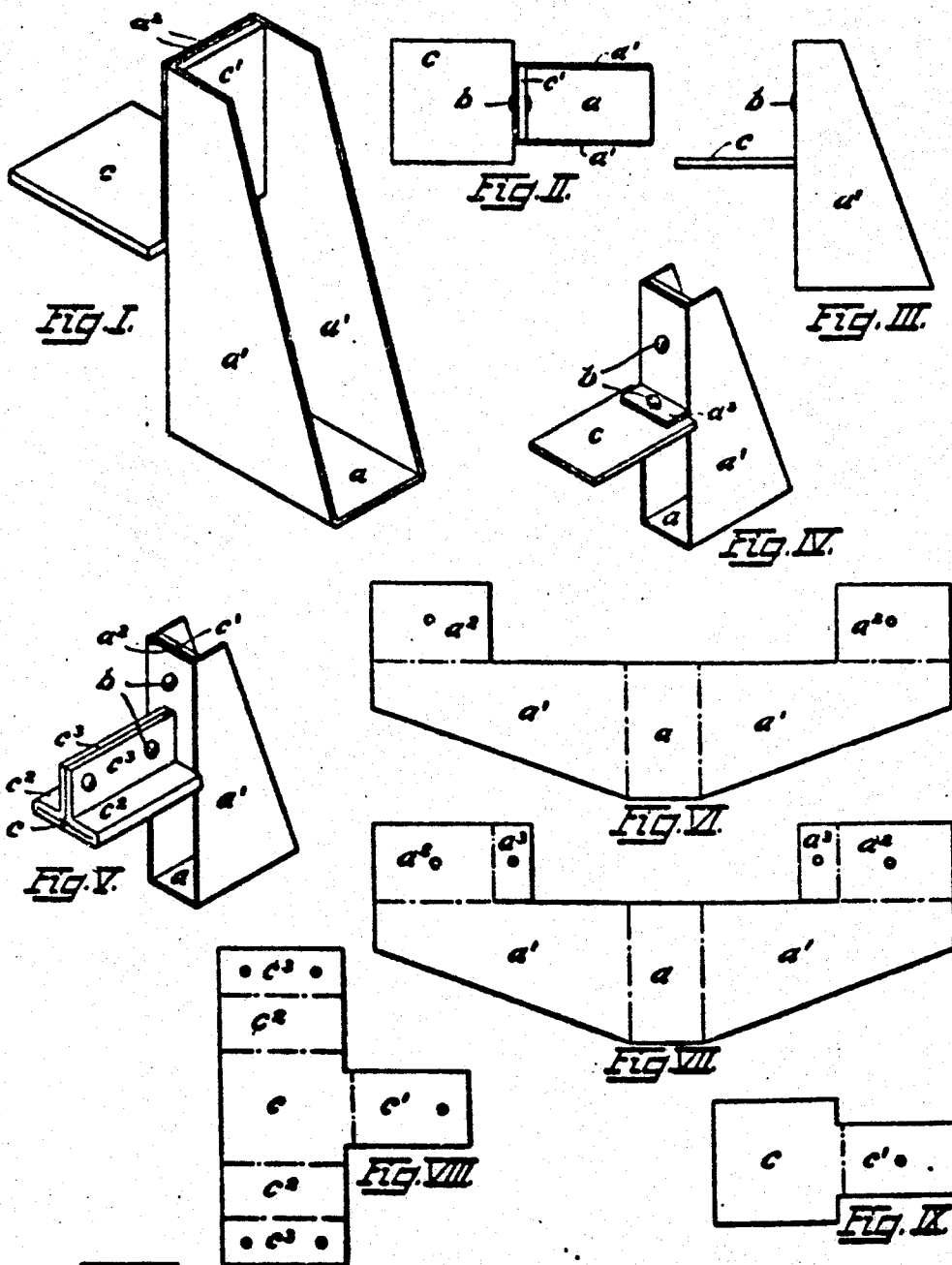


J. TUTEUR.
HANGER FOR JOISTS.
APPLICATION FILED JUNE 2, 1906.

922,215.

Patented May 18, 1909.



Witnesses:
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UNITED STATES PATENT OFFICE.

JULIUS TUTEUR, OF CLEVELAND, OHIO.

HANGER FOR JOISTS.

No. 922,215.

Specification of Letters Patent.

Patented May 18, 1909.

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To all whom it may concern:

Be it known that I, JULIUS TUTEUR, a citizen of the United States of America, and a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Hangers for Joists, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to improvements in hangers for joists, and has for its object, the provision of a structure of this character from sheet metal of relatively light gage, but so disposed as to most efficiently provide support for timbers in relatively light construction work, and particularly in concrete buildings.

Probably the most vulnerable portion of joist hangers is the point of support for the hanger itself, and a number of improvements have been directed toward suitably staying or strengthening the hanger in this particular. Quite recently there has grown up a demand for a joist hanger of light construction for association with concrete walls, whereby the timber may be carried immediately adjacent to the wall, but exterior thereof, to avoid rotting the end of said timber. This purpose is admirably subserved by the hanger of my present invention, while the structure readily lends itself to other than the specific use above referred to.

In its preferred form, the present type of hanger is made from two portions of sheet steel suitably blanked out and bent to form the respective parts, and riveted together to stay or support each other and form the complete hanger. Reference to the drawing will show that a sheet steel member is shaped to form a recess or seat for the timber end, within which seat extends an angular-member adapted to be secured by one of its limbs or angles within the supporting-wall. This angular-member may be suitably stayed, if desired, by outwardly bent ears provided upon the supporting-seat; or the latter may be rearwardly braced by suitably shaping the rearwardly-extending limb of the angular-member; all as shown in modified types of the hanger above referred to. The details of said hanger and modifications, however, will be best gathered by making reference to the accompanying sheet of drawings setting forth by different views and

upon slightly varying scales, certain hangers or joists embodying my invention.

