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TRAY ATTACHMENT FOR BEDSTEADS.

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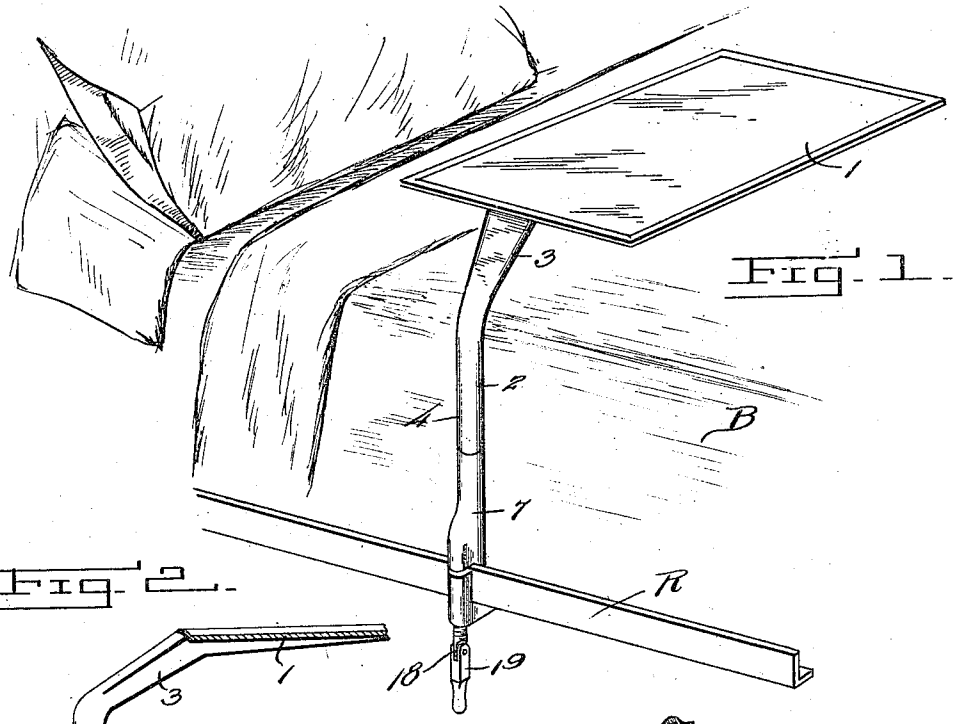



Fig. 1.

Fig. 2.

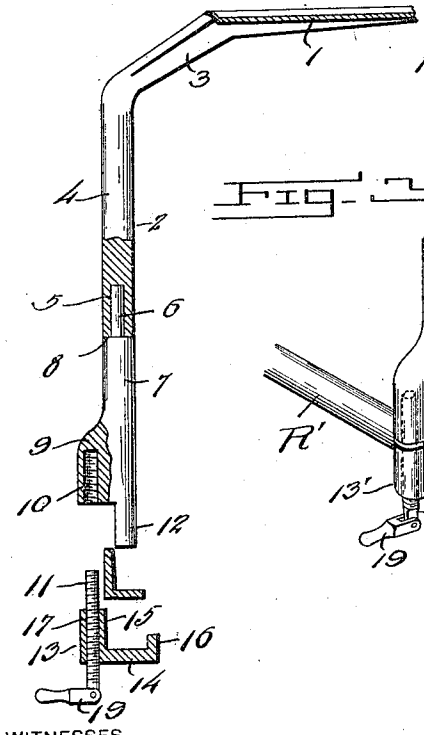



Fig. 3.



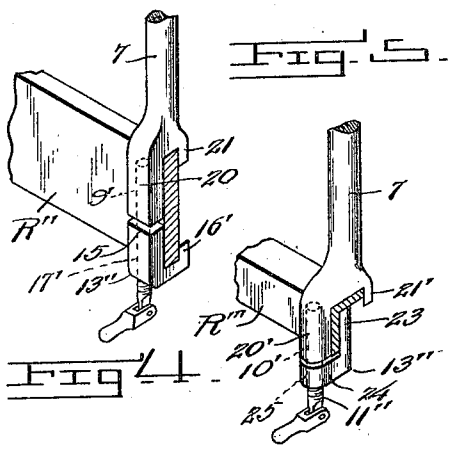




Fig. 5.

Fig. 4.

WITNESSES

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## TRAY ATTACHMENT FOR BEDSTEADS.

1,256,498. Specification of Letters Patent. Patented Feb. 12, 1918.

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*To all whom it may concern:*

Be it known that I, JAMES P. BAKER, a citizen of the United States, residing at Central City, in the county of Merrick and State of Nebraska, have invented certain new and useful Improvements in Tray Attachments for Bedsteads, of which the following is a specification.

