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G. BEZANGER.

BED BOTTOM.

APPLICATION FILED MAY 22, 1906.

Fig. 1.

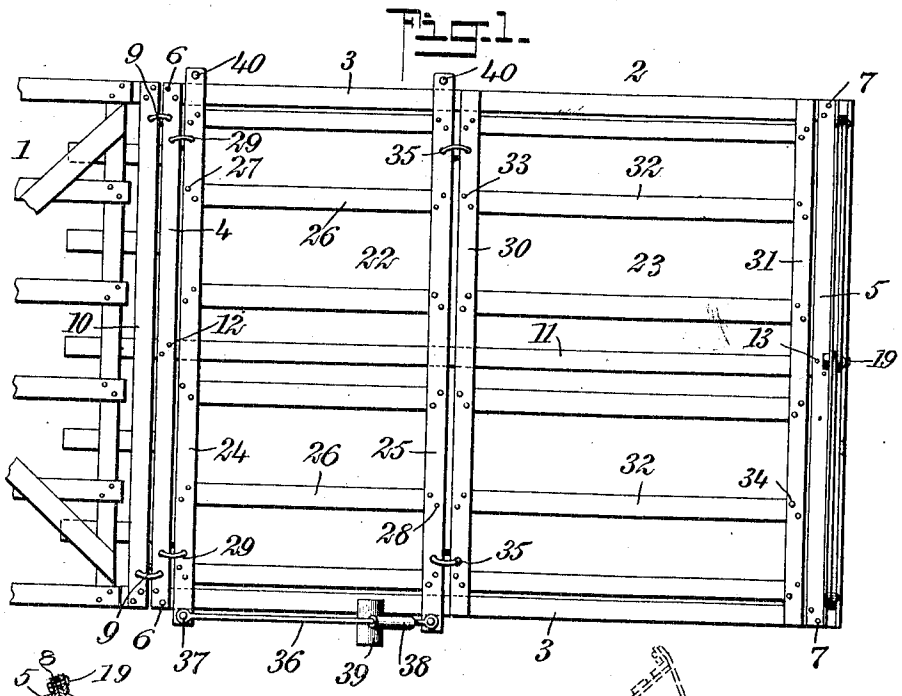


Fig. 4.

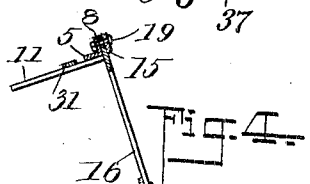
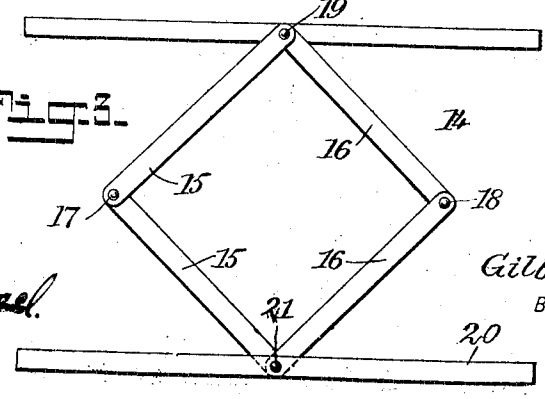


Fig. 2.

Fig. 3.



WITNESSES

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BED-BOTTOM.

No. 850,995. Specification of Letters Patent. Patented April 30, 1907.

Application filed May 22, 1906. Serial No. 318,130.

To all whom it may concern:

Be it known that I, GILBERT BEZANGER, a subject of the King of Great Britain, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented anew and improved Bed-Bottom, of which the following is a full, clear, and exact description.

This invention relates to bed-bottoms, and is especially useful in connection with beds and the like, intended for the use of invalids or those suffering from certain physical disabilities.

The object of the invention is to provide a device of this character which is strong and durable and comparatively simple in construction, which may be applied to beds or couches of the common type without change or alteration in the same, and which affords means for raising or elevating the mattress at different points and in different degrees.

A further object of the invention is to provide a device of this character which may be placed upon a bed spring of the usual construction and underneath a mattress of the common form.

A further object of the invention is to provide a device by means of which the upper or lower ends of a mattress may be elevated, and the upper or lower portions of the body of the occupant of the bed be correspondingly raised as the circumstances may demand.

