April 14, 1953 E. J. DOUCETTE 2,635,013

COLLAPSIBLE SAWHORSE OR TRESTLE

Filed July 8, 1949 2 SHEETS—SHEET 1

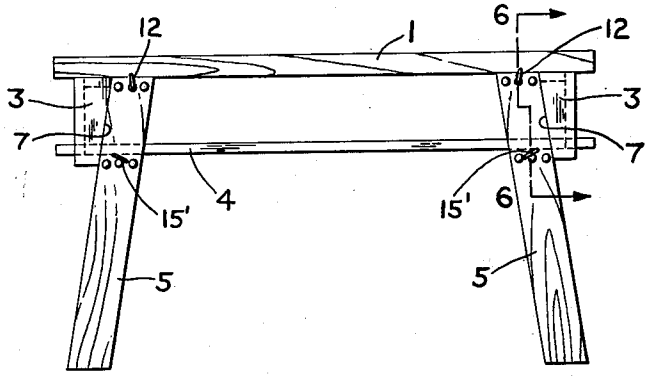


FIG. 1

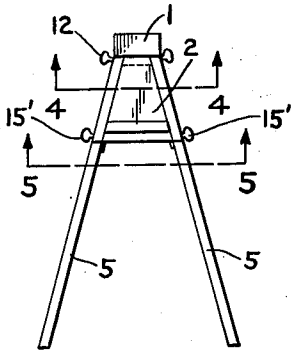


FIG. 2

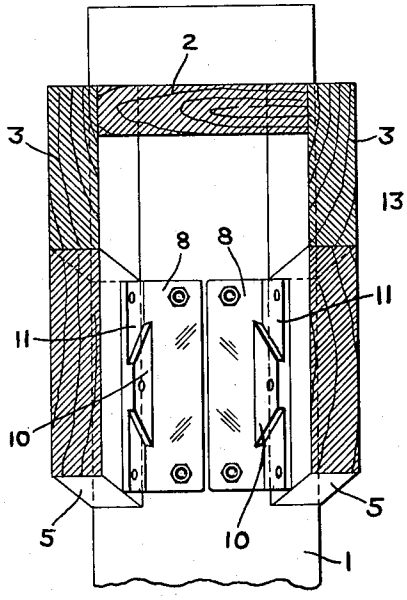


FIG. 4

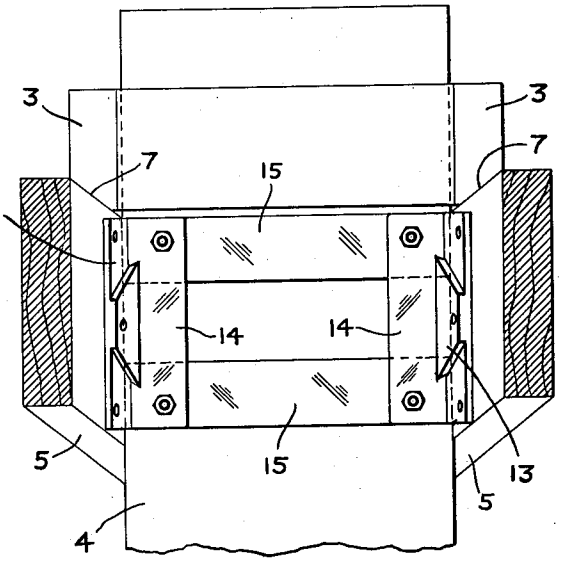


FIG. 5

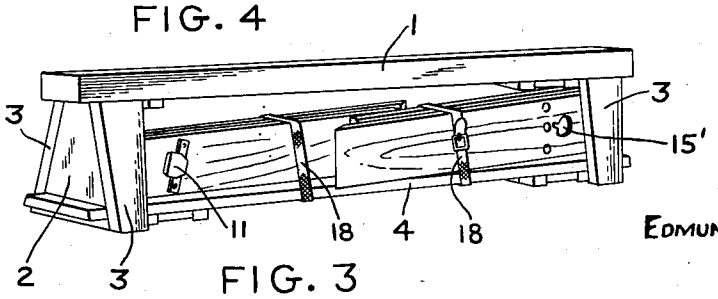


FIG. 3

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April 14, 1953 E. J. DOUCETTE 2,635,013

