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(54) Folding trestles

(57) A folding trestle includes first and second leg structures (10 and 11). Struts in the form of welded metal strips (23) extend from one (11) of the leg structures and are pivotally connected to the other leg structure (10). Flat surfaces (19) are provided at the upper ends of the leg structures (10 and 11) and are in abutting co-planar relationship in the in use condition of the trestle.

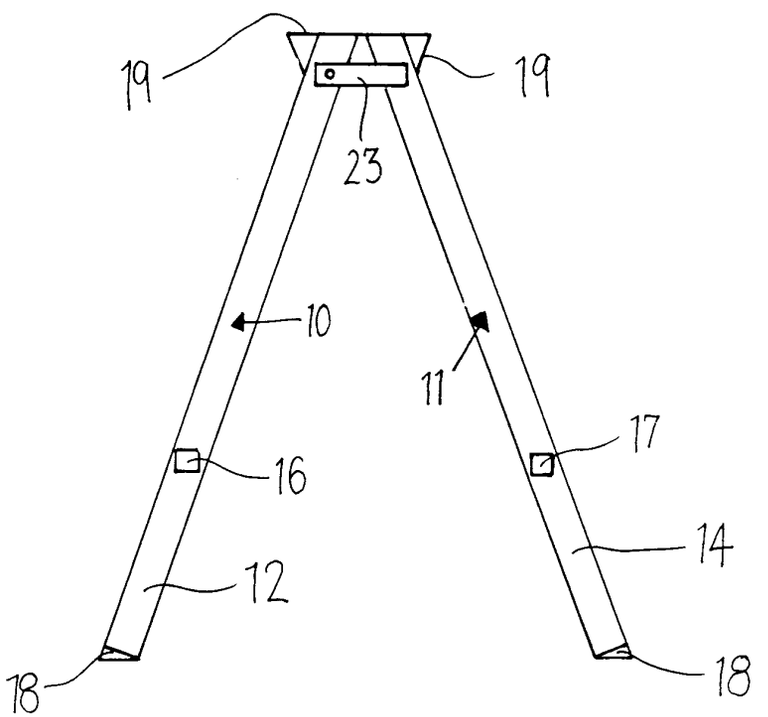

FIG. 3

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Description

Field of the Invention

[0001] This invention relates to folding trestles such as are widely used by builders and handymen.

[0002] One of the requirements for such trestles is that, when they are in use, they provide a substantial, solid support surface on which any necessary work can be placed and on which quite large loads can be placed.

[0003] Another requirement is that, when the trestles are not in use, they can be folded into a compact configuration and thus occupy a minimum of storage space.

[0004] It is accordingly an object of the present invention to provide an improved form of folding trestle, particularly one which meets the above requirements.

Summary of the Invention

[0005] According to the present invention there is provided a folding trestle comprising first and second leg structures, each in the form of frames, strut means extending from one of the frames adjacent the upper end thereof, means pivotally connecting the other frame to the strut means, and flat support surfaces at the upper ends of the frames, the arrangement being such that, in the in use condition of the trestle, the two flat support surfaces are in abutting co-planar relationship.

[0006] Each of the frames preferably comprises a pair of spaced parallel legs interconnected intermediate their ends by bracing members and interconnected at their upper ends by the two flat support surfaces.

[0007] The flat support surfaces are preferably constituted by parts of top members welded to the upper ends of the legs, which legs are preferably formed from box-section steel elements.

[0008] The strut means preferably comprises metal strips welded to the legs of the one frame and the means pivotally connecting the other frame to the strips preferably comprise pivot pins passing through the legs of the other frame adjacent the upper ends thereof.

[0009] The legs are preferably provided with plastic ground-engaging feet in the form of plastic inserts which are push-fits in the lower ends of the legs.

Brief Description of the Drawings

[0010]

Figure 1 is a front view of the folding trestle,

Figure 2 is a plan view of the trestle,

Figure 3 is a side view of the trestle,

Figure 4 is an enlarged view of one of the top members of the trestle, and

Figure 5 is a detail view of the top part of the trestle.

Description of the Preferred Embodiment

[0011] The specific embodiment of trestle shown in the drawings comprises a pair of frames 10 and 11. Each frame 10, 11 includes two legs 12, 13 and 14, 15, with each leg being formed from box-section steel tube. The legs 12, 13 and 14, 15 are interconnected by horizontal bracing members 16, 17, again in the form of box-section steel tube but having dimensions less than the dimensions of the tube from which the legs 12, 13 and 14, 15 are formed.

[0012] In the in use condition of the trestle, as shown in the drawings, the two frames 10 and 11 are each inclined to the vertical at an angle of 20°, i.e. there is an included angle of 40° between the two frames. Plastic feet 18 are push-fitted in the lower ends of the legs 12, 13 and 14, 15 and are so shaped that, in the in use condition of the trestle, the lower ground-engaging surfaces of the feet 18 are horizontal.

