Sept. 6, 1932. B. O. HORNER 1,876,230

TRAY MOUNTING MEANS FOR ATTACHMENT TO BEDS

Filed Aug. 28, 1930

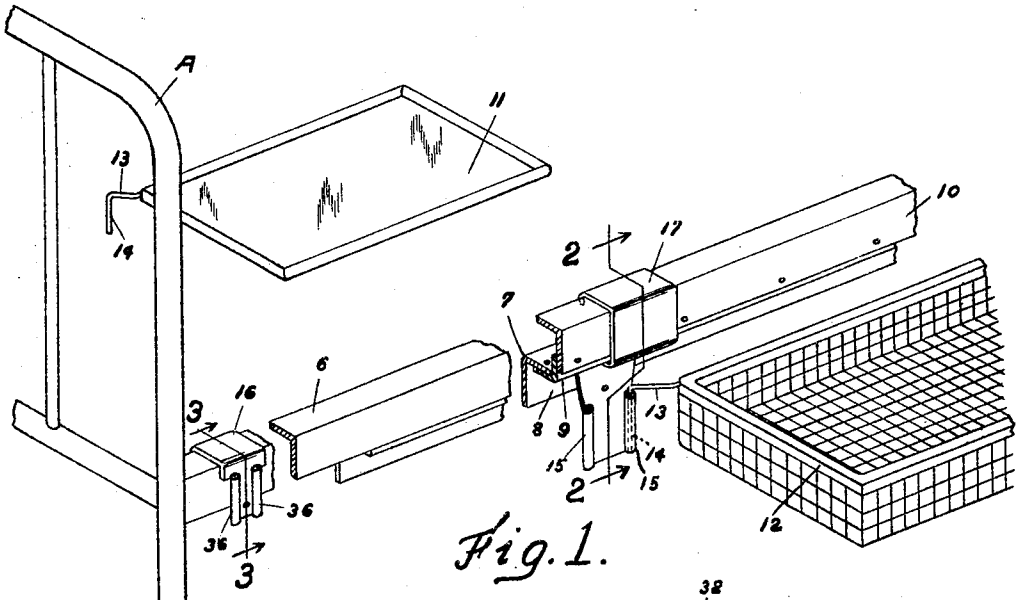


Fig. 1.

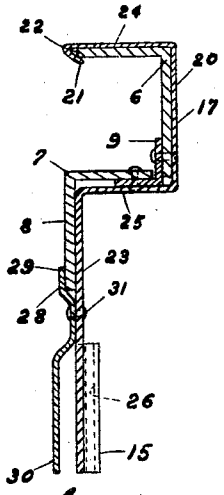


Fig. 2.

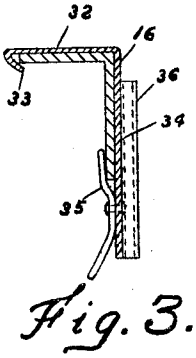


Fig. 3.

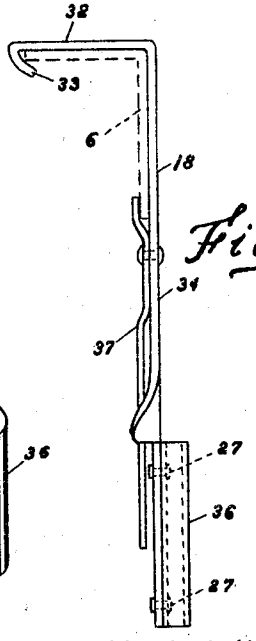


Fig. 4.

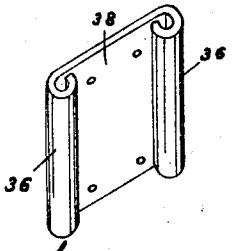


Fig. 5.

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UNITED STATES PATENT OFFICE

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TRAY MOUNTING MEANS FOR ATTACHMENT TO BEDS

Application filed August 28, 1930. Serial No. 478,346.

This invention relates to improvements in tray mounting means for attachment to beds, whereby various types of trays, tables or similar devices for the purpose of supporting a bed pan and urinal may be associated with a bed.

An object of the invention is to provide improved tray mounting means for supporting trays or the like in convenient positions upon a bed frame or rail member.

Another object is to provide an improved tray or table support that will permit of movement of the tray or table to an inoperative position beneath a bed, or to an operative position beside the bed.

Another object is to provide a simple and efficient means for the purposes stated, which means may quickly be applied to or removed from a bed frame with a minimum of effort.

Another object is to provide a tray or table support of the above character, which is provided with a simple yet effective means normally precluding inadvertent detachment thereof from the bed frame or rail.

These and other objects are attained by the means described herein and disclosed in the accompanying drawing, in which:

Fig. 1 is a perspective view of a portion of a hospital or like bed having applied thereto two modified forms of devices of the present invention.

Fig. 2 is a cross sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a cross sectional view taken on line 3—3 of Fig. 1.

Fig. 4 is a side elevational view of another modified form of tray or table mounting bracket of the invention.

Fig. 5 is an isometric view of a socket member forming an element of the device shown in Fig. 4.

