

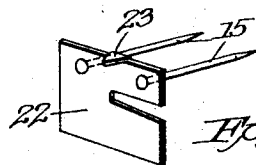
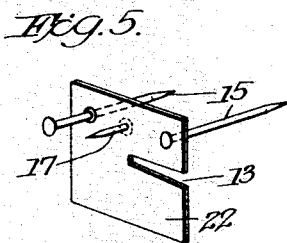
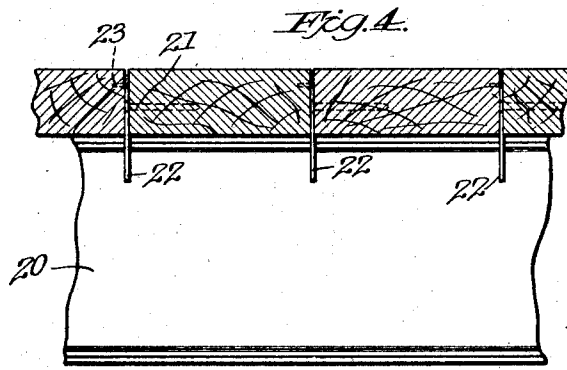
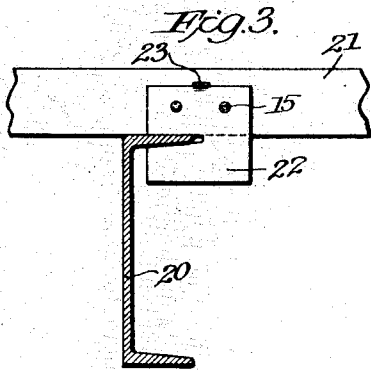
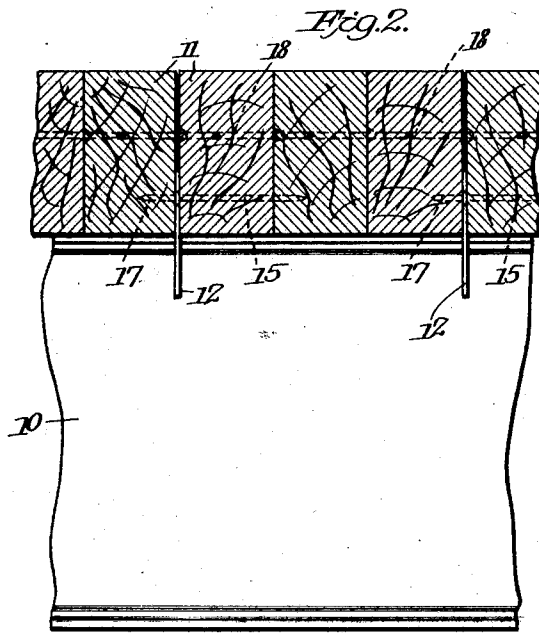
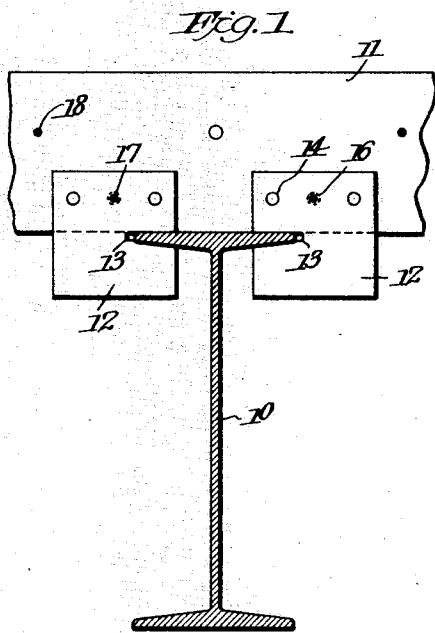
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R. R. SEWARD ET AL

CLIP FOR SECURING WOOD TO IRON BEAMS

Filed June 15, 1927



Inventors

Roy R. Seward,
John A. Booe,

334

E. R. Seward

Attorney

UNITED STATES PATENT OFFICE.

ROY R. SEWARD AND JOHN A. BOOE, OF INDIANAPOLIS, INDIANA.

CLIP FOR SECURING WOOD TO IRON BEAMS.

Application filed June 15, 1927. Serial No. 199,066.

