J. TUTEUR.

HANGER FOR JOISTS.

APPLICATION FILED MAY 21, 1906.

996,687. **Patented July 4, 1911.**

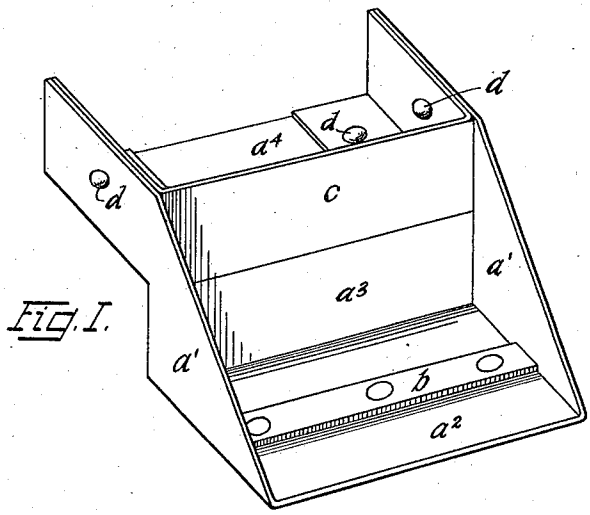

Fig. I.

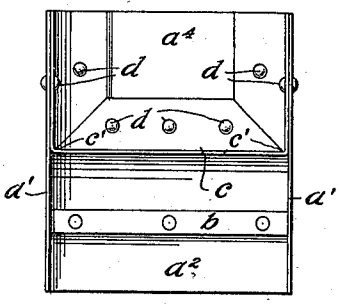

Fig. II.

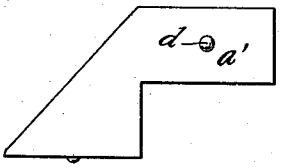

Fig. III.

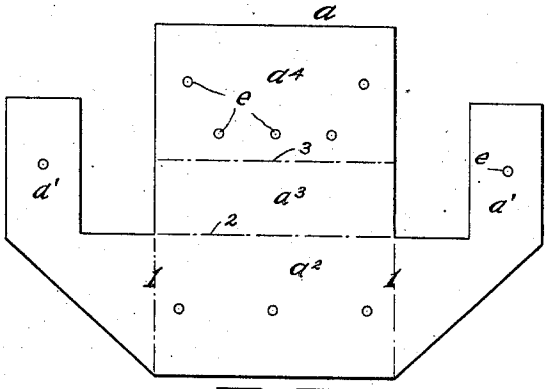

Fig. IV.

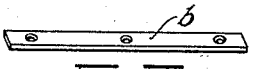

Fig. VI.

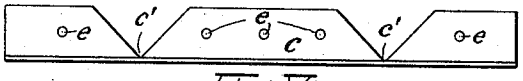

Fig. V.

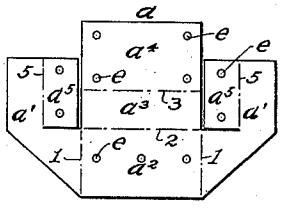

Fig. VIII.

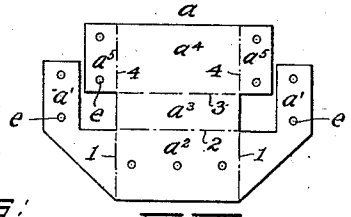

Fig. VII.

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UNITED STATES PATENT OFFICE.

JULIUS TUTEUR, OF CLEVELAND, OHIO.

HANGER FOR JOISTS.

996,687. Specification of Letters Patent. Patented July 4, 1911.

Application filed May 21, 1906. Serial No. 317,876.

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.

My invention relates to improvements in stamped metal hangers for joists employed in building construction, and has for its object, the manufacture of a hanger or support of this character from the smallest number of parts and of the simplest character, insuring a strong, safe support for timbers, and an extremely cheap and thoroughly reliable construction.

The features of my invention may be more readily gathered by making reference to the accompanying drawings, showing a sheet metal wall hanger formed simply of three pieces, the principal supporting-member of which is blanked out in a peculiar manner to enable it to be used alone as a support or in combination with the staying-members, comprising a stamped metal back-piece, and a rigid cross-piece or bar.

From the drawings, it is seen, by referring to Figure IV., that the wall hanger consists of an integral primary member suitably folded to provide a supported and a supporting seat in two different planes, while a reinforcing back-piece, Fig. V., may be stamped out and riveted thereto, and a cross-bar, Fig. VI., may be similarly secured to the joist-receiving seat of the hanger.

