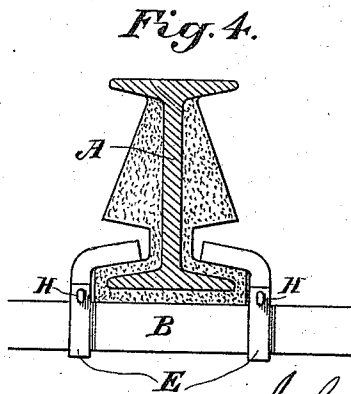
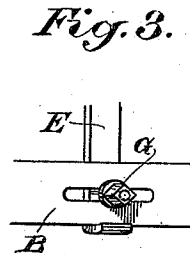
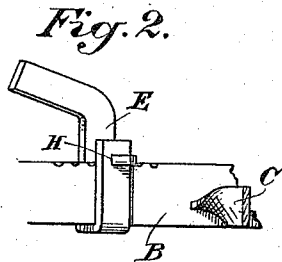
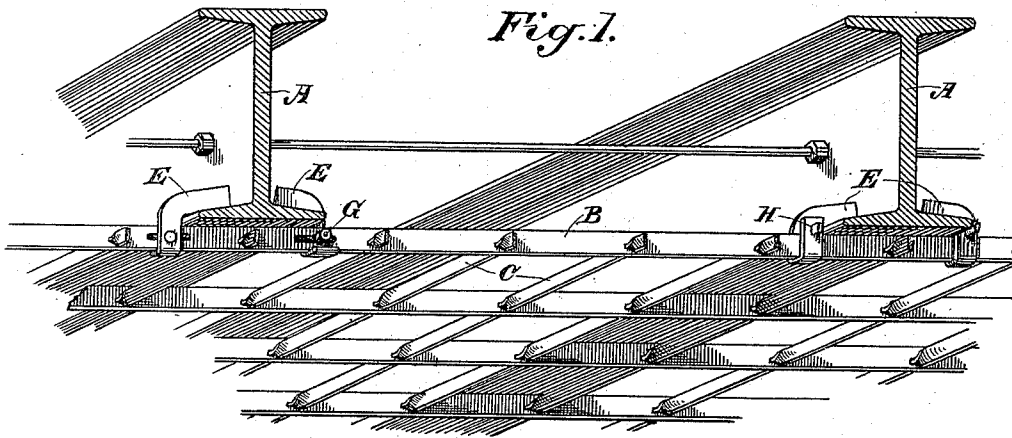


(No Model.)

J. T. McCORMICK.
METALLIC FURRING FOR BUILDINGS.

No. 573,158.

Patented Dec. 15, 1896.



Witnesses,
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H. F. Alscheck

Inventor,
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UNITED STATES PATENT OFFICE.

JOHN T. MCCORMICK, OF SAN FRANCISCO, CALIFORNIA.

METALLIC FURRING FOR BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 573,158, dated December 15, 1896.

Application filed July 17, 1896. Serial No. 599,502. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. MCCORMICK, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Metallic Furring for Buildings; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improvement in construction of buildings, and especially of what is technically called a "furring" or support for lathing and plastering upon to form walls and ceilings.

It consists of the parts and the constructions and combinations hereinafter described and claimed.

Figure 1 is a view showing a portion of my furring secured to the ceiling-girders. Fig. 2 shows one form of clips, and Fig. 3 another form. Fig. 4 shows the manner of securing the furring to girders which are covered with terra-cotta.

In the present case I have shown the device as applied for a ceiling. A A are the girders of the floor above, which in the present case are shown as in the form of I-beams.

The furring is made of metal bars B and C, extending transversely to each other, the bars B being perforated with slots, through which the bars C are passed, the bars C being twisted in such a way as to lock them to the bars B, leaving those parts of the bars C intermediate between the locking-points with the edges in the same direction and approximately flush with the lower edges of the bars B.

In order to secure the structure B C to the girders, I employ clips E, which are bent so that one end overlaps the lower flange of the girder, and the other end is so bent as to engage the bar B, to which it is locked by bolt, key, or other suitable device. I have shown the clips in pairs facing each other upon opposite sides of the girder-flanges. The flanges of the girders are rolled, with a bevel or inclination from the vertical rib to the edges, and the clips are so bent as to have approximately the same inclination. As the bars B have slots made longitudinally to receive the bolts by which the clips are secured to them, it will be seen that the clips may be moved

to or from the center rib, and these movements on the inclined surface of the flanges serve to raise or lower the structure B C. This enables me to adjust it perfectly with relation to the girders, which are often quite irregular, and thus level the surface to which the lathing is to be attached. This lathing D is of any suitable or desired material and is properly secured to the structure B C.

In Fig. 3 I have shown the end of the curved clip E which engages the bar B as bent at right angles to extend beneath the bar, and oblong holes are punched through the bar, and a hole is also made through the clip to receive a bolt G, upon which a nut may be screwed, thus securing the whole device solidly together and providing a means of adjustment. By reason of the angle which is bent to engage the edge of the bar B it will be seen that the clip is prevented from turning, so that the end which is bent over the flange of the I-beam will remain in position and cannot be dislodged or disengaged. It also takes a great portion of the weight and strain off the bolts G. In Fig. 2 I have shown this end as bent around the bar B and upon the opposite side extending enough beyond the edge of the bar so that a hole or key-slot may be made through it and the corresponding side of the clip E, and into this a key H may be driven or pressed.

In the first construction it will be seen that the holes must be made through the bars B at proper points to insure the clips engaging the beams, with allowance for adjustment, but, as shown in the second figure, the clips may be slipped along the bars B to the desired point and then locked by driving or forcing the keys through.

If desired, the edges of the bars may be slightly notched at the points where the keys pass through, so that they will be prevented from slipping or moving out of place. The whole structure is thus strongly secured to the girders, and by reason of the peculiar construction of the iron framework B C, with the edges vertically at right angles with the weight of the material to be spread upon the furring, it will be largely prevented from cracking and getting out of shape.

In some cases it is the practice to cover the

iron beams with terra-cotta or other similar non-heat-conducting material to protect them in case of fire. When this is done, holes may be punched through it to receive the ends of the clips or hangers, or it may be so shaped that the hangers rest upon it, as shown in Fig. 4.

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

1. A metallic furring for buildings consisting of rectangular bars crossing each other, those extending in one direction having slots perforated in them to receive those which extend in the other direction, the latter being twisted and interlocked at the point of junction, and both sets of bars standing with the edges in the same direction, and curved clamps or hangers having one end adapted to engage the girder-flanges, and the other bent to engage and interlock with the bars,

and a means for adjustably securing the hangers to the bars.

2. A clamp or hanger for securing metallic furring to girders and other supports, consisting of a bent bar or plate having one end adapted to engage the girder or support and the other bent at right angles so as to engage the metallic bar or part of the furring which is to be supported by it, and a means for adjustably securing the hanger and the bar together whereby the hanger is prevented from turning and disengaging from the girder or support and the furring is adjusted with relation to said girder.

In witness whereof I have hereunto set my hand.

JOHN T. McCORMICK.

Witnesses:

J. S. McCORMICK,
S. H. NOURSE.