My invention consists in the construction and combination of parts to be described hereinafter and more fully pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my invention; Fig. 2 is a side elevation showing a portion of the device in a plurality of positions in dotted outline; Fig. 3 is an elevation of a portion of the device; and Fig. 4 is a vertical cross section of a detail showing a part of the device elevated.

Before proceeding with a more detailed description, it may be stated that the form of my improvement herein shown may be used in connection with a frame adapted to be placed between the spring and the mattress of the bed, which frame may be adapted in various ways to impart bulges to the central portion of the mattress, or it may be used in connection with an ordinary frame, merely providing a flat support for the central portion of the mattress, for it must be understood that my device is principally adapted for causing the elevation of the portions of a mattress near the extremities thereof. In the drawings, Figs. 1 and 2, partial sections of such an auxiliary frame are shown, to which my invention is properly attached, as will appear hereinafter.

Referring more particularly to the drawings, I provide a frame 1 to which is hinged a section 2 consisting of sides 3 and transverse bars 4 and 5 rigidly connected to the sides 3 by means of rivets 6 and 7. The side 3 and transverse bar 4 are preferably of flat steel bars, while the transverse bar 5 consists preferably of a steel angle bar having a flange 8 projecting upwardly for a purpose to appear hereinafter. The section 2 is hinged to the frame 1 by means of rings 9 loosely mounted in openings in the transverse bar 4 and a corresponding bar 10 of the frame 1. Midway between the side 3 of the section 2 is a longitudinal slat 11, preferably in the form of a flat steel bar, for a purpose which will appear hereinafter. The slat 11 is rigidly secured to the transverse bars 4 and 5 by means of rivets 12 and 13.

Pivotally mounted upon the upwardly projecting flange 8 of the transverse bar 5 is a support 14 adapted to hold the section 2 in an elevated position when the same has been raised, for the purpose of causing the end of the mattress to assume an upward angle. The support 14 consists of two toggles 15 and 16 jointed respectively at their middle points by means of bolts or rivets 17 and 18, and pivotally secured to the flange 8 at a common joint by means of a bolt or rivet 19. At the opposite common joint the toggles are pivotally attached to a cross bar 20 by means of a common rivet 21. The cross bar 20, it will be understood, is adapted to rest upon the bed spring or upon the frame 41 of the bed when the section 2 is elevated. If it is desired to lengthen the bed for any reason the section 2 may be drawn out to extend beyond the foot with the support 14 and its cross bar 20 resting upon the floor.

I provide members 22 and 23 adapted to rest upon the section 2. The member 22 consists of cross bars 24 and 25 and of longitudinal slats 26 secured to the cross bars by rivets 27 and 28. The member 22 is hinged to the section 2 by means of rings 29 mounted in suitable openings in the transverse bar 24

and the transverse bar 4 of the section 2. The transverse bars 24 and 25 extend beyond the sides 3 and rest thereupon as well as upon the longitudinal slat 11 of the section 2. The member 23 is similar in construction to the member 22 having transverse bars 30 and 31 and slats 32 rigidly secured to the transverse bars by means of rivets 33 and 34. The member 23 is similarly supported upon the sides 3 and the longitudinal slat 11 of the section 2. The members 22 and 23 are jointed at the transverse bars 25 and 30 by means of rings 35 loosely mounted in suitable openings in the said transverse bars.

A rod 36 is removably mounted upon the extremities of the transverse bars of the member 22, which extend for this purpose beyond the sides 3, by means of bolts or screws 37. The rod 36 is located at an angle with the horizontal and for this purpose one end thereof is laterally disposed to offset that end, as shown most clearly in Fig. 2. This rod 36 is adapted to serve as a handle in raising the section 22 which will rock upon its hinged joints 29 with the transverse bar 4. In elevating the end of the member 22 remote from the transverse bar 4, the end of the member 23, to which 22 is jointed, will, of course, also be elevated, for instance, as shown in the dotted position *a* in Fig. 2. As the end of the member 23 jointed to 22 is raised, the transverse bar 31 will be drawn along the sides 3 and the longitudinal slat 11, which not only serves as a support for the transverse bars but as a slideway for the transverse bar 31 as well.

