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2,500,636

HANGING DEVICE FOR WOODEN BEAMS

Filed March 27, 1945

2 Sheets-Sheet 1

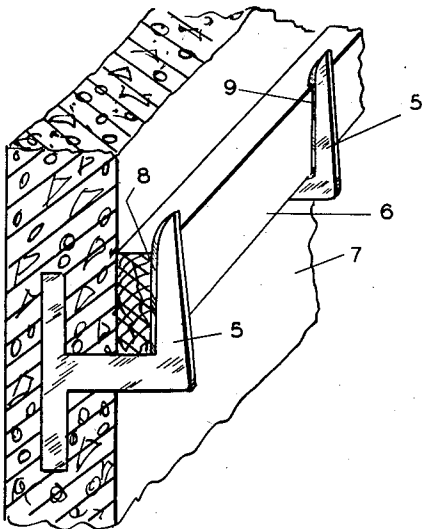


Fig. 1

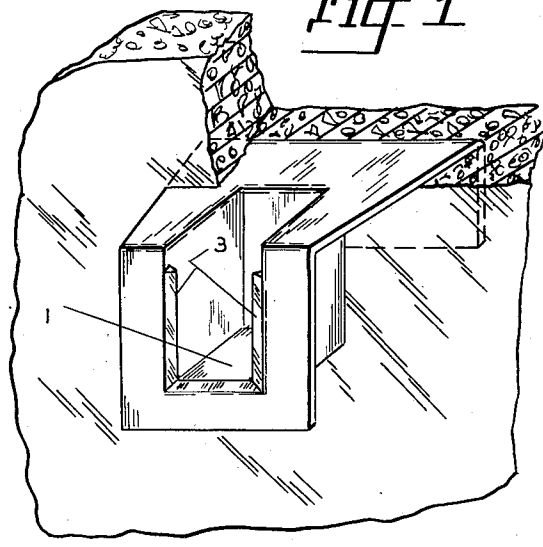


Fig. 5

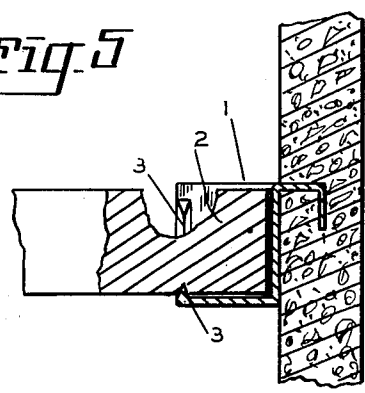


Fig. 2

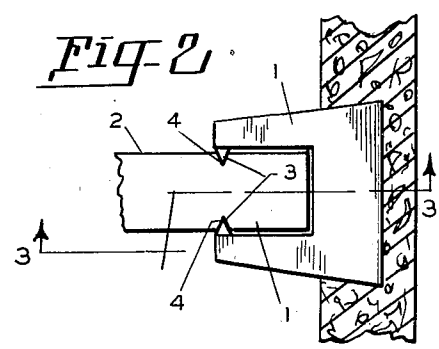


Fig. 3

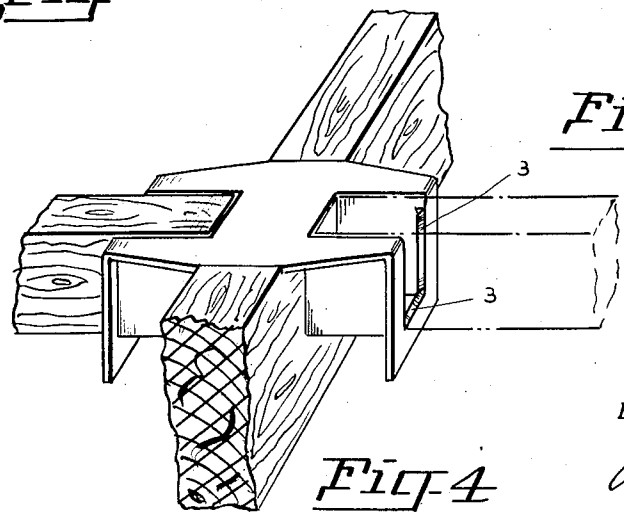


Fig. 6

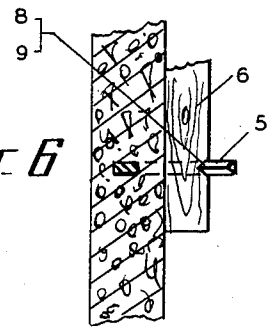


Fig. 4

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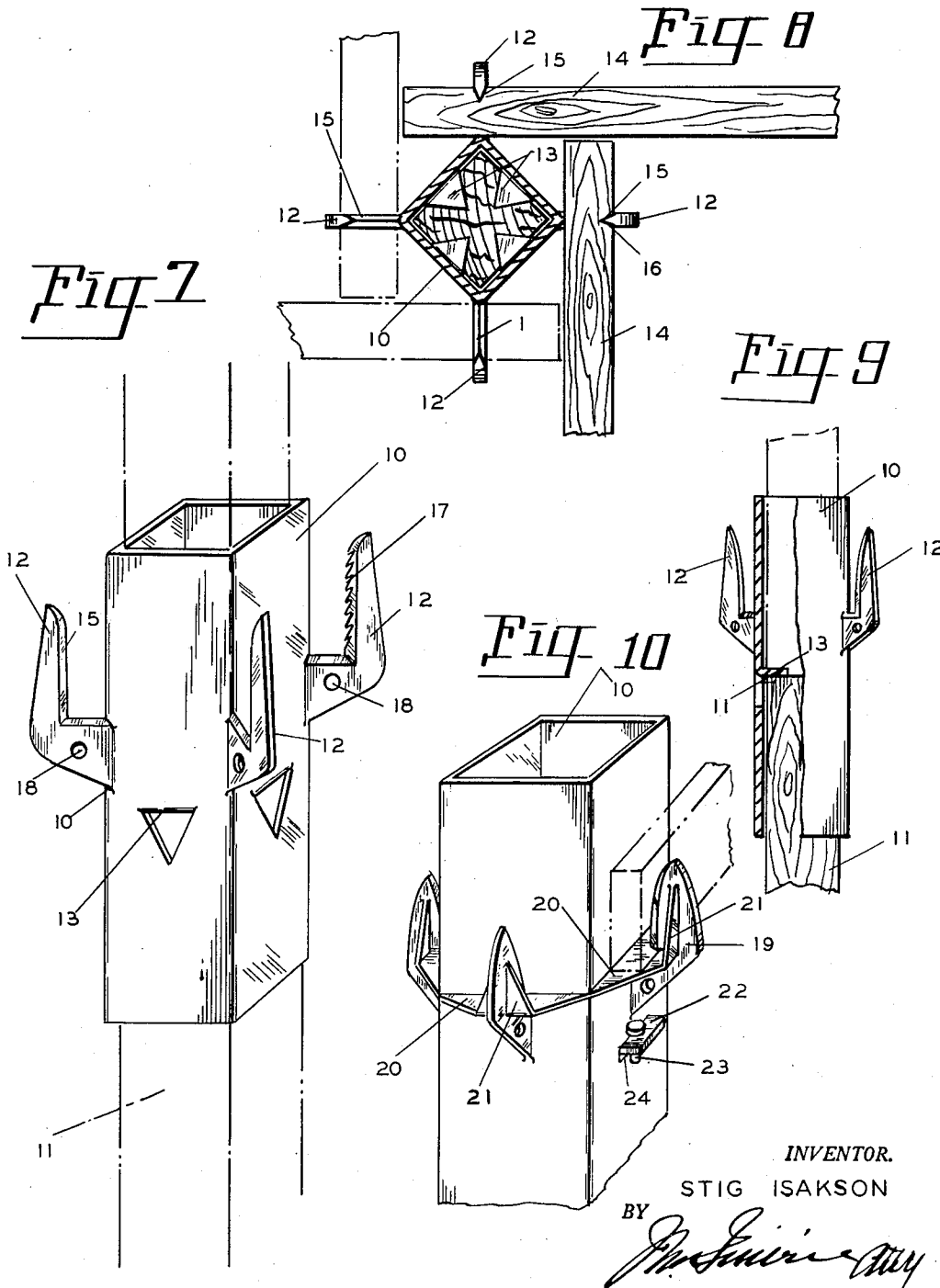
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2 Sheets-Sheet 2



UNITED STATES PATENT OFFICE

2,500,636

HANGING DEVICE FOR WOODEN BEAMS

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Application March 27, 1945, Serial No. 585,138

3 Claims. (Cl. 304—40)

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This invention relates to hanging devices and is particularly adapted to the hanging of wooden beams and scaffolding.

The primary object of the invention is to join together beams or scaffolding without the use of nails, bolts and the like. This is accomplished with my invention by the use of cutting edges, ribs or blades located within brackets for penetrating the beams while driving the beams in place within the holding brackets.

A further object of my invention is adding barbs along the edge of the cutting blades to further hold the beams in place.

These and other incidental objects will be apparent in the drawings, specifications and claims.

In the drawings:

Figure 1 is a fragmentary section of a concrete wall having one of my new and improved brackets mounted therein.

Figure 2 is a fragmentary plan section of the wall as indicated in Figure 1, but illustrating my bracket by having a beam inserted in place.

Figure 3 is a sectional view, taken on line 3—3 of Figure 2, looking in the direction indicated, parts broken away for convenience of illustration.

Figure 4 is a modified form of the bracket illustrated in Figures 1, 2 and 3, said bracket being adapted to straddle a beam to which other beams are to be mounted at right angles from said beam.

Figure 5 is another modified form of holding bracket showing the fragmentary section of a concrete wall having the bracket moulded therein and supporting a beam adjacent the wall.

Figure 6 is a fragmentary plan view of the principle illustrated in Figure 5.