In Fig. 1 of the drawing is illustrated a bed A, simulating the hospital type of bed, the opposite ends of which are connected by means of a rail 6 formed, preferably, of angle iron material. The rails of this type of bed sometimes are provided with a second angle iron member 7, one leg 8 of which depends from the main rail as indicated in Fig. 1. The second angle member 7 may be secured to the main rail in any suitable manner, such as by providing a third angle iron member 9 to which both the main and second angle iron members may be secured. It should be apparent from the disclosure in Fig. 1, that the depending leg 8 of the second angle iron lies in a substantially vertical plane parallel to but spaced from the plane of the depending leg 10 of the main rail 6, the depending leg being disposed inwardly from the leg 10. This arrangement of angle irons is provided for the purpose of mounting upon the bed one or more bed spring sections that may be inclined or otherwise adjusted for the comfort of a patient or occupant. The bed sections above-mentioned have no cooperative relationship with the tray mounting means of the present invention, wherefore such sections are omitted from the drawing.

At 11 and 12 are illustrated a substantially flat table and a wire mesh tray or basket, each of which is provided with an extension 13 having a depending hinge portion 14 for reception by a suitable socket member or tray supporting means 15 carried by the brackets or supports 16 and 18.

The device indicated at 17 comprises a C-shaped body portion 20 having an upper edge 21 turned inwardly to provide an abutment for the longitudinal free edge 22 of the rail member 6. Depending from the C-shaped body portion is a substantially vertical supporting plate 23, which is provided with a pair of substantially vertical and parallel socket members 15. The spaced legs 24 and 25 of the body portion 20 are substantially parallel and the socket members 15 have their bores 26 substantially at right angles thereto. As indicated in Figs. 1 and 4, the socket members may be formed integral with the depending supporting plate or they may be formed of a separate piece of material and riveted or otherwise secured to the supporting plate as indicated at 27. The device 17 shown in Figs. 1 and 2, is provided with a latch member 28 having on one end a latching portion 29 spaced from the back of the depending plate 23, the other end 30 thereof being developed into a suitable handle. In-

termediate the ends 29 and 30 the latch member is pivoted, as at 31, upon the depending plate. It should be readily apparent from the disclosure in Fig. 2 that the latch may be moved to an inoperative position for releasing device 17 from the depending leg 8 of member 7, by grasping the handle and rotating the latch member about its pivotal mounting 31. It is to be noted also that the socket members 15 are so located as to permit swinging of the table or tray to a position beneath the bed and the angle member 7. The table or tray to be associated with the bracket 17 may be used for supporting various types of containers or the like for the convenience of patients. The bracket 16 illustrated in Figs. 1 and 3 is adapted for use on that portion of the bed rail not provided with the angle members 7 and 9 (see Fig. 1). The bracket 16 comprises a leg 32 having a longitudinal edge 33 turned inwardly to provide an abutment similar to abutment 21 of bracket 17. Disposed at right angles to the leg 32 is a depending supporting plate 34 which carries the pivoted latch member 35 and one or more socket members 36, which correspond to the members 28 and 15, respectively, of bracket 17. It is to be noted that the socket members 36 of bracket 16 assume a position near the level of the bed frame, wherefore a tray or table supported therein is disposed within easy reach of the patient, and above the tray supported in the socket 15 of bracket 17.

In Fig. 4 is disclosed a modified form of bracket wherein the depending supporting plate 34 is increased in length so as to dispose the socket members 36 at a lower level than the socket members disclosed in Fig. 3. The modified form of the device disclosed in Fig. 4 may be used on that portion of the bed not carrying the angle members 7 and 9, or it may be used on beds constructed with the plain angle member 6. This device is provided also with a leg 32 and inwardly turned edge 33. At 37 is indicated a latch member similar to latch member 28 of bracket 17. As stated before, the socket members 36 may be formed integrally with the depending supporting plate, or they may be formed of a separate sheet of material 38 arranged to be riveted or otherwise secured to the supporting plate.

It is to be understood that the inwardly turned abutment edges 33, if desired, may comprise short inwardly turned spaced lugs, thereby effecting a saving of material. The bracket 17 provides a very rigid table or tray mounting for use on beds provided with the depending portions such as 8.

It is to be understood that various modifications and changes in structural details of the device may be made, within the scope of the claims, without departing from the spirit of the invention.

What is claimed is:

1. A clamp and support of the class described comprising a pair of connected parallel spaced legs, a turned edge on one of the legs for engagement with a bed rail, a supporting plate depending downwardly from the other leg at substantially right angles thereto, a tray supporting socket mounted on the supporting plate and disposed wholly below the level of the bed rail, and a quick action means for latching the device in position relative to the bed rail.

2. In combination with a bed having a rail member comprising a C-shaped channel including upper and lower horizontal legs and a depending leg extending from the free edge of the lower leg of the rail member, a clamp and support member having a C-shaped main body portion adapted to abut the upper horizontal leg, a hook shaped abutment on the main body portion for holding the body portion in position upon the rail member, a supporting plate depending from the body portion and abutting the depending leg of the rail, a tray adapted to be swingingly supported by the socket support and a socket member carried by the support member and so positioned relative thereto as to lie wholly below the level of the rail member of the bed when the device is attached thereto, and an extension on the tray for reception by the socket member.

3. In combination with a bed having a rail member comprising a C-shaped channel including upper and lower horizontal legs and a depending leg extending from the free edge of the lower leg of the rail member, a clamp and support member having a C-shaped main body portion adapted to abut the upper horizontal leg, a hook-shaped abutment on the main body portion for holding the body portion in position on the rail member, a supporting plate depending from the body portion and abutting the depending leg of the rail, a tray adapted to be swingingly supported by the support member, a socket member carried by the support member and so positioned relative thereto as to lie wholly below the level of the rail member when the device is attached thereto, and a quick action means for latching the clamp and support member in position relative to the bed rail.

In testimony whereof, I have hereunto subscribed my name this 25th day of August, 1930.

BIRDIE O. HORNER.