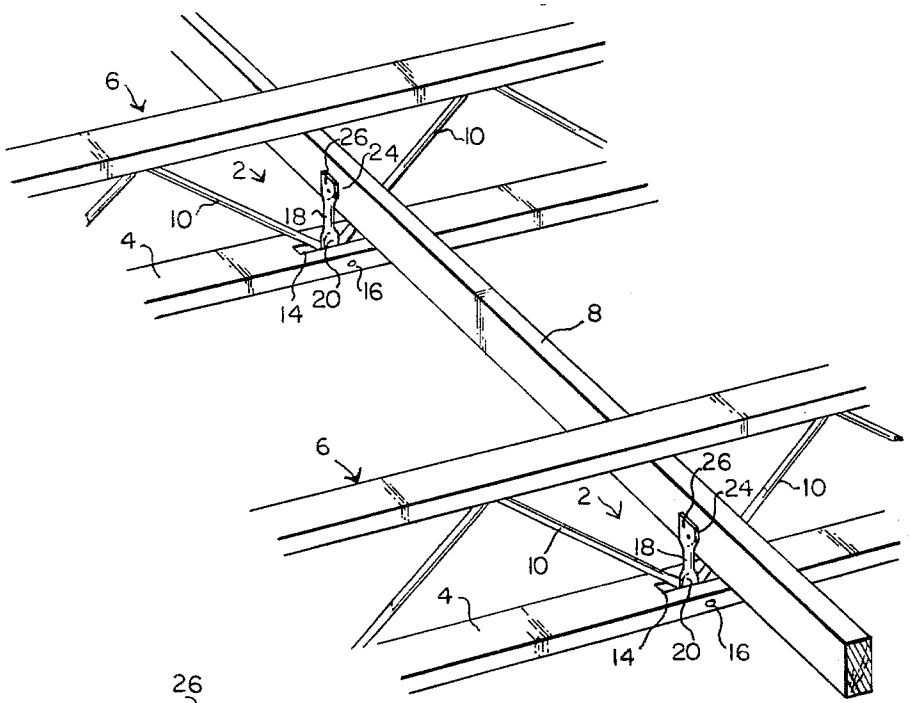
Jan. 18, 1966 A. L. TROUTNER 3,229,440

BRIDGING CLIP FOR TRUSSJOIST

Filed May 23, 1963

FIG. 1



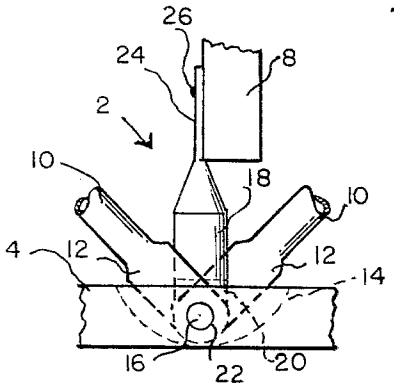


FIG. 2

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BRIDGING CLIP FOR TRUSSJOIST

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2 Claims. (Cl. 52—693)

This invention relates to composite trussjoists of the type disclosed in my co-pending applications Serial No. 60,371 filed October 4, 1960, now Patent No. 3,137,899, entitled, Composite Truss, Serial No. 171,958, now abandoned, filed February 8, 1962, entitled Composite Trussjoist and Reenforcing Clips Therefor, and the application filed concurrently herewith entitled, Composite Trussjoist and Anchor Clip.

In trussjoists of the type with which the subject matter of this application is concerned, wooden upper and lower chords, usually 2 x 4's, are connected by metal diagonals, or struts, in zigzag configuration. The struts are tubes having flattened ends which engage in slots in the lower and upper faces, respectively, of the upper and lower chords, and are held by metal cross pins which fit through cross bores in the chords and engage through the eyes in the flat ends of the struts. Composite trussjoists of this type have great utility for supporting roofs and ceilings of wide span between supporting walls, and it has been found advantageous to provide bridging, usually wooden 2 x 8's between adjacent trussjoists. The object of this invention is to provide clips for securing the bridging members to the chords.

