Jan. 18, 1938. G. M. HARRIS 2,105,785

BEDSTEAD

Filed June 17, 1936

Fig. 1

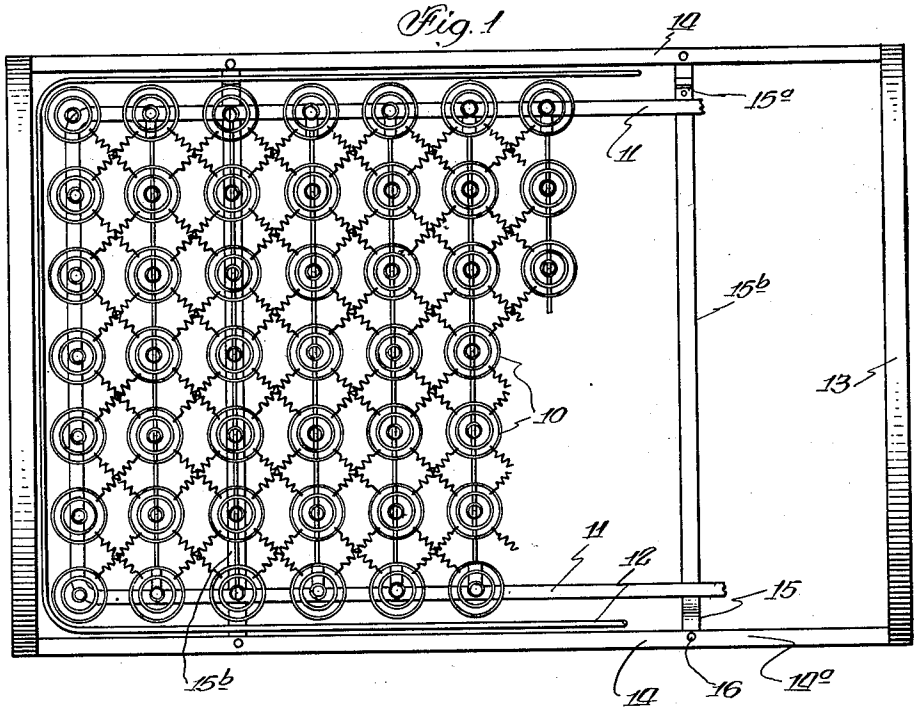


Fig. 2

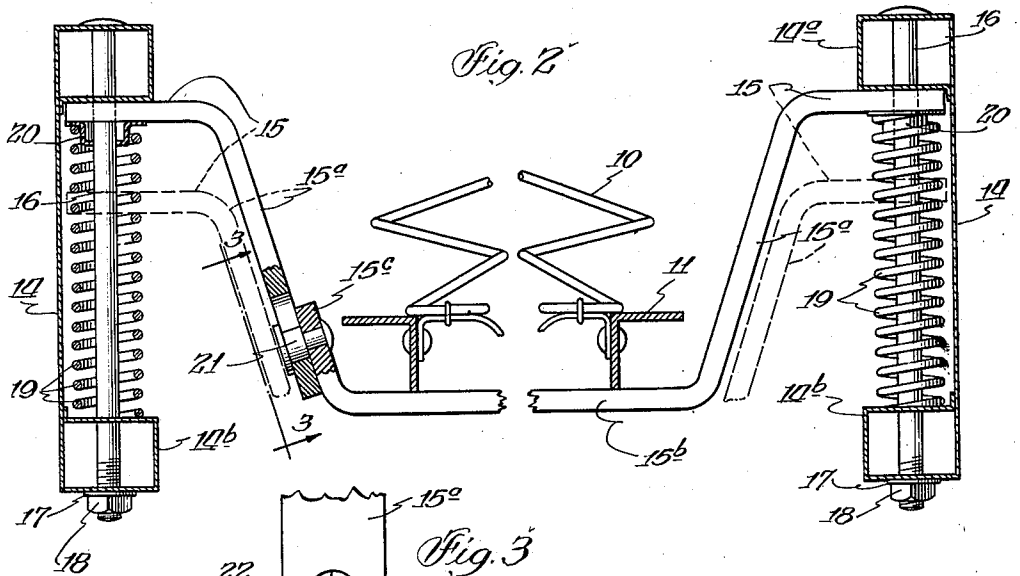
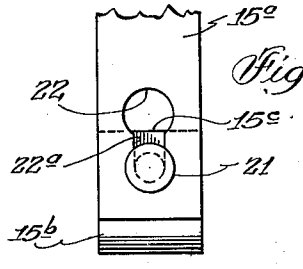


