No. 657,923. Patented Sept. 18, 1900.

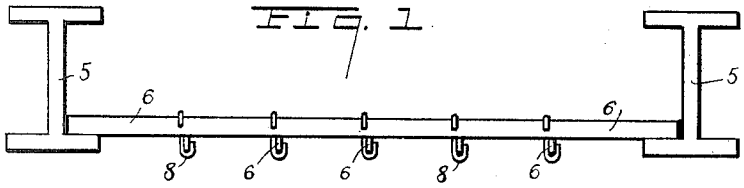
G. E. ESCHER.

MEANS FOR SUSPENDING OR SUPPORTING CEILINGS.

(Application filed May 10, 1900.)

(No Model.)

FIG. 1



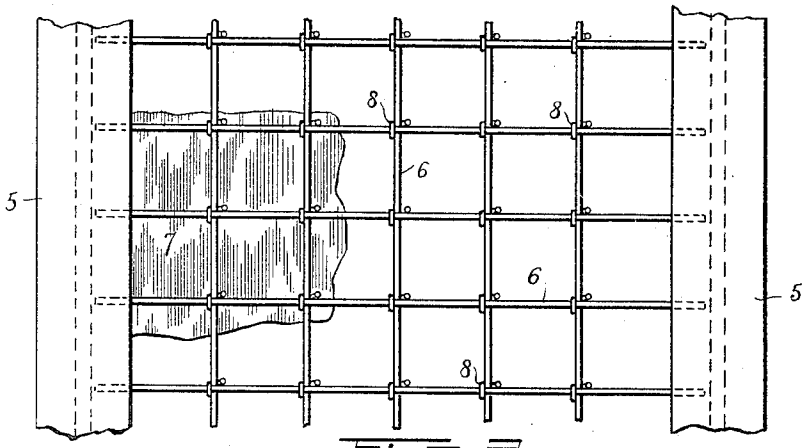


FIG. 2

FIG. 3

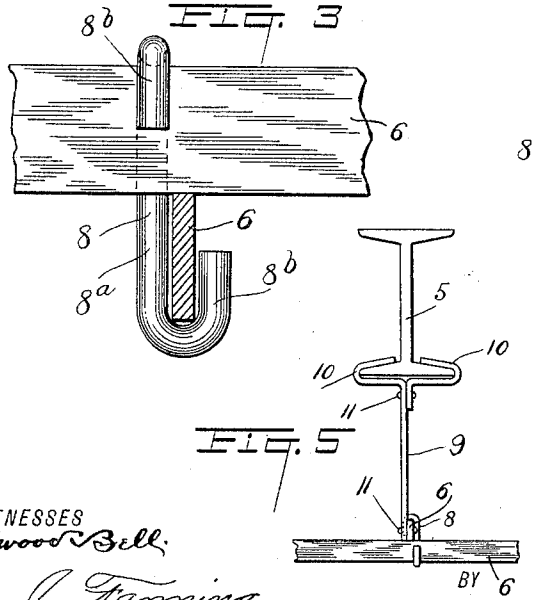


FIG. 4

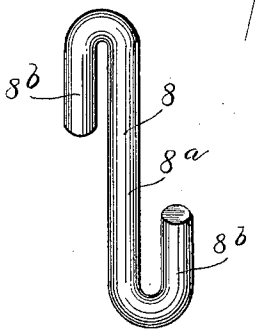


FIG. 5

WITNESSES

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MEANS FOR SUSPENDING OR SUPPORTING CEILINGS.

SPECIFICATION forming part of Letters Patent No. 657,923, dated September 18, 1900.

Application filed May 10, 1900. Serial No. 16,154. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVE EDWARD ESCHER, a citizen of the United States, residing at 275 Adelphi street, in the city of New York, borough of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Means for Suspending or Supporting Ceilings, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to supported or suspended ceiling construction; and the object thereof is to provide improved means for suspending or supporting ceilings of the ordinary or any preferred form.

