

(No Model.)

G. G. BAKER & J. N. WANICH.
SPRING BED BOTTOM.

No. 507,057.

Patented Oct. 17, 1893.

Fig. 1.

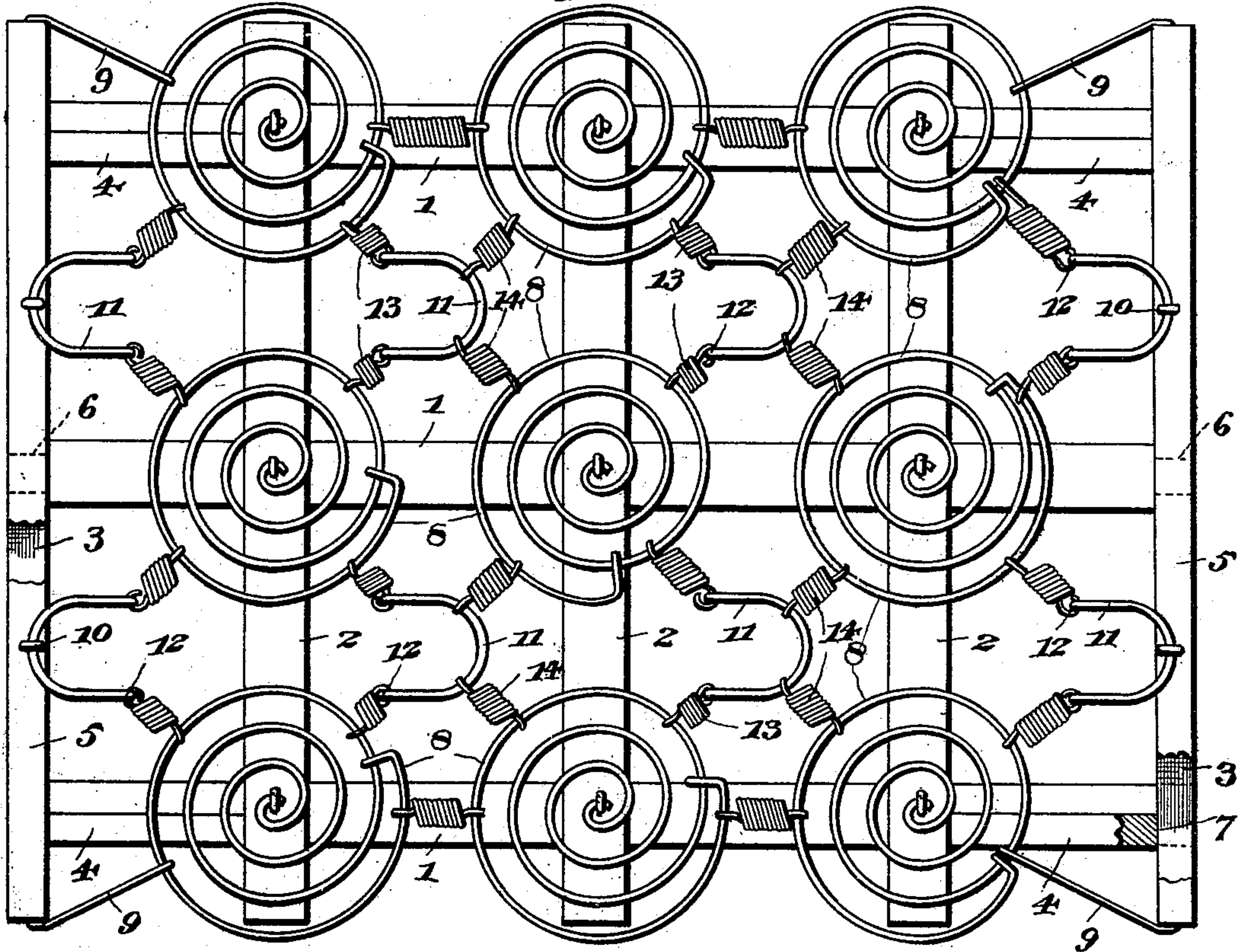


Fig. 2.