Figure I of these drawings is a perspective view of a two-part hanger embodying my invention. Figs. II and III, show in plan and side views, upon a slightly reduced scale, the aforesaid hanger. Figs. IV and V, are perspective views of modified types of said hanger. Fig. VI, shows the blanks for forming the seat-member of the hangers of Figs. I and V. Fig. VII, illustrates the blank for forming the seat-member of the hanger shown in Fig. IV. Fig. VIII, depicts the blank for forming the angular or carrying-member for the hanger of Fig. V; and, Fig. IX, shows the simpler angular or carrying-member employed in the hangers of Figs. I to IV.

Throughout the several figures of the drawings, I have employed the same character of reference to indicate similar or corresponding parts.

By first referring to the views showing the blanks, I think the simplicity of my invention will best be appreciated. The seat-member is provided with a bottom portion *a*, and upwardly-extending side-pieces *a'*, to which are secured the back-pieces *a''*, shown punched out to receive a rivet *b*. The lines upon which these parts are folded are shown by the several dotted lines upon the plan views of the separate blanks. The angular-member preferably is punched out of heavier material, and is provided with a rearwardly-extending portion *c*, and an upwardly bent part *c'*, likewise punched to receive the rivet securing the seat-member and carrying-member together, as shown in the first three figures of the drawing.

The hanger shown in Fig. IV, differs from the one just described, only in providing rearwardly-extending ears *a''*, which are riveted to the carrying-member *c*, and afford additional support for the hanger at its most vulnerable point. It cannot but be appreciated upon considering the stress to which a hanger is ordinarily subjected, that the metal is most advantageously disposed, weight for weight, in a hanger of this type. In fact, these rearwardly-extending ears *a''*, may themselves be employed for support, in lieu of the angular carrying-member, provided the building construction is sufficiently light. In the type shown in Fig.

IV., however, three separate thicknesses of metal are provided at the back of the seat-member, and at the point adjacent to the juncture with the supporting-wall, whereby great strength and rigidity are secured.

In the type of hanger shown in Fig. V, the angular-member in turn is modified by providing a double thickness of metal c^2 c^2 in the rearwardly-extending part, and a brace or stay c^3 c^3 , united by rivets and rendering the back portion of the seat or timber-support much more rigid and secure than is obtainable by any other disposition of the metal with which I am acquainted. Thus the several parts c^2 c^2 of the rear portion of the angular-member are bent inward upon the face of part c , and the extremities c^2 c^2 are bent at right angles thereto, and riveted together to form a stay or strut for the back portions a^2 of the seat-member, as best shown in Fig. V of the drawings.

With the rearwardly-extending carrying-member firmly embedded or built into a supporting-wall, it will be appreciated that with any of the hangers shown, a relatively light seat-member may be employed. Accordingly, this is blanked out of light gage steel, and is secured to such rearwardly-extending carrying-member of any type suitable to the character of building construction with which the hanger is employed. At the critical or vulnerable points of juncture between the rearwardly extending member and the seat-member, I may provide one, two or three separate webs of metal, as set forth for supporting the weight to be carried by the hanger, but the precise details described and shown need not be rigidly adhered to in practicing my invention.

I therefore claim, and desire to secure by Letters Patent, the following:—

1. In a hanger for joists, the combination with a timber-seating member formed of sheet metal, having an integral bottom, side-pieces and double reinforced back-portions riveted together, of an angular-member secured to the reinforced back and extending rearwardly at an angle therewith for carrying the weight of the supported timber, substantially as set forth.

2. In a hanger for joists, the combination with a timber-seating member formed of sheet metal, having an integral bottom, side-pieces and double reinforced back portions riveted together, of an L-shaped member interiorly secured to the reinforced back por-

tions and rearwardly extending to afford a support for the hanger and inserted timber, substantially as set forth.

3. In a support for timbers, the combination with a timber-seating member having an integral bottom, side-portions, and reinforced back-portions, a rearwardly-extending lug or ear, of an angular member secured to the back portions of the timber-seating member and with one limb extending rearwardly to engage the supporting-wall and said lug, whereby it is reinforced at the angle substantially as set forth.

4. In a sheet metal hanger for joists, a timber-supporting member blanked out or bent to form an integral bottom, side-portions, and overlapping back-portions and rearwardly-extending lugs or ears; said back-portions, and lugs respectively being riveted together to reinforce each other and stay the hanger at the point of support, substantially as set forth.

5. In a hanger for joists, the combination with a timber-receiving member, of an angular member secured intermediately and interiorly thereof, comprising an upright and a rearwardly-extending L-shaped part bent or doubled over to form a vertical stay or strut for the timber-receiving member, substantially as set forth.

6. In a hanger for joists, the combination with a timber-receiving member, of an L-shaped or angular-member having one of its limbs interiorly engaging the timber-receiving member and its other limb extending back substantially at right angles therewith and folded upwardly along its edge to engage exteriorly the back of the timber-receiving member and stay the same, substantially as set forth.

7. In a hanger for joists, the combination with a timber-seat, of an angular or L-shaped member rearwardly attached thereto, comprising a vertical attaching-member and an integral web folded longitudinally upon itself along either edge with its extremities bent into engagement in a vertical plane and riveted together to form a rear strut or stay for the timber-seat, substantially as set forth.

Signed at Cleveland, this 21st day of May, A. D. 1906, in the presence of the undersigned witnesses.

JULIUS TUTEUR.

Witnesses:

JOHN F. McDONNELL,
ALBERT LYNN LAWRENCE.