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ADJUSTABLE BED ATTACHMENT OR REST FOR INVALIDS.
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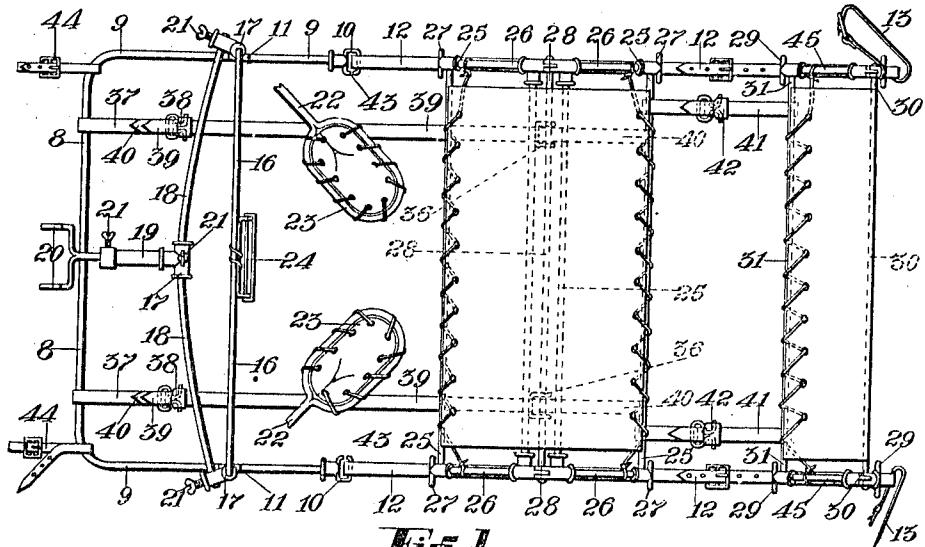


Fig. 1.

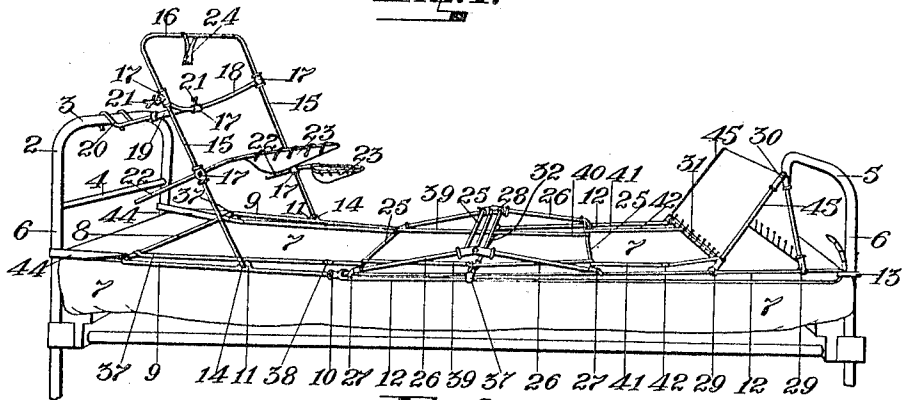


Fig. 2.



Fig. 3.

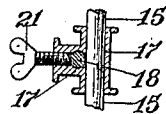


Fig. 4.

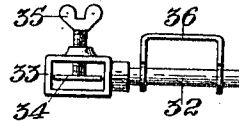


Fig. 5.

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ADJUSTABLE BED ATTACHMENT OR REST FOR INVALIDS.

947,383.

Specification of Letters Patent.

Patented Jan. 25, 1910.

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To all whom it may concern:

Be it known that I, GERTRUDE MARGARET GREAVES, a subject of the King of Great Britain and Ireland, residing at 24 Murphy street, South Yarra, in the county of Bourke, State of Victoria, Commonwealth of Australia, trained nurse, have invented certain new and useful Improvements in or Relating to Adjustable Bed Attachments or Rests for Invalids, of which the following is a specification.

This invention relates to attachments placed above the mattresses of beds for the comfort of invalids.

In the past a variety of devices have been used to allow of a person suffering from an illness securing a relieving and restful position upon a bed, but indifferent degrees of success have invariably resulted.

The object of this invention is to provide durable and cheap attachments, adapted to render general comfort to suffering persons under most circumstances and each of which attachments is easily adjusted in relation to its fellows to suit requirements and may be removed and replaced with facility, as necessity demands.

According to this invention a pivoting shoulder and back rest is furnished capable of acquiring any angle sought, and equipped with a telescoping member and sliding sleeves to secure the desired position. Rests for the patient's arms are attached to the shoulder and back rest and may be raised or lowered and so moved as to attain a suitable length for the arm. A leg and knee rest is also provided susceptible to a rising and falling movement and being adjustable as regards its distance from the shoulder and back rest. A foot rest, hingeable for transport purposes and having one sloping and one vertical side and adjustable in its relationship with the other parts, is a further factor.

