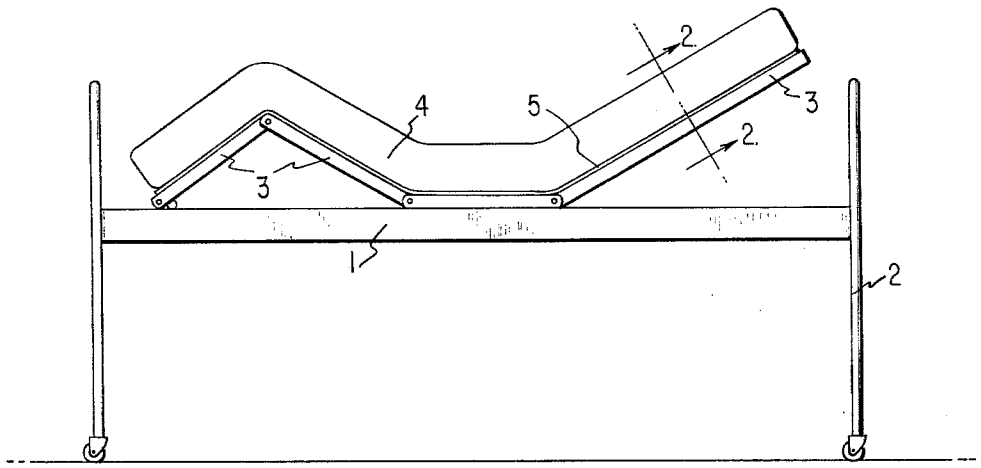
March 29, 1966 J. L. PETERSON 3,242,507

MATTRESS ANCHOR

Filed Oct. 11, 1963

FIG. 1



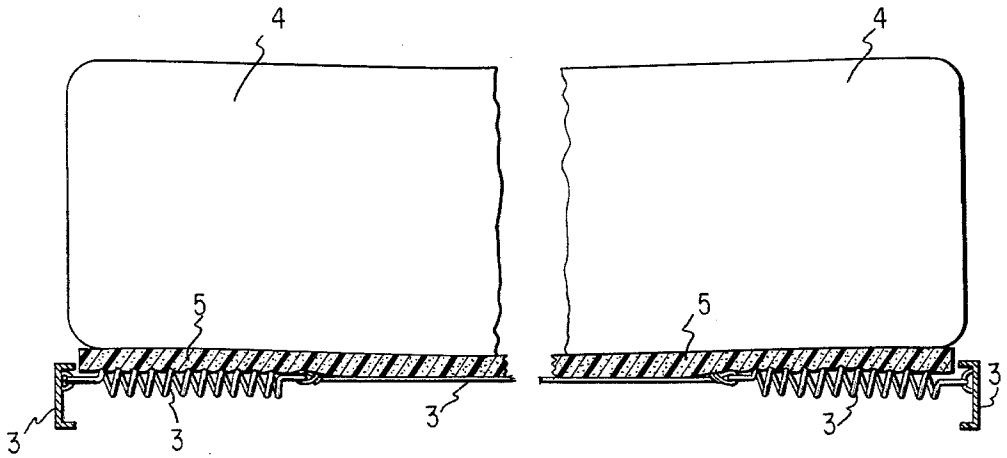




FIG. 2

INVENTOR
JAMES L. PETERSON

BY Lennie, Edmonds, Morton
Taylor & Adams
ATTORNEYS.

United States Patent Office 3,242,507 Patented Mar. 29, 1966



3,242,507

# MATTRESS ANCHOR

James L. Peterson, 1150 1st St., Idaho Falls, Idaho

Filed Oct. 11, 1963, Ser. No. 315,454
1 Claim. (Cl. 5—322)

This invention relates to a novel bed assembly, and more particularly to a novel bed assembly containing a mattress anchor.

Heretofore, it has been a difficult problem to design a bed assembly whose mattress would firmly adhere at all times to the bed springs during constant use. This problem has been particularly prevalent with regard to hospital beds whose springs are adjustable so as to change the position of the patient from a reclining to that of a sitting position during the course of his confinement. It has been found that, when the adjustments are made to the springs of these hospital beds, the mattress displays a tendency to slip from its original position directly on top of or over the bed springs to an off-center and dangling position. This tendency of the mattress to slide over the bed springs is also present in the case of ordinary mattresses and bed springs, due to their constant use. Further, this undesirable tendency of periodic slippage not only will annoy persons sleeping upon the beds, since the mattress is consequently not disposed directly over the bed springs, but it will unduly wear the fabric of the mattress due to its constant rubbing against the harshness of the hard metal bed springs.

