No. 682,086. Patented Sept. 3, 1901.

T. F. KEARNEY.

CROSS BRIDGE.

(Application filed May 31, 1901.)

(No Model.)

Fig.1

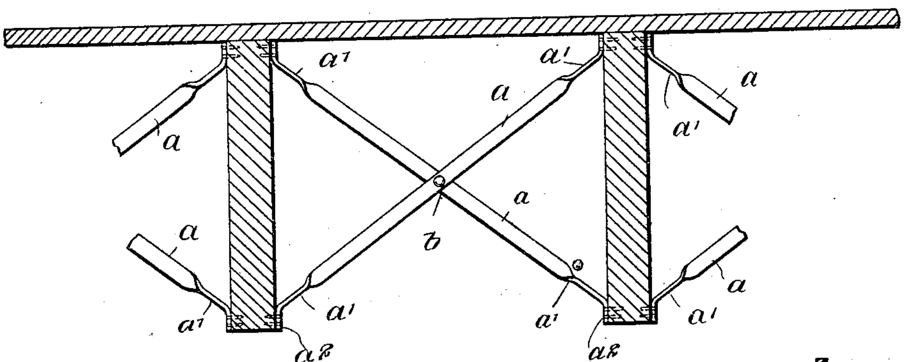


Fig.2

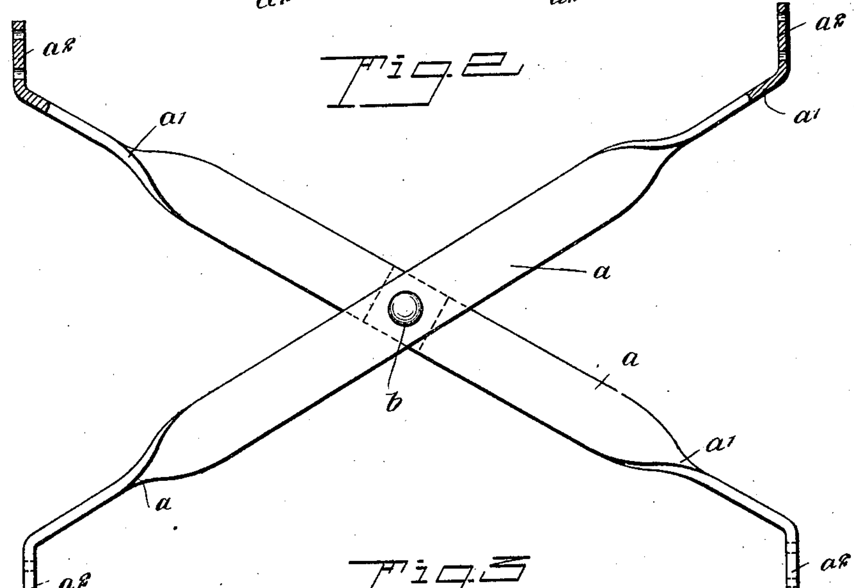
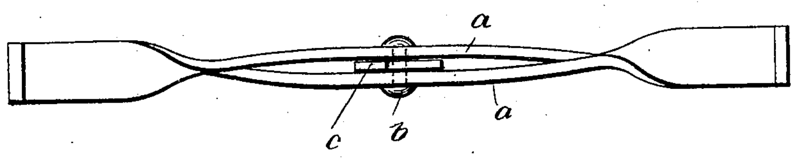


Fig.3



WITNESSES:

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UNITED STATES PATENT OFFICE.

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CROSS-BRIDGE.

SPECIFICATION forming part of Letters Patent No. 682,086, dated September 3, 1901.

Application filed May 31, 1901. Serial No. 62,512. (No model.)

To all whom it may concern:

Be it known that I, THOMAS F. KEARNEY, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Cross-Bridge, of which the following is a full, clear, and exact description.

This invention relates to a device for bracing floor-joists and other parallel timbers in the various branches of the builders' art, such devices being commonly known as "cross-bridges."

The invention comprises certain novel features of construction, which will be fully pointed out hereinafter.

This specification is a specific description of one form of the invention, while the claim is a definition of the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional view of a part of a building, showing my invention applied. Fig. 2 is an enlarged side elevation of the cross-bridge, and Fig. 3 is a plan view thereof.

The cross-bridge comprises two brace-arms *a*, which are duplicates of each other and formed, preferably, of stout plate material, the end portion *a'* of which are given a quarter turn or twist, as shown, and then bent laterally, as indicated at a^2, so that said bent ends may lie flat against the floor-joists or other timbers to which the cross-bridge is applied. These ends are adapted to be fastened in place by suitable devices, as indicated by the dotted lines in Fig. 1. The body or middle portions of the brace-arms *a* are bowed oppositely, as indicated in Fig. 3, and are pivotally connected together by a rivet or the like *b*. Between the two brace-arms a spacer or washer *c* is arranged, such washer receiving the rivet *b* and serving to hold the brace-arms *a* spaced apart at their middle portions. By thus bowing the brace-arms at their middle the end portions are placed in line with each other.

This device may be applied in various manners, as will be apparent to persons skilled in the art, and it furnishes a secure and durable brace. It is preferably constructed of metal, which not only gives great strength, but is also non-combustible, thus decreasing the liability of destructive fires. By pivotally connecting the arms together the bridge may be adjusted to suit the width of timbers to which it is to be applied and the distance between such timbers. This enables me to make the bridges in quantities previous to their application, since they are readily adjusted to the various arrangements necessary.

Various changes in the form, proportions, and minor details of my invention may be resorted to without departing from the spirit and scope of the same. Hence I consider myself entitled to all such variations as may lie within the scope of my claim.

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

A cross-bridge formed of two lengths of flat material pivoted together at their middles, and a spacer arranged between said lengths of material at the pivot to separate them from each other and said lengths of material being bowed outward oppositely from each other at their middles, their end portions being given a quarter-turn and bent laterally in the plane of the cross-bridge, said end portions lying directly opposite each other.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS F. KEARNEY.

Witnesses:

I. B. OWENS,

JNO. M. RITTER.