The following specification will make further reference to said drawings, wherein;—

Fig. I., is an enlarged perspective view of my improved hanger. Fig. II., is a plan view; and Fig. III., a side view of said hanger. Figs. IV., and V., respectively illustrate the mode of blanking out the primary member of the hanger from a flat piece of metal, and the back-piece or support from angle iron. Fig. VI., illustrates the cross-bar which may be disposed in the joist-receiving seat; and, Figs. VII. and VIII. illustrate in plan views, modified forms of my improved hanger, adapted for use in lighter construction work without reinforcement, as blanked out after the manner of Fig. IV.

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

Fig. IV., well illustrates the primary-member a, as formed from a single plate of metal, as rolled wrought iron or steel. This member is provided with lateral wings a', which are adapted to be folded at right angles upon the lines 1—1. Part a^2 thus forms the joist-seat, which may be provided, if required, with a rigid cross-bar b, suitably riveted or secured in place. The back of the hanger is formed from portion a^3 folded at right angles upon line 2, and the supporting-ledge a^4 is again folded back at right angles with part a^3 along line 3. As shown in Fig. VII., this part may be provided with lateral wings a^5, adapted to be folded at right angles along lines 4—4, whereby the side-pieces a' may be riveted directly to and supported by the ledge a^4.

The modification shown blanked out in Fig. VIII., closely resembles the foregoing type; differing therefrom only in the mode of supplying the integral reinforcing members. In this construction the wings or parts a^5 are provided upon the side-pieces a', with which they are adapted to be folded at right-angles upon lines 5—5, into the plane of the supporting-ledge or member a^4. The other parts being bent or shaped as described above, said wings a^5 are then riveted upon the member a^4 to form an integral staying or reinforcing connection. These hangers formed from the blanks shown in Figs. VII. and VIII. are primarily intended to be used in building construction not requiring further reinforcement of the hangers. They are built into the supporting-walls after the well known manner, and the side-pieces are directly supported from the embedded carrying-member a^4 through their integral connecting-parts a^5. Either of these forms may be suitably stayed by the reinforcing-member c formed of angle iron angularly notched at c' c', and folded or bent at right angles from the apexes of the angles c' to form a box-like reinforcing-part, as best shown in Fig. II. All of the parts are riveted together by numerous rivets d, which may well be positioned as shown by the several holes e punched in the blanks, and a very strong, cheap and efficient wall hanger is the result.

The type or types of hanger set forth, have been subjected to repeated and severe tests, and it is found that the integral construction not only affords an economical and thoroughly practical support for joists or

timbers, but that the metal thereof is most advantageously disposed to withstand the supporting strain to which an article of this type is subjected. Thus, the side-pieces, it is seen, form an integral part of the floor or ledge carrying the timber, and extend straight back in position to be suitably reinforced from the supporting portion or member a^4. The cross-piece or bar b may be made as heavy as required, and not only serves to stiffen or stay the ledge or support a^2, but acts as a retaining part for the timber, which is suitably cut out to accommodate this part, which, however, may be omitted in hangers of lighter construction.

From the foregoing, it will be appreciated that a hanger of approved type may be constructed in accordance with my invention from either one, two or three parts suitably shaped and riveted together, as I have fully explained.

Having now set forth the preferred embodiment of my invention, I claim as new and desire to secure by Letters Patent, the following;—

1. In a hanger for joists, the combination with a sheet metal member shaped to provide lateral wings bent up vertically from a horizontal floor and extending rearwardly thereof, a supporting member connected with the rearwardly extending wings, bent upwardly and rearwardly from the supporting floor, and means for effecting such connection of the wings thereto in position to bear edgewise upon the supporting member interiorly of said wings, substantially as set forth.

2. An integral joist hanger, comprising a sheet metal member shaped to provide a horizontal floor, lateral wings bent vertically therefrom and extending rearwardly thereof, a supporting member bent upwardly and rearwardly from the floor; all substantially within the vertical planes of said wings, and integral members uniting said wings to the supporting part interiorly of the former, substantially as set forth.

Signed at Cleveland, this 19th day of May, A. D. 1906, in the presence of two subscribing witnesses.

JULIUS TUTEUR. [L. S.]

Witnesses:

JOHN F. MCDONNELL,

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