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A. S. G. ROLSTONE

2,194,407

HANDLE FOR MATTRESSES

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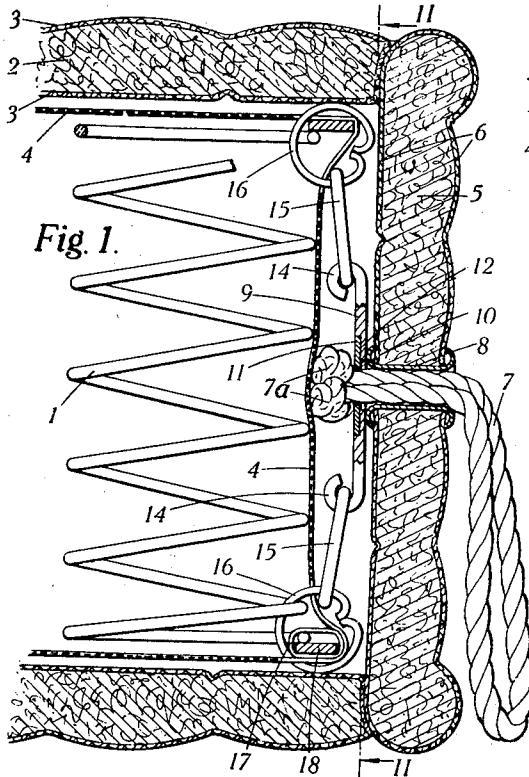


Fig. 1.

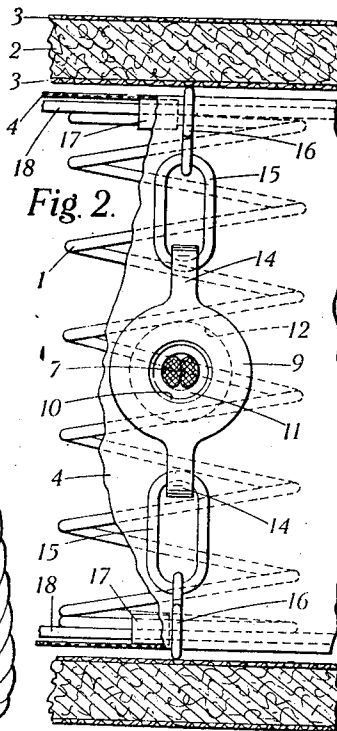


Fig. 2.

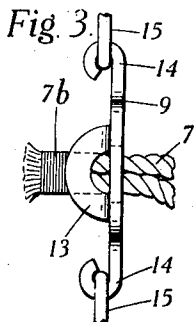


Fig. 3.

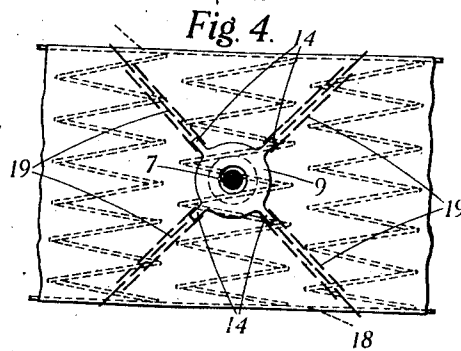


Fig. 4.

INVENTOR:
Alfred Sydney George Rolstone
BY
Peck & Peck
ATTORNEYS

UNITED STATES PATENT OFFICE

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HANDLE FOR MATTRESSES

Alfred Sydney George Rolstone, London, England

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9 Claims. (Cl. 5—345)

This invention relates to handles for mattresses and is concerned with mattresses comprising a spring interior or carcase covered on both faces with layers of padding and other material and having a preformed border or boxing secured around its edges.

Such mattresses are commonly provided with handles secured on the outer face of the preformed border to facilitate the moving, lifting or turning of the mattress but, as heretofore proposed, they have had the disadvantage that the handling of the mattress by means thereof tends to cause damage to the mattress, as by pulling the border or boxing away from the spring carcase with a consequent strain on, and sometimes failure of, the connection between the border and the top and bottom layers of the mattress.

It is the main object of the present invention to provide improved handle arrangements for spring-interior mattresses which shall not be subject to the disadvantage mentioned.

According to the invention the handle is located externally of the preformed border of the mattress and means is provided for connecting the handle to the spring carcase internally of the said border, the said means including a member attached to the end or ends of the handle and connected by flexible means to upper and lower turns of a spring or springs of the said carcase.

Some samples of the way in which the invention may be carried into effect will now be described in greater detail with reference to the accompanying drawing, wherein—

Fig. 1 is a transverse vertical section of a mattress fitted with loop handles of braided cord,

Fig. 2 is a section taken on the line II—II of Fig. 1,

Fig. 3 is a detail in side elevation, showing a modification, and

Fig. 4 is a front elevation of an alternative arrangement employing loop handles.

Corresponding parts in all the views are indicated by the same reference numerals.

Referring firstly to Figs. 1 and 2, 1 indicates the springs of the spring interior or carcase of a mattress covered on both faces with layers 2 of padding material enclosed between layers 3 of fabric. 4 is a hessian or like covering for the spring carcase and 5 is the padding and 6 the fabric coverings of a preformed border or boxing secured around the edges of the mattress by being attached to the top and bottom layers 2, 3 thereof.

