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ADJUSTABLE SAWHORSE BRACKET

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FIG. 1

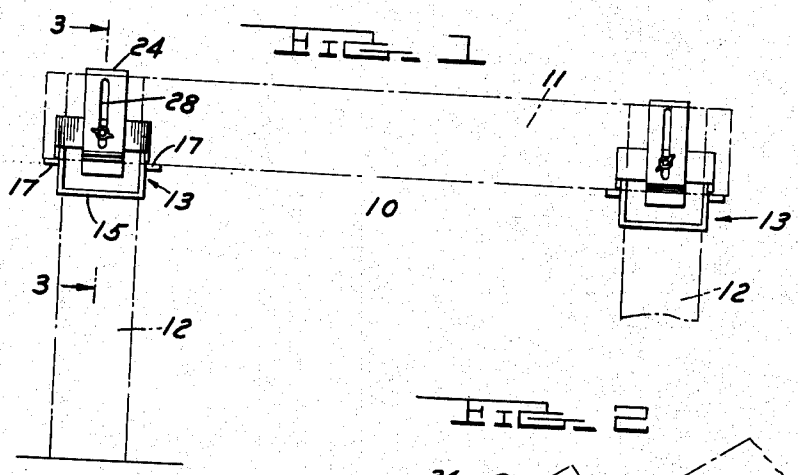


FIG. 2

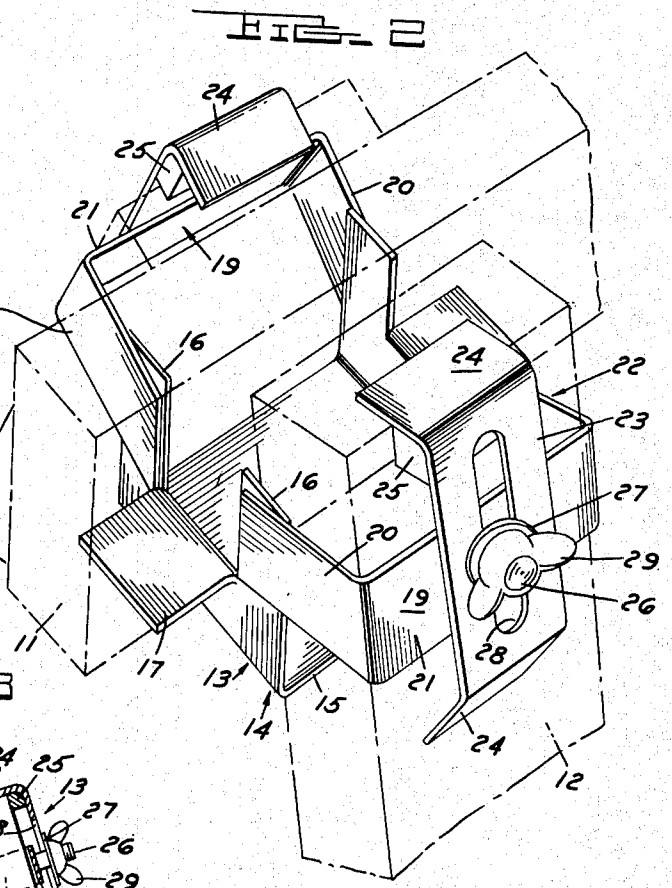


FIG. 4

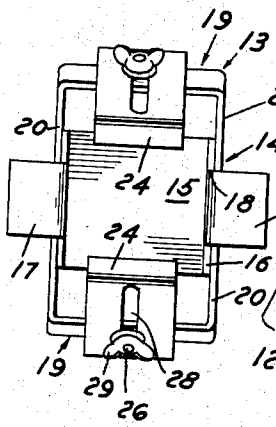
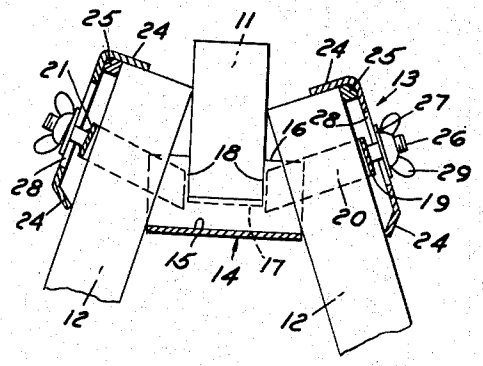


FIG. 3



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ADJUSTABLE SAWHORSE BRACKET

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6 Claims. (Cl. 304—5)

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This invention relates to supporting trestles of the type commonly known as saw horses and has particular reference to an improved bracket for removably attaching the legs of the trestle to the horizontal supporting rail.

