

No. 765,397.

PATENTED JULY 19, 1904.

T. O'SHEA.
BUILDING CONSTRUCTION.
APPLICATION FILED APR. 1, 1904.

NO MODEL.

Fig. 1.



Fig. 2.

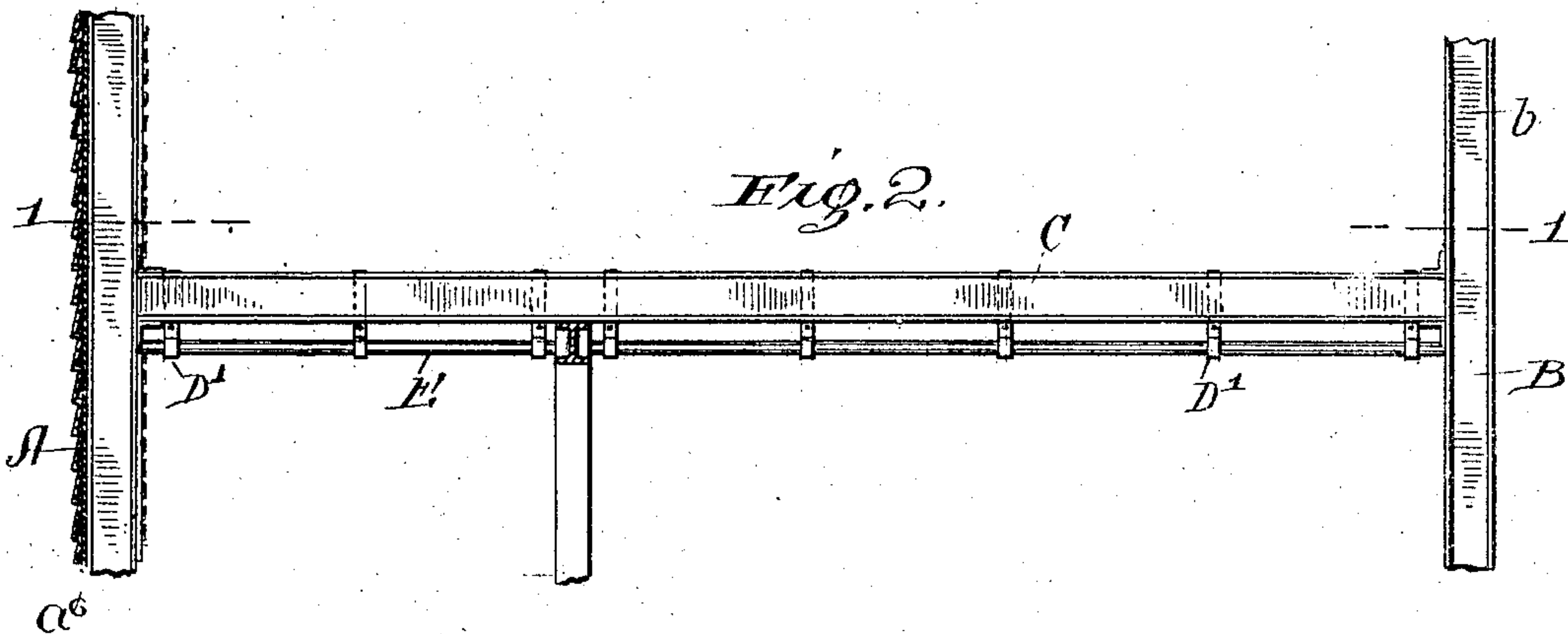


Fig. 3.