A particular object of the invention is to provide a bridging clip having a first flat end with an eye therein for engaging in a slot in which the flat ends of adjacent struts engage, with the cross-pin which engages through the eyes in the strut-ends also engaging through the eye in the clip end, and a second flat end disposed in a plane at right angles to the plane of the first-mentioned flat end. Nail or screw holes in the second flat end of the clip are provided for fastening the same to a bridging member. It is also intended that the shank of the bridging clip, i.e., the body of the clip between the two flat ends, be long enough so as to space the bridging member, usually a 2 x 8 above and clear of the adjacent struts. In the preferred embodiment of the invention, the clip is formed of a short length of tubing in which the ends are flattened in planes at right angles to one another.

These and other objects will be apparent from the following specification and drawings, in which:

FIG. 1 is an isometric view showing bridging clips in use of adjacent trussjoists; and,

FIG. 2 is a fragmentary side elevational diagram showing the manner in which a clip is mounted.

Referring now to the drawing, in which like reference numerals denote similar elements, clips **2** which form the subject matter of this invention are shown attached to the lower chords **4** of composite truss-joists **6** for mounting a bridging member, preferably a 2 x 4 length of wood, thereto. The chords of the trussjoists are formed of wooden 2 x 4's braced by diagonal struts **10**, formed of metal rods having flat ends **12** with eyes therethrough engaging in slots **14** in the chords. Slots **14** do not extend all the way through the thickness of the chords, but are sufficiently deep and wide to accommodate the flat ends of the struts and the flat ends of the bridging clips described below. Cross bores extend from side to side through the chords for receiving cross pins **16**, which are forced through with a driving fit. The cross pins pass through the eyes and the ends of the struts to provide pivotal anchors for the adjacent strut ends.

Each clip **2** has a tubular metal shank **18** with a flat lower end **20** with an eye **22** through which a cross pin

16 engages. Clips **2** also have a flat upper end **24** provided with holes for receiving nails **26** so that the upper ends of the clips can be nailed to the wooden bridging members **8**.

The bridging members **8** may be secured to either side of the flat upper ends **24** of clips **2**, thereby making it possible to lap-joint the bridging members where greater than ordinary lengths of lumber are desired for continuous bridging between many laterally spaced trussjoists. Loads, either in tension or compression, are transmitted between adjacent trussjoists by the clips and the bridging members secured thereto.

A truss utilizing one or more bridging clips as described herein has excellent load distributing properties. By placing the load on the metal pin which pivotally mounts the two adjacent metal struts, the load imposed on the pin by the bridging clip is distributed lengthwise of the wooden chord members by the struts.

The invention is not limited to the precise details of the structure shown and described, but is intended to cover all substitutions, modifications and equivalents within the scope of the following claims.

I claim:

1. A composite wood and metal truss comprising upper and lower wooden chords having slots in the lower and upper sides thereof, the slots in the upper chord being staggered with respect to the slots in the lower chord, said chords having cross-bores extending from side to side thereof and intersecting the slots, webbing comprising a zigzag series of metal struts having flat ends with eyes therethrough, the flat ends of each of two endwise-adjacent struts, save the endmost ones, being disposed side by side in respective slots with the eyes thereof in registry with the crossbores, metal cross pins extending through the crossbores and eyes at least one metal clip, said clip being of substantially less overall length than the distance between the chords and comprising a central shank, a first flat end portion at one end of the shank disposed in a slot in the lower chord alongside the flat ends of two endwise-adjacent struts, said first flat end portion having an eye therein surrounding the pin which extends through the eyes of the adjacent strut ends, and a second flat end portion at the other end of the shank, said second flat end portion having nail holes therethrough for securing the same to a member for bridging between laterally spaced trusses, said second end portion being disposed at right angles to the first flat end portion.

2. The combination claimed in claim **1**, the shank of said clip comprising an intermediate portion of a tube, the end portions of the clip being integral with the shank and comprising flat parallel walls of end portions the same tube, the overall length of the clip being substantially less than the distance between the upper and lower chords and the length of the shank being sufficient to space the bridging member above the lower chord and the ends of the adjacent struts.

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