Oct. 7, 1941. H. C. BERCHEM ET AL 2,257,876

ADJUSTABLE FOLDABLE TRESTLE HORSE

Filed March 20, 1940

Fig. 1.

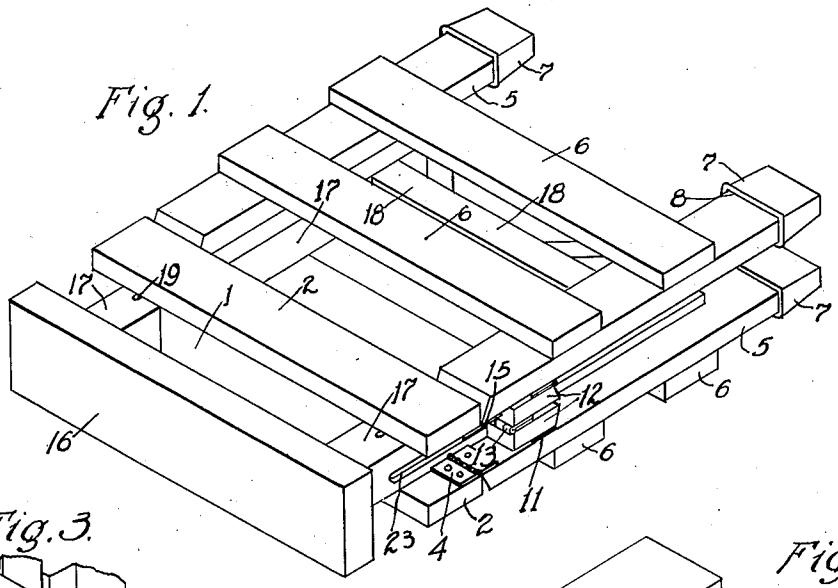


Fig. 3.

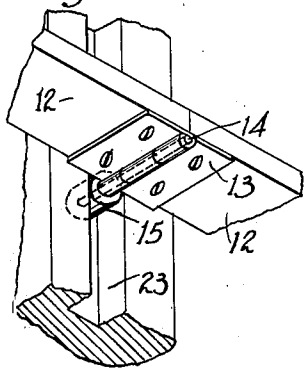


Fig. 2

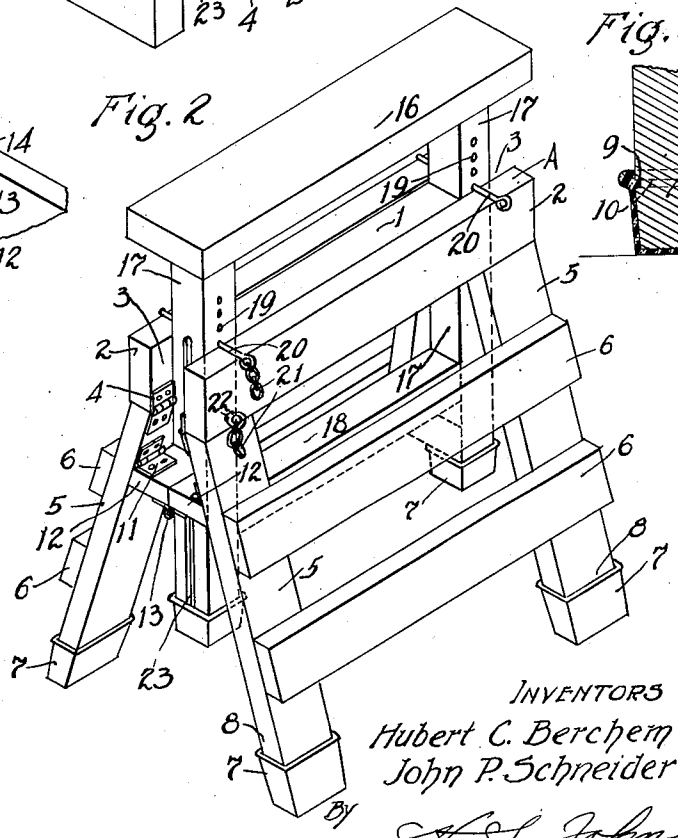


Fig. 4

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ADJUSTABLE FOLDABLE TRESTLE HORSE

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3 Claims. (Cl. 304—6)

Our invention relates to adjustable folding trestles which may be easily and quickly collapsed and which will assume a flat position when collapsed so that a plurality of trestles may be stacked one above the other for storing or shipping purposes.

An object of the invention is to provide a trestle support in the form of a horse wherein the trestle beam is adjustable to advantageous heights.

A further object of the invention is to provide a device which, when set up, will afford adjustability for scaffolding planks to various heights from the floor, which heights can be easily and quickly varied.

A still further object of the invention is to provide a hinged roller guiding means for the elevatable trestle member so that its vertical slotted members will be sustained in true vertical alignment with the horse at all times and further, when set up upon finished floors, will not mar the same.