The attachments are varied and secured in their relative positions by means of straps and a strap holder and adjuster. This latter comprises a transverse bar provided with locking screws and situated about the center of the bed. The straps are of two characters, leather side straps retaining the attachments to the bed and fabric straps keeping the parts in position one with the other. The leather straps pass through eyelets of a fundamental frame to which the shoulder

and back rest is pivoted and also eyelets of the leg and knee rest and the foot rest and both of the latter may slide upon the upper members of said straps. By the strap holder and adjuster and fabric straps the latter attachments mentioned, also adhere to the attitude in which they are set.

Referring to the drawings which form a part of this specification Figure 1 is a plan of this invention, the strap holder and adjuster not being seen, and portions of the arm rest stems being broken away for convenience of illustration. The sliding sleeves holding the arm rest stems are unshown. Fig. 2 is a perspective view of this invention, attached to a bed. Fig. 3 is a side elevation showing clearly the arrangement of the adjusting fabric straps by which the attachments are retained in their correct relative positions one with the other. Fig. 4 is an enlarged detail sectional view of a sliding sleeve upon a side piece of the shoulder and back rest. Fig. 5 is an enlarged detail view of one end of the strap holder and adjuster.

Similar numerals of reference indicate similar or corresponding parts where they occur in the several views.

This invention is applied to a bed of ordinary character having (Fig. 2) a head piece 2 provided with a top rail 3 and a lower rail 4, said bed also having a foot piece 5. Both the foot piece and the head piece have the usual bed posts 6. Upon the said bed rests a mattress 7.

Situated upon the mattress 7 and close to the head piece 2 is a fundamental or mattress frame composed of round iron or other suitable material and comprising a cross member 8, integral with or attached to side members 9 the lower ends of which are formed into or have attached thereto eyelets 10 (Figs. 1 and 2). Upon each side member, between the eyelets 10 and cross member 8, is a lug 11 having a pivot hole therein. Passing through each eyelet 10 is an adjusting leather side strap 12 secured to the bed foot piece 5 by a subsidiary strap 13 passing around a lower bed post 6. Being doubled each strap 12 forms two members, an upper and a lower. Extending from the cross member 8 are adjusting side straps 14 which, by passing around the upper bed posts 6 hold the fundamental frame in position.

Pivoting in the lugs 11 are pivot pins 14

(Fig. 2) upon the lower ends of side pieces 15 of a shoulder and back rest. Extending between the side pieces 15 and integral therewith or attached thereto is a top piece 16. Movable upon the side pieces 15 and near the top of the same are sliding sleeves 17 accommodating a curved back piece 18 the ends of which penetrate through them as seen particularly in Fig. 4. Attached to the curved back piece 18 is a further sliding sleeve 17 forming part of a telescopic member 19. This is provided with hooks 20 upon the outer end of the telescoping portion. The sliding sleeves 17 are locked in position by locking screws 21 as is also the telescoping portion of the member 19. Between the curved back piece 18 and the pivot pins 14 are situated arm rests. Each of these consists of an arm rest stem 22, passing through a sliding sleeve 17 upon a side piece 15 and an elbow portion 23 covered with canvas or like material shaped as required. The canvas is secured by lacing, passing through eyelet holes therein and around the elbow portion 23, as will be at once apparent from the drawings. To the top piece 16 is attached a pillow holder 24 which is simply an ordinary spring clip composed of two pivoted jaws retained in a closed position by a flat spring between them.

Between the eyelets 10 of the fundamental frame and the foot piece 5 of the bed is situated a leg and knee rest. This consists of cross members 25 extending between side hinging members 26 which are provided with eyelets 27 upon their lower ends. The side hinging members 26 pivot upon a bridging member and pivot pin 28. The leg and knee rest is covered with canvas or like suitable material having eyelet holes therein and which is retained by lacing passing there-through.

Between the leg and knee rest and the foot piece 5 of the bed is a foot rest. This has two sides one of which is vertical or nearly so, and the other sloping in order to readily apply it to different cases. It consists of hinging side erections 45 provided on their lower extremities with eyelets 29. Between the side erections extend an upper tie bar 30 upon which the side erections pivot, and lower tie bars 31. The said foot rest is covered with canvas or like material having eyelet holes therein and is retained by lacing as shown.

Passing (as before mentioned) through each of the eyelets 10 of the fundamental frame is an adjusting leather side strap 12 the upper member of which also passes through the relative eyelets 27 upon the leg and knee rest and those 29 of the foot rest. Each of the eyelet holes 10, 27 and 29 is provided with a mouth 43 (Fig. 1). The leg and knee rest and foot rest slide upon the upper members of the straps 12. Near the

center of the bed is a transverse bar 32. The ends 33 of this are each provided with an opening for the accommodation of both members of the aforesaid leather straps 12 and through which they therefore pass. Within the accommodation opening, in each end of the transverse bar 32, is a holding plate 34 provided with a locking screw 35. Situated upon the transverse bar 32 and near each of its ends is a fabric strap guide 36 (Fig. 5).

