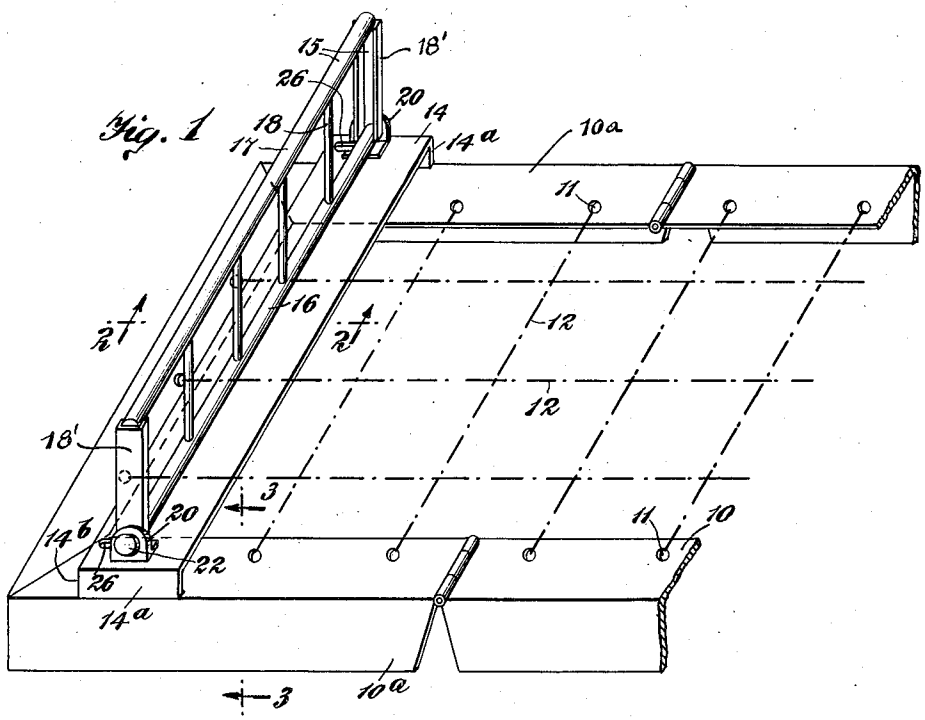
April 30, 1940. N. M. TWOMEY 2,198,982

DETACHABLE MATTRESS SUPPORT

Filed Dec. 1, 1937

Fig. 1



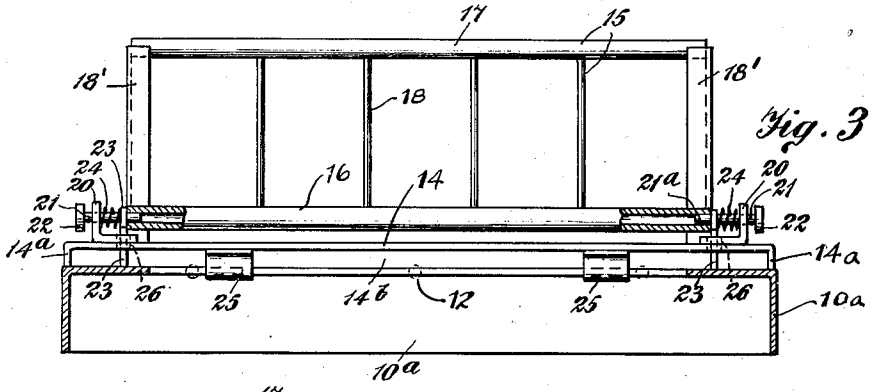


Fig. 3

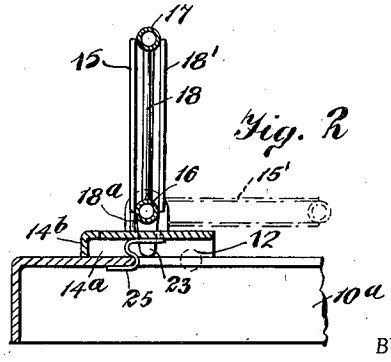


Fig. 2

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DETACHABLE MATTRESS SUPPORT

Nora Mary Twomey, New York, N. Y.