With the foregoing and other objects in view, which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the drawing for an illustrative embodiment of the invention herein.

Figure 1 is an isometric perspective of the improved trestle in its collapsed position.

Figure 2 is an isometric perspective of our invention showing the trestle in an elevated position.

Figure 3 is an isometric perspective of the collapsing hinge sustaining the guiding roller which keeps the vertical adjustable members of the elevated trestle in true vertical position with respect to the horse under all conditions.

Figure 4 is a cross section of the protective shoe fitted to each of the legs and also to the bases of the vertical trestle members.

In referring to the drawing, A represents the horizontal top body portion of a horse which is composed of a division member 1 and two side members 2. The division member 1 is of such length as the distance between the elevatable vertical members 17, while the side members 2 project beyond the length of members 1 and thereby provide the pockets 3 in which the vertical members 17 travel up and down.

The side top body members 2 are provided with leg hinges 4 to which are secured the horse legs 5 which in turn sustain a series of reinforcing cross slats or rungs 6. Each of the legs at the lower extremities are provided with shoes 7 snugly fitting the foot 8. Each shoe is held to the foot 8 by the clamping head 9 locking itself into a recess 10 in the foot of the leg.

Each pair of legs is provided with a series of struts or brace hinges 11 which sustain hinged strut members 12. The strut members 12 are hingedly connected by the folding hinge 13 upon whose elongated hinge pin 14 there is positioned an inwardly supported guide roller 15.

The elevatable trestle's top member 16 is supported upon vertical slidable elevating members 17 which are braced and locked together at the bottom by a brace member 18 arranged in parallel alignment to the top. The holes 19 in the vertical elevating member 17 are so placed as to obtain a uniform leveling extension for the elevatable trestle. There are likewise provided a series of lock pins 20 secured to pin chains 21 which in turn are made fast to the members 2 by a chain eye 22. These lock pins 20 are forced through the holes 19 when the vertical elevating trestle members 17 have been elevated to a predetermined height and allowed to rest atop the horizontal top body portion A of the horse.

Toward the far sides of the vertical elevating members 17 there are provided vertical slots 23 in which the guide rollers 15 travel. The foot ends of the vertical elevating members 17 are likewise provided with a series of shoes 7 similarly constructed as previously described.

It will be seen, that in operation, should the carpenter be required to use the trestle horse upon a finished floor, since trestle horse is equipped with shoes made of some resilient material as rubber, the floor would not be marred or should the user of the trestle horse suddenly pull both pins 20 from out of their locking holes 19 and allowing the elevatable trestle to fall and causing the feet to strike the floor, no damage can result due to the fact that its feet are protected by shoes which ward off floor injury.

Then, likewise, should the trestle horse be extended to any given height by the lifting of the trestle member 16 above the horse proper, the stability of the vertical trestle members 17 is made rigid, that is to say, there can be no wobble of the vertical members 17 due to the fact that the rollers 15 within the slots 23 of the vertical members 17 will keep the vertical members 17 in perfect perpendicular alignment with respect to the horse proper. It will be understood that various changes in the detailed construction may be made without departing from the spirit or scope of the invention as defined.

We claim:

1. An adjustable, foldable trestle horse including an elevatable load supporting bar, a pair of uprights depending therefrom, a depressed roller guide within said uprights and a guide within said horse wherein the uprights are slidably mounted, foldable hinged distending leg struts including a center hinge, a pair of hinged leg members each foldable toward the other, and a guide roller mounted upon the hinge pin of the center hinge of the foldable hinged distending leg struts, said guide roller cooperating with and traveling within said guides within the depending uprights to retain a true perpendicular position for said uprights to said horse in any selected position of adjustment substantially as described.

2. In an adjustable foldable horse, in combination with a hinged leg base including legs hinged at the upper ends to the horizontal top portion of the horse, a vertical guide within said horizontal top portion of the horse, a horizontal load supporting bar, a pair of uprights depending from the horizontal load supporting bar, a depressed roller guide within said uprights, and a pair of foldable hinged leg distending struts foldable upon each other between said hinged legs, an extended hinge pin for the central strut hinge, a guide roller mounted upon the hinged pin of the foldable hinged leg distending struts, said guide roller cooperating with and traveling within the depressed roller guides within the uprights, and a shoe positioned upon the bottom of said uprights to act as limiting means of travel of the guide roller within the depressed roller guide as fully set forth.

3. In an extensible, adjustable, foldable trestle horse, a load supporting member slidably mounted within said horse, roller guide means carried by the load supporting bar members and by the foldable trestle horse, to slidably retain said load supporting bar member in a true perpendicular position with respect to the horse, and shoes for the bases of the slidable load supporting bar member limiting the upright travel of the horizontal load supporting member.

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