

No. 662,228.

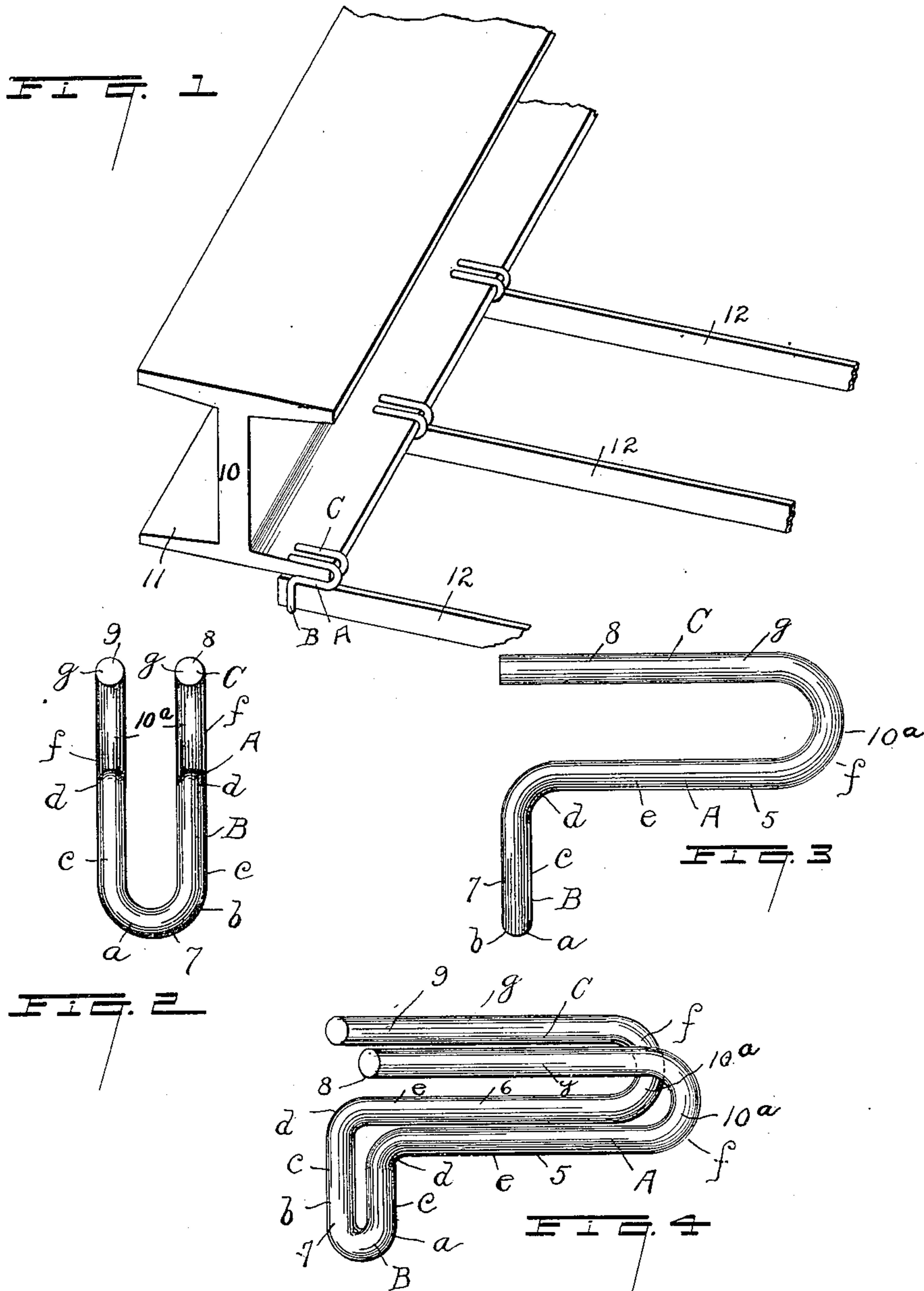
Patented Nov. 20, 1900.

G. E. ESCHER.

BEAM HANGER.

(Application filed Aug. 10, 1900.)

(No Model.)



WITNESSES  
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# UNITED STATES PATENT OFFICE.

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## BEAM-HANGER.

SPECIFICATION forming part of Letters Patent No. 662,228, dated November 20, 1900.

Application filed August 10, 1900. Serial No. 26,463. (No model.)

*To all whom it may concern:*

Be it known that I, GUSTAVE EDWARD ESCHER, a citizen of the United States, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Hangers, of which the following is a specification.

This invention relates to hangers, and more particularly to hangers employed in building construction for supporting or suspending beams, ceiling-frames, pipes, and other structural elements and fittings.

The object of the present invention is to provide a hanger of the class described which is simple, durable, and readily installed in operative position, at the same time being efficient and positive in its connecting or suspending function.

My invention consists in the novel construction and arrangement of parts hereinafter set forth.

In the accompanying drawings, which form part of this specification, and in which corresponding reference characters denote the same parts in the several views, Figure 1 is a perspective view illustrating the method of use of my improved hanger in its application to building construction; Fig. 2, an end view of the hanger; Fig. 3, a side view thereof, and Fig. 4 a perspective view thereof.

