(No Model.)

H. A. STREETER.

BUILDING CONSTRUCTION.

No. 555,981. Patented Mar. 10, 1896.

FIG. I.

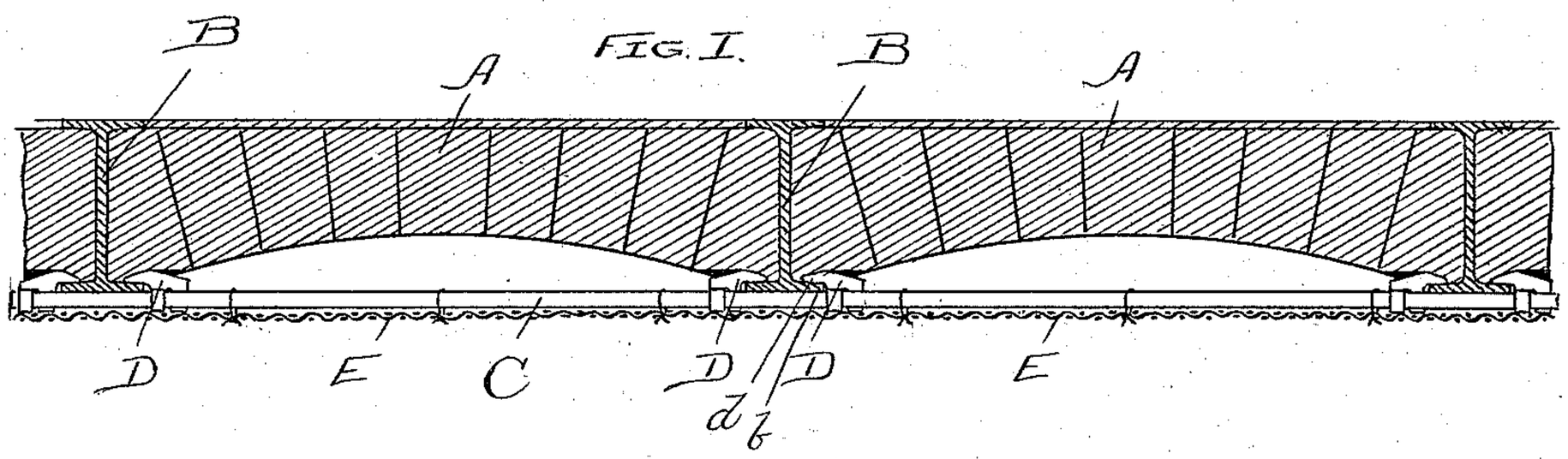


FIG. 2.

