J. F. WILSON.

ADJUSTABLE TABLE.

APPLICATION FILED JAN. 6, 1919.

1,319,445. Patented Oct. 21, 1919.

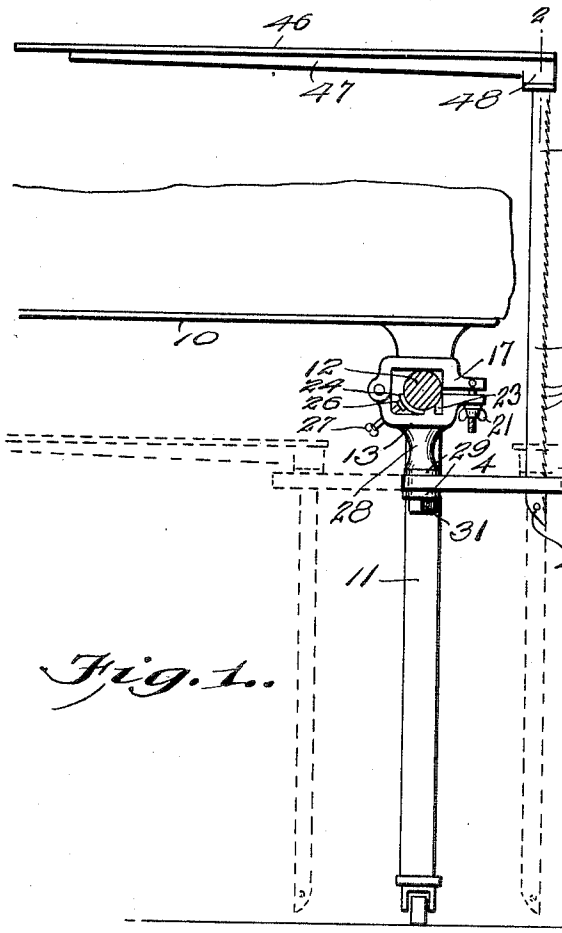


Fig. 1.

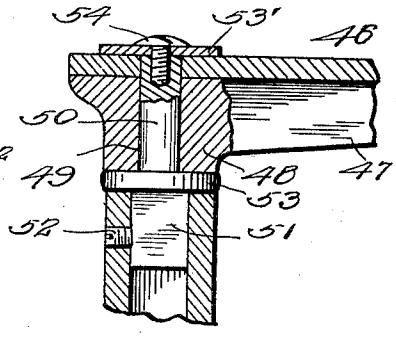


Fig. 2.

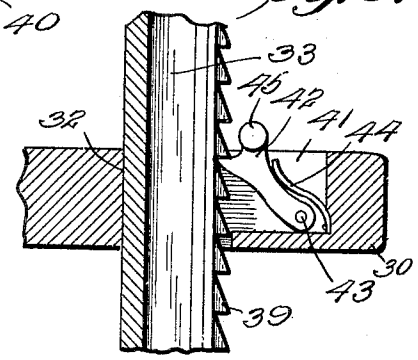


Fig. 3.

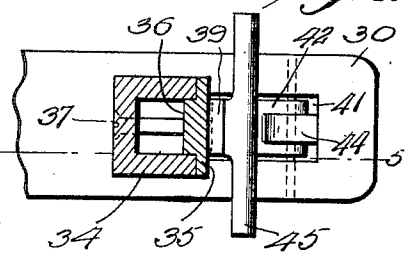


Fig. 4.

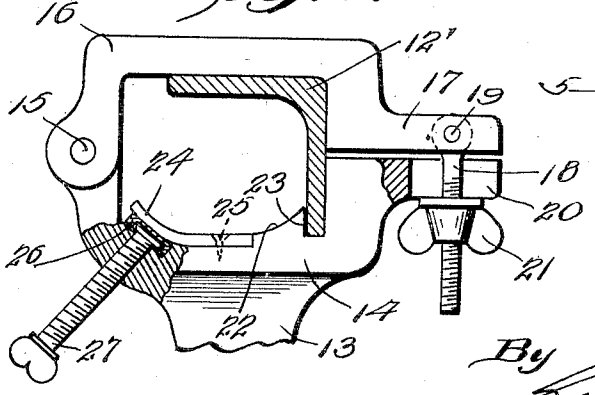


Fig. 5.