COLLAPSIBLE SAWHORSE OR TRESTLE

Filed July 8, 1949 2 SHEETS—SHEET 2

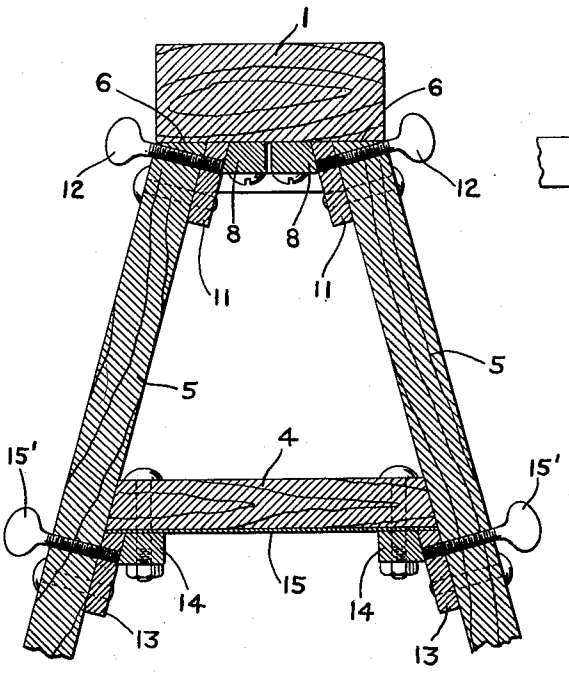


FIG. 6

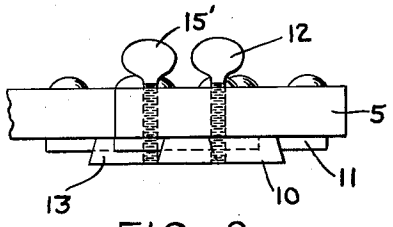


FIG. 8

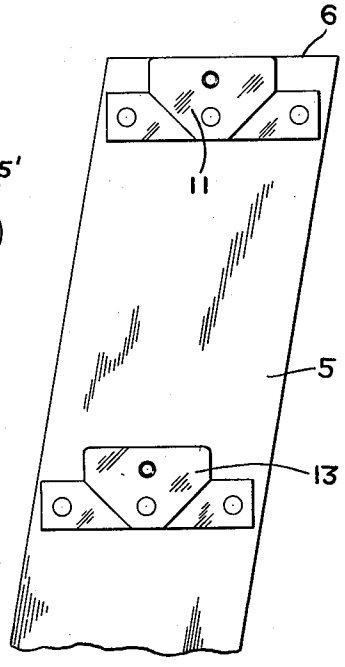


FIG. 7

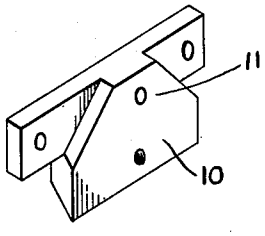


FIG. 9

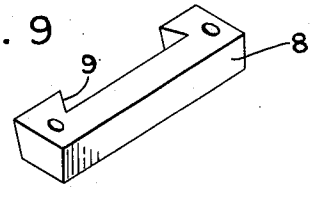


FIG. 10

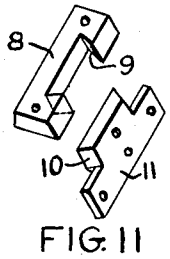


FIG. 11

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2,635,013

COLLAPSIBLE SAWHORSE OR TRESTLE

Edmund James Doucette, Long Branch, N. J.

Application July 8, 1949, Serial No. 103,591

2 Claims. (Cl. 304—5)

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This invention relates to a collapsible saw horse or trestle used by various artisans such as carpenters, plasterers, paper hangers, hobbyists, and others for supporting material being worked upon or for supporting boards or a platform to form a scaffold on which to stand while working, or a table surface such as used by paper hangers while cutting wallpaper and applying paste thereto, as well as various other uses where it is desired to provide a temporary elevated support.