The members 22 and 23 can assume a plurality of positions similar to this according to the degree in which they are elevated at their common joint, and such elevation of these members with the consequent elevation of the mattress which rests upon them is useful in certain cases of sickness or the like. In order to hold these members in an elevated position of any desired degree, I provide a sliding block 38 having a curved extension 39 which rests against the side 3 of the section 2. It will be understood that as the section 22 is raised it is merely necessary to slide the block 38 along the rod 36 continuing the extension 39 in contact with the side 3 until the desired position is reached, as indicated in the dotted outline *a* in Fig. 2. As convenience dictates the rod 36 may be attached at either of the extremities of the transverse bars 24 and 25 of the member 22, as these transverse bars are provided with suitable holes 40 for the purpose.

If it is so desired the entire section 2 may be elevated, as clearly shown in the dotted position *b* in Fig. 2. In this case the support 14 will hold the section at any desired degree of elevation through the stiffness of the joints which are purposely made tight with this intention in view, and hence the support requires no auxiliary means for holding it in a plurality of positions. When the section 2 is raised, being pivoted about the joint between the transverse bars 6 and 9, the members 22 and 23 may rest in their normal position upon the sides 3 and the slat 11, or, if so desired, give an additional bulge to the mattress by being themselves elevated.

It will be understood that this invention is equally applicable to the head or the foot of the bed.

The slats 26 and 32 as well as the transverse bars may be of thin steel possessing considerable flexibility, and in this case it is possible to use the device for the purpose for which it is intended and at the same time have it act as a spring. On the other hand, if so desired, it may rest directly upon the spring and merely serve to augment the flexibility of the same by the flexibility of its members.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A device of the class described comprising a frame having a section jointed thereto, a plurality of members jointed one to the other and supported upon said section, one of said members being jointed to said section, means for elevating the free end of said section, and means for holding said members in a plurality of positions.

2. A device of the class described comprising a frame having a section jointed thereto, said section having an adjustable support at its free end, comprising a double toggle adapted to elevate said free end of said section, a member supported upon said section and jointed thereto, a second member supported upon said section and jointed to said first member, and means for holding said members in a plurality of positions.

3. A device of the class described, comprising a frame having a section jointed thereto, means for elevating the free end of said section, a member supported upon said section and jointed thereto, a second member supported upon said section and jointed to said first member, and means for elevating said members at the joint connecting the same.

4. A device of the class described, comprising a frame having a section jointed thereto, said section comprising sides and transverse bars, adjustable means for holding said section in a plurality of elevated positions, a member having flexible slats and supported upon said sides, said member further having a hinged connection with a transverse bar of said section, a second member having flexible slats supported upon said sides and jointed to said first member, and adjustable means for elevating the said members at the joint connecting them.

5. A device of the class described, comprising a frame having a section jointed

thereto at one end of the same, said section having sides, a longitudinal slat intermediate between said sides and transverse bars, a double toggle mounted at the free end of said section and adapted to support the same in a plurality of elevated positions, a plurality of jointed members having slats and transverse bars projecting beyond said sides and adapted to rest thereupon and upon said longitudinal slat, and means for elevating said members at the joint connecting them.

6. In a device of the class described, sections having slats and transverse bars adapted to rest upon a supporting frame, said sections having a hinged connection, a removable rod mounted upon the transverse bars near the ends thereof and near the end of one of said sections at an angle with the normal position of said member, said rod affording means for elevating said member, a block slidably mounted on the rod, said block being adapted to rest upon the supporting frame and to hold said member in a plurality of positions.

7. A device of the class described, comprising a frame, a section having sides, a slat intermediate between said sides and transverse bars, one of said transverse bars being hinged to said frame, a transverse bar remote from said hinged bar having an upwardly projecting flange, a double toggle pivotally mounted upon said flange and having a bar adapted to rest upon a support, said double toggle being adapted to hold the end of said section in a plurality of elevated positions, a plurality of hinged members having flexible slats and transverse bars adapted to rest upon said sides and said intermediate slat of said section, one of said members having a hinged connection with said section, a removable rod mounted upon the transverse bars of one of said members and at an angle with the normal horizontal position thereof, said rod affording means for the elevating of said member, and a slidable block upon said rod having a curved extension adapted to rest upon the side of said section and to hold said member in a plurality of positions.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GILBERT BEZANGER.

Witnesses:
JULIUS MEYERS,
GEO. Y. YOUNG.