

No. 814,220.

PATENTED MAR. 6, 1906.

F. L. KUNKEL.
BED SPRING.

APPLICATION FILED OCT. 13, 1905.

Fig. 1.

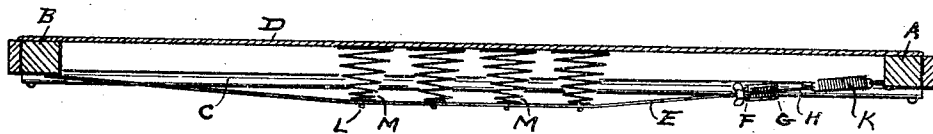
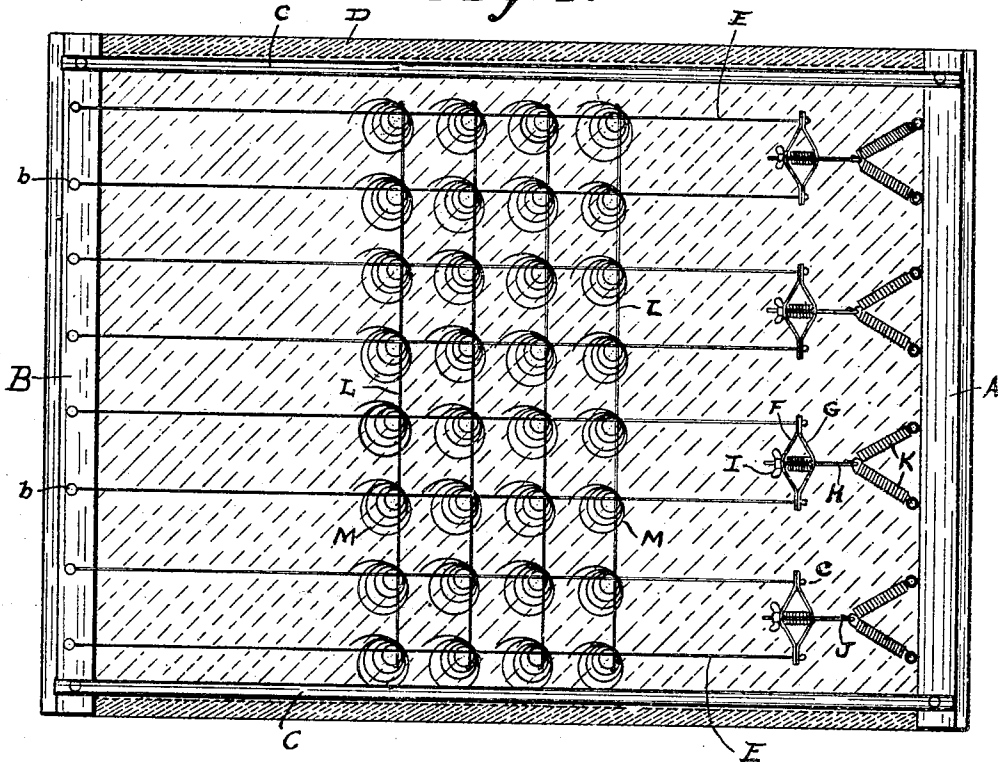


Fig. 2.

Witnesses

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FRIEDRICH L. KUNKEL, OF MILWAUKEE, WISCONSIN.

BED-SPRING.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRIEDRICH L. KUNKEL, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Bed-Springs, of which the following is a specification.

My invention relates to improvements in bed-springs, with especial reference to that class of such devices in which a flexible or woven-wire sheet is stretched between the end rails and reinforced from beneath by suitable stay-wires and auxiliary springs.

The object of my invention is to provide improved means for connecting the stay-wires with the end rails, especially at the head end of the bed, whereby the stay-wires will be given a certain mobility and the strain thereon balanced and sudden strains relieved, regard being also had for neatness of appearance and economy in manufacture.

In the following description reference is had to the accompanying drawings, in which—

Figure 1 is a view of a bed-spring embodying my invention as seen from the under side. Fig. 2 is a longitudinal section view of the same.

Like parts are identified by the same reference characters in both views.

A and B are the head and foot end rails, and C represents the side rails. D is a sheet or strip of woven-wire or other flexible material stretched between the end rails, these parts being of any ordinary construction.

The stay-wires E are arranged in sets of two each. One wire in each set is connected at one end with an end rail at *b* and at the other end with a pair of resilient yoke-bars F and G, having their ends lapped together and their central portions curved in opposite directions. The wires E composing the corresponding set are passed through holes in the respective ends of the yoke-bars and are headed at *c* to prevent withdrawal. The yoke-bars composing each pair are also connected by a rod H, which extends loosely through holes in the central portions of said bars and has its inner projecting end screw-threaded to receive a thumb-nut I and its outer projecting end provided with a hook J,

which is connected with the adjacent end rails by a pair of springs K, which extend divergently from the hook to the rails. L represents cross-wires, and M represents coiled reinforcing-springs supporting the woven wire from the stay-wires.

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

1. In a bed-spring, the combination with a frame, and a sheet of flexible material stretched between the frame-bars, of stay-wires connected with one frame-bar and arranged in sets; yoke-bars arranged in pairs, diverging in their central portions, and having their ends connected with the respective stay-wires of a corresponding set; a rod for each pair of yoke-bars extending through the central portions of the bars; an adjustable nut on the inner projecting end of each rod; and a resilient connection between the outer projecting end of each such rod and one of the frame-bars.

2. In a bed-spring, the combination with a frame, and a sheet of flexible material stretched between the frame-bars, of stay-wires connected with one frame-bar and arranged in sets; yoke-bars arranged in pairs, diverging in their central portions, and having their ends connected with the respective stay-wires of a corresponding set; a rod for each pair of yoke-bars extending through the central portions of the bars; an adjustable nut on the inner projecting end of each rod; and a resilient connection between the outer projecting end of each rod and one of the frame-bars; said resilient connection comprising a set of coiled springs extending divergently from the rod to the frame-bars.

3. The combination with a bed-spring, of a series of stay-wires, each having one end connected with the frame of said spring, and said wires being arranged in sets; a curved resilient yoke for each set connecting the wires thereof; hook-rods each adjustably connected with one of said yokes; and coiled springs extending divergently from and connecting the hook-rods with the frame.

4. The combination with a bed-spring, of a series of stay-wires, each having one end connected with the frame of said spring and said

wires being arranged in sets; a pair of oppositely-curved resilient yokes for each set of stay-wires connecting the wires of such set; a hook-rod for each pair of yokes, adjustably
5 connected with the central portions thereof; and a resilient connection between the hook-rod and the frame of the bed-spring.

In testimony whereof I affix my signature in the presence of two witnesses.

FRIEDRICH L. KUNKEL.

Witnesses:

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