An object of the invention is to provide a saw horse or trestle which may be collapsed for convenient transportation or storage when not in use and which may be quickly and easily opened up for use.

Another object of the present invention is to provide a saw horse or trestle which will support relatively great weight without danger of breaking and in which all engaging surfaces between the rail and legs are flush, firm and snug surface engagements, so constructed and arranged that all vertical and lateral strains and stresses on the saw horse will be effectively distributed to prevent breakage of any part, as well as one in which no strains or stresses will be borne by hinges, bolts, pins or other similar elements.

With these and other objects in view, as may appear from the accompanying specification, the invention consists of various features of construction and combination of parts, which will be first described in connection with the accompanying drawings, showing a collapsible saw horse or trestle of a preferred form embodying the invention, and the features forming the invention will be specifically pointed out in the claims.

In the drawings:

Figure 1 is a side elevation of the improved saw horse or trestle in open position ready for use.

Figure 2 is an end view of the saw horse or trestle.

Figure 3 is a perspective view of the saw horse or trestle in a collapsed position ready for storage.

Figure 4 is a horizontal section taken on the line 4—4 of Figure 2.

Figure 5 is a horizontal section taken on the line 5—5 of Figure 2.

Figure 6 is a fragmentary vertical cross section taken on the line 6—6 of Figure 1.

Figure 7 is a fragmentary elevation of the inner side of one of the supporting legs.

Figure 8 is a top plan of one of the supporting legs.

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Figure 9 is a perspective view of an inserting bracket in the inverted position, and Figure 10 is a perspective view of a receiving bracket in the inverted position, both of which are used in connecting the legs to the supporting rail of the saw horse or trestle.

Figure 11 is an enlarged view of an inserting bracket and a receiving bracket showing the dovetail construction thereof.

Referring more particularly to the drawings, the improved saw horse or trestle includes a top rail 1 which may be of any suitable size such as a 2 x 4, 2 x 6 or the like. The top rail 1 has end vertical braces 2 attached thereto and depending therefrom near its ends which end braces are substantially a truncated inverted V shape so as to conform to the transverse or lateral inclination of the legs of the saw horse. Attached to the top rail 1 and to the edges of the end vertical braces 2 are side vertical braces 3. The end vertical braces 2 and side vertical braces 3 are attached to a brace bar 4 which is supported a predetermined distance below the top rail 1 and in parallel relation thereto. The brace bar 4 performs the dual function of bracing and steadying the saw horse or trestle when it is in open usable position and a support for the legs 5 when the latter are disconnected from the top rail and collapsed, as shown in Figure 3 of the drawings. The end vertical bars 2 and the side vertical braces 3 together with the brace bar 4 box in the outer sides and end of the space between the top rail 1 and the brace bar 4 at the ends of the trestle to prevent longitudinal slippage of the legs when collapsed.

The legs 5, four of which are provided, are made of suitable material such as wood and of sufficient size to provide sturdy support for the top rail 1. The legs 5 incline outwardly and downwardly both longitudinally and transversely of the top rail 1 when in assembled position, as clearly shown in Figures 1 and 2 of the drawings, and the upper ends 6 are cut at an acute angle to the flat faces of the leg so that they will fit tightly and snugly against the under surface of the top rail 1 when in assembled position, as is clearly shown in Figure 6 of the drawings. The inner edges of the side vertical braces 3 are cut at an acute angle to the perpendicular as shown at 7 so that the outer edges of the upper ends of the legs will fit tightly and snugly against the inner edges of the side vertical braces 3, thus firm wood-to-wood or metal-to-metal engagement of the legs 5 with the top rail 1 and the side vertical braces 3 is provided for distributing stresses and strains from the top rail 1

throughout the entire saw horse structure and prevent localization of such strains which would tend to weaken or break parts of the saw horse.

