Sept. 5, 1944. W. A. HILLENBRAND 2,357,588

POST OR STANDARD CONSTRUCTION AND MOUNTING

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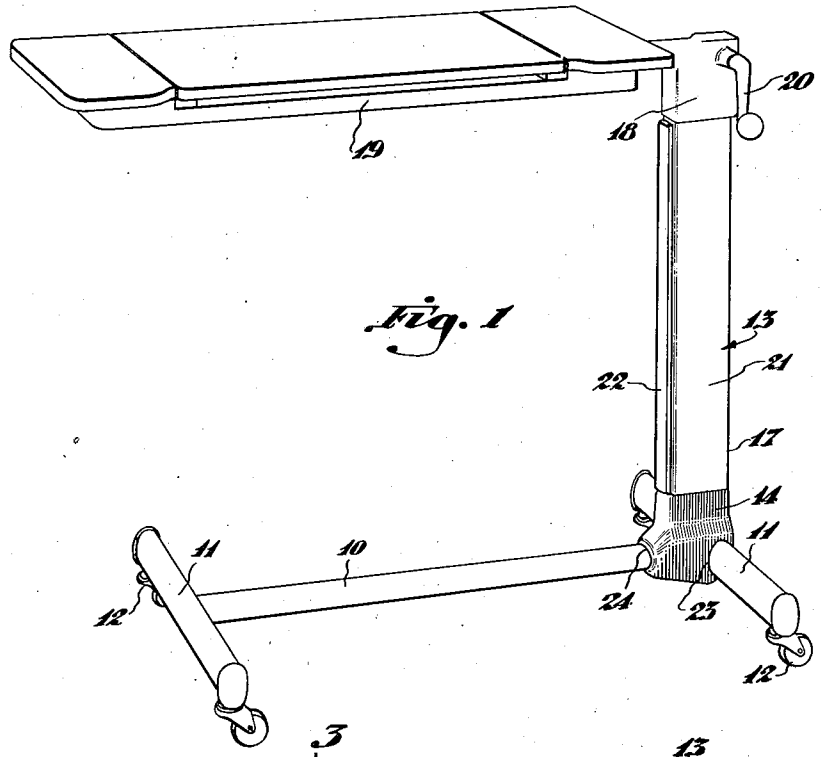