In the past, different techniques have been utilized to keep the mattress in its original position upon the bed springs. One such method which has been tried was to provide various parts of the mattress with ties for firmly anchoring it to the bed springs. Such a technique has not proved satisfactory because the attachment was difficult to accomplish since the tying may be only performed by inconveniently reaching under the bed itself where the ties are attached to the underside of the mattress. Further, this attachment requires the additional inconvenience of untying the anchor means before the mattress can be removed from the springs. Still further, due to the periodic forces exerted upon the mattress during use, it has been found that the tying means, when in a securing relation with the bed springs, frequently rupture and tear away from the mattress, leaving it free to slide along the harsh springs, and thus become worn.

This invention contemplates a novel and simplified bed assembly comprising a mattress, bed springs, and a means for frictionally anchoring the mattress to the bed spring. This novel arrangement eliminates mattress slippage on the bed springs, regardless of the position of the mattress in relation to the bed frame, due to the presence of a frictional anchoring means. It has been found that this frictional anchor decreases wear upon the mattress and thereby greatly increases its life of usefulness. In fact, the useful life of a mattress has now been increased by a factor of five over the life of a mattress without any frictional anchoring means. Further, this novel combination eliminates the need for the inconvenient and unreliable mattress ties for anchoring the mattress to the bed springs. These and other novel features of the invention will be better understood after considering the following discussion, taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a side elevated view of the novel combination; and



FIG. 2 is a sectional view taken along line 2—2 of FIG. 1.

In the embodiment herein illustrated there is shown an adjustable bed comprising a bed frame 1 and attached thereto legs 2. Located within the bed frame 1 is an adjustable bed spring 3. A mattress 4 is disposed directly over the bed spring 3 and located between the bed spring 3 and mattress 4, a mattress anchor 5 is positioned.

This mattress anchor 5 is preferably in the shape of a rectangular sheet of material whose facial dimensions are equal to that of the mattress 4, except that the thickness of the anchor 5 is preferably about one-quarter inch. An anchor of such a planar dimension provides more surface frictional contact area so as to hold the mattress and bed spring more firmly together. This anchor is also preferably flexible and, accordingly, easy to spread on the bed spring 3 prior to the mattress being placed thereon.

The particular composition of the mattress anchor might vary but it must display the characteristic of providing a frictional or adhesive surface between the mattress 4 and the bed spring 3 so as to hold the mattress in place at all times, regardless of its position relative to the bed frame 1. Such compositions which have been found satisfactory include anchor sheets 5 made of either thermoplastic or thermosetting resins, for example, sponge or foam rubber.

It has been found that, with the above-noted materials, it is unnecessary to fasten the anchor sheet 5 to the spring 3 or the mattress 4 since the adhesive quality of the anchor sheet 5 holds the mattress 4 by gripping the fabric of the mattress 4 while, on the other hand, when the added weight of the mattress 4 is placed on top of the foam anchor sheet 5, the anchor sheet 5 practically surrounds each wire of the spring 3 to firmly secure the anchor sheet 5 from movement relative to the bed spring 3, because of its compressible characteristic. It is thus evident that once the weight of the mattress 4 is placed upon the anchor sheet 5, the coefficient of friction, existing between the mattress 4 and the anchor sheet 5, will be a great deal greater than the coefficient which would be present between the mattress 4 and bed spring 3 if the anchor sheet 5 were not present.

Various changes may be made in the details of the invention as disclosed, without departing from the scope or sacrificing the advantages thereof.

I claim:

In a bed assembly comprising a bed spring and separate mattress resting unattachedly thereon, the improvement comprising a mattress anchor of a sheet of sponge rubber having a surface with high coefficient of friction and having the same horizontal dimensions as the mattress interposed therebetween whereby the mattress is prevented from lateral slippage across the bed springs.

**References Cited by the Examiner**

UNITED STATES PATENTS

| | | | |
|---|---|---|---|
| 2,847,685 | 5/1952 | Freedlander | 5—354 |
| 3,116,196 | 12/1963 | Terry | 5—351 X |

FOREIGN PATENTS

| | | |
|---|---|---|
| 808,758 | 7/1949 | Germany. |
| 447,100 | 12/1935 | Great Britain. |
| 215,905 | 11/1941 | Switzerland. |

FRANK B. SHERRY, *Primary Examiner.*
R. D. KRAUS, *Assistant Examiner.*