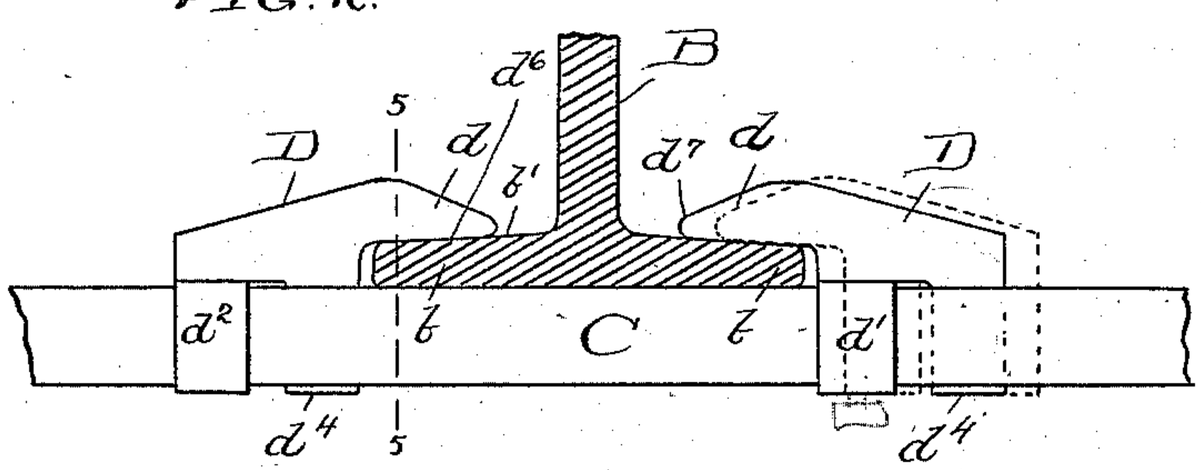


FIG. 3

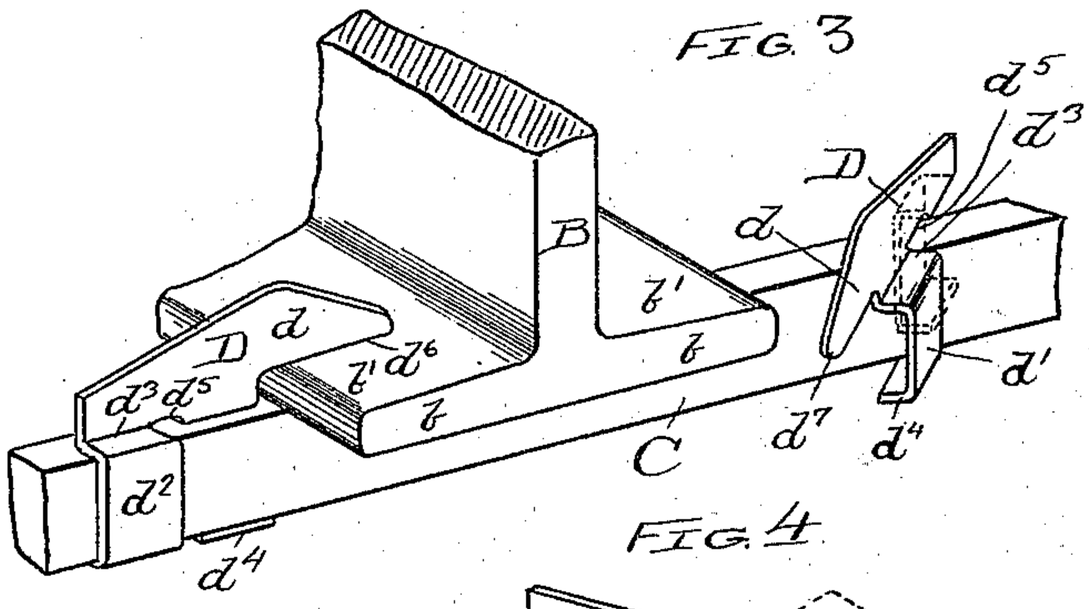


FIG. 4

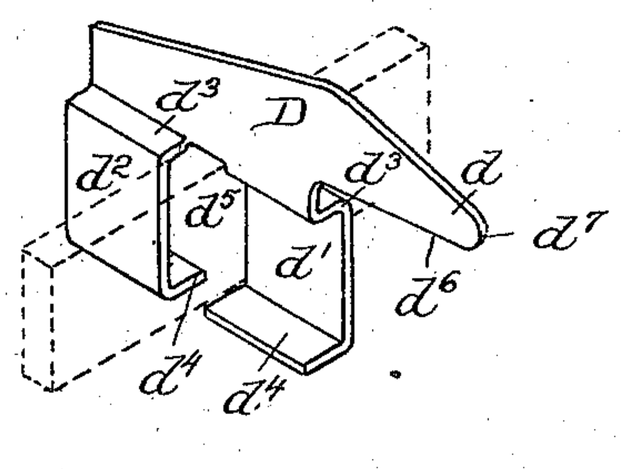
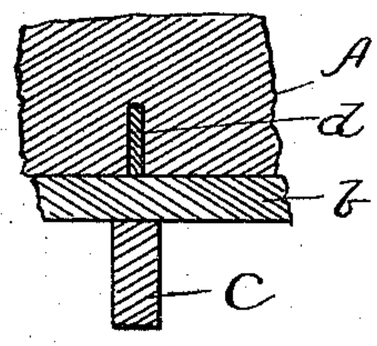


FIG. 5.



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UNITED STATES PATENT OFFICE.

HERBERT A. STREETER, OF CHICAGO, ILLINOIS.

BUILDING CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 555,981, dated March 10, 1896.

Application filed December 21, 1894. Serial No. 532,572. (No model.)

