No. 807,441. PATENTED DEC. 19, 1905.

J. CRAIG.

PROCESS OF MAKING WROUGHT METAL JOIST HANGERS.

APPLICATION FILED APR. 3, 1905.

2 SHEETS—SHEET 1.

Fig. 1

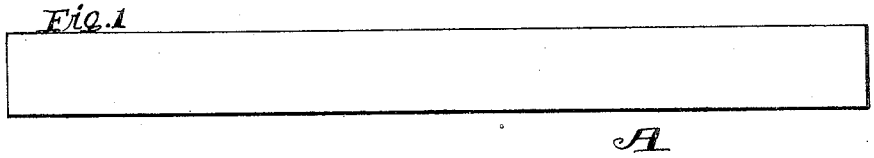


Fig. 2.

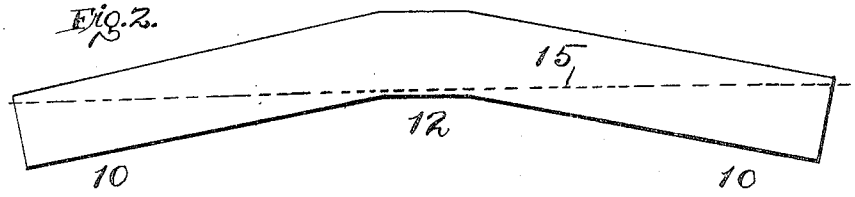


Fig. 3.

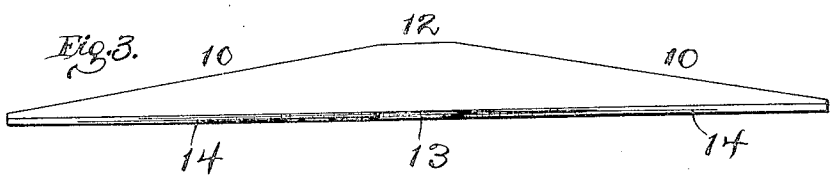
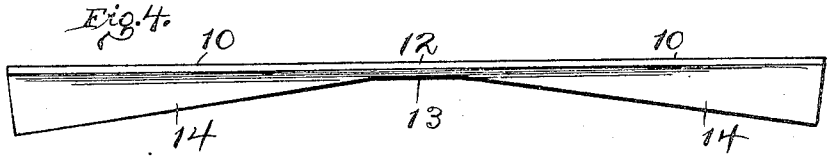


Fig. 4.



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2 SHEETS—SHEET 2.

Fig. 5.

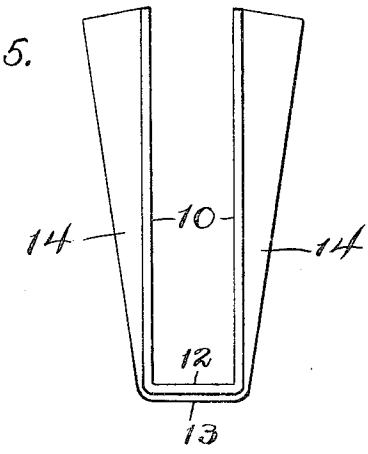
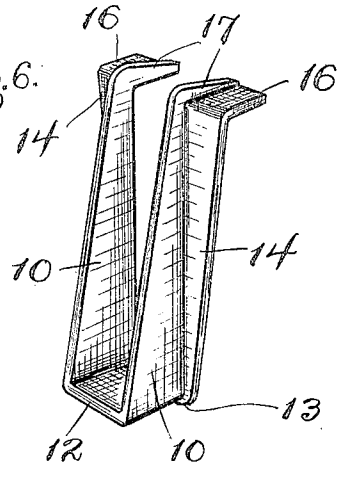


Fig. 6.



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JAMES CRAIG, OF CLEVELAND, OHIO, ASSIGNOR TO THE NATIONAL IRON AND WIRE COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

PROCESS OF MAKING WROUGHT-METAL JOIST-HANGERS.

