(No Model.)

F. A. WILLIAMS.

SUPPORTING CLAMP.

No. 415,689. Patented Nov. 19, 1889.

Fig. 1.

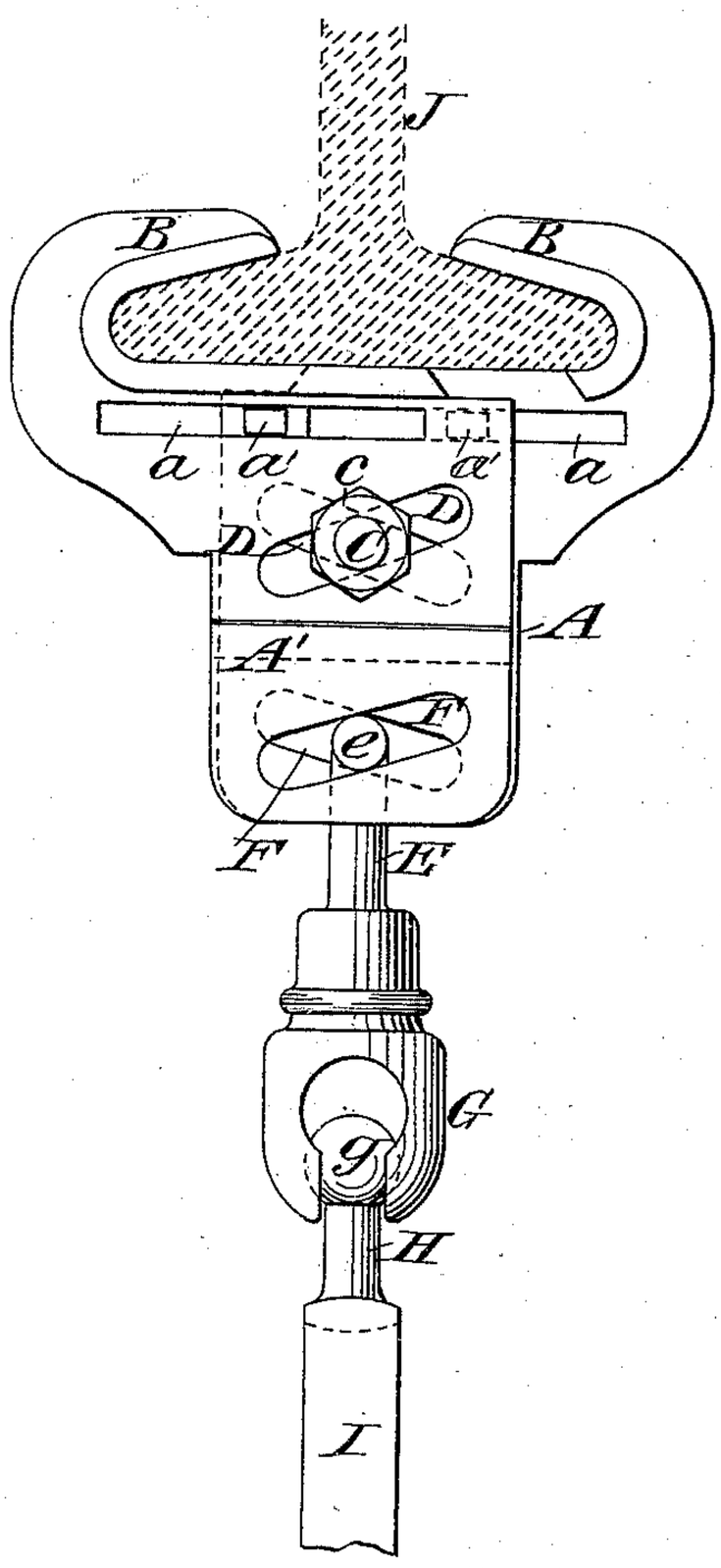
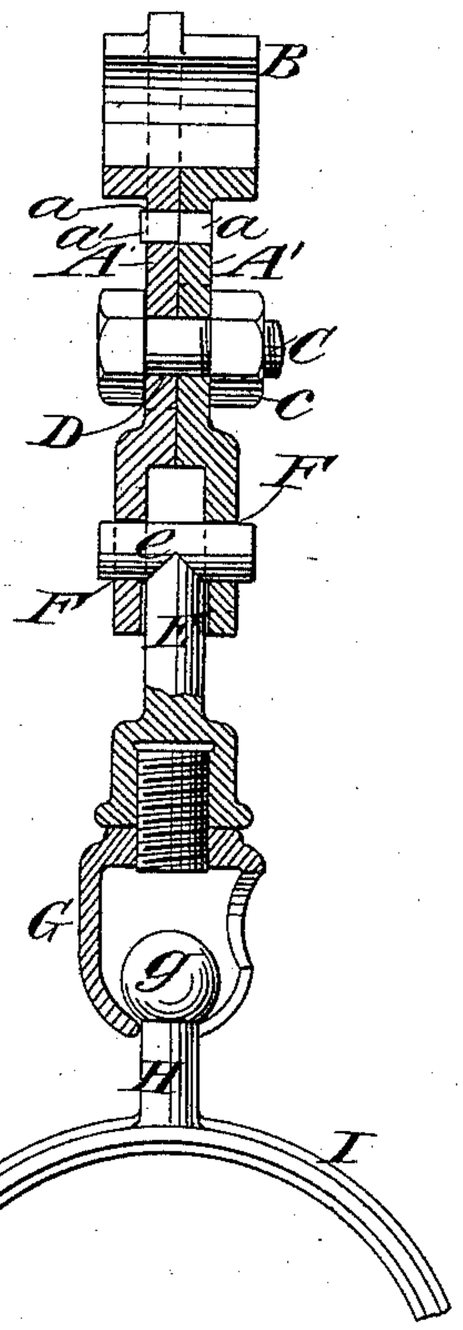