It is one of the objects of this invention to provide a bracket having a body member on which the rail is seated and having straps at opposite sides of the body member for respectively removably positioning the legs in diverging relation to the rail.

It is another object of this invention to provide the bracket with clamping elements having portions respectively engageable with the upper ends of the legs and having portions mounted on the bracket at opposite sides of the body member for sliding movement relative to the body member in the direction of length of the legs. Thus the legs may be independently adjusted in the direction of their length relative to the rail by manipulating the clamps, and variations in the lengths of the legs as well as irregularities in the surface on which the legs are supported may be readily compensated for.

It is a further object of this invention to provide a bracket of the above general type which is simple in construction and renders it possible to readily assemble and disassemble the various parts of the trestle or saw horse.

The foregoing as well as other objects will be made more apparent as this description proceeds, especially when considered in connection with the accompanying drawing, wherein:

Figure 1 is a side elevational view of a trestle or saw horse having brackets embodying the features of this invention;

Figure 2 is a perspective view of one of the brackets showing the associated parts of the saw horse in broken lines;

Figure 3 is a sectional view taken on the line 3—3 of Figure 1; and

Figure 4 is a plan view of the bracket shown in Figure 2.

Referring now more in detail to the drawing, it will be noted that the reference character 10 designates generally a saw horse or trestle of the type commonly employed to temporarily support articles in convenient positions for certain work performing operations. The trestle 10 comprises a horizontally disposed rail 11, supporting legs 12 for the rail, and brackets 13 for securing the legs to the rail. In accordance with conventional practice the supporting legs 12 are arranged in pairs at opposite ends of the rail 11 and the legs of each pair diverge from opposite sides of the rail.

In the present instance the rail 11 and supporting legs 12 are detachably secured in assembled relationship by the brackets 13 which cooperate to rigidly hold the several parts of the trestle in assembled relationship during use, and are of a nature to enable quickly dismantling the parts when desired. Thus when not in use the several

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parts of the trestle may be arranged in a compact package and stored in a space considerably smaller than the space occupied by the trestle when the parts thereof are in assembled relationship.

In the interests of simplicity in manufacture, the brackets 13 are shown as fabricated from sheet metal parts of a nature to enable producing the same by inexpensive stamping operations, and since both brackets are identical in construction, only one need be described in detail herein. As shown in Figures 2 to 4 inclusive, the bracket comprises an upwardly opening channel-shaped body member 14 having a base 15 and having upstanding flanges 16 at opposite ends of the base. Tongues 17 are struck laterally outwardly from the flanges 16 and the slots 18 formed by this operation are of a width sufficient to freely receive the rail 11. The tongues 17 extend substantially normal to the upstanding flanges 16 and form pads or rests for engaging the underside of the rail 11.

A pair of U-shaped straps 19 are positioned at opposite sides of the body member 14 and open in a direction toward the body member. The legs 20 of the straps are respectively welded or otherwise permanently secured to the end flanges 16 on the body member 14, and the base portions 21 of the straps are respectively disposed in diverging planes.

During assembly of the trestle, the rail 11 is first inserted in the slots 18 and the underside of the rail is seated on the pads 17. The upper ends of one pair of legs are then respectively inserted into the spaces provided between opposite side edges of the body member 14 and the straps 19. When the above is accomplished, the inner edges of the upper ends of the pair of legs will wedge against opposite sides of the rail 11, and this wedging action increases in proportion to the load supported on the top of the rail, so that the parts of the trestle are effectively held in assembled relationship during use.

However, the above construction does not compensate for irregularities that may be present in the surface on which the trestle is supported, and furthermore, does not compensate for any differences in length in the legs. In order to accomplish this result a pair of clamps 22 are provided. The clamps are generally U-shaped in cross section, and the base portions 23 are respectively mounted on the base portions 21 of the straps 19 in a manner such that the legs 24 extend laterally inwardly toward the body member 14. The top flanges 24 of the clamps respectively overlie the upper ends of the adjacent pair of legs 12, and the bottom flanges 24 are somewhat shorter and respectively bear against the outer sides of the legs. If desired suitable blocks 25 may be welded or otherwise secured to the undersides of the top flanges 24 in positions to respectively abut the outer sides of the adjacent pair of legs and cooperate with the bottom flanges 24 to hold the legs in assembled positions.