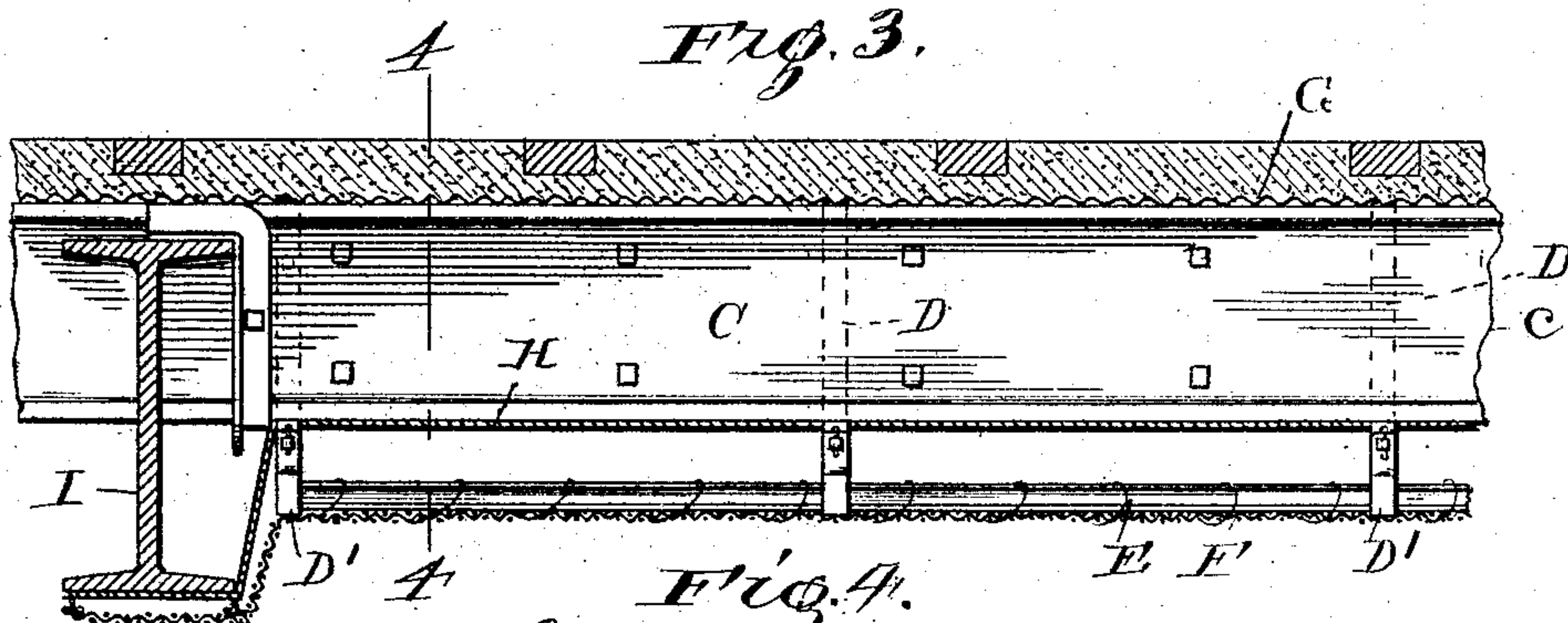
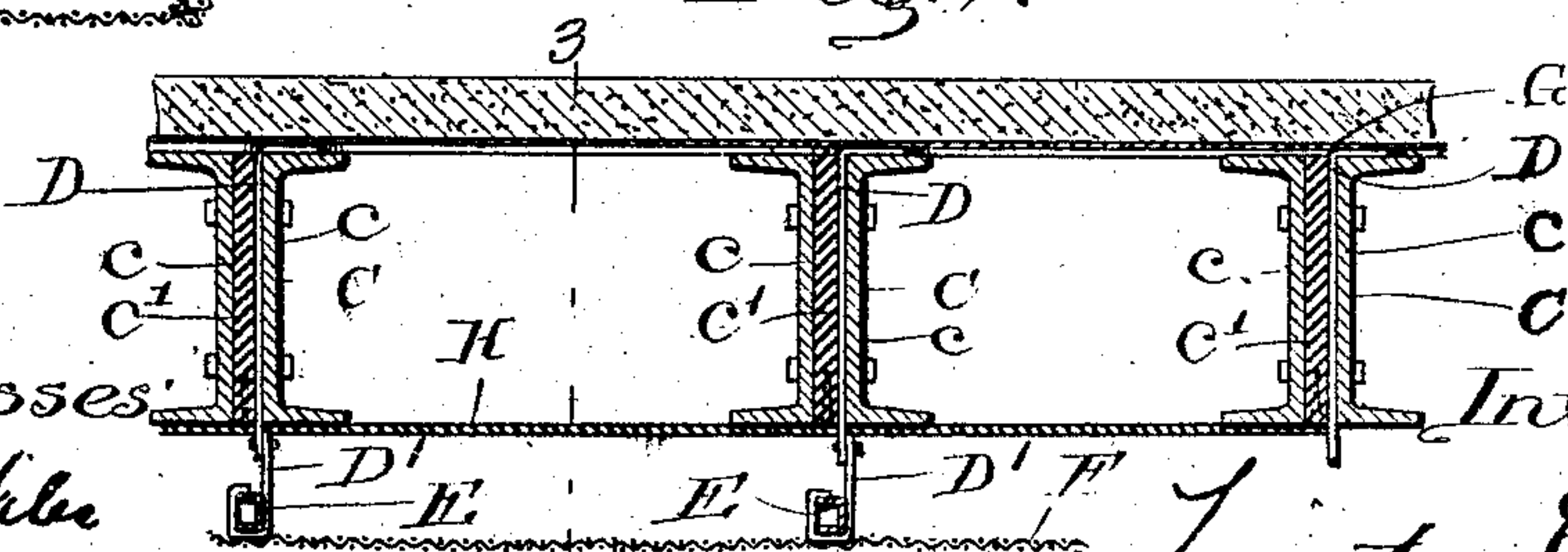


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

TIMOTHY O'SHEA, OF CHICAGO, ILLINOIS.

BUILDING CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 765,397, dated July 19, 1904.

Application filed April 1, 1904. Serial No. 201,061. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY O'SHEA, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Building Construction, of which the following is a specification.

