

H. C. SEIPP.
JOIST HANGER.

APPLICATION FILED FEB. 20, 1909.

943,847.

Patented Dec. 21, 1909.

Fig. 1.

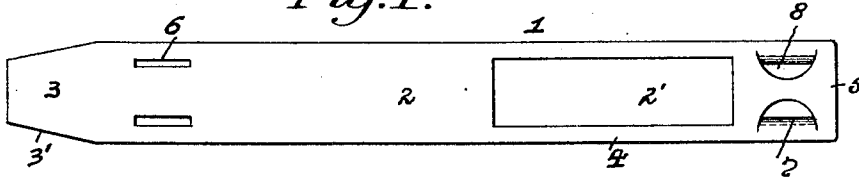


Fig. 2.

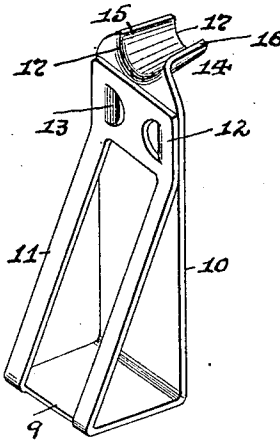


Fig. 5.

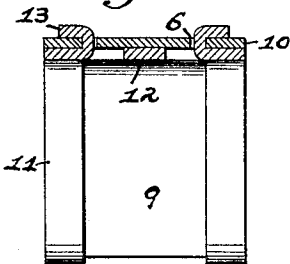


Fig. 3.

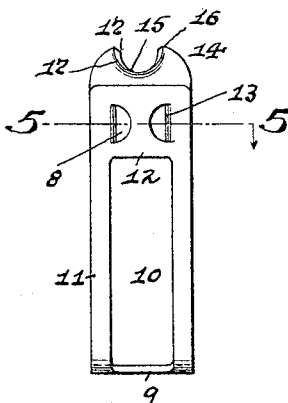
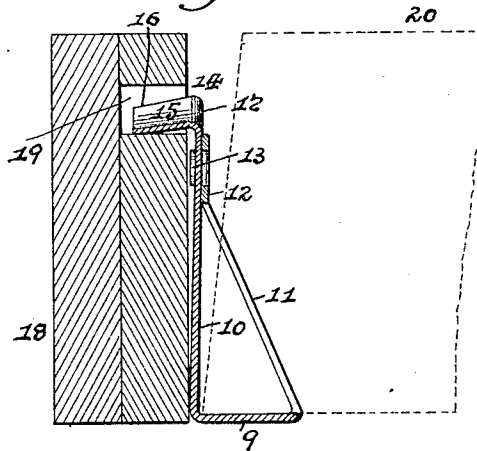


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

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JOIST-HANGER.

943,847.

Specification of Letters Patent.

Patented Dec. 21, 1909.

Application filed February 20, 1909. Serial No. 479,051.

To all whom it may concern:

Be it known that I, HENRY C. SEIPP, a resident of Coraopolis, in the county of Allegheny and State of Pennsylvania, have
5 invented a new and useful Improvement in Joist-Hangers; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a joist hanger, and
10 has special reference to a hanger of a class which is formed from sheet metal.

The object of my invention is to form a cheap, simple and efficient joist hanger which can easily and quickly be formed
15 from a blank of sheet metal and cut and bent to shape, as well as one which will tend to support itself under loads and strains, will not be liable to breakage, and will be stronger and more durable than the ordi-
20 nary class of these hangers now in use.

My invention consists, generally stated, in the novel arrangement, construction and combination of parts, as hereinafter more specifically set forth and described and particularly pointed out in the claims.
25

To enable others skilled in the art to which my invention appertains to construct and use my improved joist hanger, I will describe the same more fully, referring to
30 the accompanying drawing, in which—

Figure 1 is a plan view of the blank from which my improved joist hanger is formed. Fig. 2 is a perspective view of the finished or completed hanger. Fig. 3 is a front view
35 of the same. Fig. 4 is a vertical central section of the hanger showing the same applied in position. Fig. 5 is a cross-section of the hanger on the line 5—5 Fig. 3.

Like symbols of reference herein indicate
40 like parts in each of the figures of the drawing.

As illustrated in the drawing, 1 represents the blank for construction or forming the hanger, which is formed or cut to shape
45 from a piece of sheet metal and has a body portion 2 and lug portion 3 at one end of the same having inwardly tapering sides 3'. The body 2 is provided with the opening 2' within the same for forming the parallel
50 arm portions 4 on each side of the same and cross-portion 5 at the other end of the same. The body 2 has the two parallel holes or slots 6 punched lengthwise of the same near the lug portion 3 and the cross-portion 5

has the parallel and curved lug portions 7 55 punched lengthwise of the same and thereby leaving the holes 8 in said portion.

After the blank 1 has been thus formed it is formed into the finished hanger preferably at a single operation through a suitable
60 machine by bending outwardly the body 2 at a right angle to form the horizontal portion 9 and the vertical body portion 10 of the hanger, and the arm portions 4 and cross-portion 5 are bent upwardly and in-
65 wardly at an angle toward said vertical portion to form the inclined arms 11. At the same time the cross-portion 5 is bent upwardly in a vertical line with the vertical
70 portion 10 and against the front face of the same to form the upper horizontal portion 12, and the lug portions 7 thereon are passed through the slots 6 in said vertical portion
75 to form the attaching lugs 13 by being bent outwardly and clenched against the back of said vertical portion. At the same time the
80 lug portion 3 on the body 2 is bent back at right angles to the vertical body portion 10 to form the supporting portion 14 of the hanger, and preferably formed by means of
85 suitable dies into U-shape, such as is shown and described in United States Letters Patent No. 829,234, granted to me on August 21, 1906, and in my application for United
90 States Letters Patent filed April 6, 1908, Serial No. 425,425, which consists of a semi-circular or gutter supporting portion 15 provided with the open outer top 16 and open
95 ends 17.

