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G. P. WASHBURN

CONSTRUCTION FOR THE ASSEMBLING OF BOX LIKE STRUCTURES, SUCH FOR EXAMPLE AS BOXES, TABLES, AND THE LIKE

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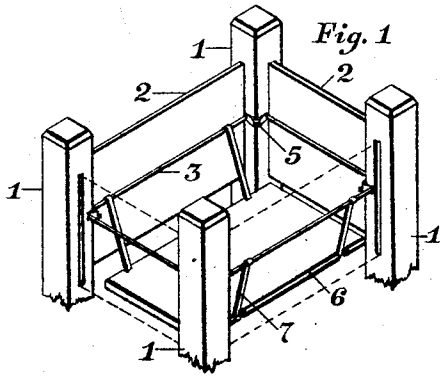


Fig. 1

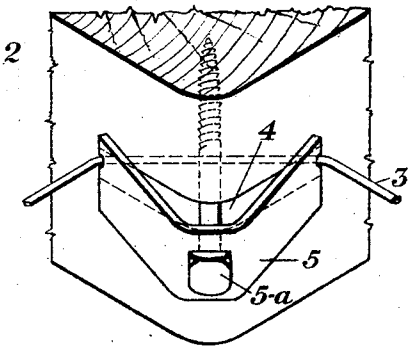


Fig. 2

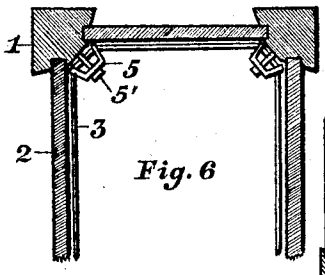


Fig. 6

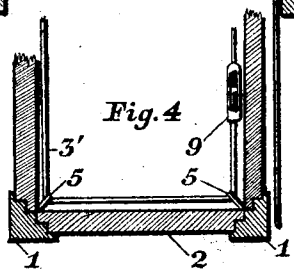


Fig. 4

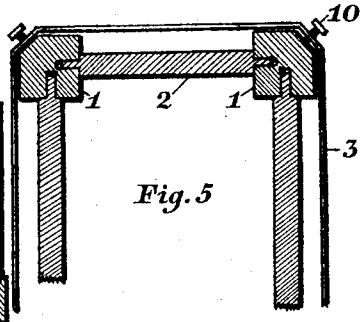


Fig. 5

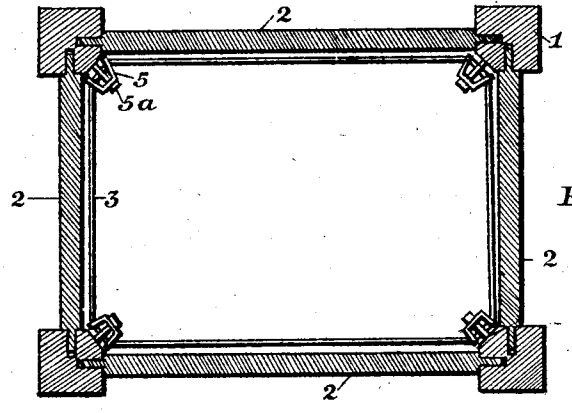


Fig. 3

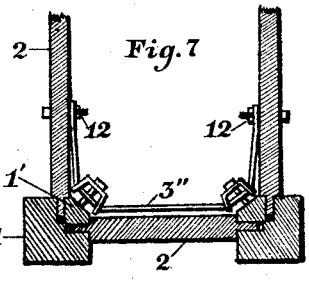


Fig. 7

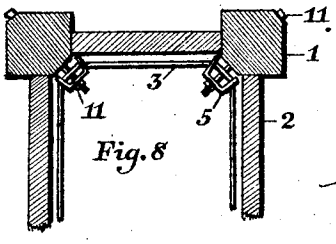


Fig. 8

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CONSTRUCTION FOR THE ASSEMBLING OF BOX-LIKE STRUCTURES, SUCH FOR EXAMPLE AS BOXES, TABLES, AND THE LIKE.

Application filed April 9, 1925. Serial No. 21,878.

The invention relates to a construction for joining the elements of box-like structures particularly adapted for quick and easy assembling, thereby facilitating shipment in compact knockdown form and assemblage at the point of use.

While I have chosen for illustration a tee box for golf courses, my invention is not limited to such use, as many of its features are adapted to tables, chair frames and other structures wherein ease of assemblage, strength and cheapness are desired.

In the accompanying drawings, Fig. 1 is a perspective view partly broken away, of a box or stand, more particularly intended as a tee box for golf courses, and Fig. 2 is a perspective view on an enlarged scale of the construction and mode of application of the corner tightening means of Fig. 1. Fig. 3 is a sectional view of Fig. 1 taken through the slots in the corner members and viewed from below. Figs. 4, 5, 6, 7 and 8 illustrate modifications.

The construction illustrated comprises corner members or legs 1 and co-operating side members 3 adapted to fit together to form a rectangular structure, and means for exerting inwardly directed forces for holding the same together. For the purpose of a tee box the corner members are appropriately extended to serve as legs. They are shown broken away. In the several forms of construction illustrated in the figures the side and corner members are shaped to fit together by various forms of mortised or rabbeted joints, but any mode of abutting may be used which permits of tightening and crowding them together by inwardly directed forces applied to the corner posts.

