanks of  
55 which enter perforations in the two partitions, and thus the partitions are securely connected.

What I claim is—

1. The combination of U shaped plates *a*, superposed in such a manner that their horizontal flanges project in opposite directions, and that such flanges overlap at the center only, but are of single thickness at the ends, with an upright entering slots in the overlapped sections, substantially as specified.  
60

2. The combination of U-shaped plates *a*, overlapping one another, with a cruciform upright, *c*, entering slots in such plates, substantially as specified.  
65

3. The combination of U shaped plates *a*, overlapping one another, with post *c*, and with the plate *d*, having slotted flange *d'*, and with wedge *e*, substantially as specified.  
70

4. The combination of overlapping U-shaped plates *a*, having slotted horizontal flanges, with  
75 the posts *f*, entering such slotted flanges, and with the staples *g*, substantially as specified.

PETER SMITH.

Witnesses:

F. V. BRIESEN,  
HENRY E. ROEDER.