Sept. 25, 1928. 1,685,283

J. P. GIBSON.

COLLAPSIBLE TRESTLE

Filed March 17, 1927

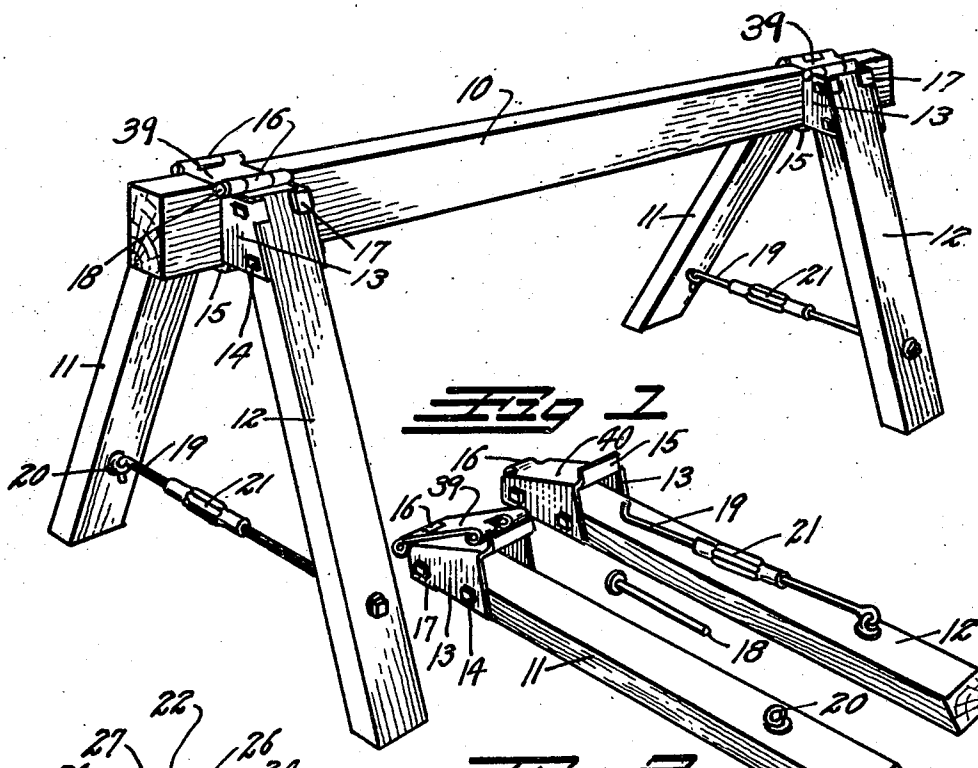


Fig. 1

Fig. 2

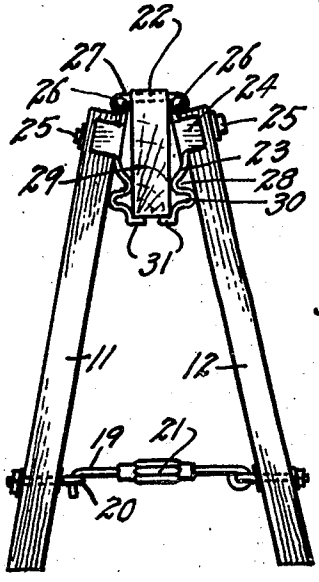


Fig. 3

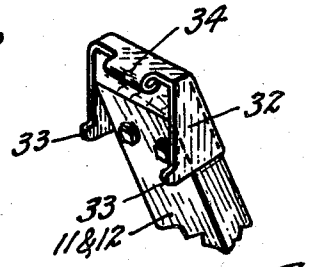


Fig. 4

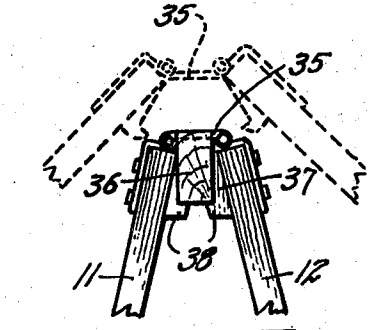


Fig. 5

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UNITED STATES PATENT OFFICE.

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COLLAPSIBLE TRESTLE.

Application filed March 17, 1927. Serial No. 175,994.

This invention relates to trestles more particularly of the small, portable type used for supporting benches and tables in banquet halls, mess halls and the like, and, while particularly adaptable to this use, will also be found valuable for use by carpenters, paper hangers and similar mechanics for supporting their work.

The principal object of the invention is to provide a trestle of this type, the legs of which may be easily folded upon or disconnected from each other so that the entire trestle will occupy but a minimum of space for shipping, transporting or carrying, and which, when erected, will be firm and solid.

Another object of the invention is to provide a leg structure for trestles which may be quickly applied to any cross piece to form a complete trestle without the use of tools, bolts, nails and screws.

A further object is to provide a clamping construction which will cause the legs to act as levers to grip the cross piece and firmly lock the complete trestle into a unit structure.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention, reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 is a perspective view of a complete trestle employing one form of my invention.