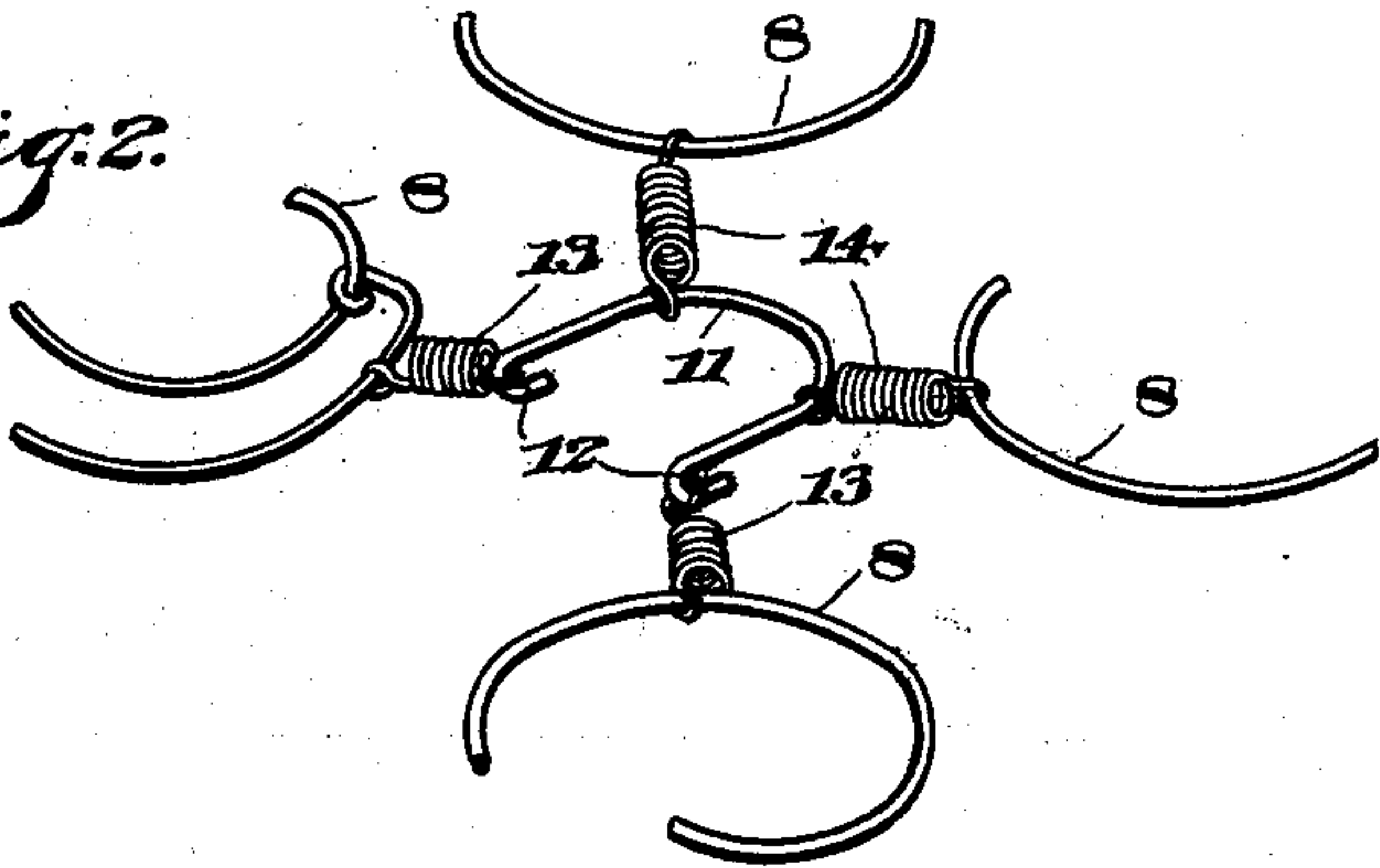
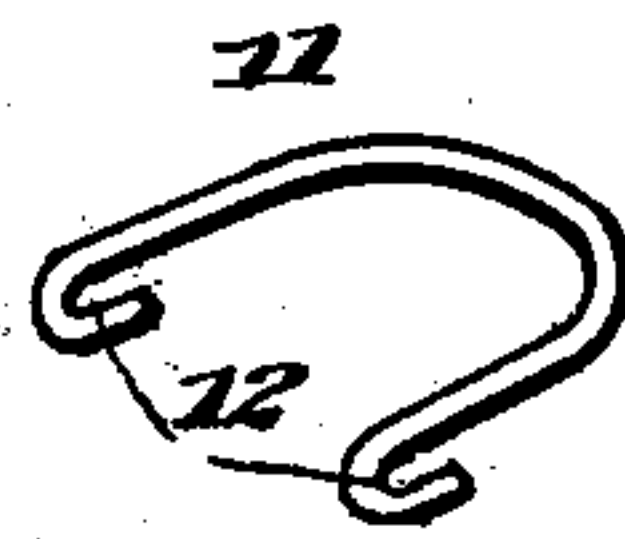


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE GRANT BAKER AND JOHN N. WANICH, OF BLOOMSBURG,
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SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 507,057, dated October 17, 1893.