Figure 7 illustrates my invention being adapted for use in scaffolding and the like, wherein the vertical uprights are joined together by the device ready for cross beams to be inserted within the holding brackets.

Figure 8 is a sectional plan view of Figure 7, illustrating the uprights in position, together with the connecting beams mounted within the brackets.

Figure 9 is a side view of Figures 7 and 8, partially broken away for convenience of illustration.

Figure 10 is another preferred form of arranging the holding brackets relative to the device for connecting the uprights together.

In the drawings:

My invention consists primarily of providing a bracket 1 for receiving a beam 2, preferably of wood, wherein the beam is driven in place and held therein by penetrating ribs or cutting blades

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3. In the case where beams are joined to side walls the bracket illustrated in Figures 1, 2, 3, 4, 5 and 6 are employed, although I do not wish to be limited to the exact structure as illustrated. The primary object being that once the beam is driven in place the ribs 3 or cutting blades form a groove 4 within the beam for securely holding the beam in place without the use of nails, bolts or the like.

I have shown in Figures 5 and 6 a bracket 5 of somewhat different construction, where the same is provided for holding a beam 6 adjacent the wall 7. A cutting edge 8 is formed adjacent the beam so that when the same is driven into place this cutting edge will cut into the beam at 9 preventing endwise movement of the beam. The only way of removing the beam is to remove it by lifting it away from the bracket in the opposite direction to that in which it was driven into the bracket.

Referring to Figures 7, 8, 9 and 10, I have illustrated my invention as it would be used in connection with scaffolding and the like. I have illustrated a tubular device 10 for joining vertical scaffolding 11 together and at the same time providing for lateral beam supporting brackets 12. Spacers 13 are provided for separating the ends of the vertical scaffolding 11. The lateral beams 14 are dropped into the brackets 12 as illustrated in Figure 8 and driven downwardly causing the cutting edges 15 to penetrate the beams at 16, securely locking them in place. Each cutting edge may have barbs 17 formed in the cutting edges 15 for further preventing the beams from being removed.

Holes 18 are provided for inserting tie rods for further binding the scaffolding assembly together. I have illustrated a modified form of holding bracket assembly in Figure 10 where the scaffolding joint 10 has holding brackets 19 located centrally of the side walls of the joint and having base plates 20 upon which the beams can rest. Braces 21 are also provided for preventing lateral movement of the bracket 19.

Referring to Figure 10, I have substituted a removable spacing bar 22 for the turned in spacers 13, as illustrated in Figure 8 for separating the ends of the uprights. This removable bar is held in place by a suitable locking device as bolt 23, the bar itself passing through the opening 24 and across the joint assembly 10. The object of having a removable bar is to provide assembly and disassembly of the uprights midway their lengths instead of having to disassemble the whole scaffolding in order to remove the jointing device 10.

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In the operation of my new and improved holding bracket the beams are registered with the bracket, then driven down into the bracket, the bracket having a cutting edge adjacent the beam for cutting a groove within the beam so that lateral or end movement of the beam is prevented while being held by the bracket, this is the principle object of my invention.

I do not wish to be limited to the exact structure as illustrated, as other mechanical equivalents may be substituted still coming within the scope of my claims.

What is claimed as new is:

1. A metal scaffold bracket comprising a vertical sleeve for fitting about a scaffold upright, means on said sleeve for securing it on the scaffold upright, support members extending laterally from said sleeve for supporting horizontal wooden scaffold cross-members, upright portions on said support members and spaced from said sleeve to receive the wooden scaffold cross-members between said upright portions and said sleeve to laterally confine said wooden cross-members, and cutting edges on the inner sides of said upright portions to cut into the adjacent sides of the wooden cross-members as the latter are forced into position and for holding said cross-members against longitudinal movement.

2. A scaffold bracket as defined in claim 1 wherein the cutting edges are provided with downwardly directed barbs to hold the wooden cross-members against accidental lifting from their seats on the support members.

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3. A metal scaffold bracket comprising a vertical sleeve for fitting about a scaffold upright, a member extending inwardly and transversely of said sleeve and centrally thereof to divide said sleeve into sockets for respectively fitting over the top of a lower scaffold upright and for receiving the bottom of a superimposed scaffold upright, support members extending laterally from said sleeve for supporting horizontal wooden scaffold cross-members, upright portions on said support members and in spaced substantially parallel relation to said sleeve to receive the wooden scaffold cross-members between said upright portions and said sleeve to laterally confine said wooden cross-members, and cutting edges on the inner sides of said upright portions to cut into the adjacent sides of the wooden cross-members as the latter are forced into position and for holding said wooden cross-members against longitudinal movement.

STIG ISAKSON.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
101,825	Clinger	Apr. 12, 1870
409,893	Wray	Aug. 27, 1889
1,664,499	Baker	Apr. 3, 1928
2,037,736	Payne et al.	Apr. 21, 1936
2,323,195	Bouchillon	June 29, 1943