May 6, 1952 F. W. COFFING ET AL 2,595,449

BED COVER SUPPORT

Filed May 31, 1945

FIG. 1

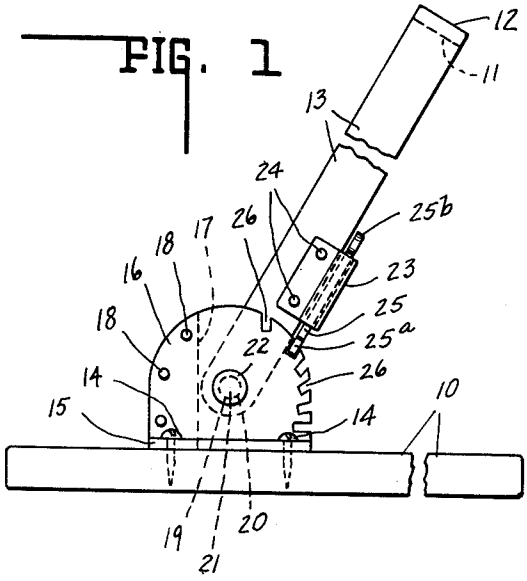


FIG. 2

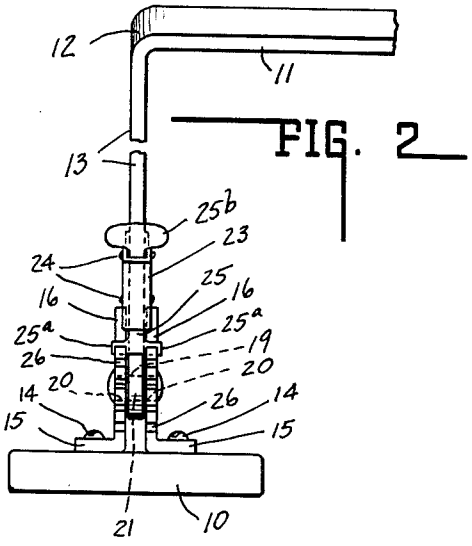
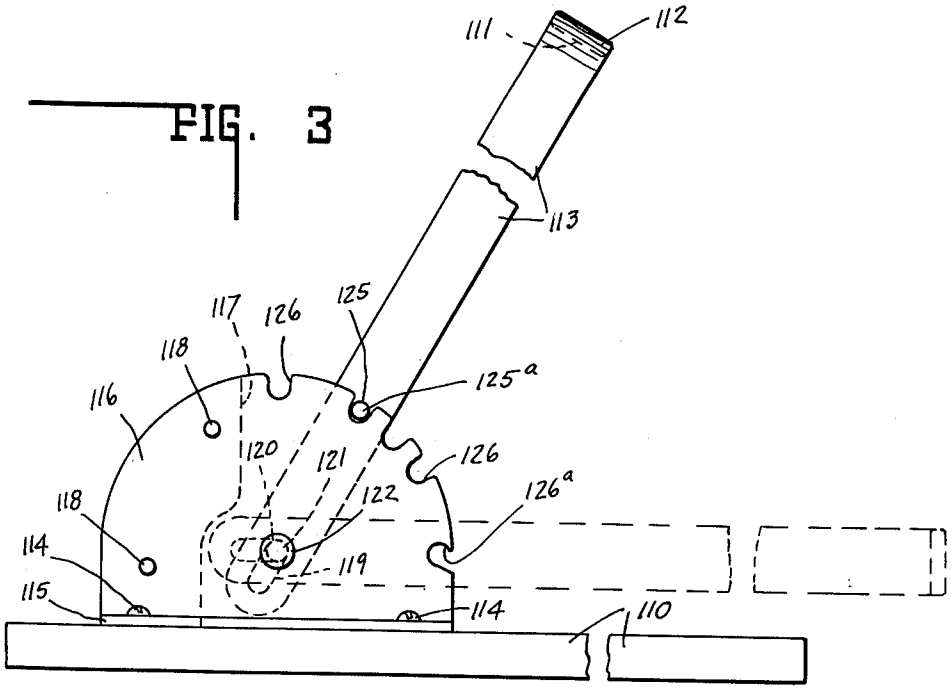


FIG. 3



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BED COVER SUPPORT

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2 Claims. (Cl. 5—319)

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This invention relates to a bed cover support and is of the type that can be inserted beneath the covers and above the mattress and mattress covers and which is collapsible for carrying purposes and will fit substantially all beds.

Since the purpose of such a support is to hold elevated the covers of a bed so that the weight of such covers will not bear upon certain parts of the body of the person in the bed such a structure need only be as wide as a single width bed and transverse extensibility is usually not required but, if it is, same can be of the type illustrated in Patent No. 2,356,219 dated August 22, 1944. Also in common with said patented cover support, same can be placed at the foot of the bed to keep the weight off of the feet, about one-third up from the foot to keep the weight off of the knees and about half-way between the bed ends to keep the weight off of the abdomen of the person in the bed.

The present invention contemplates, like the aforesaid patent, the inclusion of an inverted U-shaped cover supporting portion, a pair of elongated base members, each of moderate width, and adjustable connections between the arms of the supporting portion and said base members.

The chief object of the present invention is to reduce the number of parts of such a structure to a minimum and have such parts of extremely simple character.

The chief feature of the present invention resides in the base supported pivotal connections for the U-shaped cover support and the locking association therebetween.

Other objects and features of the invention will be set forth more fully hereinafter.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims:

In the drawings Fig. 1 is a side elevation of the arm supporting end of a bed cover support base and the arm associated therewith.