The invention consists in the novel construction and arrangement of parts hereinafter set forth.

In the accompanying drawings, which form part of this specification, and in which like reference characters denote like parts in the several views—

Figure 1 is a side view of the improved means for supporting ceilings which constitutes the present invention. Fig. 2 is a plan view thereof; Fig. 3, a fragmentary view of Fig. 2, partly in section; Fig. 4, a perspective view of an essential feature or element of my invention, and Fig. 5 an elevation of a modified form of construction.

Referring more particularly to the drawings, I have shown at 5 two I-beams, such as are customarily employed in building construction and which constitute the main support for the ceiling and the supra-imposed flooring.

The supplemental supports 6, from which the ceiling, a portion of which is shown at 7, is suspended, comprise customarily angle or T irons, which are supported upon or suspended from the I-beams and the several main and transverse series of which are bolted together.

In the practice of my invention I provide in substitution the supplemental supports 6, as shown, the same consisting of flat strips or bars, preferably metallic, which are relatively cheaper in manufacture and which I arrange relatively, as shown in the drawings, in main and transverse series, the respective bars of said series being connected by hook-shaped devices 8, whereby any two connected bars 6 are arranged relatively edge to edge. The hook-shaped devices 8 comprise each a shank or body portion 8^a and two oppositely-directed and relatively rectangularly-projecting hooked end portions 8^b, each of which latter is passed about one of two bars 6, connected by the hook-shaped devices 8.

It is manifest that by means of the devices 8, which form an essential part or element of the present invention, I am enabled to so connect two of the bars 6 that one thereof is suspended from the other at right angles thereto and that the two bars so connected will present each an edge to the other, whereby the bars 6 are capable of withstanding best the strain of the ceiling imposed thereon. It is furthermore manifest that the hook-shaped devices 8 obviate in their employment the bolting together of the bars 6, the total result of the construction and relative arrangement of the several parts as above described being conducive to high efficiency, durability, rigidity, and cheapness in manufacture, assembling, and installation. The hook-shaped devices 8 are of relatively-slight cost in manufacture, it being possible to cut and form the same with little labor from metal bars, rods, or tubes.

In Fig. 5 I have shown a modified form of construction for supporting or suspending the supplemental supports 6, which consists of the employment of hangers 9, provided at the upper end with grips 10, which are engaged with the I-beams 5, and one series of supplemental supports 6 is bolted at 11 to the hangers 9, the other series thereof being connected therewith by the hook-shaped devices 8. These hangers 9 are preferably employed in some instances, and it will be understood that the means for supporting or suspending the supplemental supports 6 form no part of the present invention.

I do not wish to be understood as limiting myself to the specific construction and arrangement of parts herein specified, reserving the right to vary the same within the scope of my invention and the claims hereunto appended.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. As an improved means for supporting ceilings, a plurality of suitably supported and connected flat bars or rods, with which the ceiling is connected, said bars or rods having a relative edge-to-edge arrangement, the devices for connecting said bars or rods comprising hook-shaped devices embodying relatively angularly directed hooked end portions, substantially as shown and described.

2. As an improved means for supporting ceilings, a plurality of suitably-supported flat bars or rods arranged in two series, a main and a transverse, devices for connecting the bars of said transverse series with the bars of said main series, whereby the bars of said transverse series are suspended from the bars of said main series, comprising hook-shaped devices embodying a central shank and relatively rectangularly directed hooked end portions, the bars of said main series and the bars of said transverse series having a relative edge-to-edge arrangement.

3. As an improved means for supporting ceilings, a plurality of suitably-supported flat bars or rods arranged in two series, a main and a transverse, there being a relative edge-to-edge arrangement of the bars of said main series and the bars of said transverse series, and devices for connecting the bars of said transverse series with the bars of said main series, whereby the bars of said transverse series are suspended from the bars of said main series, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 7th day of May, 1900.

GUSTAVE EDWARD ESCHER.

Witnesses:
EDWIN A. WILLIAMS,
GEORGE S. ANDERSON.