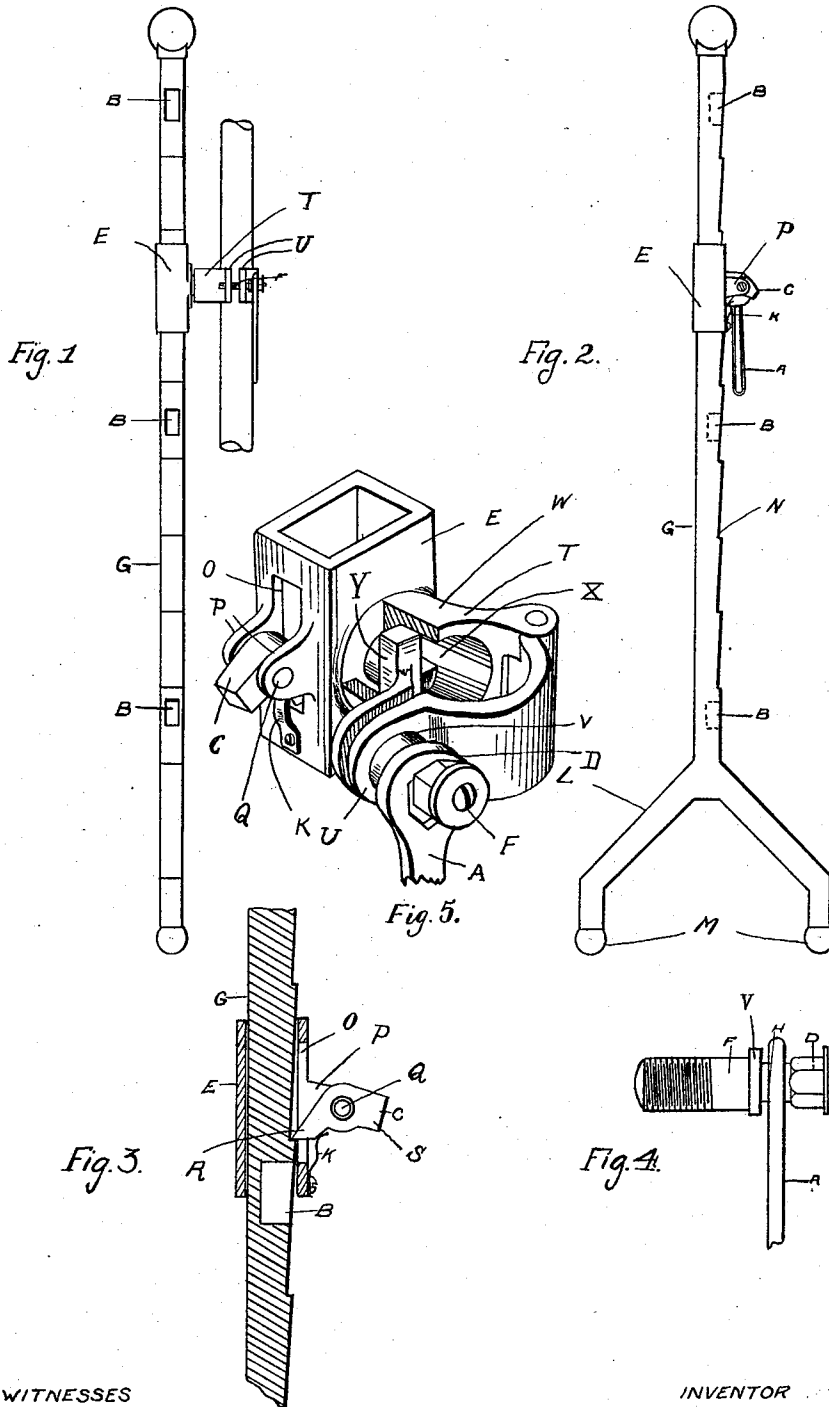


T. J. LE CRAS.
BED JACK.
APPLICATION FILED AUG. 1, 1910.

1,031,798.

Patented July 9, 1912.



WITNESSES

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BED-JACK.

1,031,798.

Specification of Letters Patent.

Patented July 9, 1912.

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To all whom it may concern:

Be it known that I, THOMAS JAMES LE CRAS, a subject of the King of Great Britain, resident of the city of Toronto, county of York, Province of Ontario, in the Dominion of Canada, manufacturer, have invented certain new and useful Improvements in Bed-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention relates to improvements in bed jacks, as described in the following specification and illustrated in the accompanying drawings that form part of the same.

The invention consists essentially in the novel construction and arrangement of parts whereby a bed or other piece of furniture is adjustably held in a raised position by a ratchet member slidably secured to a ratchet toothed stand.

The object of the invention is to devise a means for adjustably supporting the ends or sides of beds, cots, etc., in an elevated position which may be easily and quickly released for lowering by the simple operation of lifting the supported member to a certain point thereby enabling a nurse attending an invalid to lower the bed quickly and without the necessity of manipulating the supporting apparatus.

In the drawings, Figure 1 is a vertical elevational view showing the edge of the supporting stand and a portion of a bed or cot secured to the adjustable portion of said stand. Fig. 2 is a side elevational view of the stand. Fig. 3 is an enlarged vertical sectional detail of a portion of the stand and the ratchet mechanism. Fig. 4 is an enlarged elevational view of the clamping screw and lever. Fig. 5 is an enlarged perspective view of the clamp member and adjustable sleeve, the clamp member being partly broken away to show the pivotal means of connecting the clamp and sleeve together.