Our invention relates to clips for securing wood decking for roofs of buildings, bridge floors and the like to steel purlins and it is an object of the invention to eliminate wood nailers at the top or side of steel stringers and to thereby decrease the cost of construction and weight of the load carried, all as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings which are made a part hereof and on which similar reference characters indicate similar parts.

Figure 1 is an elevation of our clip with its upper end attached to a sill and embracing the flange of an eye beam, the beam being shown in cross-section,

Figure 2, a view taken at right angles to Fig. 1 showing the edge of the clip,

Figure 3, a view similar to Fig. 1 illustrating a modified form of beam and clip,

Figure 4, a view taken at right angles to Fig. 1 showing the edge of the clip, and

Figures 5 and 6, perspective views of the clips shown in Figs. 1 and 3 respectively.

In the drawings reference character 10 indicates a steel purlin or supporting I beam which may be part of a bridge, roof or sliding structure to which is supplied wooden members 11 which form a bridge, roof or side wall structure. A clip 12 consists of a substantially rectangular body having a recess 13 adapted to fit over and embrace an edge of a beam such as the I beam 10. The clip 12 preferably has holes 14 punched therein for the reception of relatively long nails 15 by means of which the clip is fastened to material into which such nails may be driven such as for example the wooden beam 11. The holes 14 are preferably disposed one at each side of the clip and a hole 16 is punched in the clip between the holes 14 for the reception of a relatively short nail 17. By using the oppositely disposed nails 15 and 17 the clip may be fastened to contiguous sleepers or sills and serve to firmly hold them in position on steel frame members or the like.

As shown in Fig. 2, it is unnecessary to apply the clips between each pair of wooden beams. The beam at one side, as for example at the right in Fig. 2, is applied and is held to its supporting steel I beam 10 by the clip 12 which is secured thereto by a relatively long nail 15 with a relatively short nail 17 projecting in an opposite direction through

the central hole 16 in the clip and forming a spur or sharp projection against which the next wooden sill or beam is forced to cause the said spur to be embedded in the same. Nails 18 are inserted through the upper portion of the wooden members and are driven into the next contiguous member. In this manner after the sill is laid which engages the nail or short spur 17, two additional timbers may be laid and nailed into position by the nails 18, to the second of which timbers or wooden beams is nailed another clip 12 thereby holding the intermediate timber firmly in position by means of the nails 15 and 18.

In lieu of the construction and manner of laying the timbers, shown in Figs. 1 and 2, it may be desirable to use a lighter construction such as, for example, a channel beam 20 and wooden beams or timbers 21, as shown in Figs. 3 and 4, with which a clip 12, such as I have described, may be employed but in lieu of such clip a modified form of clip 22 may be used. The clip 22 is of substantially the same construction as the clip 12 with the exception of the omission of the central hole 16 for the relatively short nail or spur 17, such nail or spur being replaced by a prong 23 formed integral with the clip which performs the same function as the short nail or spur 17.

By providing a clip at each side of the I beam, as shown in Fig. 1, the wooden member is prevented from warping or buckling to any appreciable extent, as is common in structures of this character, as well as prevented from moving endwise. The nailer strips and their dead weight are also eliminated. As will be readily seen the clips support the steel members in a lateral direction thereby increasing their carrying capacity.

It will be obvious to those skilled in the art that various changes may be made in our device without departing from the spirit of the invention, and we, therefore, do not limit ourselves to what is shown in the drawings and described in the specification, but only as set forth in the appended claim.

Having thus fully described our said invention, what we claim as new and desire to secure by Letters Patent, is:

The combination of a supporting metal member having a laterally extending tapered flange, transverse wooden members extending across the flange, and means for securing said wooden members on said flange, com-

prising a stamped sheet metal plate having an elongated tapered recess for receiving the flange and for engaging opposite sides of the same to form a tight fit, said member having 5 spaced apertures to receive nails for entering one of the wooden members and an intermediate oppositely disposed projection integrally formed on the metal plate adapted to pierce an adjacent wooden member when it is forced against said intermediate projec- 10 tion, substantially as set forth.

In witness whereof, we have hereunto set our hands at Indianapolis, Indiana, this 13th day of June, A. D. nineteen hundred and twenty-seven.

ROY R. SEWARD.
JOHN A. BOOE.