This invention relates to improvements in tables or trays, and more particularly to those designed for use as an attachment to bedsteads for the convenience of invalids.

The main object of the invention is to provide a tray of this character which while extremely simple and light in construction, is strong and durable, having a minimum number of parts with a maximum efficiency in operation.

Another object is to provide a tray so constructed as to be pivotally mounted in relation to the bed and in which the tray proper may be lifted readily from its pivot leaving the latter fixed to the bedstead thereby avoiding any clamping or unscrewing of the parts when it is desired to remove the tray.

Still another object is to provide simply constructed, strong and efficient mechanism for reliably clamping the attachment to its support which when placed in operative position and clamped must remain until manually released.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:

Figure 1 represents a perspective view of a tray constructed in accordance with this invention shown attached to the side rail of a metal bedstead, parts being broken out and a portion only of the bed shown,

Fig. 2 is a detail side elevation of the clamping members of the frame shown in Fig. 1 detached and arranged in juxtaposition,

Fig. 3 is a detail perspective view showing a slightly different form of clamp for use in connecting the attachment to a round bed rail,

Fig. 4 is a similar view showing a different clamp constructed to connect the attachment to the side rail of a wooden bedstead, and

Fig. 5 is a similar view showing a still different form of clamp for use in connection with an iron bed rail of inverted L-shaped form in cross section.

In the embodiment illustrated in Figs. 1 and 2, the tray and its connecting mechanism constituting this invention is shown applied to the side rail R of a metal bedstead, said rail being L-shaped in cross section.

The table or tray proper 1 forming a part of this attachment may be of any desired configuration, being here shown rectangular and it, together with its supporting parts, may be constructed of any suitable material, preferably aluminum, to insure lightness combined with strength.

The table member 1 of this attachment is mounted on a substantially L-shaped standard 2, the upper arm 3 of which is preferably inclined outwardly disposing it at an obtuse angle to its lower arm 4 and this standard is preferably made integral with the table member 1, although not necessarily so. The free end of arm 4 has a socket 5 extending longitudinally inward therefrom which is designed to engage a pintle 6 carried by the upper end of a combined stand and clamping member 7, a shoulder 8 being formed at the base of said pintle on which the standard 2 is designed to rest and turn.

The stand 7 is enlarged at one side to form a laterally offset boss as shown at 9 and this enlargement is provided with an internally threaded longitudinally extending bore or socket 10 to receive a screw threaded rod 11 presently to be described. Projecting longitudinally from the stand 7 at one side of the enlargement 9 is a finger 12 which is preferably made angular in cross section and is designed to fit within the rail R, the end of said finger abutting against the horizontal flange of said rail and its inner straight face against the upright flange thereof as is shown clearly in Fig. 1, the upper edge of the vertical rail flange abutting against the lower face of the enlargement 9, said finger 12 being of a length corresponding to the width of said rail flange so that the device when applied will fit snugly on said rail. This fingered portion of the stand 7 constitutes one member

of a clamp, the other member 13 being substantially L-shaped in form with its horizontally disposed arm 14 of a length corresponding substantially to the width of the horizontal flange of the bed rail R to which the device is to be attached, the other arm 15 of said clamping member 13 being designed to fit the outer face of the vertical or upright flange of the rail (see Fig. 1). The free end of arm 14 of clamp 13 has a laterally extending flange or toe 16 which is designed to engage the inner edge of the horizontal flange of the rail R to assist in securely retaining the clamp in engagement with said rail. The arm 15 of the clamp member 13 has a threaded bore 17 extending longitudinally therethrough which registers when the parts are assembled with the bore 10 in stand 7 and in which operates the rod 11 before referred to and which is designed for adjusting the clamp members toward and away from each other to provide for the attachment of the device to or its removal from the bedstead. The rod 11 is provided at its lower end with an apertured longitudinally extending lug 18 with which is pivotally engaged an operating handle 19, said handle being here shown bifurcated at one end to receive the lug 18 with which it is pivotally connected. This handle 19 is designed to be swung outwardly at right angles to rod 11 for clamping and unclamping the device and when not in use is swung downwardly under the bed rail as shown in Fig. 1. By swinging this handle downwardly under the bed rail, no projections are left such as would be likely to engage extraneous objects as the clothing of the nurse or other persons.

From the above description it will thus be obvious that the tray supporting stand 7 when clamped to the bed rail R will remain permanently in position on said rail while the table or tray proper may be lifted from its pivot 5 and carried into the kitchen or any other place where it is desired to use it. By connecting the tray to the stand by the pivot and socket connection, it will be seen that the table portion 1 may be swung laterally over the bed B for use by the occupant, or swung away from the bed when not desired for use.