Fig. 1

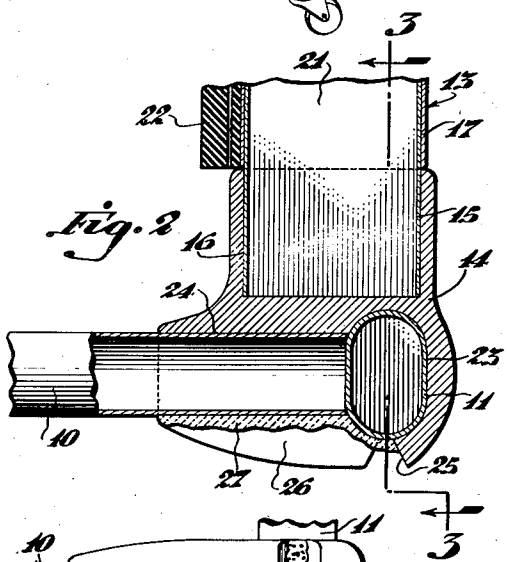


Fig. 2

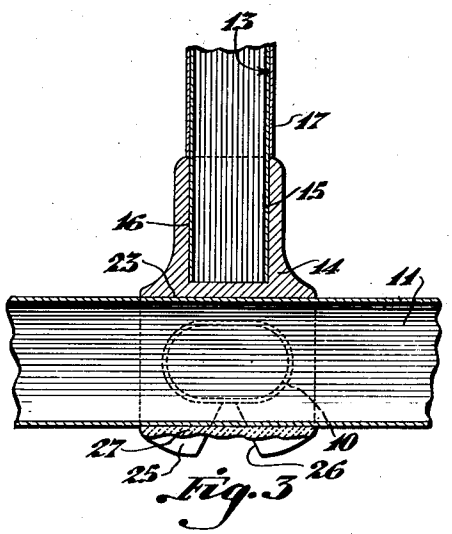


Fig. 3

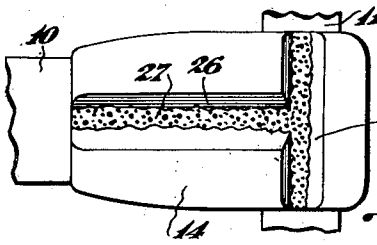


Fig. 4

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POST OR STANDARD CONSTRUCTION AND MOUNTING

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4 Claims. (Cl. 248—194)

This invention relates to the structure of a post or standard and means for mounting or supporting the post or standard on a base, as for example, in the structure of an overbed table of the so-called single pedestal type. These tables are designed for use in the hospital or sick room. More specifically, the invention may be said to reside in a joint structure for securing the standard or pedestal on the base members as well as to the structure of the standard itself and the associated base members.

It will be apparent that it has been an extremely difficult problem to construct and mount the pedestal or standard of the single pedestal type of overbed table so that the table has been adequately supported. In a table of this sort, the table top extends substantially across the bed and is unsupported at its outer end. The normal weight of the table plus that of any articles placed upon it provide a considerable leverage tending to bend or pull the pedestal out of vertical position, or the connections between the pedestal or post and the base members of the structure are twisted and strained.

Accordingly, it has been the object of the present inventor to provide a base and post or standard combination incorporating an improved joining means or bracket whereby the standard is supported on the base at one end thereof in an extremely rigid manner, precluding twisting or bending of the post and disruption of the connections to the base.

Further, it has been the object to provide a bracket arrangement which is connected to the base members in a highly efficient and rigid manner wherein the bracket may be bonded or integrated with the base members through the use of welding applied relative to the base members and the bracket so as to entirely preclude displacement of any of the parts and to prevent fracture or loosening under the strain produced by undue leverage imparted to the standard through an extended top merely supported at one end on the standard or post.

Another object has been to provide an improved standard or post construction wherein the resistance to bending of the post out of vertical position is greatly increased by the proper distribution and arrangement of the cross section of the post.

Other objects and advantages of the invention will be more fully apparent from the description of the drawing in which:

Figure 1 is a perspective view of an overbed table of the single pedestal type disclosing the improvements of this invention associated with the post or pedestal and base thereof.

Figure 2 is a fragmentary sectional view taken through the bracket connecting the base and the post or pedestal, the view being taken lengthwise of the base.

Figure 3 is a fragmentary sectional view taken on line 3—3, Figure 2.

Figure 4 is a fragmentary bottom plan view of Figure 2.

The structure of the present invention has been designed primarily to attach securely and rigidly a standard or pedestal to a base structure and has a special utility in those cases where the standard or pedestal supports a table, which table is not supported at its outer end. In structures of this type, a great deal of leverage is exerted on the pedestal or standard because of the weight of the table top, either alone or combined with articles resting upon it. The entire purpose of this invention is to so attach or mount the standard and so construct it and the base relative to the attachment that these leverage forces are not capable of materially bending the standard or fracturing or loosening the connection to the base.

Referring specifically to Figure 1 of the drawing, it will be noted that the improvements have been illustrated in an overbed table of the single pedestal type. The base structure of this table is constituted by tubing arranged to form in plan view a sort of broadened H. The central rail is indicated at 10 and the cross or end rails at 11. Each of the end members has a caster 12 at each end thereof. A post or pedestal of telescoping sectional form is indicated at 13. The post or standard rises from the intersection of the central rail or base member 10 and one of the end or cross base members 11. A bracket 14, described in detail later, is structurally united with the base members 10 and 11 and has the lower end of the inner post section 15 socketed therein in a socket 16. The upper or outer section 17 of the post, telescopically engaged upon the section 15, carries a top supporting bracket 18 at its upper end. The table top 19 extends out laterally from this bracket over the base portion of the table.

