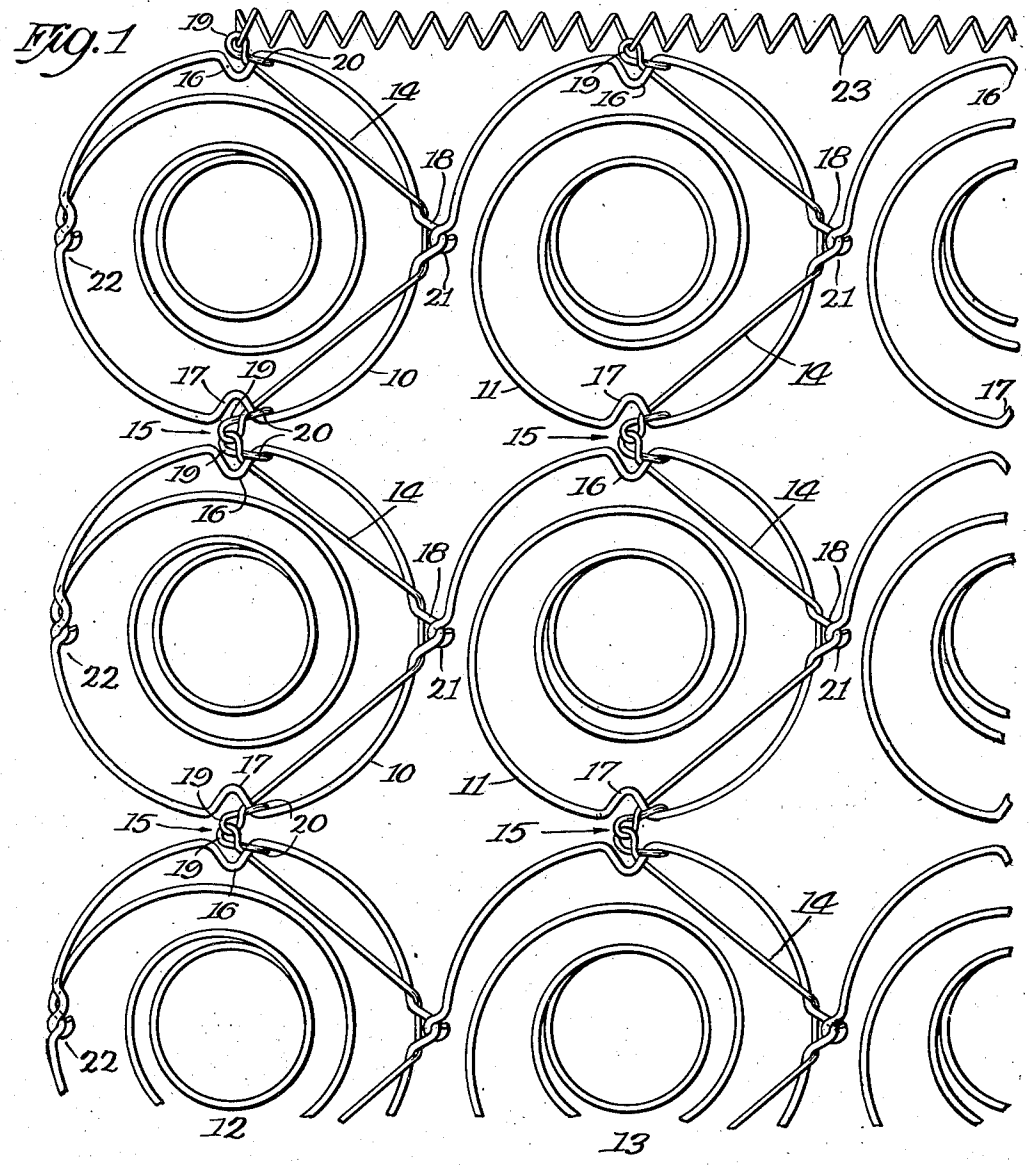
Oct. 27, 1936. C. D. KARR 2,058,462

SPRING MATTRESS ASSEMBLY

Filed Oct. 3, 1934

Fig. 1



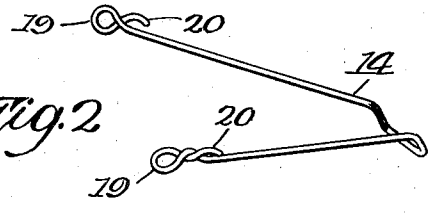




Fig. 2

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## SPRING MATTRESS ASSEMBLY

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8 Claims. (Cl. 5—246)

The invention relates to spring mattress assemblies comprising spirals arranged in rows and secured together, the objects of the invention being to provide improved means for tying together the spirals of the several rows and for tying together adjacent rows, and to provide other features of improvement as hereinafter set forth.

A desirable embodiment of the invention is hereinafter described, and is illustrated in the accompanying drawing, in which

Fig. 1 is a detail plan view of the spring assembly; and

Fig. 2 is a view in perspective of one of the links employed in connecting the spirals of the several rows.

The assembly is composed of a plurality of spirals, as 10, 11, arranged in rows, as 12, 13, which may extend either lengthwise or crosswise of the assembly. The spirals of each of these rows are secured together by means of V-shaped links 14, one of such links being attached to an end turn of each spiral, the links of adjacent spirals being looped together, as shown at 15.