[0013] Top members 19 are welded to the upper ends of the legs 12, 13 and 14, 15. Each top member 19 comprises, as shown in Figure 4, a flat support portion 20 and a pair of downwardly extending flanges 21 and 22 inclined at angles of 70° to the flat support portion 21. The flanges 21 are longer than the flanges 22 and are welded at their lower edges to the legs 12, 13 and 14, 15. The flanges 22 are substantially flush with the adjacent surfaces of the uppermost portions of the legs 12, 13 and 14, 15 and are welded thereto.

[0014] Flat metal strips 23 are welded to the outsides of the legs 14 and 15 of frame 11. The flat metal strips 23 act as struts and extend horizontally. They are formed, adjacent their free ends, with apertures through which the shanks of bolts 24 are passed. Nut and washer assemblies are tightened on to the bolts 24 on the insides of the legs 12, 13. The shanks of the bolts 24 act as pivot pins for pivotal movement of frame 10 relative to frame 11 between the in use condition shown in the drawings and the storage condition in which the frame 10 has been moved in an anti-clockwise direction from the position shown in Figure 3 into a position in which the lower end of the frame 10 is in contact with the lower end portion of frame 11. A compact storage condition is thus provided.

[0015] When the folding trestle is in its in use condition, as shown in the drawings, the adjacent edges of the two support portions 20 are in abutting relationship. A continuous support surface is thus provided and any vertical load applied to this support surface will effectively serve to urge the two support portions 20 together, thereby providing a very stable support.

Claims

1. A folding trestle comprising first and second leg

structures (10 and 11), each in the form of frames, strut means (23) extending from one (11) of the frames adjacent the upper end thereof, means (24) pivotally connecting the other frame (10) to the strut means (23), and flat support surfaces (19, 20) at the upper ends of the frames (10 and 11), the arrangement being such that, in the in use condition of the trestle, the two flat support surfaces (19, 20) are in abutting co-planar relationship.

2. A folding trestle as claimed in Claim 1, in which each of the frames (10, 11) comprises a pair of spaced parallel legs (12, 13, and 14, 15) interconnected intermediate their ends by bracing members (16, 17).

3. A folding trestle as claimed in Claim 2, in which the legs (12, 13 and 14, 15) of each of the two frames (10, 11) are interconnected at their upper ends by the two flat support surfaces (19, 20).

4. A folding trestle as claimed in Claim 3, in which the flat support surfaces are constituted by parts (20) of top members (19) welded to the upper ends of the legs (12, 13 and 14, 15).

5. A folding trestle as claimed in any one of Claims 2 to 4, in which the legs (12, 13 and 14, 15) are formed from box-section steel elements.

6. A folding trestle as claimed in any one of Claims 2 to 5, in which the strut means comprise metal strips (23) welded to the legs (14, 15) of the one frame (11).

7. A folding trestle as claimed in Claim 6, in which the means pivotally connecting the other frame (10) to the strips (23) comprise pivot pins (24) passing through the legs (12, 13) of the other frame (10) adjacent the upper ends thereof.

8. A folding trestle as claimed in any one of Claims 2 to 7, in which the legs (12, 13 and 14, 15) are provided with ground-engaging feet (18) in the form of plastic inserts which are push-fits in the lower ends of the legs (12, 13 and 14, 15).