My invention relates to certain new and useful improvements in building construction; and its object is to produce a device which shall have certain advantages which will appear more fully and at large in the course of this specification.

To this end my invention consists in certain novel features of construction, which are clearly illustrated in the accompanying drawings and described in this specification.

In the aforesaid drawings, Figure 1 is a horizontal section through a structure embodying my invention, the line of the section being indicated by the line 1 1 of Fig. 2 and the floor and ceiling being removed to show the construction. Fig. 2 is a vertical section of a similar structure in the line 2 2 of Fig. 1. Fig. 3 is a detailed vertical longitudinal section in the line 3 3 of Fig. 4 through a completed floor and ceiling, showing the same supported by an I-beam; and Fig. 4 is a vertical transverse section in the line 4 4 of Fig. 3.

Referring to the drawings, and particularly to Figs. 1 and 2, A B are the two side walls of a building. These two walls are provided with vertical studs *a b*, which are here illustrated as being in the form of compound beams, but which, as far as my invention is concerned, may be of any desired form. To the studs *a b* are secured floor-beams C, which are composed of two opposing channel-beams *c* and an interposed sheet of asbestos or other fibrous material *c'*. After these beams are in place flat ceiling-hooks D are inserted. These ceiling-hooks are composed of sheet metal bent into the shape of an L. The longer leg of each of these hooks is driven through the beam between the two channel-beams beside the asbestos sheet, as illustrated in Fig. 4. Hangers D' are then secured by rivets or bolts to the lower ends of these ceiling-hooks, the said hangers having hooked lower ends adapted to

hold channel-bars E, to which metallic lathing F is secured to form a basis for the ceiling. Sheets H of asbestos or other fibrous material are secured upon the lower edges of the floor-beams (see Figs. 3 and 4) by nailing them thereto, the nails entering the fibrous filling between the channel-bars of the floor-beams. After the ceiling-hooks are in place sheets G of corrugated iron can be secured to the upper edges of the beams and the concrete floor built thereon, or any other desired type of flooring can be laid on the beams.

In Figs. 3 and 4 the floor-beam is shown supported upon an I-beam I, such as is employed in the construction of fireproof buildings, the upper edges of the floor-beam being raised slightly above the I-beam—as, for instance, one and one-fourth inches—thus leaving a space between the corrugated sheets G and the I-beams. Considerable space is also left between the fireproof sheets H and the ceiling structure, said space extending by the I-beams, as shown. In this way air-spaces are left between the ceiling and fireproof sheets H and between the latter and the floor construction, said spaces extending across the entire structure, and, if desired, leading to suitable flues or air-ducts in the walls, which may carry off gases which would otherwise be confined in these spaces and in case of fire will carry off the heated air from said spaces, thus preventing explosions and reducing the danger of the fire passing through the floor construction to a minimum.

The type of building construction herein illustrated is particularly simple, cheap, and strong, and its chief advantage lies in the means which is used for supporting the ceiling.

This structure is intended as an improvement upon the structure of my pending application on building construction, filed February 24, 1904; Serial No. 195,797, and can be used in buildings where the ceiling-supporting means shown in that application would not be sufficiently strong—as, for instance, in machine-shops, warehouses, and the like—where the ceiling might be sufficiently jarred to loosen it from the beams. In the structure

herein shown the ceiling is supported from the tops of the beams, and it is impossible for it to fall unless the beams fall with it.

I realize that considerable variation is possible in the details of this construction without departing from the spirit of the invention, and I therefore do not intend to limit myself to the specific form herein shown and described.

10 I claim as new and desire to secure by Letters Patent—

1. In a building construction, a floor comprising in combination, beams, each having two opposing channel-beams, sheet-metal ceiling-hooks, having vertical portions passing between said channel-beams, and having horizontal portions engaging with the tops of the beams, ceiling-hangers secured to the lower ends of said ceiling-hooks, bars supported by
15 said ceiling-hangers, and a ceiling secured to said bars.

2. In a building construction, a floor comprising in combination, beams each having two opposing channel-beams, sheet-metal ceiling-

ing-hooks having vertical portions passing between said channel-beams, and having horizontal portions engaging with the tops of the beams, ceiling-hangers secured to the lower ends of said ceiling-hooks, channel-bars supported by said ceiling-hangers, and a ceiling
25 secured to said hangers. 30

3. In a building construction, a floor, having in combination, horizontal beams, each of which consists of two opposing channel-beams, and an interposed sheet of fibrous material, L-shaped sheet-metal ceiling-hooks, passed through said beams adjacent to the said sheet of fibrous material, ceiling-hangers secured to the lower end of said hooks, and a ceiling
35 secured to said hangers. 40

In witness whereof I have signed the above application for Letters Patent, at Chicago, in the county of Cook and State of Illinois, this 28th day of March, A. D. 1904.

TIMOTHY O'SHEA.

Witnesses:

RUSSELL WILES,
CHAS. O. SHERVEY.