Fig. 2.



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SUPPORTING-CLAMP.

SPECIFICATION forming part of Letters Patent No. 415,689, dated November 19, 1889.

Application filed August 14, 1889. Serial No. 320,769. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS A. WILLIAMS, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Supporting-Clamps, of which the following is a specification.

My improvement relates to clamps which may be used to support articles from iron beams, and particularly for supporting pipes, such as steam-pipes.

I will describe in detail a supporting-clamp embodying my improvement, and then point out the novel features in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a clamp embodying my improvement, showing a portion of a pipe-hanger suspended therefrom. Fig. 2 is a contral vertical section of the same.

Similar letters of reference designate corresponding parts in all the figures.

A A′ designate two members of the clamp. These members may be made of cast metal and have sliding connections with each other. Their upper portions are bent or extended over toward each other, so as to form overhanging jaws B. These overhanging jaws, when the clamp is in position, extend over the foot or base of a beam J, constituting an overhead support. Each member of the clamp is provided with a horizontally-extending slot *a*, and each is also provided with a projection *a′*, which projection extends into the slot *a* of the other member of the clamp. These slots and projections operate as guides to cause the jaws to occupy proper relative positions to each other when the members of the clamp are being moved laterally to cause them to embrace a beam of greater or less width.

I prefer to maintain the elements of the clamp together, so as to prevent their separation, by means of a bolt or pin C. I have shown a bolt provided with a nut *c*. This bolt C extends loosely through angularly-extending slots D, formed in the members A A′ of the clamp. These slots extend in reverse directions from each other—or, in other words, so that they will cross each other at angles. By this means the securing-bolt C will be always centered between the jaws in whatever position the members may be adjusted into laterally.

In order to support an article—such, for instance, as a pipe-hanger—from the clamp, I prefer to employ a T-bolt E, provided with a head *e*, which head extends loosely through angularly-extending slots F in the members A A′, which slots are in shape and inclination approximately the same as the slots D. This construction enables the T-bolt to be centered in the same manner as is the connecting-bolt C, and the strain of the weight suspended from the T-bolt is always central beneath the supporting-beam. The slots D and F also act as cams, which, when the strain is brought to bear upon their lower surfaces, cause the jaws of the clamp to tightly grip the beam. I have shown supported from the T-bolt E a socket G, in which is received a ball *g* upon a shank H, extending from a pipe-hanger I. I have only shown a portion of this pipe-hanger, as the same does not constitute part of my invention.

It will be seen that by improvement I provide a very simple and ready clamp by which an article may be supported from an iron beam, which, while strong and durable, may also be readily attached to and detached from the foot of the beam at any desirable point.

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

1. A clamp comprising two members each provided with jaws adapted to extend over and grip the foot of a beam, and each provided with an angularly-extending slot, which slots cross each other in reverse directions, and a bolt or pin extending loosely through said slots and serving to secure said members together, substantially as specified.

2. A clamp comprising two members each provided with jaws adapted to extend over and grip the foot of a beam, and each provided with an angularly-extending slot, which slots cross each other in reverse directions, a bolt or pin extending loosely through said slots and serving to secure said members together, said members being also provided with other slots similar to the slots first named, and a T-bolt, the head of which ex-

tends into said last-named slots, substantially as specified.

3. A clamp comprising two members each provided with jaws adapted to extend over and grip the foot of a beam, and each provided with an angularly-extending slot, which slots cross each other in reverse directions, a bolt or pin extending loosely through said slots and serving to secure said members together, and a guide for guiding said members during their lateral movements, substantially as specified.

FRANCIS A. WILLIAMS.

Witnesses:
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GEO. BARRY.