

F. H. REAM.  
METAL BRIDGING FOR FLOOR JOIST.  
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1,106,844.

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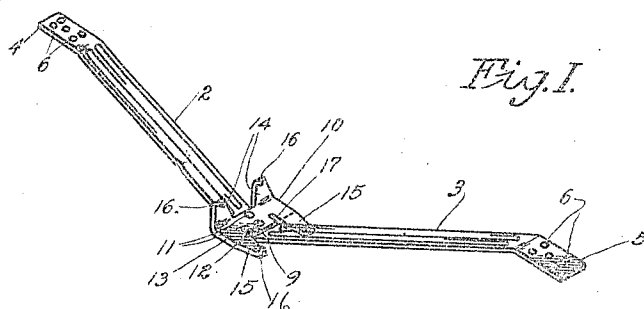


Fig. I.

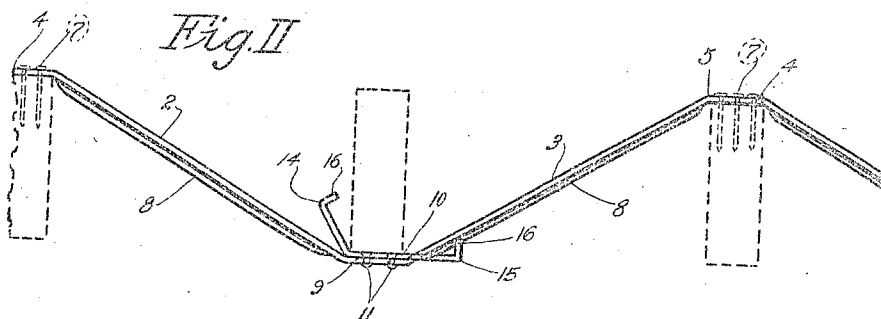


Fig. II.

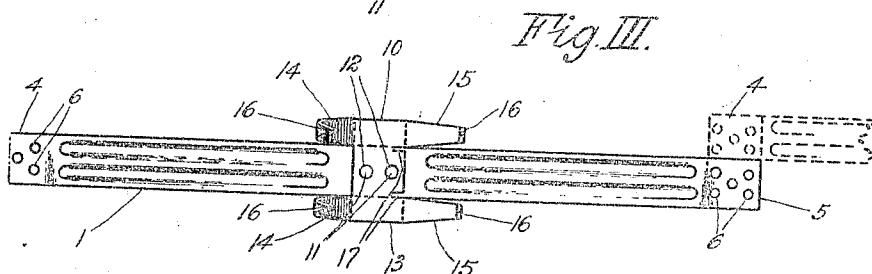


Fig. III.

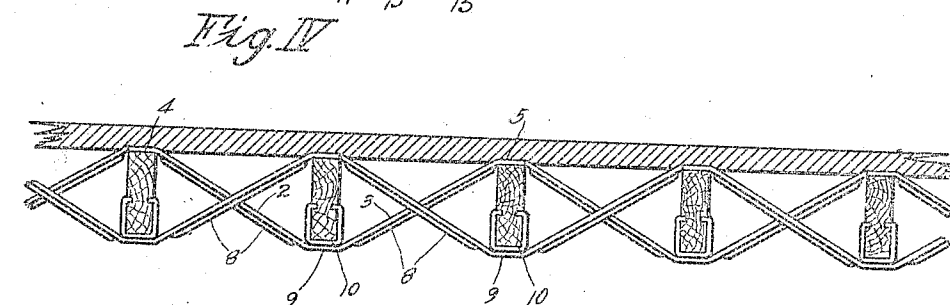


Fig. IV.

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METAL BRIDGING FOR FLOOR-JOIST.

1,100,844.

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*To all whom it may concern:*

Be it known that I, FRED H. REAM, a citizen of the United States, residing in the city of Lincoln, in the county of Lancaster and State of Nebraska, have invented a new and useful Improvement in Metal Bridging for Floor-Joist, of which the following is a specification.

My invention relates to metal-bridging for floor-joists, by which wood floor-joists in the floors of bridges and building structures are securely held spaced apart in proper position regardless of compression or other strains.