It is not believed necessary to describe the top or the bracket 18 in detail here since it does not constitute a part of the invention described and claimed in this application. This top is raised and lowered through the telescoping movement of the pedestal sections brought about through rotation of a small crank 20 mounted

on the bracket 18, the bracket 18 containing the operating mechanism.

The post sections 15 and 17 are rectangular in cross section and are of tubular form. Regarding the cross section of these rails, it is pointed out that it is disposed lengthwise of the base and top of the table. This longitudinal arrangement of the wide side walls 21 of the tubes constituting the post sections provides a greater resistance against bending of the post inwardly longitudinally of the base under the weight of the top. In order to prevent marring or scuffing of the pedestal with which the bed is associated, a rubber strip 22 is placed along the vertical inner wall of the upper or outer post section.

The end or cross member 11 of the base traverses a bore 23 in the bracket 14 crosswise thereof at right angles to the standard. The bore 23 and the socket 16 are not interconnected. The tubing, constituting the end members 11, is flattened, being of elongated or oval shape in cross section. This tubing is placed so that its flattened sides are disposed vertically and thus, the weight of the supported structure is more easily sustained with less opportunity for the base member to bend at the middle; that is, directly beneath the bracket.

The central rail or base member 10 enters a socket 24 intersecting the bore 23 and thus, the base members 10—11 intersect within the bracket 14. The central member 10 is formed of tubing of the same cross section as the end members, but its flattened sides are disposed horizontally. Each of the bores 23—24 is entered by notches 25—26 respectively cut into the bottom of the bracket longitudinally of the respective bores. These notches are V-shaped and intersect (in view of the intersection of the bores). When the base tubes are in place, as shown in the detailed Figures 2 and 3, substantial lengthwise portions of the respective tubes are exposed through the bottom of the bracket. The welding operation is performed through these V-shaped slots, the operation being facilitated due to the flared form of the slots. Accordingly, the welding material 27 is applied along the exposed portions of the tubing and against the sides of the slots, the slots directing the welding operation and providing pockets for receiving the welding material.

It will be apparent that the weld applied in these slots completely integrates the structure. The base members are firmly fixed within the bracket and to each other. There is no opportunity for fracture or loosening of the connection of the post structure to the base or separation of the base members.

Having described my invention, I claim:

1. A post supporting structure, comprising a bracket having a vertically disposed socket in its upper side for the reception of a vertically disposed post, a cross base member traversing said bracket, a longitudinally disposed base member having its end disposed in the bracket and engaging the cross base member within the bracket, said bracket including slots in its underside disposed longitudinally of and entering the respective bores receiving the base members, and welding applied within the slots against the exposed portions of the base members and the sides of the slots.

2. Means for mounting a post on a base structure, consisting of a bracket having a vertical socket for receiving the post, a horizontal cross bore for receiving a base member and a horizontal bore intersecting said cross bore for receiving another base member, and slots entering the respective bores for permitting the application of welding to the exposed portions of the base members.

3. A post supporting base structure, comprising base members arranged in the form of a widened H in plan view, a bracket disposed at the contact point of the central longitudinal member with a cross member and including a cross bore traversed by the end member and an intersecting bore having the adjacent end of the central longitudinal member disposed therein whereby the members intersect within the bracket, and welding securing the base members within the bracket.

4. Means for mounting a post on a base structure, consisting of a bracket having a vertical socket for receiving the post, a horizontal cross bore for receiving a base member and a horizontal bore intersecting said cross bore for receiving another base member, and said bracket having slots formed longitudinally of and entering the respective bores for permitting the application of welding to the exposed portions of the base members, said slots being flared outwardly.

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