Dec. 29, 1953 E. J. DOUCETTE 2,664,319

COLLAPSIBLE SAWHORSE OR TRESTLE

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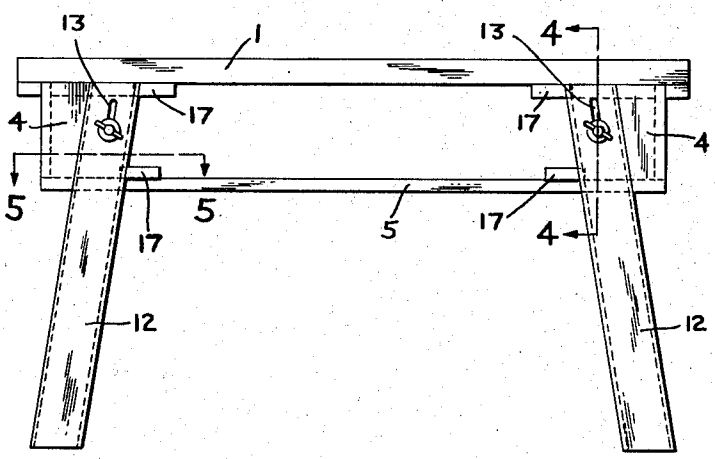


FIG. 1

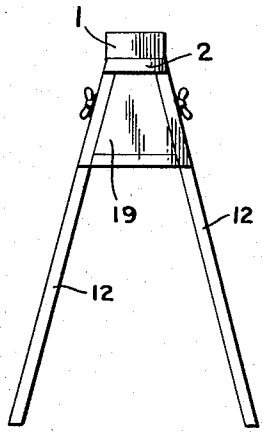


FIG. 2

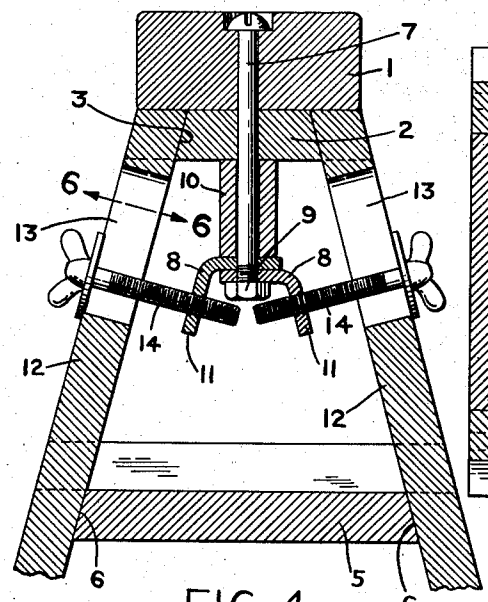


FIG. 4

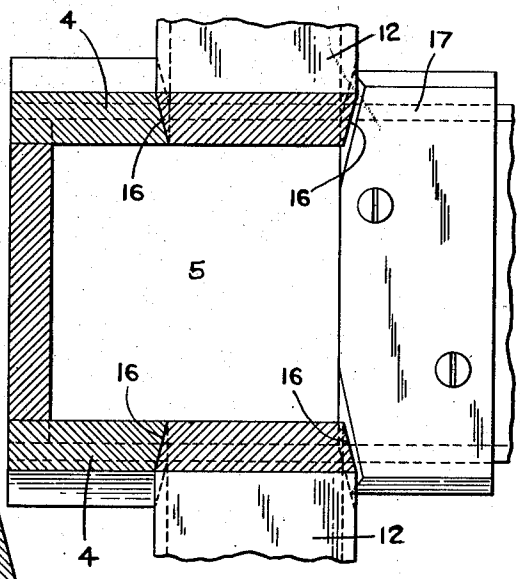


FIG. 5

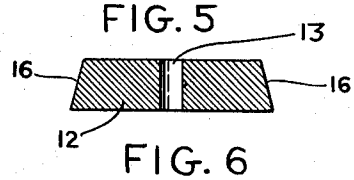


FIG. 6

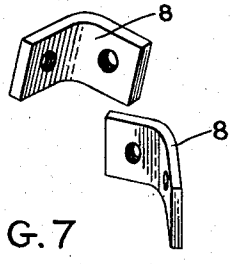


FIG. 7

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COLLAPSIBLE SAWHORSE OR TRESTLE

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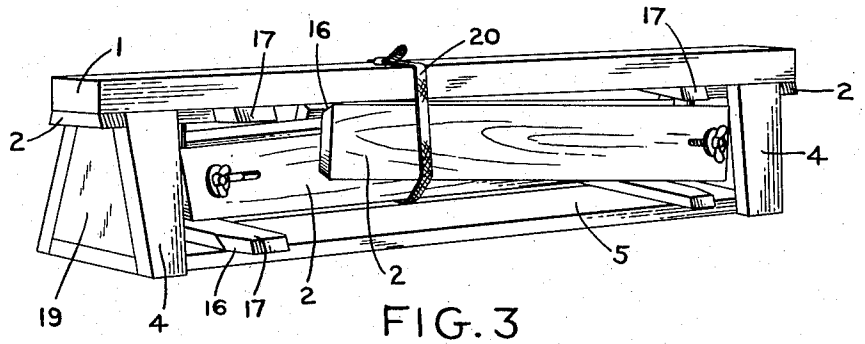