The top rail 1 has receiving brackets 8 attached to its under surface in any suitable manner and these receiving brackets have dove-tailed recesses 9 formed therein which receive the portions 10 of the inserting brackets 11 which are attached to the inner surfaces of the legs 5 at their upper ends. The dove-tailed recesses in the receiving brackets 8 are closed by the top rail 1 and the inserting section 10 of the inserting bracket 11 engages the dove-tailed recess so as to provide a firm snug fit between the inserting bracket 11 and the receiving bracket 8. Thumb screws 12 are threaded through the inserting bracket 11 and into engagement with the recessing bracket 8 to securely wedge the inserting brackets within the receiving brackets.

Inserting members 13 are carried by the legs 5 and have their inserting sections 10 inserted in receiving brackets 14 carried by the brace bar 5. A metal strip 15 is shown in Figure 6 between the brace bar 4 and the receiving brackets 14. The inserting brackets 13 and the receiving brackets 14 are identical with the inserting brackets 11 and receiving brackets 8 and tightening thumb screws 15' are carried by the inserting brackets 13.

When the saw horse or trestle is in assembled position as shown in Figures 1 and 2 of the drawings and it is desired to collapse it for storage the various thumb screws 12 and 15' are loosened and the saw horse is preferably reversed so that it is supported upon the top rail 1. The legs are then moved longitudinally, that is, downwardly or outwardly with respect to the top rail so as to release the inserting brackets from the receiving brackets, the legs are placed in flatwise engagement with each other and placed upon brace bar 4 and preferably fastened by straps indicated at 18 so as to collapse the saw horse in a relatively small compact structure for storage. In assembling the saw horse for use, the top rail 1 and brace bar are preferably placed upside down and the various inserting brackets inserted into their respective receiving brackets and the thumb screws tightened, after which the saw horse is placed upright for use.

By constructing the leg members 5 and the side vertical braces 3 with their inclined surfaces increasing or inclining outwardly as they extend downwardly, weight and stresses on the top rail 1 will tend to force them into more firm engagement. However, by reason of the acute angle cut at the upper end of the legs 5 and the inserting and receiving brackets above described each of the parts fits firmly and snugly one to the other and prevents any wobbling or loose motion of any parts of the saw horse or trestle.

It will be understood that the invention is not to be limited to the specific construction or arrangement of parts shown, but that they may be widely modified within the invention defined by the claims.

What is claimed:

1. In a saw horse or trestle, a top rail, supporting legs therefor, a brace bar extending parallel and in spaced relation to said top rail, receiving brackets carried by said top rail, receiving brackets carried by said brace bar, inserting brackets carried by said legs for insertion into said receiving brackets to detachably connect said legs to said top rail and brace bar, said legs inclining outwardly from said top rail laterally and longitudinally of the top rail when attached thereto, the top ends of said legs being cut at an acute angle to fit in flat snug engagement with the underside of the top rail, end and side vertical braces connecting said top rail and said brace bar near their ends, said end vertical braces being substantially inverted truncated V-shaped to conform to the lateral angles of inclination of said legs and said side vertical braces having their inner ends cut to conform to the longitudinal angles of inclination of said legs and to lie flush against the edges of the legs when the saw horse is in assembled position.

2. In a saw horse or trestle, a top rail, supporting legs therefor, a brace bar extending parallel and in spaced relation to said top rail, receiving brackets carried by said top rail, receiving brackets carried by said brace bar, inserting brackets carried by said legs for insertion into said receiving brackets to detachably connect said legs to said top rail and brace bar, said legs inclining outwardly from said top rail laterally and longitudinally of the top rail when attached thereto, the top ends of said legs being cut at an acute angle to fit in flat snug engagement with the underside of the top rail, end and side vertical braces connecting said top rail and said brace bar near their ends, said end vertical braces being substantially inverted truncated V-shaped to conform to the lateral angles of inclination of said legs and said side vertical braces having their inner ends cut to conform to the longitudinal angles of inclination of said legs and to lie flush against the edges of the legs when the saw horse is in assembled position, said receiving brackets having tapered receiving recesses therein opening downwardly, and said inserting brackets having upwardly and inwardly tapering insert members thereon for fitting in said tapered receiving recesses.

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