M. ESTES.

BED ATTACHMENT

APPLICATION FILED MAY 3, 1920.

1,356,613. **Patented Oct. 26, 1920.**

Fig. 3

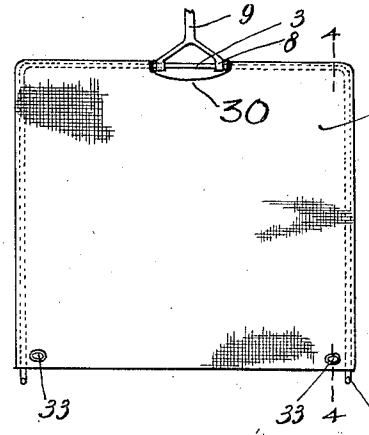


Fig. 4

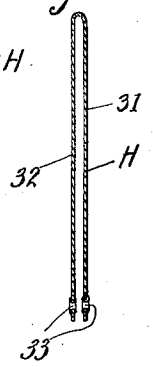


Fig. 1

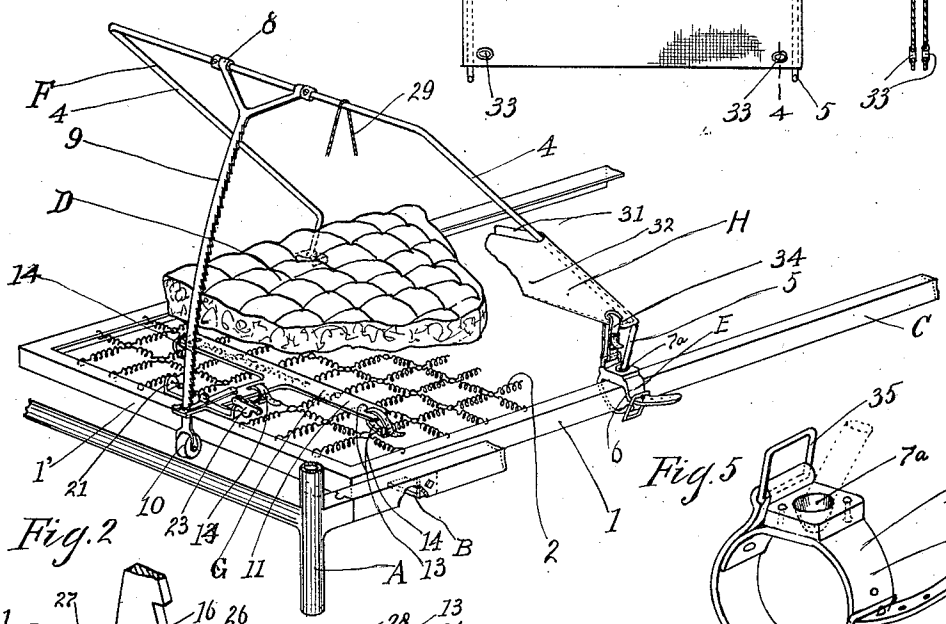


Fig. 2

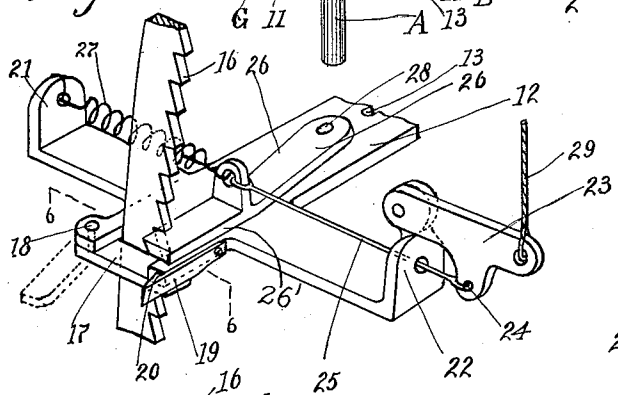


Fig. 5

Fig. 7.