Application December 1, 1937, Serial No. 177,467

4 Claims. (Cl. 5—322)

This invention relates to new and useful improvements in a detachable mattress support and has specific reference to a revision of the device shown in my Patent No. 2,067,515.

The invention proposes to characterize the detachable mattress support by the fact that it has a hollow longitudinal member for extending across the end of a mattress support which includes a frame and springs extending across the sides thereof. It is proposed to make the hollow longitudinal member with an open bottom and an open side for providing room for the passage of said springs.

Still further the invention contemplates the provision of cleats mounted on the bottom of the longitudinal member for engaging the end of the frame for holding the mattress attachment in place.

Furthermore, the invention proposes an arrangement for removably and foldably holding the upright support member of the attachment.

As another object of this invention it is proposed to provide means for engaging against the frame to assist the cleats in holding the attachment in place.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a fragmentary perspective view of a detachable mattress support constructed according to this invention.

Fig. 2 is a fragmentary sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a fragmentary sectional view taken on the line 3—3 of Fig. 1.

The detachable mattress support, according to this invention, is intended for use in conjunction with invalid beds and the like. It is intended to prevent the mattress upon such a bed from slipping when a portion thereof is in the inclined position. In Fig. 1 a portion of an invalid bed is shown which includes a mattress support 10 having a hingedly connected end portion 10*a* which is adapted to be raised and lowered as conditions warrant. The mattress support 10 is of frame-like form and is formed on the inner sides with a plurality of openings 11. Between the opposite sides of the frame of the mattress support a plurality of springs and supporting wires 12 are secured through said openings 11. These wires form a spring structure for supporting the mattress.

The detachable mattress support includes a hollow longitudinal member 14 for extending across one end of the mattress support 10*a*. An upright support member 15 is mounted on the said longitudinal member 14 for engaging the end of a mattress resting on said mattress support. The bottom and one side of said longitudinal member 14 is open for providing room for the springs 12.

The longitudinal member 14 is formed from a strip of sheet material which has its ends 14*a* and one side 14*b* bent downwards to form the hollow construction. Consequently, the bottom and the opposed side is open. This hollow longitudinal member is of a size so as to be capable of being seated over the spring structure 12 at the end of the mattress support.

The upright support member 15 comprises a bottom tubular element 16, a top tubular element 17, and a plurality of connecting elements 18. The end connecting elements, indicated by the numerals 18′, have extended bottom end portions 18*a* which abut against the top face of the longitudinal member 14 to hold the upright support member in an upright position, as more fully explained hereafter. The bottom tubular member 16 is removably and turnably supported on the longitudinal member 14 so that the upright support member 15 is foldable downwards as indicated by the dot and dash lines 15′ in Fig. 2.

At the ends of the longitudinal member 14 there are vertical lugs 20. A stem 21 engages through each lug 20. The outer ends of these stems have heads 22 by which they may be manipulated. The inner ends 21*a* of these stems 21 are adapted to engage into the open ends of the bottom tube 16. A cam element 23 is fixedly mounted intermediate the ends of each of the stems 21. A spring 24 is coaxially mounted on each stem 21 and acts between the lug 20 and the element 23 for resiliently urging the stem inwards to engage the tubular member 16. Normally, the stems 21 support the upright support member 15 so as to be foldable as indicated in Fig. 2.

Cleats 25 of hook shape are mounted upon the bottom face of the longitudinal member 14 and are cooperative with the end of the frame of the mattress support 10 for holding the attachment in position. To assist these cleats the cam elements 23 are engageable through slots 26 (see Fig. 1) in the top of the longitudinal member 14 to extend downwards and abut the mattress support 10 as clearly shown in Fig. 2. The cam ele-

ments 23 provide sufficient upward stresses to hold the hook cleats 25 firmly in their holding positions.