Attached to the cross member 8 of the fundamental frame are adjusting fabric straps 37 each provided with a buckle or like fastening 38. Attached to the left hand lower cross member 25 of the leg and knee rest are two adjusting fabric straps 39. Each of these passes through a guide 36 and through one of the buckles 38 by which it is retained. Attached to the lower right hand cross member 25 are adjusting fabric straps 40. These also pass through the guides 36 and are retained by the buckles 38. Extending between the leg and knee rest and the foot rest are adjusting fabric straps 41 provided with buckles 42.

The cycle of operations with this invention is as follows:—To elevate or correct the angle of the shoulder and back rest, it is only necessary to loosen the locking screw 21 of the sleeve portion of the telescopic member 19 when the telescoping portion may be extended as required. Or the sliding sleeves upon the side pieces 15 and controlling the curved back piece 18 may be moved or the hooks 20 of the telescopic member 19 may be placed upon the top rail 3 instead of the lower rail 4 or vice versa. The arm rests may also be loosening the locking screws of the relative sliding sleeves be manipulated either upwardly, downwardly, inwardly or outwardly. The leg and knee rest may be elevated or depressed or otherwise adjusted by loosening the fabric straps 39 and 40 from the buckles 38. The transverse bar 42 is then relieved from its locked position by slackening the screws 35. The said leg and knee rest is then pushed along the upper member of each of the leather side straps 12 until the correct position is acquired. The transverse bar 32 is then locked again by the screws 35 and plates 34 and the fabric straps 39 and 40 are readjusted by the buckles 38. The fabric straps 41 are adjusted by means of the buckles 42, the foot rest moving along the upper members of the straps 12 in a manner similar to that just described. Should it be desired to remove either of the component parts such as the leg and knee rest or the foot rest such may be accomplished by passing the upper members of the leather side straps 12 through the mouth 43 provided in each of the eyelets 27 or 29.

Having now described my invention, what

I claim as new and desire to secure by Letters Patent is.—

1. In combination with a bedstead, a mattress frame having attached thereto and adjustable thereon, a shoulder and back-rest, a leg and knee rest and a foot rest, the different rests being adjustable in their component parts and in their position relative to each other, substantially as described.

2. In invalid beds, a bedstead, a mattress frame, a shoulder and back rest pivotally mounted on said frame, in combination with a pivoted leg and knee rest adapted to be adjusted as regards its distance from the shoulder and head rest, substantially as described.

3. In invalid beds, a bedstead, a mattress frame, a shoulder and back rest pivotally mounted on said frame adjustable means connecting the back and shoulder rest with the bedstead, in combination with a pivoted leg and knee rest and means for adjusting the distance between the shoulder and leg rests, substantially as set forth.

4. In invalid beds, a bedstead, a mattress frame, a shoulder and back rest pivotally mounted on the said frame and adjustably connected with the bed, in combination with straps adjustably connecting the frame with the head and foot posts of the bedstead, substantially as set forth.

5. In invalid beds, a bedstead, a mattress frame, adjustable straps connecting said frame with the head post of the bedstead, adjustable straps connecting the frame with the foot posts of the bedstead, in combination with a pivoted leg and knee rest adjustably mounted on the latter straps, substantially as described.

6. In invalid beds, a bedstead, a mattress

frame, adjustable straps connecting the frame with the head post of the bedstead, in combination with a pivoted foot rest adjustably mounted on the latter straps, substantially as described.

7. In invalid beds, a bedstead, a mattress frame, adjustable straps connecting said frame with the bedstead, a pivoted leg rest, and a pivoted foot rest mounted on said strap, said rests being provided with passages for the straps, in combination with strap holders adapted to adjustably hold the rests on the straps, substantially as set forth.

8. In invalid beds, a bedstead, a mattress frame supported by the bedstead, a shoulder and back rest pivotally mounted on said frame and provided with adjustable arm and elbow rests, in combination with a hooked rod engaging the bedstead and adjustably connected to the shoulder and back rest, substantially as set forth.

9. In invalid beds, a bedstead, a mattress frame, a pair of adjustable double straps connecting the mattress frame to the bedstead, a leg and knee rest adjustable on the upper members of the double straps, in combination with an adjustable transverse central bar controlling the position of the leg and knee rest, having at its outer ends openings adapted to receive both members of the double straps, and means for adjustably fastening the transverse bar to the double straps, substantially as described.

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

GERTRUDE MARGARET GREAVES.

Witnesses:

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CECIL M. GLESTRIN.