Like letters of reference indicate corresponding parts in each figure.

Referring to the drawings, G is a stand formed with a forked lower end L terminating in the ball shaped ends M which rest upon the floor. The stand G is preferably formed rectangular in cross section and one of the vertical edges thereof is formed with a plurality of ratchet teeth N extending from the bottom to the top thereof.

B are recesses or wells formed in the ratchet face of the stand G and preferably arranged at the bottom, middle and top of said stand though any number or arrangement of such wells desired may be made.

E is a sleeve rectangular shaped in cross section encircling the vertical section of the stand G and adapted to slide freely thereon, said sleeve having a vertical slot O in the side adjacent to the ratchet face of the stand and a pair of lugs P projecting outwardly therefrom and arranged one on each side of said slot.

C is a pawl pivotally supported on the pin Q, said pawl having a projecting portion R with a beveled outer end adapted to engage the ratchet teeth of said stand and the projecting lug S extending therefrom in angular relation to the portion R.

K is a flat spring secured to the sleeve E below the pawl C and extending upwardly and engaging the outer side of the portion R of said pawl and spring holding the beveled end of said pawl in contact with the toothed edge of the stand G.

T is a clamp member formed of a pair of hinged sections adapted to encircle the post of the bed or other article to which the device is to be attached and having the lugs U extending laterally therefrom, one of said lugs having a threaded orifice and the other a plain orifice therethrough.

F is a clamping screw extending through the plain orifice and threaded into the threaded orifice in the lugs U and having a shoulder V adapted to engage the outer lug to draw said lugs tightly together to clamp the bed post securely. The shank portion H of the clamping screw projects a short distance from the shoulder V and is formed with a hexagonal head portion D to receive the wrench A. The shank between the head D and the shoulder V is slightly reduced and the wrench A hangs loosely thereon when not in use. The member W of the clamp T is formed with a transverse slot X into which the head of the T-shaped lug Y on the sleeve E extends.

In the use of this device the clamps T are first attached to the sleeves E by slipping the slotted members W over the T heads Y and giving said clamps a half turn so that the said head engages the inner sides of the slotted portion. The clamps are then placed around the post of the member to be elevated and drawn tight by means

of the wrench A. The device is then ready for use and as the bed or other member attached to the device is raised the sleeve E slides on the stand G and the pawl C engaging the ratchet piece successively holds the bed securely in a raised position at any desired height. The shank portion of the lug Y is round and forms a pivotal connection between the stand and the member being raised thus obviating the tilting of the stands. In order to lower the elevated member it is merely necessary to raise it until the pawl C swings into one of the wells B. On the lowering of the supported member the pawl rotates on its pivot and allows the free downward movement of the sleeve to the bottom or to the next well lower down. The pawl point swings back by gravity into the well and a slight upward movement swings the pawl again into operating contact with the ratchet face of the stand G. It will thus be seen that it is not necessary for the attendant to manipulate any parts of the device but by the raising or lowering of the supported member can adjust its height to any desired position.

What I claim as my invention is:—

1. In a bed jack, a stand formed with a plurality of vertically arranged ratchet teeth and having a plurality of recesses or wells formed in the ratchet face, a member slidably arranged on said stand, a pawl pivotally supported on said slidable member and adapted to engage the ratchet teeth of said stand to hold said slidable member in adjusted positions and to swing into said recesses or wells to release the slidable member, and means connected to said slidable member for supporting the article to be raised.

2. In a bed jack, a stand formed with a plurality of vertically arranged ratchet teeth and having a plurality of recesses or wells formed in the ratchet face, a sleeve slidably encircling said stand and having a vertical slot in one side thereof and a pair of projecting lugs arranged one at each side of said slot, a pawl pivotally supported between said lugs and having a projecting portion extending through said slot and engaging the ratchet teeth of said stand, a spring engaging said pawl and holding the

projecting portion in contact with said ratchet face, said pawl being adapted to swing into said recesses to release the supported member, and means connected to said sleeve for supporting the article to be elevated.

3. In a bed jack, a stand having vertically arranged ratchet teeth, a sleeve slidable on said stand and having a headed lug projecting therefrom, a clamp member formed with a socket portion adapted to receive said headed lug and to swivel thereon, said clamp also having a hinged portion adapted to extend around the article to be supported, a clamping screw adapted to draw the hinged portions of said clamp together, and ratchet means for holding said sleeve in adjusted positions on said stand.

4. In a bed jack, a stand having vertically arranged ratchet teeth, a sleeve slidable on said stand and having a projecting lug formed with a T-shaped head, a clamp member formed of a pair of hinged sections one of said sections having a socket portion and a transverse slot therein to allow the insertion of the T-head of said lug, a clamping screw adapted to draw said sections together, and ratchet means for holding said sleeve and clamp in adjusted positions on said stand.

5. In a bed jack, a stand having vertically arranged ratchet teeth, a sleeve slidable on said stand, ratchet means for holding said sleeve in adjusted positions on said stand, a clamp member pivotally secured to said sleeve and formed of a pair of hinged sections having projecting lugs, a clamping screw extending through a plain orifice in one lug and into a threaded orifice in the other lug and having a shoulder portion and a reduced outer end formed with a nut shaped head, a wrench adapted to fit said head and swinging loosely on the reduced portion of said screw, and a disk secured to the outer end of said clamping screw and retaining said wrench thereon.

THOMAS JAMES LE CRAS.

Toronto June 1910.

Signed in the presence of—

A. V. ANNETTE,

D. HARRY GRACE.