In the arrangement shown in Fig. 1 the means for drawing and holding the members together is shown as a metal rod or strip bent to approximately the inside peripheral dimensions and having its ends suitably joined, as by welding, to form a rectangular loop 3. The corner members 1 are formed with a slot 4 of a width sufficient to receive the member 3 and to permit the passage of a screw or bolt into the material of the corner member. To produce an inward force sustained by the loop member 3, an angle member 5 is arranged to bear upon the loop 3 and to permit a lag screw 5^a or a bolt 11, as shown in Fig. 8, to draw the corner member toward the angle member.

The result of screwing in the lag screw is to exert a tension on the loop or hoop member 3, drawing the corner members inward and thereby firmly clamping the side members. I have found this to be an effective method of producing a strong, rigid, box-like structure which at the same time is cheap and very easy to assemble. At the same time this construction affords a means for applying a top or bottom member. In Fig. 1 a bottom member 6 is supported by metal hangers 7 bent to conform to the bottom and to hook over the loop member 3. In the particular construction shown, a tight fitting bottom is not desired as it is intended only to support the sand and water containers customarily located at each tee on a golf course. A tight fitting bottom or cover member may be similarly applied by any suitable tightening devices as nuts on the hanger member 7. Such a closure member may obviously be located to serve either as a top, as for instance a table top or a chair or stool seat, or as a bottom and by the term closure member used in my claims, I intend to designate either a top or bottom member.

In Fig. 4 I have shown a different form of rabbeting for the side and corner members and have also shown a loop member 3′ of flexible material, such as wire or cable tightened by a turnbuckle. In this instance the angle members 5 take the form of screw eyes, staples or the like, secured to the corner members 1. The tension produced in the member 3′ exerts inward forces upon the corner members and draws the corner and side members tightly together.

In Fig. 5 I have shown the peripheral loop member 3 arranged outside instead of inside the box-like frame, as when a clear inside is desired. In this instance the member 3 is provided with screw threaded holes or equivalent means for receiving screws 10 whose ends engage flattened surfaces on the corner members 1. Screwing in on the screws 10 puts the hoop member 3 in tension and forces together the corner and side members.

In Fig. 6 I have shown a modified form of rabbet which reduces the cost of the side members and is effective. The construction is otherwise similar to that of Fig. 3.

In Fig. 7 I have shown a modified arrangement in that the tension member in-

stead of being a complete hoop or loop, takes the form of two strap-like members 3″, one at each end, fastened to the side members as indicated at 12. Only one is shown as the figure is broken away. As will be seen the loop is effectively completed by the sides, which are capable of resisting tension. When I use the term loop in my claims I intend to include this form unless otherwise excluded. In Fig. 7 I have also shown a modified corner post construction in which an outer member 1 and an inner member 1′ are employed. In this case the screw or bolt extends through the member 1.

It will be understood that any of the plans for rabbeting the corners may be employed in conjunction with any of the tension means shown.

While I have shown various ways of rabbeting or fitting the side member and various constructions for the tension means, others may be used and it will be evident that the side and corner members may be formed of either wood or metal, engaging one another in any suitable way that will enable them to be firmly engaged by inward pressure at the corners.

What I claim is:—

1. A collapsible enclosure comprising corner members, side members engaging said corner members to form said enclosure, a peripheral member capable of resisting tensional stress, angle members adapted to engage said peripheral member and means engaging said corner members and said angle members for holding said enclosure together, and a closure member and means engaging said member and the peripheral member for holding said closure in position.

2. An assembly means for structures, wherein corner members, side members and a closure member, such as a bottom or cover, are employed, comprising a loop member approximately defining the cross-sectional shape of the structure, means engaging said loop and said corner members for positively forcing the corner and side members together and means also engaging said loop for holding said closure member in definite relation therewith.

3. A tee box or the like, comprising corner members, side members constructed to engage said corner members in such manner as to be held together by inward pressure on the corner members, a peripheral member substantially defining the cross sectional shape of the structure and adjustable tensioning means engaging said corner members and said peripheral member to exert inward pressure on said corner member for holding said structure together.

4. A tee box, or the like, comprising corner members, side members constructed to engage said corner members, an interior loop member substantially defining the shape of said enclosure without materially obstructing the interior thereof, means engaging said corner members and said loop member for putting the latter in tension to hold said side and corner members in engagement, a bottom member and means supported by said loop for holding said bottom member.

5. A tee box or the like comprising corner members and side members formed for mutual engagement to be held together by inward forces at the corners, a loop member capable of resisting tensional stresses, means for adjustably stressing said loop member for holding said side and corner members in engagement, a closure member and means engaging said loop for holding said closure member in position.

6. A tee box comprising mortised corner members serving as legs, side members tenoned for engagement with said corner members, a loop member peripherally disposed inside said box and capable of resisting tensional stresses, angle members engaging said loop member, screw means for drawing said corner members diagonally inward, and a closure member and means engaging said loop member for holding the closure member.

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