

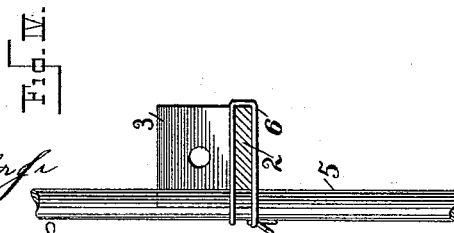
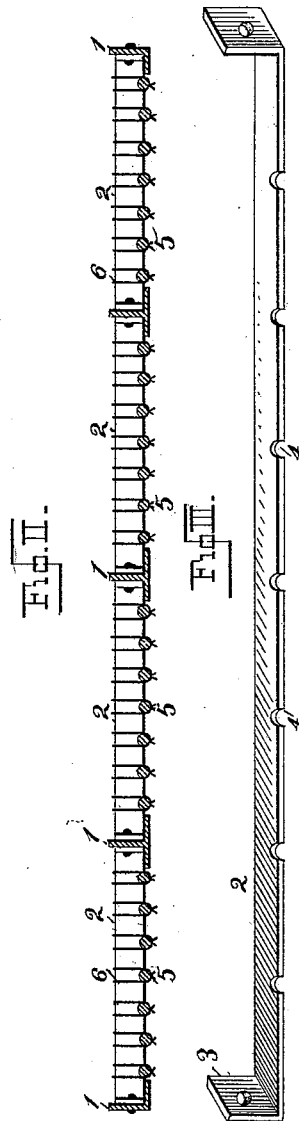
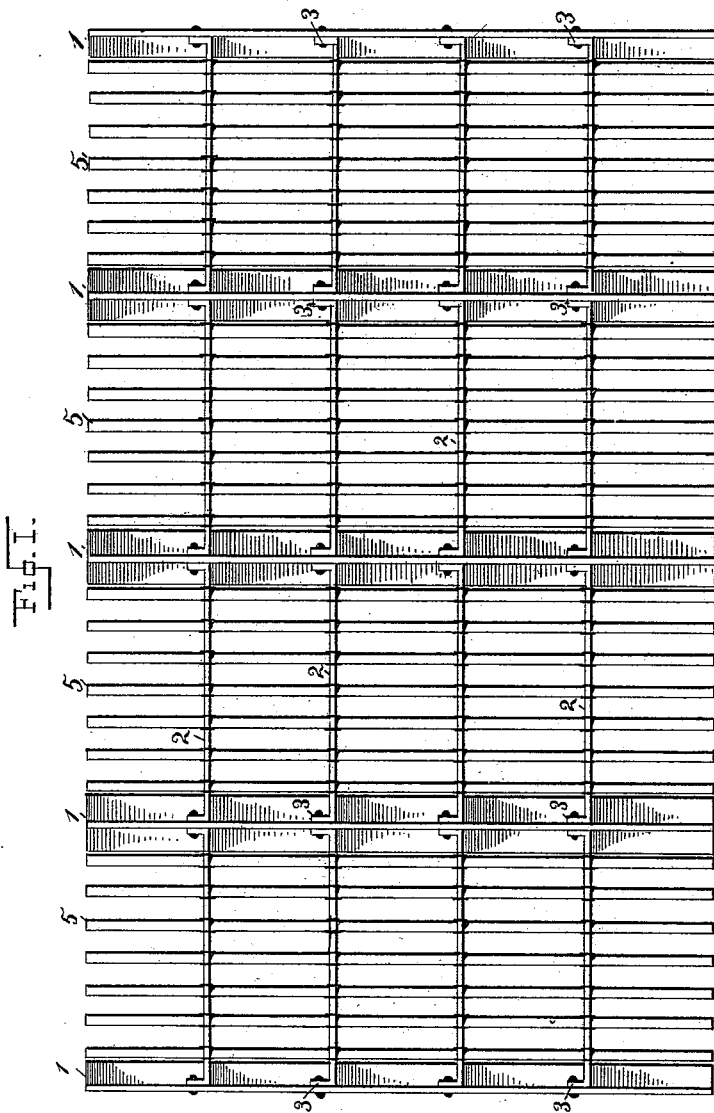
(No Model.)

2 Sheets—Sheet 1.

A. M. HOUSTON.  
IRON FRAME FOR FIREPROOF PARTITIONS.

No. 525,903.

Patented Sept. 11, 1894.



*Witnesses*

George McKaylar  
M. V. Bidgood

*Inventor*

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Houston  
By Wm. A. R. R.  
Attys.