At approximately the same locations along each of the two longer sides of the border 5, 6 are provided loop handles 7 of braided cord. Each handle has its two ends passed through a tubular eyelet 8, secured in the border 5, 6 at approximately the centre of the depth thereof, to be engaged in a plate 9 located between the inner fabric covering 6 of the border and the hessian covering 4 of the carcase. Each plate 9 has a central aperture 10 through which pass with some play the ends of the loop handle 7 to be knotted at 7a so that they cannot return through the aperture. Preferably, a metal washer 11 is threaded on the said ends before knotting and is received rotatably in a recess 12 formed in the inner face of the plate 9. The washer is with advantage a tight fit on the braided cord ends and permits of swivelling of the handle without undue wear on the same at the edges of the aperture 10. In an alternative arrangement, shown in Fig. 3, the ends of the handle 7 are bound at 7b and a washer 13 is slipped thereover to be clamped on the said ends by folding about a diameter. Both arrangements have the plate 9 formed with upper and lower hooked lugs 14 in which are loosely engaged chain links 15 which are also engaged in C-shaped spring clips 16. The latter are clipped over the upper and lower turns of a spring 1 of the spring interior of the mattress, passing through apertures in the hessian 4. As shown, the springs 1 are themselves clipped top and bottom (at 17) to a border or edging 18 which may also be embraced by the clips 16. The edging 18 may be of any of the well-known types.

In the modified arrangement of Fig. 4 the plate 9 is formed with four hooked lugs 14 each at 45° to the vertical and a separate chain 19 is engaged at one end with each lug and at the other end with the top or bottom turn of a spring 1. The right-hand pair of chains 19 connect to one spring and the left-hand pair to another.

The disclosure hereof is made for purposes of explanation, and not for purposes of limitation, as various modifications, omissions, additions, and changes can be made without departing from the spirit and scope of the invention defined by the following claims.

In the use of the handles according to the invention, all the stresses are transmitted directly to the spring carcase and there is no danger of damaging the border. Furthermore, the constructions are such that the spring edge of the mattress may still be compressed in the nor-

mally desired manner in the neighbourhood of the handles.

I claim:

1. The combination with a mattress, comprising a plurality of springs forming a spring interior, a layer of padding on each face of the spring interior and a preformed padded border secured around the edges of the said layers, of an external handle having at least one end extending loosely through the preformed border, a member attached to the handle end internally of the said border and flexible means connecting the said member to upper and lower ends of at least one spring of the spring interior.
2. The combination with a mattress, comprising a plurality of springs forming a spring interior, a layer of padding on each face of the spring interior and a preformed padded border secured around the edges of the said layers, of an external handle in loop form having ends extending loosely through the preformed border, a rigid member attached to the ends of the handle internally of the border and flexible means connecting the rigid member to the upper and lower ends of a spring of the spring interior.
3. The combination with a mattress, comprising a plurality of springs forming a spring interior, a layer of padding on each face of the spring interior and a preformed padded border secured around the edges of the said layers, of an eyeletted aperture in the preformed border at approximately the centre of the depth thereof, an external handle having an end passing loosely through the aperture and attached to a member located internally of the border and a plurality of flexible connections extending between the said member and upper and lower turns respectively of at least one spring of the spring interior.
4. In a mattress, comprising an assembly of coil springs and a padded boxing therefor, an external handle of flexible material having an end extending loosely through the boxing and attached to a member located internally of the boxing and a plurality of flexible connections of which at least one extends between the said member and an upper end turn of a spring of the assembly and at least one extends between the said member and a lower end turn of a spring of the assembly.
5. In a mattress, comprising an assembly of coil springs and a padded boxing therefor, an external handle of flexible material in loop form having ends extending loosely through the boxing at approximately the centre of the depth thereof, a member connected internally of the boxing to

the ends of the handle, and flexible connections extending between the said member and upper and lower turns of a spring of the assembly.

6. In a mattress and the like, the combination of a spring assembly comprising a plurality of springs provided with upper and lower edgings to which the upper and lower portions of said springs, respectively, are attached; and a covering substantially enclosing said spring assembly, said covering including a border; with an exterior handle having at least one end extending loosely through said border; a member attached to said handle end interiorly of said border; and flexible means operatively connecting said member to said edgings.

7. A mattress and the like, comprising an assembly of coiled springs; and a covering enclosing said assembly, said covering including a padded border, in combination with an external flexible handle having an end extending loosely through said border; an apertured plate arranged between said assembly and said border, said handle end extended loosely through said plate and provided with stop means confined thereon and rotatably abutting said plate; and flexible connections between said plate and upper and lower spring portions of said assembly.

8. A mattress and the like, comprising an assembly of coiled springs; and a covering enclosing said assembly, said covering including a border; in combination with an external handle of flexible material in loop form having an end portion extending loosely through said border approximately midway between the top and bottom thereof; a member connected internally of said border to said portion of the handle that extends loosely through said border; and chain links forming flexible pull connections from said member to upper and lower portions of said spring assembly.

9. In a mattress of the type substantially as described, the combination of a plurality of coiled springs attached together to form the interior spring assembly of said mattress; with a handle-anchoring member arranged loosely interiorly of said mattress; flexible member-supporting pull connections operatively coupling said member with opposite end portions of at least one spring of said assembly and loosely anchoring said member substantially between said opposite end spring portions; and an exterior flexible pull handle anchored to said member to transmit thereto the load on said handle, said handle being otherwise loosely included in said mattress.

ALFRED SYDNEY GEORGE ROLSTONE.