Fig. 2 is a rear elevational view of the same.

Fig. 3 is a side elevation of a still simpler form of the invention.

Since the aforementioned patent in Fig. 1 illustrates multiple positioning of such a support upon a bed, no duplication herein is believed necessary and similarly illustration of but one side portion of such device is believed sufficient.

In Fig. 1 and 2, 10 indicates an elongated base, 11 the adjacent end of the intermediate portion of a U-shaped support having bend 12 when same extends as arm 13 towards the base.

The base 10 has secured to it by suitable means

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such as screws 14, if of wood, the flanges 15 of the spaced brackets 16. In side elevation same have a semi-circular upper edge, see Fig. 1. Interposed therebetween and at the forward portions of such plates 16, is a spacing member 17 and same may be retained in position by rivets 18 or the like.

The free end of arm 13 is apertured at 19, see Fig. 1, and the plates are apertured at 20. Extending therethrough is pivot pin 21 having heads 22 bearing on the exterior faces of plates 16. Thus the arm 13 is pivoted to the base 10. Of course, it is to be understood that both sides of the support structure 16 are similarly formed.

To retain the U-shaped support in adjusted angular position the arm 13 mounts at 24 an elongated U-shaped clip or guide 23. Slidable therein is tongue 25 provided at its upper end with the finger grip or wing structure 25b. So that same may lie flat against base 10 when the structure is collapsed such wing structure 25b is coplanar with the tongue 25. When this is not desired the wing structure may be curled away from arm 13. When so curled, if full collapse is desired, guide 23 and tongue 25 may be mounted upon the opposite side edge of arm 13.

The two plates 16 are radially notched at their peripheries as at 26 and the lateral extensions 25a of said tongue 25 simultaneously seat in any aligned pair of notches. By this means the elevation of portion 11 relative to the plane of base 10 can be adjusted as determined by said notches.

The aforesaid structure is self-sustaining and latchable in adjusted position and acts as a brace member or members.

Reference will now be had to a still further simplified form of the invention and same is illustrated in Fig. 3. Therein 110 indicates the base and numerals 111 to 118 indicate corresponding parts. Herein the plate periphery notches 126 are similar except the lowermost aligned pair which have lateral extensions 126a.

The arm 113 herein is apertured at 119 but same is elongated as illustrated. Pivot pin 121 is slidable therein and has head portions 122, said pin passing through aligned apertures 120 in said plates 116. Arm 113 has positioned therein a pin 125 and extending oppositely therefrom said pin has notch seating aligned portions 125a.

The length of slot 119 in arm 113 is at least sufficient to permit the arm to be moved longitudinally and radially relative to pin 121 until pin end portions 125a are positioned immediately

beyond the periphery of plates 116. Then the arm 113 can be swung up or down as desired and then reversely moved inward relative to pivot 121 whereupon portions 125a seat in the selected aligned pair of notches 126.

For retaining the structure in collapsed position for transportation, the parts are positioned so that pin ends 125a register with and seat in the aligned notches 126a closest to the base 110. Lifting upon the arm or portion 111 then causes the arm 113 to slightly pivot on pivot 121 so that the portions 125a then seat in the offset portions 126a of the bottom pair of notches 126 and are pressure trapped therein when the structure is carried by the portion 111. If desired these offset portions 126a may be angular or bayonet slot type.

While the invention has been illustrated and described in great detail in the drawings and foregoing description, the same is to be considered as illustrative and not restrictive in character.

The several modifications described herein as well as others which will readily suggest themselves to persons skilled in this art, all are considered to be within the broad scope of the invention, reference being had to the appended claims.

The invention claimed is:

1. In a portable, collapsible and adjustable self sustaining bed cover supporting structure having a pair of spaced elongated base members each of substantial width and of a length several times that of the width and relatively independent of each other, and an inverted U-shaped element having arms directed towards said members and constituting substantially the sole connection therebetween, the combination of an arcuate rack projecting upwardly from each base member, a pivot coaxial with the center of the rack, each arm adjacent the base member having an aperture formed at the end for seating said pivot, and means projecting laterally of the arm in juxtaposition to the rack and operatively associated therewith for securing the arm in adjusted angularity to the plane of the base member, each arcuate rack comprising a pair of spaced side plates, the peripheries thereof having arcuately spaced notches formed therein, the notches of one plate being in alignment with the notches of the other plate of each rack, the means projecting laterally of the arm comprising a tongue having lateral projections of a size adapted to be seated within said notches, said tongue being slidably supported on said arm.

2. In a portable, collapsible and adjustable self sustaining bed cover supporting structure having a pair of spaced elongated base members each of substantial width and of a length several times that of the width and relatively independent of each other, and an inverted U-shaped element having arms directed towards said members and constituting substantially the sole connection therebetween, the combination of an arcuate rack projecting upwardly from each base member, a pivot coaxial with the center of the rack, each arm adjacent the base member having an aperture formed at the end for seating said pivot, and means projecting laterally of the arm in juxtaposition to the rack and operatively associated therewith for securing the arm in adjusted angularity to the plane of the base member, each arcuate rack comprising a pair of spaced side plates, the peripheries thereof having arcuately spaced notches formed therein, the notches of one plate being in alignment with the notches of the other plate of each rack, the means projecting laterally of the arm comprising a tongue having lateral projections formed to a size to enable them to be seated readily within said notches, said tongue being slidably supported on said arm, guide means carried by the arm for said tongue, said tongue extending through said guide means and having a finger engageable portion at one end thereof.

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