Application filed March 28, 1893. Serial No. 467,999. (No model.)

To all whom it may concern:

Be it known that we, GEORGE GRANT BAKER and JOHN N. WANICH, citizens of the United States, residing at Bloomsburg, in the county of Columbia and State of Pennsylvania, have invented a new and useful Spring Bed-Bottom, of which the following is a specification.

This invention relates to coiled wire spring bed bottoms composed of coiled wire springs permanently attached to a frame, and the object thereof is to so construct and secure the springs that they shall retain their proper relative positions, and as far as practicable their original resiliency and tension at all times, and also permit a free lateral movement of the springs and a compensation thereof for variations in the weights brought to bear thereupon.

With these and other objects in view the invention consists of the construction and arrangement of the parts thereof as will be hereinafter more fully described and claimed.

In the drawings: Figure 1 is a top plan view of the complete bed bottom. Fig. 2 is a detail perspective view of a part of the main coiled wire springs, showing the improved construction in connection therewith. Fig. 3 is a detail perspective view of one of the U-shaped links detached.

Similar numerals of reference indicate corresponding parts in the several figures of the drawings.

Referring to the drawings, the numerals 1 designate a series of longitudinal slats, to which are secured a series of transverse slats 2, opposite end-bars 3, vertically-disposed corner brackets 4, and to the upper parts of the brackets 4 are secured top end-bars 5, that are braced by vertical uprights 6, extending upwardly from the end-bars 3, the said latter bars being fitted in mortises 7, formed in the lower corners of the brackets 4 to provide a flush arrangement of the several parts. The lower ends of cone-shaped coiled springs 8, are connected permanently to the slats 2, and the said springs are arranged in vertical position with the widened parts thereof uppermost, and the upper part of the outermost spring of each end row is connected to the end of the top end bar 5 by

a tie-rod 9, whose inner end loosely engages the last coil of the spring by being looped thereover to thereby permit movement of the said spring inwardly, but at the same time hold it properly braced. Movably secured to each of the top end bars 5, by staples 10, is a pair of U-shaped links 11, having the inner free ends thereof formed into hooks 12, that are movably engaged by the outer ends of a pair of coiled springs 13 that have their inner ends movably secured to the uppermost coil of the springs 8, to thereby form a yielding and flexible connection for the said springs 8 with the said top end bars 5. Between the springs 8 are located other links 11 of U-shaped form having their free ends formed into hooks 12, with springs 13 attached to the said hooks and to the adjacent uppermost coils of the said springs 8, and to the bow of the said links are loosely and movably fastened the ends of other springs 14 whose opposite ends are loosely and movably fastened to the uppermost coils of adjacently situated springs 8. The outermost longitudinal row of springs 8 are connected at their upper termination by springs 15, and by this entire series of movable connections of a yielding and flexible nature the said springs 8 are united in such manner as to yield laterally in all directions in a horizontal plane, as well as being permitted to be freely depressed by weights brought to bear thereon.

It will be observed that the U-shaped links 11 obviate the formation of limiting angles, as their bowed portions permit the springs 14, secured thereto, to have free movement thereon, and further, the hooked ends of the said links permit a ready and easy attachment or detachment of the springs 13 and 14 thereto and render it less difficult to make such form of attachment and thereby save labor, time, and expense.

The parallel arms or sides of the links 11 are arranged longitudinally of the bed bottom, or parallel with the longitudinal bars thereof, whereby greater transverse than longitudinal flexibility is provided. This difference between the transverse and longitudinal flexibility is unattainable with complete links, or links which are not provided with the free

sides or arms as described. It is desirable to provide for as free a movement of the upper ends of the spiral springs as is possible without allowing the displacement thereof, and as the greater strain upon the springs is in a longitudinal direction, less flexible connecting devices must be provided in this direction, but the springs may be allowed a considerable transverse movement without detriment to the structure.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having described the invention, what is claimed as new is—

In a spring bed-bottom, the combination with the longitudinal and transverse rails and the bars constituting the frame, of a series of vertically-disposed coiled springs that are

fixed at their lower ends to the intersections of the rails or bars of the frame, a series of U-shaped links arranged in the horizontal plane of the upper coils of said springs with the parallel side arms thereof disposed longitudinally or parallel with the longitudinal bars of the frame and having hooked free ends, and horizontally-disposed springs engaging said hooked ends and intermediate points of the links and connected to the upper coils of said vertically-disposed springs, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

GEORGE GRANT BAKER.
JOHN N. WANICH.

Witnesses:

WM. KRICKBAUM,
ELIAS UTT.