No. 807,441. Specification of Letters Patent. Patented Dec. 19, 1905.

Application filed April 3, 1905. Serial No. 253,708.

To all whom it may concern:

Be it known that I, JAMES CRAIG, a citizen of the United States of America, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented an Improved Process of Making Wrought-Metal Joist-Hangers; and I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

This invention relates to an improved process of making wrought-metal joist-hangers.

The primary object of this invention is to make a joist-hanger of a wrought-metal rectangular blank-forming bar having parallel longitudinal edges and to avoid waste in the manufacture of a joist-hanger of the character indicated.

With this object in view this invention consists in the steps hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan of a wrought-metal bar suitable for use as a blank in producing a wrought-metal joist-hanger. Fig. 2 shows the opposite end portions of the blank-forming bar bent somewhat edgewise toward each other. Fig. 3 is a top plan relative to Fig. 2, except that in Fig. 3 the bar is bent upwardly from end to end and on a line parallel with the longitudinal edges of the original bar. Fig. 4 is a top plan relative to Fig. 3. Fig. 5 is an elevation showing the end portions of the bar illustrated in Fig. 4 bent upwardly and toward each other. Fig. 6 is a view in perspective of a joist-hanger formed by rearwardly bending the upper ends of the end portions of the bar shown in Fig. 5.

Referring to the drawings, A, Fig. 1, indicates a wrought-metal blank-forming bar. The bar or blank A is rectangular, having parallel longitudinal edges and parallel transverse edges. The first step of my improved process is, therefore, the provision of a wrought-metal bar having parallel longitudinal edges and parallel transverse edges.

The second step of my improved process consists in heating the blank to render it capable of being bent in any direction, whereupon opposite end portions 10 of the heated bar are bent somewhat edgewise toward each other, as illustrated in Fig. 2. The central portion 12 of the bar having been left unbent forms the joist-seat centrally of the joist-hanger produced by my improved process. When the end portions of the bar have been bent as hereinbefore described, the bar is bent from end to end and on a line parallel with the longitudinal edges of the original blank, so as to form upon the bar a flange which extends from end to end of the bar, with the central portion 13 of the said flange parallel with the central portion 12 of the bar, and with the end portions 14 of the flange gradually increasing in width toward the ends of the bar. For instance, the bar shown in Fig. 2 is bent on the dotted line 15 in the said figure and at a right angle to form the flange 13 and 14, as shown in Figs. 3 and 4. The portion 13 of the flange is arranged to form a rib upon the under side of the joist-seat, which, as already indicated, is formed by the central portion 12 of the flanged bar. The two end portions 10 of the flanged bar are bent upwardly at opposite sides, respectively, of and at a right angle to the central portion 12, as shown in Fig. 5, and the upwardly-bent end portions 10 of the flanged bar form the side members of the joist-hanger to be formed. The upper ends of the end portions 10 of the flanged bar having been bent as shown in Fig. 5 are then bent rearwardly at a right angle to the said end portions to form rearwardly-projecting supporting-arms 16, arranged at the upper ends of the side members of the joist-hanger, as shown in Fig. 6, and ribbed upon their upper side, as at 17, which arms are adapted to engage and rest upon the top or upper side of a supporting-beam or other support. (Not shown.)

What I claim is—

The process hereinbefore described of making a wrought-metal joist-hanger consisting, first, in the provision of a straight wrought-metal blank-forming bar uniform or substantially uniform in width from end to end, then suitably heating the bar and bending opposite end portions thereof somewhat edgewise toward each other, then bending the bar on a line extending longitudinally of the longitudinal edges of the original blank to form a flange extending longitudinally of the bar,

then bending the end portions of the bar upwardly at the sides of the joist-seat-forming central portion of the bar to form the side members of the joist-hanger to be formed, and then bending the upper ends of the upwardly-bent end portions of the bar rearwardly to form supporting-arms.

In testimony whereof I sign the foregoing specification in the presence of two witnesses.

JAMES CRAIG.

Witnesses:
C. H. DORER,
B. C. BROWN.