Referring with particularity to the drawings my improved hanger consists, in a preferred form, of a body portion or member A, comprising two preferably parallelly-extending rods 5 and 6, a carrying member B, comprising a loop 7, ranging downwardly from the corresponding ends of the rods 5 and 6, and a suspending member C, comprising two rods 8 and 9, ranging, preferably, in parallelism with and above the member A and having a yielding or spring connection at 10<sup>a</sup> with the body member A at the end thereof opposite that from which the carrying member B depends. The outer or free ends of the rods 8 and 9 preferably terminate in the plane of the member B, being thus of approximately the same length as the rods 5 and 6, as shown.

In constructing my improved hanger I preferably provide a single length of spring or malleable-metal wire, rod, or bar *a* and bend the same centrally to form a loop *b*, the sides *c* of which project substantially in parallel-

ism, and the loop *b* constitutes the carrying member B. The wire *a* is then bent at right angles at *d* and extended in two substantially parallel rods *e*, which constitute the body member A. The rods *e* merge at the ends thereof opposite the bends *d* into two loops *f*, and said loops *f* are extended into two rods *g*, which are substantially relatively parallel and which extend jointly above and substantially in parallelism with the rods *e*. The rods *g* constitute the suspending member C, and the loops *f* serve as the spring connection between the suspending member C and the body member A. The extreme end portions of the wire *a* terminate approximately within the plane of the loop *b* or carrying member B.

In Fig. 1 I have illustrated the method of employment of my improved hanger for the purpose of suspending or supporting ceiling-frames in building construction. At 10 is shown an I-beam provided with the customary flanges 11, and at 12 are shown the ceiling-frame bars or members, flat bars being shown. It is understood, however, that my improved hanger is adaptable to use in connection with angle-irons, channel-irons, or other forms of bars. In connecting one of the bars 12 with the I-beam 10 in suspended position I first pass the hanger onto the bar until the latter is seated in the carrying member B or loop *b*, and this, due to the open-work construction of the hanger, may be readily performed by simply passing the hanger upwardly from beneath the bar, the suspending member C and body member A offering no transverse obstruction to such manipulation. The hanger is preferably so proportioned that when the bar is seated in the carrying member B the upper edge portion of the bar will not project above the body member A. The hanger is now slipped onto the flange 11 of the I-beam, the suspending member C and the body member A passing, respectively, above and beneath the flange. This manipulation brings the bar 12 up closely in or approximately in engagement with the under surface of the flange 11. As shown, the flange 11 is wedge shape in form, tapering outwardly toward its edge portion, and as the hanger is passed onto the same with sufficient pressure or under hammer blows the suspending member C and



body member A are relatively separated, causing an increased spring potential in the spring connection at 10<sup>a</sup>, whereby they are connected. This increased spring potential  
 5 causes a positive clamping action by the members A and C upon the flange 11 and results in a firm connection of the hanger, and consequently of the bar 12, with the I-beam. If  
 10 the hanger be constructed of malleable-iron wire, there will still be a yielding relation between the body member and the suspending member sufficient to cause the clamping action above referred to.

It is manifest that I may considerably vary  
 15 the specific details of construction and arrangement above described in adapting my improved hanger to varying conditions of use without departing from the spirit of my invention and the scope of the following claims.  
 20 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A hanger of the class described, comprising a body member, a carrying member depending from one end thereof, and a suspending member having a yielding connection with the other end thereof and extending above and substantially in parallelism with the body member, substantially as shown and described, and for the purpose set forth.  
 30

2. A hanger of the class described, comprising in integral construction, a body member consisting of side rods, a carrying member connected with one end thereof and consisting of a depending loop, the sides of which are connected with the side rods of the body member, and a suspending member connected with the other end of the body member by means of spring or yielding loops, and consisting of side rods extending above the body member.  
 40

3. As an improved article of manufacture, a hanger of the class described, formed of a single length of bent wire, formed centrally  
 45 into a loop constituting the carrying member,

the wire being thence bent and extended in substantially parallel side rods to form the body member, and thence bent and extended in substantially parallel side rods to form the suspending member; said suspending member ranging above, and said carrying member below the body member. 50

4. The combination, with a flanged beam, of a hanger consisting of a body member, a carrying member depending from one end thereof, and a suspending member ranging above the body member and having a yielding connection with the other end thereof, said body member and said suspending member being passed about the flange of the beam and at opposite sides thereof; the hanger being formed in its entirety of a single length of bent wire. 55

5. A hanger of the class described, comprising a body member, a carrying member depending from one end thereof, and a suspending member having a yielding connection with the other end of the body member and ranging thereabove, substantially as shown and described, and for the purpose set forth. 60

6. A hanger of the class described, comprising, in integral construction, a body member consisting of a longitudinal rod, a carrying member connected with one end thereof and consisting of a depending loop one side of which is connected with the longitudinal rod of the body member, and a suspending member connected with the other end of the body member by means of a spring or yielding loop and consisting of a rod extending above the body member. 75

In testimony that I claim the above as my invention I have signed the same, in presence of two witnesses, this 9th day of August, 1900.

GUSTAVE EDWARD ESCHER.

Witnesses:

RAYMOND I. BLAKESLEE,  
 M. R. ROCKWELL.