The stand 7 is constructed of a height slightly less than the height of the bed with the mattress thereon so that it may be protected and disposed out of sight by placing the bed covering thereover.

In the form shown in Fig. 3, all of the parts are the same as those above described except the clamping members and these are changed to conform to the configuration of the rail to which the device is to be applied, said rail R′ being here shown round, such as is often found in metal beds. The stand 7 in this form of the device has its longitudinally extending finger 12′ cut off and serrated on its lower face as shown at 12″ which is designed to coöperate with the serrated face 14″ of the arm 14′ of the L-shaped clamping member 13′, the serrated portion of the arm 14′ being concave to receive the round rail R′ and the serrated face 12″ of the finger 12′ being also similarly concaved so that when the device is applied to a round rail it will be securely gripped between these serrated faces and the attachment held against turning. The remainder of the parts are the same as those shown in the form illustrated in Figs. 1 and 2 above described.

In the form shown in Fig. 4, the stand 7 is the same as that shown in the other forms except that the clamping portion thereof is changed to conform to the rail R″ to which the device is to be applied and which is the ordinary side rail of a wooden bedstead. The stand as here shown has a longitudinally extending finger 20 offset laterally from the stand 7 and designed to engage the outer face of the rail R″, another finger 21 being spaced laterally from the finger 20 a distance corresponding to the thickness of the rail R″. This finger 21 is designed to engage the inner face of said rail R″ which fits snugly between said fingers at its upper edge. The coöperating clamping member 13″ is substantially the same in shape as the member 13 shown in Figs. 1 and 2, the only difference being that the space between the flange 16′ thereof and its upright arm 15′ is less than that in the form first described, the distance between said members corresponding to the thickness of the rail R″ so that when said clamp is engaged with said rail the flange 16′ will fit closely against its inner face and the arm 15′ closely against its outer face. This arm 15′ has a threaded bore 17′ which registers with the threaded bore 9′ in finger 20 and which receives the clamping screw rod 11′ which operates in the same manner as that described in Figs. 1 and 2 to move the clamping members toward and away from each other for securely engaging the rail R″ between them.

In the form shown in Fig. 5, the clamp is constructed to conform to the shape of a metal side rail of a bed which is inverted L-shaped in cross section, the horizontal flange projecting from the upper edge of the vertical flange instead of from its lower edge as shown in Fig. 1. The clamping member carried by the lower end of the stand 7 in this form is similar to that shown in Fig. 4 and comprises two laterally spaced fingers 20′ and 21′, the finger 21′ being shorter than finger 20′ and adapted to engage the free edge of the horizontal flange of the rail, while finger 20′ engages the outer face of the vertical flange and is of a length corre-

sponding to the width of said flange. The coöperating clamp member 13''' is shown L-shaped in form with its long arm 23 designed to engage the inner face of the vertical flange of the rail R''', the lower edge of which rests on the laterally extending arm 24 thereof. This arm 24 has a threaded bore 25 extending therethrough which registers with a bore 10' in the finger 20' and in which bores is disposed a screw rod 11'' which is the same as that shown in the other figures and operates in a similar manner for drawing the clamping members toward each other or opening them when it is desired to apply or remove the attachment.

From the above description it will be seen that the stand 7, table member 1 and standard 2 are the same in all of the figures, the clamping member carried by the lower end of the stand and the clamping member for coöperation therewith being changed in the several views to adapt the device for use on bed rails of different configurations, the principle in all of them is the same, the stand 7 being securely clamped in each instance to the rail by means of a screw rod operating in a coöperating clamp member which passes under the bed rail and in the clamp member carried by stand 7 which engages the upper face of the rail in all of the forms shown.

It will thus be seen that when this attachment is once clamped to a bed rail that it will be reliably held in engagement therewith and all danger of its becoming accidentally detached is avoided, it being necessary to unscrew the connecting screw rod before such removal can take place.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains and while I have described the principle of operation of the invention together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made as are within the scope of the claimed invention.

I claim:—

A device of the class described comprising a combined standard and clamping member having its upper end reduced to form a pintle with a shoulder at its base and a laterally offset boss at its lower end with a screw threaded socket extending longitudinally thereof, a finger extending longitudinally from said lower end of the standard and at one side of said socket with its inner face flattened to insure reliable engagement with a support, a substantially L-shaped coöperating clamping member having one arm horizontally disposed and provided at its free end with an upturned toe, its other arm having a longitudinal threaded bore extending therethrough to register with the socket in said first mentioned member, a threaded rod operable in said bore and socket to adjustably connect said members, an operating handle pivotally mounted on the lower end of said rod, and a table carrying standard having a socket in its lower end to swivel on said pintle.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES P. BAKER.

Witnesses:
W. G. McGregor,
W. C. Kerr.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."