Fig. 3



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BEDSTEAD

George M. Harris, Chicago, Ill.

Application June 17, 1936, Serial No. 85,800

2 Claims. (Cl. 5—210)

My invention relates to bedsteads, and more particularly to the means for supporting the bedsprings therein, and my main object is to provide a structure which adds resiliency to the bedspring and renders the same more comfortable.

A further object of the invention is to provide a suspension means for the bedspring which is an improvement over the arrangement of slats conventionally employed for the purpose.

A still further object of the invention is to design the suspension means previously referred to with an underslung formation, whereby to conveniently receive the bedspring and afford sufficient depth for the same.

An additional object of the invention is to employ the bed rails for the resilient mounting of the spring suspension means and so to permit the latter to be simple and clear of instrumentalities.

A significant object of the invention is to construct the bed rails with pockets in which the resilient mountings for the bedspring suspension means are compactly nestled.

Another object of the invention is to include a separating item in the bedspring suspension means to render the latter compactly foldable with the side rails for purposes of storage and shipping.

A still further object of the invention is to design the novel support along lines of simplicity and in a manner to firmly and permanently secure the bedstead.

With the above objects in view, and any others which may suggest themselves from the description to follow, a better understanding of the invention may be had by referring to the accompanying drawing, in which—

Fig. 1 is a plan view of the novel bedstead, partly broken away;

Fig. 2 is an enlarged cross section, partly in section and with the middle portion removed; and

Fig. 3 is a section on the line 3—3 of Fig. 2.

In the construction of wood bedsteads, cross slats are still used as the most simple form of support for the bedspring. However, the slats move out of place frequently, making the spring support uneven; further, not being secured they are apt to fall out; and finally, they do not contribute to keep the side rails of the bed from spreading or to otherwise reinforce the same. In the case of metal bedsteads, a more rigid suspension is afforded and slats are eliminated. However, the bedspring is necessarily rigidly supported and only affords resiliency at points where stress or weight is received. Where external means have been devised to add resiliency to the bedspring, such means have usually been involved or complicated, increasing the cost of producing the bedstead to a prohibitive figure. It has therefore been my intention to provide an arrangement for the resilient suspension of the bedspring which is adaptable both to wood and metal bed construction, yet solves the problem simply and efficiently.

In accordance with the foregoing, specific reference to the drawing indicates a typical bedspring at 10. The assembly of coils is grouped on a base comprised of an angle frame 11 and is formed with a marginal guard wire 12 at the top. In the conventional wood bedstead, the base frame 11 rests on the cross slats, while in the case of metal beds it rests on the cross bars carried by the end structures.

In the novel embodiment the end structures may be of any design and are simply indicated in the drawing by the numeral 13. However, the side rails 14 are preferably of sheet metal, being formed with box caps 14*a* and 14*b* at the top and bottom, respectively, for purposes of rigidity. The sides of the rails are thus flat and smooth, and the box caps project inwardly.

The immediate element supporting the bedspring is a pair of hangers 15 adapted to be longitudinally spaced in the bedstead. Each hanger has horizontal terminal portions and is formed with a drop 15*a* from each of these to result in an underslung medial portion 15*b*, the latter parts of the hangers forming the supports of the side sections of the bedspring frame 11.