When it is desired to remove the attachment, the heads 22 may be turned through approximately 90° so as to extend upwards the cam elements 23, up through the slots 26. The attachment is now free and may be moved to disengage the cleats 25. Furthermore, the heads 22 of the stems 21 may be drawn outwards to disengage the inner ends 21*a* from the bottom tubular member 16, and then the upright member 15 is removable.

While I have illustrated and described my invention with some degree of particularity, I realize that in practice various alterations therein may be made. I therefore reserve the right and privilege of changing the form of the details of construction or otherwise altering the arrangement of the correlated parts without departing from the spirit or the scope of the appended claims.

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

1. A removable attachment for invalid beds and the like, adapted to prevent the mattress from slipping when in an inclined position, comprising a hollow longitudinal member for extending across the end of a mattress support which includes a frame and springs extending across the sides thereof, an upright support member with a horizontal bottom tubular portion for the end of a mattress resting on said mattress support, and the bottom and one side of said longitudinal member being open for providing room for said springs, cleats secured on the bottom of said strip and adapted to engage the end of said frame for holding the attachment in place lugs mounted on said longitudinal member slightly spaced from the ends of said horizontal bottom tubular portion, stems slidably mounted through said lugs and engaging into the ends of said tubular portion for turnably and foldably supporting said upright member, cam elements on said stems adjacent the ends of said horizontal tubular portions and engaging slots in said hollow longitudinal member, and resilient expansion means acting between said cam elements and said lugs.

2. A removably attachment for invalid beds and the like, adapted to prevent the mattress from slipping when in an inclined position, comprising a hollow longitudinal member for extending across the end of a mattress support which includes a frame and springs extending across the sides thereof, an upright support member with a horizontal bottom tubular portion for the end of a mattress resting on said mattress support, and the bottom and one side of said longitudinal member being open for providing room for said springs, cleats secured on the bottom of said strip and adapted to engage the end of said frame for holding the attachment in place, lugs mounted on said longitudinal member slightly spaced from the ends of said horizontal bottom tubular portion, stems slidably mounted through said lugs and engaging into the ends of said tubular portion for turnably and foldably supporting said upright member, cam elements on said stems adjacent the ends of said horizontal tubular portions and engaging slots in said hollow longitudinal member, and resilient expansion springs coaxially on said stems and acting between said cam elements and said lugs.

3. A removable attachment for invalid beds and the like, adapted to prevent the mattress from slipping when in an inclined position, comprising a hollow longitudinal member for extending across the end of a mattress support which includes a frame and springs extending across the sides thereof, an upright support member mounted on said longitudinal member for the end of a mattress resting on said mattress support, and the bottom and one side of said longitudinal member being open for providing room for said springs, cleats secured on the bottom of said strip and adapted to engage the end of said frame for holding the attachment in place, and means engageable against said frame to produce an upward stress on said longitudinal member for assisting said cleats in holding the attachment, comprising turnable stems mounted on said longitudinal member, and cam elements mounted on said stems and in certain positions engageable against said frame, said upright member being turnably and foldably supported on said stems.

4. A removable attachment for invalid beds and the like, adapted to prevent the mattress from slipping when in an inclined position, comprising a hollow longitudinal member for extending across the end of a mattress support which includes a frame and springs extending across the sides thereof, an upright support member with a tubular portion mounted on said longitudinal member for the end of a mattress resting on said mattress support, and the bottom and one side of said longitudinal member being open for providing room for said springs, cleats secured on the bottom of said strip and adapted to engage the end of said frame for holding the attachment in place, and means engageable against said frame to produce an upward stress on said longitudinal member for assisting said cleats in holding the attachment, comprising turnable stems mounted on said longitudinal member, and cam elements mounted on said stems and in certain positions engageable against said frame, and resilient means urging said stems into the ends of said tubular portion on said upright support member.

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