FIG. 3

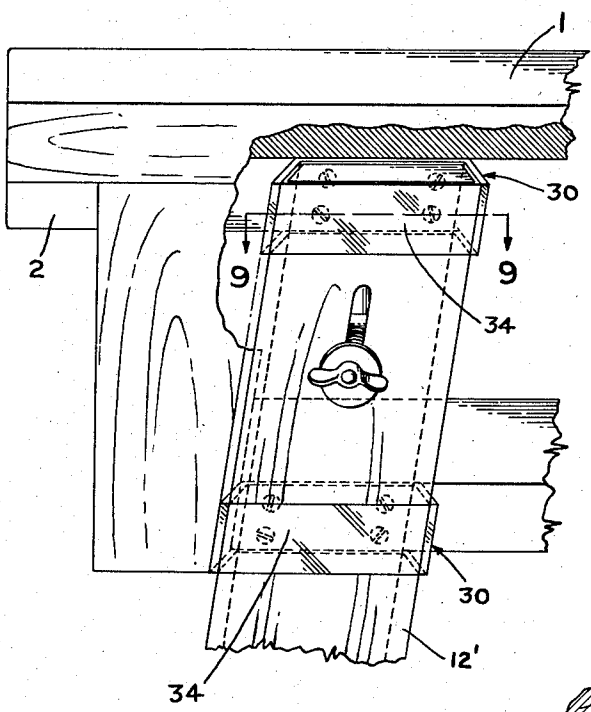


FIG. 8

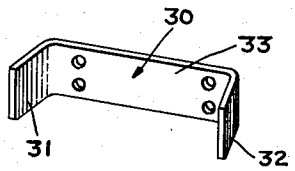


FIG. 10

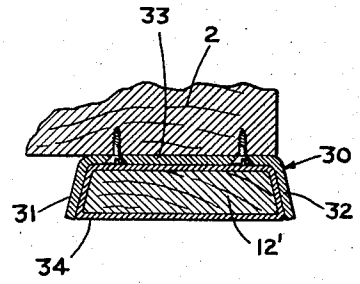


FIG. 9

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COLLAPSIBLE SAWHORSE OR TRESTLE

Edmund J. Doucette, Long Branch, N. J.

Application January 29, 1949, Serial No. 73,540

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 operative position.

Figure 2 is an end view of the saw horse or trestle in open or operative position.

Figure 3 is a perspective view of the saw horse or trestle showing it in folded or collapsed position ready for either transportation or storage.

Figure 4 is an enlarged fragmentary vertical section taken on the line 4—4 of Figure 1.

Figure 5 is an enlarged horizontal section taken on line 5—5 of Figure 1.

Figure 6 is a horizontal section taken on the line 6—6 of Figure 4.

Figure 7 is perspective views of angle brackets employed in the saw horse or trestle structure.

Figure 8 is a fragmentary perspective view partly in section of a modified form of the invention.

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Figure 9 is a horizontal section taken on the line 9—9 of Figure 8.

Figure 10 is a perspective view of a brace structure employed in the modified form of the invention.

Referring more particularly to the drawings, the improved saw horse includes the top rail or supporting bar 1 which may be made of any suitable material such as a wooden 2 by 4, 2 by 6 or the like. In the form shown in Figures 1 to 7, inclusive, of the drawings, the rail 1 has longitudinally extending flat braces 2 attached to its under surface at each end thereof, the edges of which braces are cut at an acute angle to the perpendicular as shown at 3. Vertical braces 4 are attached at one end to the bottom or under-surface of the rail 1, and on their inner sides to the angled portions 3 of the longitudinally extending braces 2 and the side edges of a longitudinally extending brace bar 5 parallel to said rail 1, whose side edges are angled to correspond to the angled portion 3 of the braces 2 as is clearly shown at 6 in Figure 4 of the drawings. This acts to vertically space the longitudinally extending brace bar 5 from the rail 1 as is clearly shown in Figures 1, 3 and 4 of the drawings. Bolts or rods 7 extend vertically through the rail 1 near its ends and through the braces 2, projecting below the braces. The lower end of the bolt or rod 7 is threaded and angled metal brackets 8 are mounted thereon and held in proper position by means of a nut 9 and spacing collar 10. The outer downwardly extending studs 11 of the braces 8 are angled to correspond to the angularity of the edges of the braces 3 and the longitudinal brace bar 5 and correspond to the transverse angle at which the legs 12 extend when they are in extended rail supporting position, as shown in Figures 1, 2 and 3 of the drawings. The legs 12 are provided with longitudinally extending slots 13 therein near their upper ends through which clamping bolts 14 extend. The clamping bolts 14 are threaded into the downwardly extending angled edges of the brackets 8 and when threaded sufficiently into the angled brackets 8 will tightly clamp the legs 12 in supporting position. As clearly shown in Figures 1 and 5 of the drawings the upper ends of the legs 12 are angled so that when the legs are in supporting positions the upper ends will have complete tight surface engagement with the under side of the rail 1 so that any vertical stresses imposed upon the rail will be distribut-