When thus formed the hanger is applied
90 to a beam or joist 18, as shown in Fig. 4, by having a hole 19 formed within such beam or joist and just above the neutral axis of the same, and within said hole the gutter
95 supporting portion 15 on the hanger is placed, so that such hanger is anchored and hung thereby from said beam or joist. After the hanger is thus in position the cross-beam or joist 20, shown in dotted lines in Fig. 4 is placed within the hanger so that
100 its end rests upon the horizontal portion 9 and between the arms 11 so as to be supported and carried thereby, while any side movement of said beam or joist will be prevented by the said arms.

When the hanger is thus in position and supporting the beam or joist 20, it is evident that in any bending or other strains the

hanger will be firmly supported by its supporting portion 15 and by the arms 11 engaging with the vertical portion 10 of the same through the vertical portion 12 and lugs 13 thereon being attached firmly and

securely to said vertical portion.
If desired, the hole 16 can be extended through the beam or joist 18 and a screw-bolt placed within said hole and grooved seat 15' in the U-shaped end 15 of the hanger, so that said end can be firmly and securely held in said hole to support the hanger in place, while the beam or joist supporting portion of the hanger is supported by the upper end of said hanger. If desired, other forms and shapes can be applied to the right angled anchoring portion of the hanger, and various other modifications and changes in the design and construction of my improved joist hanger may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

It will thus be seen that my improved joist hanger can be made by hand operations or by a machine and when in use will form a firm and substantial support for the beam or joist, as it will not be liable to slip from or out of the beam or joist holding the same, and any bending or other strains upon the beam or joist supporting portion of the hanger will be prevented by the supporting of said portion on the upper end of the hanger, as well as overcoming any possible distortion of said supporting portion when holding a beam or joist in position thereon. It will also be seen that the hanger is formed from a continuous piece of sheet metal, such as steel, and such a form of hanger will enable it to be used on different heights of beams or joists. Practical experience in the making of the hanger enables it to be formed at one operation of a machine and in a rapid and easy manner, thereby cheapening the cost of manufacture in labor and material over the ordinary class of these hangers and permit the formation of a hanger less liable to breakage and of unusual strength and simplicity.

What I claim as my invention and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a hanger having a vertical body portion, an anchoring portion at the upper end of said body portion, and a carrying portion bent out at a right angle from the lower end of said body portion and having a portion comprising spaced arms bent up at an angle toward said body portion, the bend being on a line parallel to the faces of said carrying portion and attached to said body portion.

2. As a new article of manufacture, a hanger having a vertical body portion, an anchoring portion at the upper end of said

body portion, a carrying portion bent out at a right angle from the lower end of said body portion and having a portion comprising spaced arms bent up at an angle toward said body portion, the bend being on a line parallel to the faces of said carrying portion, and means attaching said armed portion to said body portion.

3. As a new article of manufacture, a hanger having a vertical body portion, an anchoring portion at the upper end of said body portion, a carrying portion bent out at a right angle from the lower end of said body portion and having a portion comprising spaced arms bent up at an angle toward said body portion, the bend being on a line parallel to the faces of said carrying portion, and lugs on said armed portion for being attached to said body portion.

4. As a new article of manufacture, a hanger having a vertical body portion, an anchoring portion at the upper end of said body portion, a carrying portion bent out at a right angle from the lower end of said body portion and having a portion comprising spaced arms bent up at an angle toward said body portion, the bend being on a line parallel to the faces of said carrying portion, and lugs on said armed portion for being attached to said body portion by passing through openings in said body portion and clenched against the same.

5. As a new article of manufacture, a hanger having a vertical body portion, an anchoring portion at the upper end of said body portion, a carrying portion bent out at a right angle from the lower end of said body portion and having a portion comprising spaced arms bent up at an angle toward said body portion, the bend being on a line parallel to the faces of said carrying portion, a vertical cross-portion connecting the ends of said arms, and means attaching said cross-portion to said body portion.

6. As a new article of manufacture, a hanger having a vertical body portion, an anchoring portion at the upper end of said body portion, a carrying portion bent out at a right angle from the lower end of said body portion and having a portion comprising spaced arms bent up at an angle toward said body portion, the bend being on a line parallel to the faces of said carrying portion, a vertical cross-portion connecting the ends of said arms, and lugs on said cross-portion for being attached to said body portion.

7. As a new article of manufacture, a hanger having a vertical body portion, an anchoring portion at the upper end of said body portion, a carrying portion bent out at a right angle from the lower end of said body portion and having a portion comprising spaced arms bent up at an angle toward

said body portion, the bend being on a line
parallel to the faces of said carrying por-
tion, a vertical cross-portion connecting the
ends of said arms, and lugs on said cross-
5 portion for being attached to said body por-
tion through openings in said body portion
and clenched against the same.

In testimony whereof, I, the said HENRY C.
SEIPP, have hereunto set my hand.

HENRY C. SEIPP.

Witnesses:

J. N. COOKE,
JAMES L. WEHN.