The objects of my invention are:—First, to provide a cheap, substantial and durable bridging member for floor-joist. Second, to provide a bridging-member that will effect considerable saving in expense for time, labor and material when staying and bracing floor-joist, and third, to provide a bridging-member impervious to moisture and adapted for carrying compression and tension strains without impairing the integrity of the fastenings. I attain these objects by the means and devices illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of my complete invention; Fig. 2 a side elevation of my invention illustrating the method of applying same; Fig. 3 a plan view of my invention, and Fig. 4 a sectional view of a floor supported by floor-joist provided with my invention.

Similar numerals refer to similar parts throughout the drawing.

The numeral 1 indicates a body-member consisting of a strip of sheet metal, such as galvanized-iron, steel, and the like flat metals, preferably of steel. The said strip is narrow in width and provided with a length adapted for extending downwardly from the upper-edge of one floor-joist, beneath the adjoining floor-joist, and upwardly to the upper-edge of the next adjoining floor-joist, as shown in Figs. 2 and 4. Adjacent the middle of said strip, and substantially equi-distant from its exact center, on both sides thereof, the strip is bent upwardly a distance for the purpose of providing the limbs 2 and 3. The terminal part of each of said limbs 2 and 3 is bent outwardly to provide lugs 4 and 5, which lugs are each provided with a plurality of holes 6 apertured therein through which the fastening devices 7 are forced into the floor-

joist. The limbs are each indented longitudinally to provide a rib 8 adapted for added strength and rigidity. The intermediate portion of said strip located between the upwardly-bent limbs 2 and 3 provides a seat 9 upon which a retaining-member 10 is immovably secured by the headed rivets 11 inserted in the holes 12 apertured in the seat 9 and in the retaining-member 10. The said retaining-member 10 comprises an oblong plate of pliant metal similar to the metal body-member provided integrally with prongs 14, 14 projecting from one side of the plate 13, outwardly of and parallel with the opposite sides of the body-member 1. Prongs 15, 15 project from the opposite side of the plate 13, outwardly of and parallel with the opposite sides of the body-member 1. The prongs 14, 14, and the prongs 15, 15 are each sharply pointed and bent upwardly to substantially a vertical position and the points 16 are each bent inwardly adapted to be forced into the opposite sides of the floor-joist, bringing the upwardly-bent portion of the respective prongs into rigid adjustment with the floor-joist. It is known that wood floor-joist, dimensions the same, have variable thickness, and for the purpose of obtaining accurate adjustment of the retaining-member to the floor-joist regardless of such variations slots 17 are apertured transversely in the plate 13 in line with the inside-edge of each of the prongs 15, 15. The slots 17 provide means for bending the prongs 15, 15 upwardly to engage the floor-joist regardless of any variation in the thickness of the floor-joist.

To apply my metal bridging the plate 13 of the retaining-member 10 is placed in engagement with the lower edge of the floor-joist, and the prongs 14 and 15 are bent upwardly and the points 16 forced into the opposite sides of the floor-joist. The lugs 4 and 5 are positioned and secured upon the upper-edge of the floor-joist next adjoining on opposite sides of the floor-joist engaged by the retaining-member 10. The metal bridging is similarly applied to each floor-joist thus effecting a trussing of the individual floor-joist, as shown in Fig. 4, adapted to carry compression strains and provide lateral bracing secured by fastening devices not affected by tension strains.

While I show my invention as comprising two members rigidly assembled the same

may be made integral and stamped from sheet metal without departing from my invention or the scope of the appended claim.

Having described my invention I claim:

- 5 In a joist bridging, a metal bridge member consisting of a body-member having a flat-portion located intermediate its length and having an upwardly-extending limb outwardly from the opposite sides of said  
10 flat-portion, the terminal part of each of said limbs provided with an outwardly-extending lug having a plurality of holes apertured therein adapted for the entry of fas-

tening devices, and a metal retaining-member secured on the flat portion of the body-member, said retaining-member consisting of an oblong plate formed with prongs extending upwardly from its opposite side edges and having their terminal points bent inwardly, adapted for clutching wood floor-joist to retain the body-member in place. 15 20

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Witnesses:

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