To all whom it may concern:

Be it known that I, HERBERT A. STREETER, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Building Construction, of which the following is a specification.

My invention relates to improvements in construction of iron or steel structures or buildings wherein the roofs, floors, or ceilings are formed of or supported by iron or steel beams or bars crossing each other, and more particularly to means for firmly securing together the crossing beams or bars and clamping them in place.

The object of my invention is to provide a strong and secure device of a simple and cheap construction for securing the crossing beams or bars together and which may be easily and quickly applied without interfering with or injuring the hollow tile or other material between the beams.

To this end my invention consists in the novel construction of parts and devices and novel combinations of parts and devices herein shown and described, and particularly specified in the claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a vertical sectional view of my invention as applied to a ceiling and floor structure of a building. Fig. 2 is an enlarged detail view. Fig. 3 is a perspective view illustrating the manner of applying the clamping-clips. Fig. 4 is a detail perspective view of the clips. Fig. 5 is a section on line 5 5 of Fig. 2.

In the drawings like letters of reference indicate like parts in all the figures.

In the drawings, B B, for example, represent the iron or steel beams or bars between which the tile A is supported, and C the crossing beams or bars to which the suspended ceiling or metal lath E is secured, and D D are the clamps, clips, or devices by which the crossing beams or bars B C are secured and clamped together.

The clamp D is preferably made of sheet-steel and has a nose d adapted to fit over the flange or other portion b of the beam B, and it is provided with two wings or limbs d' and d^2, offset at d^3 d^3 and adapted to fit astride or on opposite sides of the beam or bar C, and one or both are provided, preferably both, with a flange d^4 adapted to fit under or around said beam or bar C; and between said limbs d' d^2 there is a slot or open space d^5 equal to the width of the bar or beam C, so that when the clip D is turned transversely to the bar C it may be placed thereon as indicated in Fig. 4, and then turned as indicated in Fig. 3 to bring the clip parallel to the bar C, when it may be driven along said bar until its wedging nose or lip d firmly clamps the flange b of the beam B, as indicated in Figs. 1 and 2. As the clip D stands in a vertical plane and is comparatively thin it will readily drive into the tile A or into the mortar joints between the tile, the nose d cutting its own slot or way in the material A as it is driven in. As the nose d of the clip D has a wedging action on the flange b, due either to the inclined edge d^6 of said nose d or to the inclined upper face b' of the flange B, or to both, it is obvious that as the clip D is driven firmly home it will exert a great clamping action and firmly bind the two beams together; and as the edge of the blade-like wedging nose d will more or less embed or cut itself into the flange b it is obvious that when the clip D is thus driven home it can no longer be turned on the bar C as was done in putting the clip astride said bar. To facilitate the driving or cutting of the nose d into the tile or material A, said nose is preferably more or less pointed or rounded, as shown at d^7. As the strain on the clip D comes in the direction of its plane it will be seen that it possesses very great strength for its size and weight, and is, therefore, well adapted for supporting the bars C for suspended ceilings.

I claim—

1. The combination with crossing beams or bars B and C and tile or filling material A, of sheet-steel clips D standing at right angles to the plane of the tile or floor and provided with a nose d fitting over the flange b of beam B and provided further with offset limbs d' d^2, having flanges d^4 and a slot d^5 between them, fitting astride said beam or bar C, said clips D being adapted to be placed astride said bar or beam C, turned parallel thereto and driven longitudinally along said beam or bar C to clamp said beams or bars B and C firmly together, substantially as specified.

2. The combination with crossing beams or bars B and C of clip D provided with nose *d* and limbs *d' d²* fitting astride said beam C, substantially as specified.

3. The combination with crossing beams or bars B and C of clip D provided with nose *d* and limbs *d' d²* fitting astride said beam C, there being a slot or open space between said limbs *d' d²*, substantially as specified.

4. The combination of two crossing beams with a plate or sheet-metal clip having a nose fitting edgewise on and embracing one of said beams and two limbs embracing and fitting astride of the other beam, the strain on the nose of the clip coming in the direction of its plane to increase the strength, and said clip being adapted to be driven along one of said beams to cause its nose to wedge over and clamp the other, substantially as specified.

HERBERT A. STREETER.

Witnesses:
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