ed directly throughout the length of the legs 12 instead of being supported by pivots, bolts, hinges or the like, thus materially adding to the strength and rigidity of the saw horse.

The edges of the legs 12 are cut at acute angles to the flat inner and outer surfaces of the legs as shown at 16, and in the form of the invention shown in Figures 1 to 7 of the drawings the inner edges of the vertical braces 4 are cut at a corresponding angle as are also the edges of the transversely extending braces 17 carried by the longitudinal brace bar 5 so that when the legs 12 are drawn into supporting position by the bolts 14 the edges of the legs 16 will have snug surface engagement with the inner edges of the vertical braces 4 and with the inner edges of the transverse braces 17 thus providing for distribution of lateral stresses on the legs of the saw horse over relatively large areas rather than upon the bolts 14. Also the flat surface engagement between the edges of the legs and the braces 4 and 17 will rigidly support the legs in position against wobbling.

If it is so desired, the ends of the saw horse or trestle between the rail 1 and the longitudinal brace bar 5 and vertical braces 4 may be enclosed by suitable panels 19.

When it is desired to store or transport the saw horse or trestle the bolts 14 are threaded outwardly a sufficient distance to permit the legs 12 to clear the ends of the cross braces 17 and the vertical braces 4 after which the legs are moved both longitudinally and pivotally on the bolts 14 and swung upwardly into position substantially parallel with the rail 1 and folded in beneath the rail to rest upon the longitudinal brace bar 5 where they may be fastened securely in position by means of a strap or other suitable means such as shown at 20 in Figure 3 of the drawings.

In the modified form of the invention shown in Figures 8, 9 and 10 of the drawings, the major features of the saw horse or trestle are identical with the form shown in Figures 1 to 7 of the drawings, the difference being that the cross braces 17 are eliminated and angled substantially U-shaped braces 30 are substituted therefor. The U-shaped braces 30 are attached to the edges of the longitudinally extending braces 2, beneath the under surface of the rail 1 and they have their legs 31 and 32 angled to correspond to the angle at which the legs 12' extend or angle longitudinally of the trestle or saw horse, while their connecting portions 33 are angled with respect to the vertical to correspond to the angle at which the legs 12 extend laterally of the rail 1 when in supporting position. The legs 12' have metal bands 34 about them at their portions which are engaged by the substantially U-shaped brackets 30 providing a metal-to-metal contact, and due to the shape of the brackets and the edges of the legs firm surface engagement will be provided between the legs 12' and the brackets 30 when the legs 12' are moved and tightened into supporting position, the same as in the structure shown in Figures 1 to 7 of the drawings, so that the distribution of the stresses and strains will be substantially the same in both forms of the invention.

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 is:

1. In a saw horse or trestle, a top rail, longitudinally extending flat braces attached to the underside of said rail at either end thereof, a brace bar extending parallel to said top rail, said brace bar and said longitudinally extending flat braces having side edges with corresponding angles, vertical braces in engagement at both ends with the underside of said top rail and attached laterally to the angled side edges of said braces and said brace bar, legs pivotally and longitudinally adjustably supported from said top rail whereby the legs may be moved into supporting position or into inoperative collapse positions, said legs having angled side edges, each of said vertical braces having its inner edges angled to contact and abut at least one adjacent leg in edgewise engagement, and transversely extending braces carried by said top rail and said brace bar for wedging said legs against the vertical braces in the supporting position.

2. In a saw horse or trestle as claimed in claim 1, wherein each of the legs has wedge-shaped sides and each of the vertical braces and transverse extending braces forms a wedge-shaped seat in engagement therewith in the supporting position.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
327,427	Zeigler	Sept. 29, 1885
467,081	Church	Jan. 12, 1892
862,725	Fietsam	Aug. 6, 1907
1,601,946	Dujardin	Oct. 5, 1926
1,778,566	Pitner	Oct. 14, 1930
1,967,979	Stern	July 24, 1934
2,001,438	Stuck	May 14, 1935
2,079,575	Matter	May 4, 1937
2,144,049	Forcier	Jan. 17, 1939
2,194,027	McDonald	Mar. 19, 1940
2,281,039	Jones	Apr. 28, 1942
2,376,787	Larson	May 22, 1945

FOREIGN PATENTS

Number	Country	Date
612,550	Germany	Apr. 27, 1935