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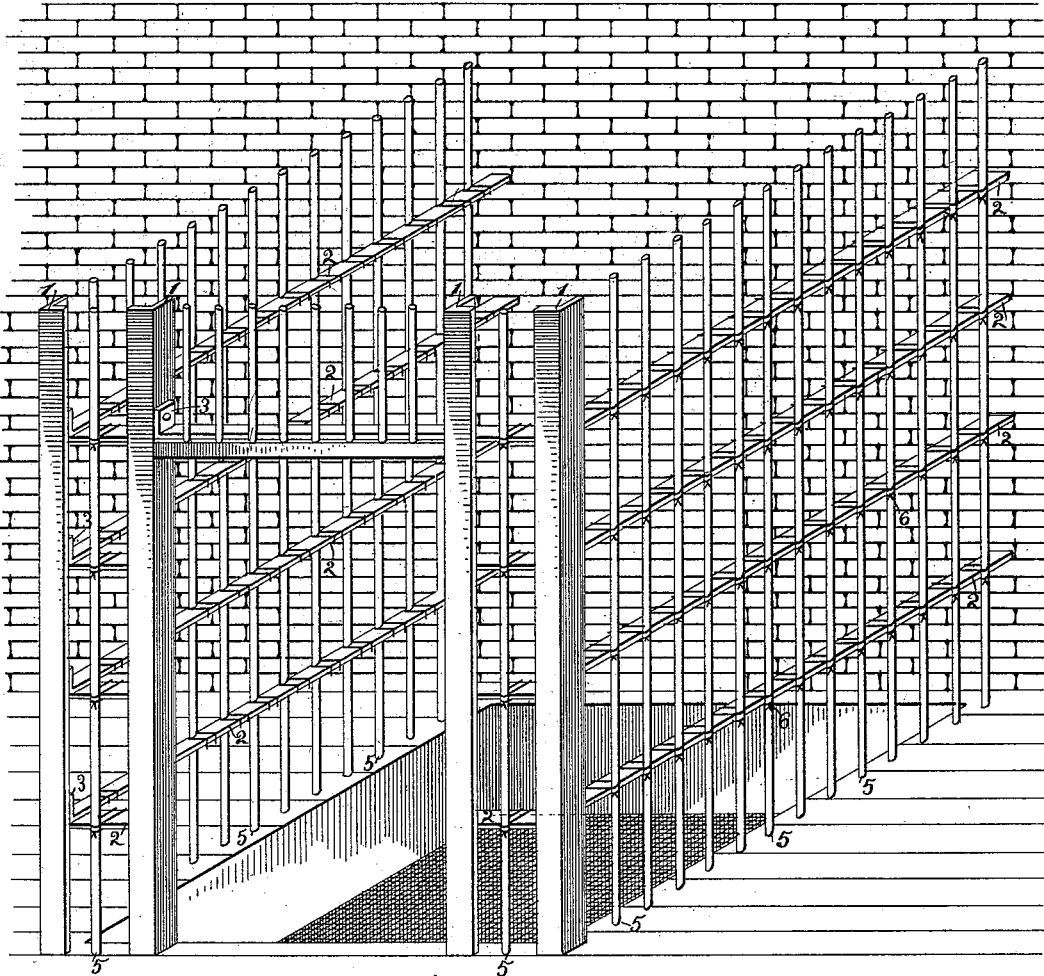
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Fig. V.



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# UNITED STATES PATENT OFFICE.

ALEXANDER M. HOUSTON, OF BROOKLYN, NEW YORK.

## IRON FRAME FOR FIREPROOF PARTITIONS.

SPECIFICATION forming part of Letters Patent No. 525,903, dated September 11, 1894.

Application filed May 19, 1894. Serial No. 511,760. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER M. HOUSTON, a citizen of the United States, residing in Brooklyn, county of Kings, State of New York, have invented certain new and useful Improvements in Iron Frames for Fireproof Partitions, of which the following is a specification.

In making fireproof partitions in office buildings and other buildings, the hollow fireproof brick is being displaced now-a-days by a metallic structure whose frame is made of angle and flat iron bars which have tied to them a wire cloth backing for the plaster. These structures are quite fireproof and take up but little floor-space, but, as hitherto made, they possess certain defects which it is the object of my invention to overcome. It is customary to run flat bars from floor to ceiling eking out discrepancies in length due to varying heights of rooms, by bolting on end pieces. This operation takes much time. Then, where a room is, say, twelve feet high, the length of flat iron is so great as to make the partition unsteady and it can be readily bent to and fro by hand. Such a frame-work can also be only put in floor by floor and is not adapted for use where it is desired to make the partition work a continuous structure running from cellar to roof.

My invention is designed to improve the frame-work in all these respects and to that end it consists of combinations which I will first fully describe with reference to the accompanying drawings, leaving to the claim the pointing out of the novel parts.

In said drawings: Figure I is a side elevation of an iron frame constructed according to my invention. Fig. II is a horizontal sectional view thereof. Fig. III is a perspective view of one of the flat bars. Fig. IV is a sectional elevation to a scale larger than that of the preceding figures, illustrating the means of fastening one of the vertical bars to a flat bar. Fig. V is a perspective view of my frame surrounding an elevator shaft.

The main vertical bars of the frame are angle-irons 1 placed preferably eight feet apart. The bars 1 may be of T-iron or I-iron or L-iron as preferred. To them are bolted horizontal flat irons 2 which are spaced about three feet apart and which have upturned ends 3 adapted to receive the bolts. One edge of flat irons has seats 4—preferably semicircular—and in these are placed (preferably only about a foot apart) the vertical bars 5 (preferably of three-eighths inch round iron so that they will project three-sixteenths of an inch) to a level with the outer surface of the angle irons as shown in Fig. II, thus affording a level surface throughout for the attachment of the wire fabric which is then to receive the layer of plaster in the usual manner.

The bars 5 are tied to the flat irons by wires 6 as shown in Fig. IV. The round bars 5, may, it will be seen, run from top to bottom of the building and the partition work may thus be made uniform throughout. The structure is much stiffer than any other frame in use in such structures and no thicker. It can also be put in place more rapidly.

Fig. V will be now readily understood, as it represents merely the application of the invention to an elevator shaft. The equivalent parts here are numbered as in the preceding figures.

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

A metallic frame-work for partitions consisting of vertical angle irons 1, horizontal flat irons 2 provided with seats 4 and fixed to irons 1, and the vertical bars 5 occupying said seats and connected to said flat irons, substantially as set forth.

ALEX. M. HOUSTON.

Witnesses:

HARRY E. KNIGHT,  
M. V. BIDGOOD.