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ADJUSTABLE TABLE.

1,319,445. Specification of Letters Patent. Patented Oct. 21, 1919.

Application filed January 6, 1919. Serial No. 269,825.

To all whom it may concern:

Be it known that I, JAMES FRANKLIN WILSON, a citizen of the United States, residing at Kensington, in the county of Montgomery and State of Maryland, have invented certain new and useful Improvements in Adjustable Tables, of which the following is a specification.

My invention relates to adjustable supporting means for connecting a table or tray with a hospital bed or the like.

An important object of my invention is to provide means of the above mentioned character, whereby the table top or like member will be given a wide range of adjustment, so that it may be conveniently employed in use and shifted to an out of the way position beneath the bed, when not in use.

A further object of the invention is to provide a clamp adapted for engagement with a bed member, which may be either circular or rectangular in cross section.

A further object of the invention is to provide an adjustable rack bar which is light, strong, and comparatively cheap to manufacture.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a side elevation of a device embodying my invention,

Fig. 2 is a detailed section through the swiveled connection between the rack bar and table top, taken on line 2—2 of Fig. 1,

Fig. 3 is an enlarged detailed section through the rack bar and horizontally swinging arm, parts being shown in elevation,

Fig. 4 is a horizontal sectional view taken on line 4—4 of Fig. 1, and,

Fig. 5 is a side elevation, parts in section, of the clamp showing the same held upon an angle iron bed member.

In the drawings wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 10 designates a hospital bed, having at each end a pair of legs 11, which are connected by a horizontal member 12. In Fig. 1, the member 12 is shown as circular in cross section, and the same may be solid or hollow. In Fig. 5, this member is designated by the numeral 12′, and is shown in the form of an angle iron.

My device embodies a clamp 13, adapted for use in connection with the members 12 and 12′. This clamp comprises a lower stationary approximately U-shaped clamp member 14, having pivotal connection, as shown at 15, with a coacting approximately U-shaped clamp member 16. The clamp member 16 has an extension 17, pivotally connected with a bolt 18, as shown at 19. This bolt operates within a slotted extension 20 of the clamp member 14, and carries a winged nut 21. The clamp member 14 has a lug 22, provided with a curved face to contact with the member 12. Forwardly of the lug 22 is a notch 23, which receives the member 12′, as indicated in Fig. 5. Secured to the clamp member 14 is a flexible preferably metallic strap 24, as shown at 25. This flexible strap is engaged by a swiveled head 26 carried by a clamping bolt 27, which engages the clamp member 14, as shown.

When the clamp 13 is applied to the member 12, which is circular in cross section, as shown in Fig. 1, the thumb nut 21 and bolt 27 are both suitably adjusted, as is obvious. When the clamp is applied to the angle iron member 12′, the bolt 27 is withdrawn to the outer position, one edge of the member 12′ inserted within the notch 23, and the nut 21 suitably adjusted.

Depending from the clamp member 14 is a shank or standard 28, preferably formed integral therewith, which is provided at its lower end with a pair of spaced knuckles 29, receiving therebetween a horizontally swinging arm 30, pivoted therein by means of a bolt 31.