As shown in Figure 3 of the drawing, a pair of studs 26 have the head portions 27 thereof respectively welded or otherwise secured to the base portions 21 of the straps. The studs 26 project through slots 28 formed in the base portions 23 of the clamps, and the slots are elongated in the direction of length of the legs. A suitable washer 27 is supported on each stud 26 at the outer side of the adjacent clamp, and a fastener, preferably in the form of a wing nut 29, is threaded on each stud to coact with the washers in securing the clamps 22 in place.

Inasmuch as the top flanges 24 on the clamps 22 overlie the upper ends of the adjacent pair of legs 12, it follows that movement of the clamps vertically relative to the straps renders it possible to adjust the effective length of the legs. Also since the clamps 22 are independently adjustable, it will be noted that each of the four legs may be adjusted independently of the others. As a result any variations in the length of the legs or irregularities in the surface on which the trestle is supported may be compensated for by merely adjusting the appropriate clamps.

What I claim as my invention is:

1. A bracket for use in holding a rail and a pair of supporting legs of a trestle in assembled relationship, comprising a body member having means providing a seat for the rail, U-shaped straps supported on the body member at opposite sides thereof and cooperating with the body member to slidably receive the upper ends of the supporting legs, clamps respectively supported on the base portions of the U-shaped straps for movement relative to the straps in the direction of length of the legs, said clamps having inwardly extending flanges at the top respectively engageable with the upper ends of the supporting legs and having inwardly projecting flanges at the bottom respectively engageable with the outer sides of the legs to clamp the latter against the body member, and releasable fastening means for respectively securing the clamps to said straps.

2. A bracket for use in holding a rail and a pair of supporting legs of a trestle in assembled relationship, comprising a body member having means providing a seat for the rail, U-shaped straps supported on the body member at opposite sides thereof and cooperating with the body member to slidably receive the upper ends of the supporting legs, clamps respectively supported on the base portions of the U-shaped straps for movement relative to the straps in the direction of length of the legs, said clamps having inwardly extending flanges at the top respectively engageable with the upper ends of the supporting legs and having inwardly projecting flanges at the bottom respectively engageable with the outer sides of the legs to clamp the latter against the body member, releasable fastening means for respectively securing the clamps to said straps, and shoulders provided on the undersides of the top flanges of the clamps in positions to respectively abut the outer sides of the legs adjacent the upper ends thereof.

3. A bracket for use in holding a rail and a pair of supporting legs of a trestle in assembled relationship, comprising a body member having means providing a seat for the rail, U-shaped straps supported on the body member at opposite sides thereof and cooperating with the body member to slidably receive the upper ends of the supporting legs, clamps respectively supported on the base portions of the U-shaped straps for movement relative to the straps in the direction of length of the legs, said clamps having inwardly extending flanges at the top respectively engageable with the upper ends of the supporting legs and having inwardly projecting flanges at the bottom respectively engageable with the outer sides of the legs to clamp the latter against the body member, and releasable fastening means for respectively securing the clamps to said straps, said releasable fastening means comprising studs respectively projecting outwardly from the base portions of the straps through slots formed in the clamps and elongated in the direction of movement of the clamps relative to the straps, and fastener elements respectively threadably engageable with the studs at the outer sides of the clamps.

4. A bracket for use in holding a rail and a pair of supporting legs of a trestle in assembled relationship, comprising a body member having means providing a seat for the rail, U-shaped straps supported on the body member at opposite sides thereof and cooperating with the body member to slidably receive the upper ends of the supporting legs, clamps respectively supported on the base portions of the U-shaped straps for movement relative to the straps in the direction of length of the legs, said clamps having inwardly extending flanges at the top respectively engageable with the upper ends of the supporting legs to position the latter vertically relative to the body member, and releasable fastening means for respectively securing the clamps to said straps.

5. A bracket for use in holding a rail and a pair of supporting legs of a trestle in assembled relationship, comprising a body member having means providing a seat for the rail, U-shaped straps supported on the body member at opposite sides thereof and cooperating with the body member to slidably receive the upper ends of the supporting legs, clamps respectively supported on the U-shaped straps for movement relative to the straps in the direction of length of the legs, said clamps having flanges at the top respectively engageable with the upper ends of the supporting legs to position the latter vertically relative to the body member, and releasable fastening means for respectively securing the clamps to said straps.

6. A bracket for use in holding a rail and a pair of supporting legs of a trestle in assembled relationship, comprising a body member having means providing a seat for the rail and having means at opposite sides thereof for respectively slidably receiving the upper ends of the legs, clamps supported by the body member at opposite sides thereof for movement relative to the body member in the direction of length of the legs, said clamps having flanges at the top respectively engageable with the upper ends of the supporting legs to position the latter vertically relative to the body member, and releasable fastening means for respectively securing the clamps to the body member.

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