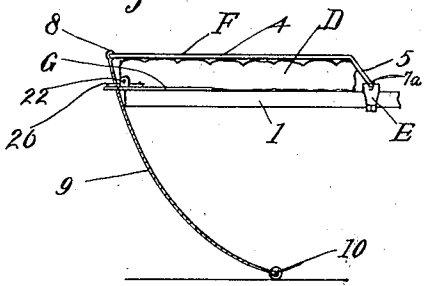
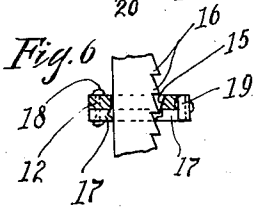


Fig. 6



Inventor;
Murray Estes
by A. J. Johnson
his Attorney.

UNITED STATES PATENT OFFICE.

MURRAY ESTES, OF ST. PAUL, MINNESOTA.

BED ATTACHMENT.

1,356,613. Specification of Letters Patent. Patented Oct. 26, 1920.

Application filed May 3, 1920. Serial No. 378,357.

To all whom it may concern:

Be it known that I, MURRAY ESTES, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Bed Attachments, of which the following is a specification.

This invention relates to back rests for beds and the like, and has for one of its objects to provide a back rest of the nature of an attachment, which will be foldable on the bed when not in use so as not to interfere with the ordinary use of the mattress, the device being attachable to any make of bed spring having side rails and an open work spring web supported thereon.

A further object of the invention is to provide improved back supporting means which is neat in appearance, light in weight and conveniently portable, the actual attaching means being in the nature of flexible straps easily conformable to the various shapes of bed parts, no holes or other special provision on the bed spring being necessary.

To this end the invention consists of the features of construction, combination and arrangement of parts hereinafter described and claimed. In the drawings:

Figure 1 is a fragmentary perspective view of a bedstead supporting a bed spring, the latter having the invention attached thereto.

Fig. 2 is a fragmentary perspective view of the locking devices for holding the back rest positioned.

Fig. 3 is a front view of a cloth slip enveloping the back rest frame.

Fig. 4 is a sectional view on line 4—4 of Fig. 3.

Fig. 5 is a perspective view of the socket bearing fastening collar or strap.

Fig. 6 is a sectional view on line 6—6 of Fig. 2, and

Fig. 7 is a diagrammatic side view of a part of the bed spring showing the invention in folded out-of-use position.

A designates a bedstead having suitable bed spring supports such as B, C a bed spring and D a mattress overlying the bed spring in the usual manner, E constitutes a flexible socket bearing fastening band and F the back rest frame.

The bed spring shown comprises a rectangular frame having side rails 1 and end rails 1′, one only of the latter being shown. Overspanning the opening of the frame in the usual way is the mattress supporting open-work spring web, that shown in the drawings being formed of interlaced coil springs 2. The frame F comprises a cross member 3 and parallel side members 4, the latter being bent abruptly downwardly at their outer free ends at approximately 135 degrees to form end supports 5 so that when said frame is tilted to about 45 degrees with respect to the bed spring said end supports will assume an approximately upright position. The end supports are rounded at their outer free ends. The collar E is a contractible loop and consists of a flexible strap 6 having a buckle 7 at one end, the opposite end thereof being projected through and engaging said buckle in the usual way whereby the collar may be securely buckled around the side rail 1, there being a loop for each rail. Intermediate its ends the strap is formed with an upturned flat face having centrally a comparatively deep circular socket 7^a the walls thereof slanting centerward, so that when the frame is positioned (out of service) as shown in Fig. 7, the end supports will be projected well into the socket. Pivotally mounted on the cross bar 3 by means of the journal ends 8 is the comparatively long thin flat curved brace member 9, having a bifurcated outer end rotatably supporting a roller 10 so as to rotate in a vertical plane parallel with the side rails 1. Overlying the spring web of the bed spring and the end rail thereof and extending beyond the latter, is the skeleton anchor plate G designed to spread over a comparatively large area of said spring web for the purpose of maintaining it in an approximately horizontal position when the weight of an occupant is flexing the said web. The plate is formed with laterally extending arms 11 and a central longitudinal arm 12 said arms having elongated strap openings 13 to receive the buckle straps 14 whereby the plate may be firmly strapped to the web as shown.

