June 3, 1924. 1,496,133

S. W. ROTHROCK

ADJUSTABLE WOOD CROSS BRIDGING FOR FLOORS AND JOISTS

Filed Aug. 22, 1922

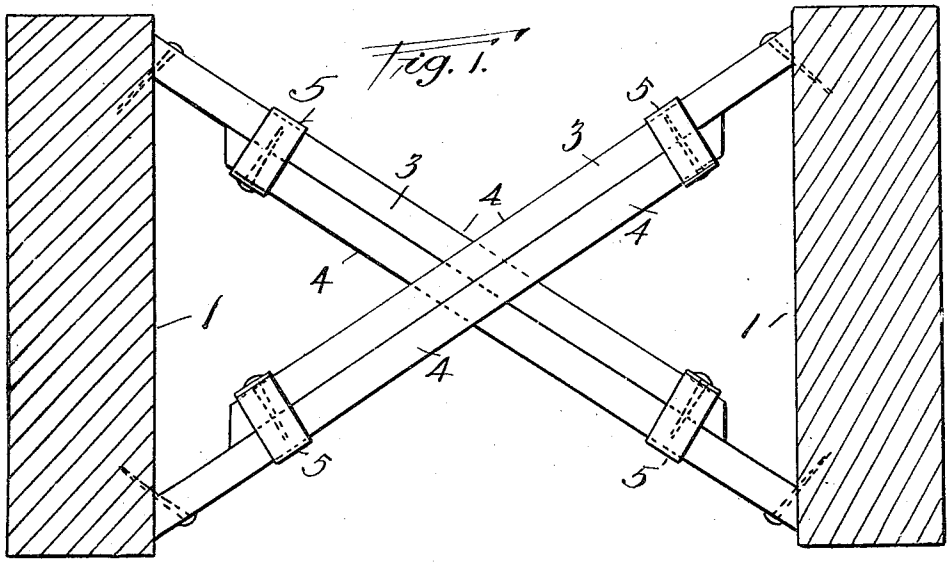


Fig. 1.

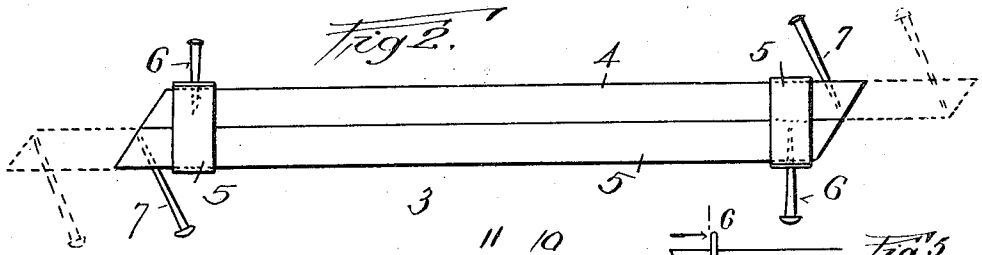


Fig. 2.

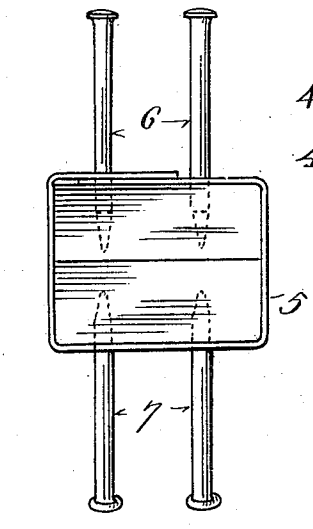


Fig. 3.

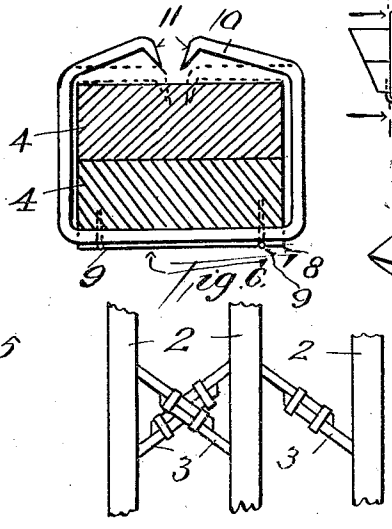


Fig. 4.

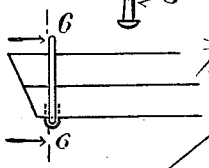


Fig. 5.

Fig. 6.

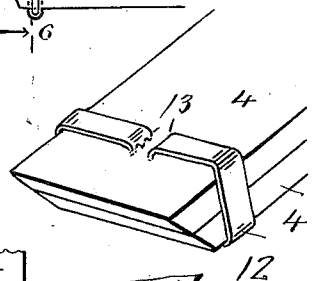


Fig. 7.

INVENTOR

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BY His ATTORNEY

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UNITED STATES PATENT OFFICE.

SAMUEL W. ROTHROCK, OF NEW YORK, N. Y.

ADJUSTABLE WOOD CROSS BRIDGING FOR FLOORS AND JOISTS.

Application filed August 22, 1922. Serial No. 583,499.

To all whom it may concern:

Be it known that I, SAMUEL W. ROTHROCK, a citizen of the United States, and a resident of the city of New York, county of Queens, and State of New York, have invented a new and useful Improvement in Adjustable Wood Cross Bridging for Floors and Joists, of which the following is a specification.