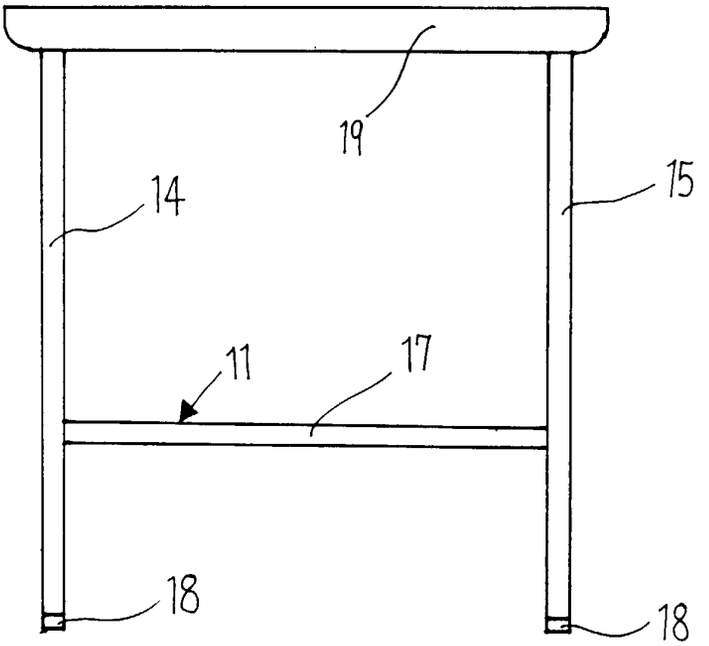


FIG. 1

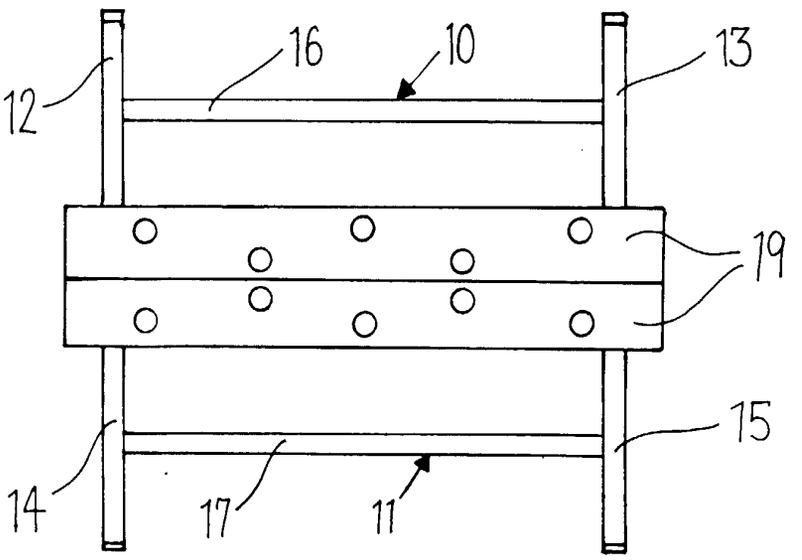


FIG. 2

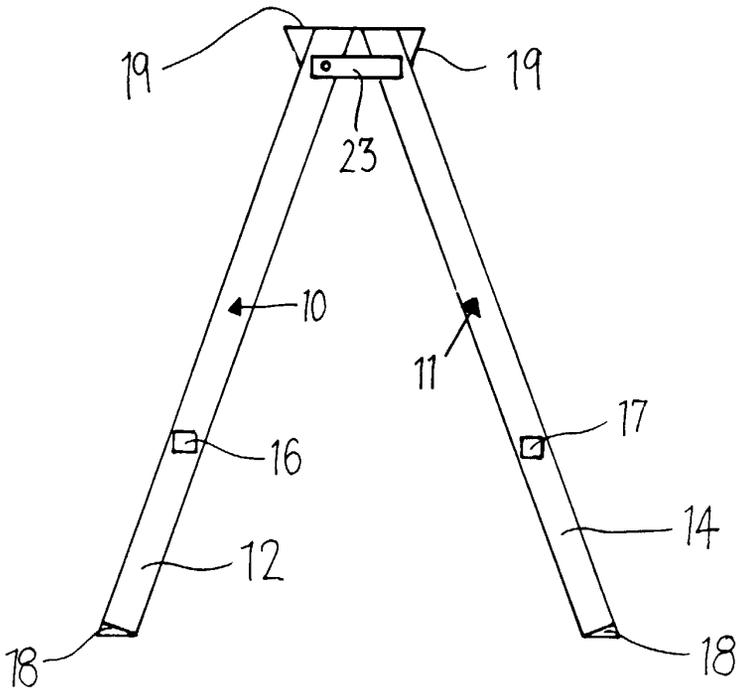


FIG. 3

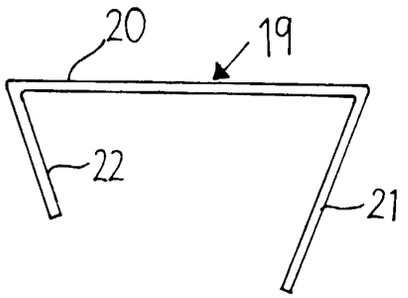
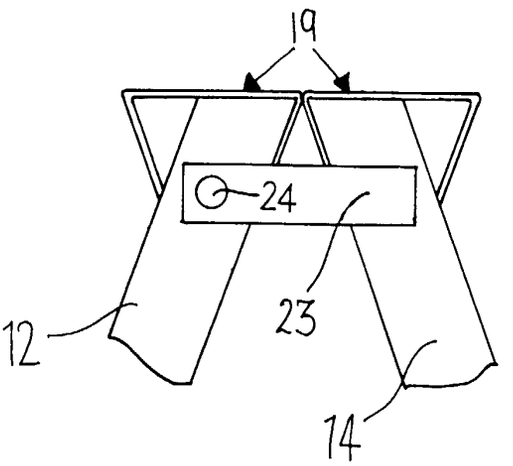


FIG. 4

FIG. 5



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EUROPEAN SEARCH REPORT

Application Number
EP 99 30 9696

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X Y	US 4 245 718 A (POSTON DANIEL W ET AL) 20 January 1981 (1981-01-20) * column 2, line 21-54; figures *	1 2-5	B25H1/06
Y	FR 2 688 572 A (EMO PATRICK; LAPEYRE DIDIER) 17 September 1993 (1993-09-17) * page 4, line 35 - page 5, line 5; figures *	2-5	
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A	FR 2 245 170 A (CHATELLERAULT ARMES & CYCLES) 18 April 1975 (1975-04-18) * page 2, line 8,9; figures *	8	

TECHNICAL FIELDS SEARCHED (Int.Cl.7)

B25H

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	6 April 2000	Dietz, N

CATEGORY OF CITED DOCUMENTS

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 99 30 9696

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06-04-2000

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82