To provide suitable anchorage for the ends of the links the end turn of each spiral is indented, as shown at 16, 17, on the median line of the row of which it is a member. This end turn is further distorted midway between the indentations 16, 17, by an outward loop 18. The outer ends of the arms of the links 14 are formed into loops 19, the extreme end 20 of the wire projecting backwardly beyond the loop to form a hook, as plainly shown at 20, for engaging one side of the indentation 16, 17.

Midway of its ends the link 14 is folded under the outwardly extended distortion 18 of the end turn of the spiral, the length of the link being such that it is normally under slight stress from end to end.

The links associated with adjacent spirals of each row being looped together, as indicated at 15, the several spirals are connected with sufficient rigidity to maintain their alinement while permitting an ample degree of flexibility. The links are easily applied to the spirals and connected together, and are so anchored to the spiral that relative turning movement is prevented. Because of the V form of the links their arms do not come into contact with the inner turns of the spirals, which are of less diameter than the end turns, and consequently there is no metallic clicking as the spirals are compressed.

Adjacent rows as 12, 13, of the spirals are preferably connected together by means of the hooks 21 formed at the end of the final turn of the spiral 11, and which engage the outstanding deformation 18 of a spiral of the adjacent row 12. This connecting means not only contributes to the maintenance of the elements in an assembly in proper position, but also prevents the possibility of the disengagement of the links 14 from the deformation 18. Furthermore, by reason of the interlocking of the apex of the link with the end turn of the spiral, as shown, and the attachment of the end of the final turn of an adjacent spiral at the point of such interlocking, such attachment is indirectly with the link, as all of the stress from the neighboring spiral is communicated to it and is not borne by the spiral through which the connection is made. It will be seen that these stresses are transmitted to the chain of which the link is a part, and thus spread over a wide area of the spring assembly.

The spirals of one of the outer rows, as 12, of the assembly may have their end turns closed, as indicated at 22. The link loops 19 at the ends of the several rows may carry a binder helical 23.

I claim as my invention:—

1. In a spring mattress assembly, in combination, spirals arranged in rows, a terminal turn of such spirals being distorted at diametrically opposite points, such distortions of adjacent spirals being in alinement, such terminal turns having each an outwardly projecting distortion intermediate of the first-named distortions, a link associated with each of such terminal coils and having its ends secured to the named oppositely disposed distortions, and its body portion looped over the named outward projection, the ends of links of adjacent spirals being looped together.

2. In a spring mattress assembly, in combination, spirals arranged in rows, a terminal turn of such spirals being distorted at diametrically opposite points, such distortions of adjacent spirals of the same row being in alinement, such terminal turns having each an outwardly projecting distortion intermediate of the first-named distortions, a link associated with each of such terminal coils and having its ends secured to the named oppositely disposed distortions and its body portion looped over the named outward projection, the ends of links of adjacent spirals of the same row being looped together, the ends of the terminal turns of spirals of adjacent rows being in hooked engagement with the named outwardly projecting distortions.

3. In a spring mattress assembly, in combi-

nation, spirals arranged in rows, a V-shaped link associated with each spiral and being anchored to the end coil thereof at diametrically opposite points and at its apex, the ends of the links of adjacent spirals being in looped engagement, and a binder in the form of a helical threaded into the link loops at the outer margins of end spirals of the several rows.

4. In a spring mattress assembly, in combination, spirals arranged in two sets of relatively normal rows, the spirals of one set of rows being connected by the end of the terminal turn of one with the terminal turn of a laterally adjacent spiral and the spirals of the other set being united by a set of interlocked V-shaped links, the terminals of each link being attached to the terminal turn of one of the spirals at opposite points on the central line of the row, and the apex of the link being attached to the same terminal coil.

5. In a spring mattress assembly, in combination, spirals arranged in rows, a V-shaped link associated with each spiral and being anchored to the end coil thereof at diametrically opposite points and at its apex, the ends of the links of adjacent spirals being flexibly interlocked and the end terminal of laterally adjacent spirals being connected with each of the first-mentioned spirals at the apex of the link.

6. A spring assembly formed of spirals arranged in juxtaposed rows, the spirals of each row being connected by a continuous chain formed of V-shaped links, each link having its ends in connected engagement with the terminal turn of one of the spirals and at opposite portions thereof, and in eye engagement with the ends of links associated with adjacent spirals, the end of the terminal turn of each spiral being connected with the contiguous spiral of an adjacent row and thereby indirectly connected with the apex of the link associated with such spiral.

7. In a spring assembly for mattresses, spirals arranged in rows, the spirals of each row being connected by a chain formed of interlocked V-shaped links, the ends and the apex of each link being attached to an end turn of one of the spirals, such attachment of the link ends being on the central longitudinal line of the row of which the spiral is an element.

8. In a spring assembly for mattresses, spirals arranged in rows, the end turns of the spirals of inner rows being attached to the end turns of spirals of an adjacent row, the spirals of each row being connected by a chain formed of interlocked V-shaped links, the ends and the apex of each link being attached to an end turn of one of the spirals, such attachment of the link ends being on the central longitudinal line of the row of which the spiral is an element, and binders crossing the ends of the rows and attached to the end spirals thereof.

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