Heretofore, cross bridging has been made in various ways as by metal strips or strips of wood cut on the job, and sometimes wood has been cut in a mill and sent to the job. In any event, when the work is done off the job, great trouble is had in the bridging because wooden joists and beams are always irregular and so this bridging, which is required to run from top to bottom and diagonally across, cannot be made the right length away from the exact place where it is to be used. If cut on the job, where it is to be used, the work is necessarily slow because a great deal of time is consumed in cutting and fitting.

The object of my invention is to provide a universal bridging which may be used on any job and be prepared before it is sent to the job and when used it can be readily adjusted to the desired length so as to always insure a good fit. This object is accomplished by my invention, several embodiments of which are hereinafter more particularly set forth.

For a more detailed description of my invention, reference is to be had to the accompanying drawings, forming a part hereof, in which—

Figure 1 is a sectional view of two beams connected by my improved bridging.

Figure 2 is a side elevation of this bridging as delivered to the job.

Figure 3 is an end view of the same.

Figure 4 shows this bridging secured between studs.

Figure 5 shows a modified structure, and

Figure 6 is an enlarged sectional view, taken on the line 6—6 of Figure 5, looking in the direction of the arrows.

Figure 7 shows yet a further modification.

Throughout the various views of the drawings, similar reference characters designate similar parts.

Referring to the modification shown in Figures 1 to 4 inclusive, it appears that two beams 1 or studs 2 are connected by the bridging 3. This bridging 3 is composed of two parallel strips 4 with bands 5 of steel or other suitable material near each end. These bands are made to overlap and each band is provided with two registering perforations through which passes a nail 6, and a corresponding nail 6 passes through a single perforation adjacent to the other two when the band is bent, as shown in Figure 3. When the bridging 3 is assembled in a mill, it is sent from the mill in the condition shown in Figures 2 and 3 with the nails 6 protruding and entering one strip only and ready to be driven into the other strip.

The ends of the strips 4 are beveled at an angle of something like sixty degrees and bored so as to have nail holes to receive the nails 7, as indicated, two of these nails 7 being used at each end.

When the bridging reaches the job it is given to a carpenter who goes to the place of use and slides one strip 4 on the other and measures the length of bridging he desires from the top of one beam to the bottom of the other. Having determined this measurement, he holds the two strips firmly while he drives home the nails 6. He then has the bridging at the precise length desired for the particular use intended. He then replaces the bridging at the place of use and drives home the nails 7.

In the preferred embodiment of my invention, these nails 6 and 7 are covered with resin or some similar compound, so that they will hold firmly when once driven.

It will be noted that these nails 6 and 7 and the bands 5 prevent all separation of the strips 4 after assembly, and prior to the time of use. While these strips may be slid one on the other until the bands meet, in which position the bridging has its maximum length, yet the strips cannot be separated. It will also be noted that the coating of the nails will prevent them from shaking out or becoming loose in shipment, or use.

In Figures 5 and 6 is shown another embodiment of my invention with the nails omitted. In this structure the parts can be separated, but as the nails are omitted, it can be packed in less space. Here the strips 4 near one end of each have a groove 8 and staples 9 which hold a bent and pointed wire 10 which takes the place of the band 5, the ends 11 are left raised, as shown in Figure 6 and may be driven home as shown

in dotted lines in this figure, by a hammer blow when once the proper length has been determined, as above set forth.

In Figure 7 a further modification is shown which is much the same as the structure of Figures 5 and 6, except that in place of a wire 10, a band 12 is employed which is nailed to one strip 4 and adapted to be secured to the other strip by means of the serrated ends 13 when once the proper length of bridging has been determined, as above set forth.

In any embodiment of my invention, the bridging may be assembled at a mill and sent to the place of use and there fitted by a carpenter on the job in a minimum time and with maximum convenience, and this is true regardless of the length of the bridging required. Furthermore, it will be noted that the strips 4 overlap at the center where the greatest strength is required.

If each piece 4 be made as shown in Figure 2 with a diagonal length of 14 inches from toe to toe, it is possible to fit all sizes of floor beams in common use from 2″x6″ to 4″x18″ which are spaced from 12″ to 24″ between centers.

While I have shown and described some embodiments of my invention, it is obvious that it is not restricted thereto, but that it is broad enough to cover all structures that come within the scope of the annexed claims.

Having thus described my invention, what I claim is:

1. A bridging composed of two parallel and beveled strips, gripping devices, engageable with the two strips, and spaced a substantial distance apart, for adjustably holding the two strips in close contact throughout their overlapping portions, and means for locking the two strips in proper relation when adjusted.

2. A bridging composed of two parallel strips with beveled ends, each of which has a band secured at one end and embracing the other strip and nails holding the bands in place the beveled ends being adapted to lie against and be secured to the adjacent parallel faces of a pair of beams.

3. A bridging composed of two parallel strips each having a band secured to one end by nails so that the strips may be adjusted and then the nails driven so as to hold the strips in fixed relation.

4. A bridging composed of two beveled strips with bands about the same, each band being secured at one end of each strip by nails and nails driven into each strip for securing the bridging to a joist or beam so that the strips cannot become separated when in transit or after assembly and prior to use.

5. A bridging composed of two beveled strips with bands about the same, each band being secured at one end of each strip by coated nails and coated nails driven into each strip for securing the bridging to a joist or beam so that the strips cannot become separated when in transit or after assembly and prior to use.

In testimony whereof, I have hereunto set my hand this 14th day of August, 1922.

SAMUEL W. ROTHROCK.