Fig. 2 is a perspective view of the legs of Fig. 1 in the dis-assembled condition.

Fig. 3 is an end view of a trestle employing an alternate form of invention.

Fig. 4 is a detail perspective view of an upper leg extremity illustrating a second alternate form of the invention.

Fig. 5 is a fragmentary end view of a trestle illustrating a third alternate form of the invention.

In the preferred form of the invention the body or cross piece of a trestle is indicated at 10 with a pair of legs 11 and 12 supporting each extremity thereof.

Each of the legs 11 and 12 is provided with a sheet metal clamping member 13 bolted to its upper extremity as shown at 14. The member 13 is provided with a clamping face 40 arranged at an angle to the axis of the leg and terminating at its lower edge in a shelf or ledge 15 and at its upper edge in a hinge member 16. The sides of the member 13 engage the edges of the legs and are provided with ears 17 which extend across the back of the legs. The hinge members 16 of opposite legs are joined across the top of the cross piece 10 by means of a hinge plate 39 which connects with the hinges through the medium of removable hinge pins 18.

Adjacent the lower extremity of each leg 12, a hook member 19 is secured which engages an eye 20 on the leg 11. A turn buckle 21 is incorporated in each of the hook members 19.

The leg construction is such that any convenient 2 x 4 timber may be employed for the cross piece 10, in which case the hinge plates 39 are placed across the top of the 2 x 4 and the legs 11 and 12 brought downward each side thereof until the ledges 15 pass under the cross piece 10. The hooks 19 are then engaged in the eyelets 20 and the turn buckles 21 are tightened. This results in forcing the clamping faces 40 of the members 13 firmly against the sides of the cross piece so as to prevent any looseness or vibration.

As the turn buckles are tightened, the upper extremities of the legs tend to move outwardly. This outward movement is resisted by the ears 17 which engage the outer face of the legs. It is preferred to notch the cross piece 10 and set the hinge plate 39 in this notch so that it will not project above the top of the cross piece 10, as shown at 22, Fig. 3.

In Fig. 3 I have illustrated an alternate form of my invention which, however, employs the same clamping principle of the hooks 19 and turn buckles 21. In this form a clamping member 23 engages the sides only of the legs by means of ears 24.

The clamping member 23 is bolted as shown at 25 adjacent the upper extremity of the leg and carries a hinge member 26 connecting with the hinge member 26 on the opposite leg by a hinge plate 27. The lower part of the clamping member 23 is curved inwardly as shown at 28 to engage a cross piece 29, thence outwardly as shown at 30 to engage the leg, thence inwardly to form a shelf or ledge 31 under the cross piece. The clamping member is preferably, but not nec-

essarily, formed of spring steel or similar resilient material so that it will first engage the lower portion of the cross piece and then be drawn to a snug engagement with both the cross piece and the leg by means of the turn buckle 21.

In Fig. 4 a second alternate form is shown somewhat similar to the preferred form. In this form, however, a sheet iron cap 32 is employed which passes across the outside of the leg and turns inwardly at each edge thereof to form cross piece supports 33. The cap 32 passes over the top of the leg and terminates in a hinge member 34 to which any of the previously described hinge plates may be attached.

In Fig. 5 still another alternate form of the invention is illustrated. This form is more economical to manufacture and employs the turn buckle and hook previously described. In this form an extension hinge 35 is arranged to extend across the top of a cross piece 36 and the tops of the legs 11 and 12, and downwardly on the outside of each of the legs. On the inside of the legs angle blocks 37 are placed to cause the legs to angularly project from the faces of the cross piece. If desired, ledges 38 may be formed on the blocks 37 to support the cross piece, however, the clamping action of the legs is usually sufficient to maintain the cross piece in position. In broken line in Fig. 5 the position of the legs immediately before attachment to the cross piece is indicated.

While specific forms of the improvement have been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what I claim and desire to secure by Letters Patent is:—

1. Collapsible trestle legs adapted to support a cross piece comprising a pair of legs; a hinge connecting said legs with each other at their one extremity; projections for maintaining said legs at an angle to the faces of said cross piece; and means for causing said legs to approach each other at their other extremities so as to cause said projections to be clamped against said cross piece.

2. Collapsible trestle legs adapted to support a cross piece comprising a pair of legs; a hinge connecting said legs with each other at their one extremity, said hinge arranged to pass over said cross piece; angular faces on said legs adapted to contact with the sides of said cross piece; and means for clamping said angular faces against said cross piece.

3. A collapsible trestle comprising a cross piece; a hinge plate arranged to laterally cross the upper face of said cross piece; co-acting legs hinged one to each end of each of said hinge plates; clamping members carried by said legs and adapted to engage opposite sides of said cross piece; means arranged to draw the free extremities of said co-acting legs toward each other so as to cause said clamping members to grip said cross piece; and projections on said clamping members adapted to support said cross piece between said legs.

In testimony whereof, I affix my signature.

JAMES P. GIBSON.