The end portions 15 of the hangers are vertically perforated to permit the passage of bolts 16 disposed along the inner side of the side rails 14. The bolts also pass through the box caps 14*a* as clearly shown in Fig. 2, and are secured by means of bottom washers 17 and nuts 18.

The hangers 15 are so positioned that their end portions lie immediately under the box caps 14*a*. These portions are maintained in this position by compression springs 19 coiled about the bolts 16. The upper end of each compression spring fits over a cup guide 20 which is perforated for the passage of the corresponding bolt 16 and seats against the under side of the hanger 15; and the lower end of the spring 19 bears directly against the box cap 14*b*.

It is evident from the above arrangement that the means for supporting the bedspring 10 are of the utmost simplicity, comprising only two

hangers 15. Further, the fact that these are underslung affords sufficient depth to receive the spring and by means of the drop sections 15a to retain the spring against lateral shifting or displacement. Moreover, it is to be noted that the drop sections 15a are inwardly inclined. Such an arrangement facilitates the placing of the bed spring 10 on the portions 15b and provides means whereby the bedspring 10 is automatically centered thereon. Also, the underslung feature permits the spring to be mounted low and therefore lends the same more stability.

The spring mountings 19 at the four corners of the hanger assembly 15 provide extra resiliency for the bedspring support, so that the assembly may well be named a spring within a spring. Further, the nestling of the spring mountings 19 in the pockets formed in the side rails 14 not only conceals the mountings from view and protects them from dust and interference, but also clears the hangers 15 of any attachments, appendages or other instrumentalities in the region of service, so that the mounting or removal of the bed-spring meets no obstacles and the form of the support is neat and simple.

While the hangers 15 may be made in one piece where utmost simplicity is of importance, a two-part construction is preferable for purposes of storage and shipping. Thus, the left-hand portion of Fig. 2 and Fig. 3 shows the joint in the drop portion 15a of the hanger. The drop portion is cut off at the bottom and overlaid from the inner side by an extension 15c of the bottom 15b. The latter carries a rivet 21 which passes freely into the narrow portion 22a of a key-slot 22 made in the drop portion 15a, such narrow portion being in the lower part of the key-slot. The joint is shown assembled, and it follows that the weight of the bedspring assures its locked condition. However, when the side rail assemblies are taken down for storage or shipping, the part 15c is raised to free the rivet 21 from the key-slot 22. The hanger portions thus become separated, and each may be swung on its related bolt 16 to fold it compactly along the inner side of the side rail.

Finally, it will be seen that the improved bedstead is an assembly of few parts which are of a nature to be inexpensively produced and durably constructed. When these parts have been assembled, the hangers 15 not only form a resilient support for the bedspring, but also constitute tie bars to firmly and positively connect the side rails 14 of the bedstead against separation or vibration, thus serving as a reinforcement for the bedstead.

While I have illustrated and described the device along specific lines, the same is clearly susceptible of minor changes and refinements, and I consider all such changes and refinements as coming within the scope and spirit of the appended claims.

I claim:—

1. A bedspring support comprising a bedstead containing side rails, at least one cross-member between said side rails to receive and support said bedspring, an intermediate joint in said cross-member to permit the separation of said cross-member into sections, said cross-member having drop-portions inwardly of said end portions and a bottom portion uniting the drop portions, said joint being in one of the drop portions, and said joint being separable by relative up and down movement of said sections.

2. A bedspring support comprising a bedstead containing side rails, a cross-member between the latter to receive and support the bedspring, vertical pivot means connecting the cross-member with the side rails, an intermediate joint in the cross-member to make the latter separable into sections which are swingable on said pivot means to fold alongside the related side rails, the end portions of the cross-member receiving said pivot means, the cross-member having drop portions inwardly of said end portions and a bottom portion uniting the drop portions, and said joint being formed by dividing one of the drop portions into overlapping sections, one section having a key-slot and the other a pin locked in the key-slot and removable therefrom to separate the sections.

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