At or near its free end the arm 30 has a vertical opening 32, receiving a reciprocatory rack bar 33. This rack bar is preferably tubular and square in cross section and embodies a channel member 34, which is U-shaped in cross section. This channel member has its open side covered by a flat strip 35, provided with an interior flange 36 projecting into the channel member 34. The strip 35 is secured to the channel member 34 by screws 37 or the like. The strip 35 has the ratchet teeth 39 formed or cut thereon, and I have found that these teeth may be formed upon the flat strip much more cheaply than upon a circular bar or the like, and this is the principal reason for having the strip 35 formed separate

from the channel member. The rack bar 33 cannot be withdrawn from the opening 32, since it carries at its lower end a transverse cotter pin 40, as shown.

As more clearly shown in Fig. 3, the arm 30 is provided outwardly of and near the opening 32 with a pocket or recess 41, receiving a pawl or dog 42, pivoted therein, as shown in 43. A spring 44 moves the pawl into engagement with the ratchet teeth 39. The pawl 42 is provided at its free end with a transverse rod or handle 45, which is of substantial length and projects beyond the side walls of the pocket 41, thereby preventing the pawl from falling to the bottom of the pocket.

The numeral 46 designates a table, carried by a horizontal spider 47, having a hub 48. As clearly shown in Fig. 2, this hub 48 has an opening 49, for pivotally receiving a pin 50, rigidly secured to a coupling element 51 formed square in cross section, and inserted in the upper end of the tubular rack bar 33. The coupling element 51 is held in position by a clamp screw 52. A wear washer 53 is carried by the pin 50 beneath the hub 48. A washer 53′ is connected with the upper end of the pin 50 by a screw 54 or the like.

In use, the table 46 may be conveniently elevated to the desired height and will be held in such position by the pawl 42 engaging with the ratchet teeth. The table 46 may be swung horizontally upon its pivot. When the table 46 is lowered, as indicated in Fig. 1, the arm 30 is swung horizontally to bring the table to a position beneath the bed.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes may be resorted to in the shape, size, and arrangement of parts, without departing from the spirit of my invention or scope of the subjoined claims.

Having thus described my invention what I claim is:

1. A device of the character described, comprising a two part clamp, one part having a lug stationary with relation thereto and a notch arranged upon one side of the same, a clamping bolt arranged upon the opposite side of said lug and having screw threaded engagement with the said part, means to draw the parts of the clamp together, and a supporting device connected with the clamp.

2. A device of the character described, comprising a two part clamp, one part having a lug and a notch upon one side of the same, means to draw the parts of the clamp together, a flexible element secured to the part having the lug and upon the opposite side of the lug, a clamping bolt having screw threaded engagement with said part and operating the flexible element, and a supporting device connected with the clamp.

3. A device of the character described comprising an adjustable arm having an opening formed therein, a tubular member within the opening, including a channel element and a flat strip secured to the open side thereof, said flat strip having a set of ratchet teeth formed thereon, a pawl carried by the arm to engage the ratchet teeth, and a table element secured to the upper end of the tubular member.

4. A device of the character described, comprising a pair of coacting members having substantially rectangular openings, one member being provided upon its inner wall with a transverse notch disposed at the end of the rectangular opening for the reception of a portion of an angle iron, a clamping bolt having screw threaded engagement with the notched member near the opposite end thereof, and means to draw the members together.

5. A device of the characted described, comprising a pair of coacting members having substantially rectangular openings, one member being provided upon its inner wall with a lug and a notch disposed upon one side of the lug at the end of the rectangular opening, said notch being adapted for the reception of a portion of an angle iron, a diagonally arranged clamping bolt having screw threaded engagement with the same member and arranged near the opposite end of the rectangular opening and upon the opposite side of the lug, and means to draw the members together.

6. A device of the character described, comprising a pair of coacting members having substantially rectangular openings, one member being provided upon its inner wall with a lug having a curved contacting surface and a notch disposed upon one side of the lug, a diagonal clamping bolt carried by the same member and arranged upon the opposite side of the lug, means to pivotally connect corresponding ends of the members, and adjustable means to draw the opposite ends of the members together.

In testimony whereof I affix my signature.

JAMES FRANKLIN WILSON.

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