The longitudinal arm 12 extends beyond the end rail 1′ the outer end thereof being bifurcated to loosely, slidably receive widthwise the brace member 9. One of the side walls 15 of said bifurcation is slanted from above inwardly so as to clear the rake of the downwardly directed saw teeth 16 in one edge of the brace member. The bifurca-

tion is closed by the laterally extending bar 17 having hinge connection 18 whereby it may be swung outwardly as indicated in dotted lines (Fig. 2) to permit the brace member to be withdrawn. A spring arm 19 formed with a shoulder 20 holds the bar 17 in closed position thereby forming an elongated rectangular slot through which the brace bar may be freely moved. Adjacent said slot the plate G is formed with oppositely extending arms each having an upstanding lug 21 and 22 respectively. Extending laterally from the lug 22 and pivotally connected at one end thereon so as to swing upwardly, is the lever arm 23 having pivot connection 24 located intermediate its ends below its pivotal end connection with the locking lever 26. Alined with the rod 25 and connected so as to be under constant tension with the locking lever and the lug 21 is the spring 27. The locking lever has pivot connection 28 with the plate G and extends beyond the brace member into the path of the teeth 16 thereof so as to engage the latter to lock it against downward movement. A cord 29 attached to the free end of the lever 23 leads over the top bar of the frame F to a position conveniently within reach of the occupant of the bed. By pulling at the cord the locking dog or lever 26′ becomes disengaged from the teeth of the brace member thereby rendering the latter free to be moved longitudinally to change the position of the back rest. The brace bar is suitably curved so as to be concentric with the socket 7ª. When in out-of-use position (Fig. 7) the roller 10 at the outer extremity of the brace member is free to roll upon the floor or carpet whereby injury to the latter is prevented. Adapted to be slipped over the brace bar by means of the opening 30 in its upper edge and neatly enveloping the frame F to the bend forming end supports 5 is the double walled cloth slip or cover H. The latter is rectangular in form and has oppositely disposed solid walls 31 and 32. The lower edge of the slip is open to snugly receive the frame, strap openings 33 being provided at opposite corners adjacent said lower edge and cutting through both walls to receive the buckle straps 34, the latter being made of flexible material such as leather. The straps 34 are strung through the eye 35 on the collar E of the respective side rails 1 whereby the cloth cover is firmly drawn downwardly to force and hold the end supports 5 in their respective sockets. When the back rest is moved upon its pivot ends in the sockets, the strap connection, being flexible and to a degree elastic, will yieldingly conform to any distortion of the parts during such movement.

By pressing the spring arm outwardly to release the bar 17 the brace member may be swung upwardly to permit the cloth cover to be conveniently removed and a clean one substituted.

I claim:

1. In an attachment for beds of the class described, the combination with a bed spring, comprising in part a frame and a spring web over the opening thereof, of a back rest extending across the bed spring and having detachable pivotal connection with opposite side rails thereof, locking mechanism having an elongated slot detachably secured to said bed spring web so as to move therewith when the latter is flexed, a brace member pivoted to said back rest and extending through said slot so as to be engageable with said mechanism to be locked thereby, and means for operating said locking mechanism.

2. A back rest attachment for a bed spring including a frame having a mattress thereon, consisting of a back rest having side rails extending longitudinally parallel with the respective side rails of the frame, on the level with the top of the mattress, the ends of said back rest side rails being turned downwardly, a brace member pivoted to the back rest extending downwardly over the end of said frame, a plate supported on the bed spring surrounding said brace member to guide it, a fabric envelop snugly inclosing said back rest up to said down-turned ends, holes in said envelop adjacent said down-turned ends, an upwardly opening readily removable cup-like socket on each of said frame rails adapted to pivotally receive respectively said down-turned ends, and flexible readily removable tying means for each back rest side rail, extending through its respective hole in said envelop and connected with said cup-like socket for the purpose set forth.

In testimony whereof I affix my signature.

MURRAY ESTES.