No. 887,929. PATENTED MAY 19, 1908.

J. W. EFAW.

BED BOTTOM.

APPLICATION FILED SEPT. 18, 1907.

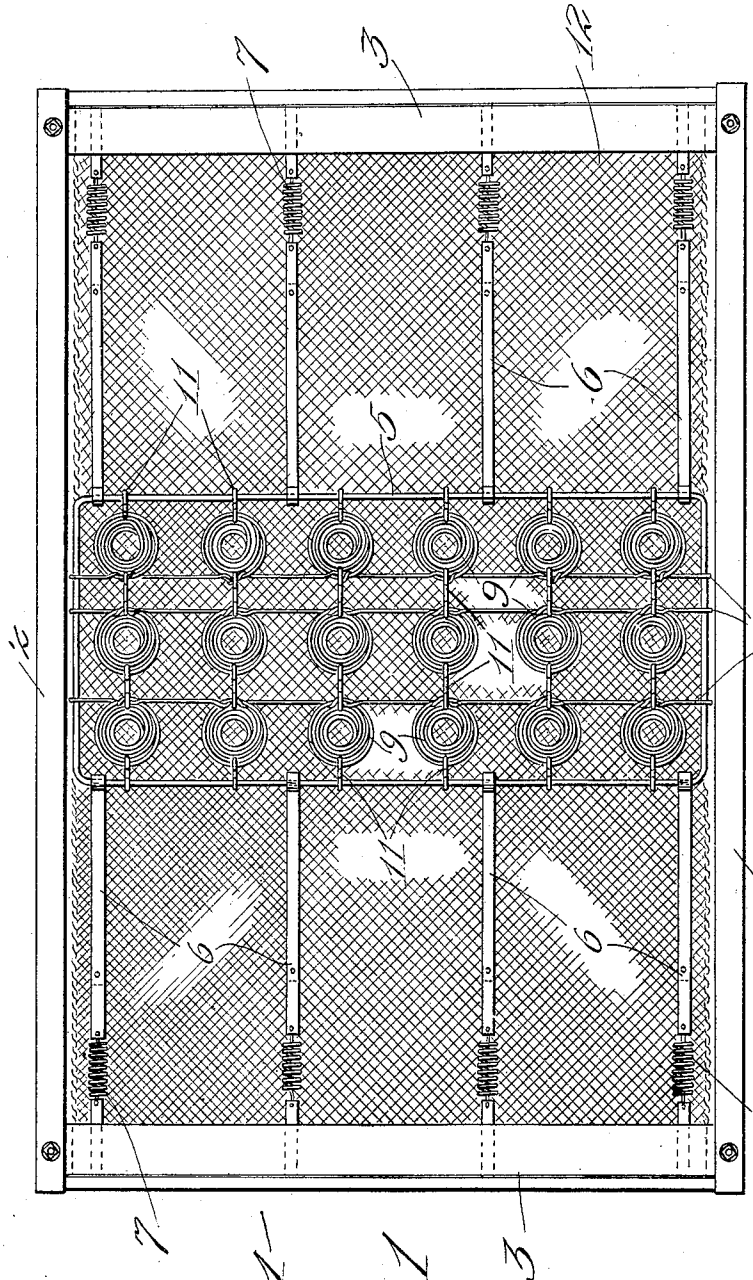

Fig. 1

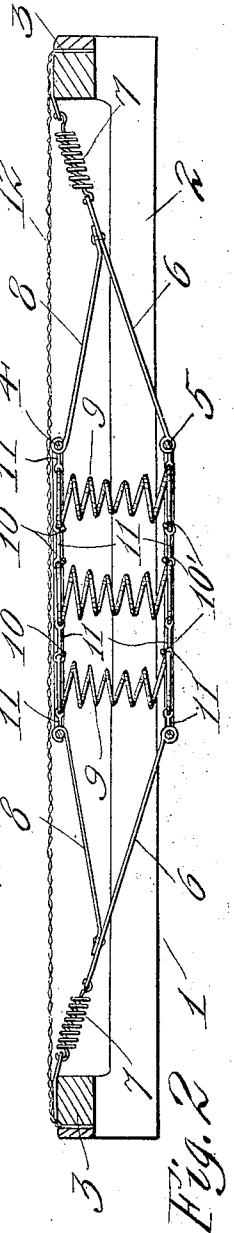

Fig. 2

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN W. EFAW, OF SEATTLE, WASHINGTON.

BED-BOTTOM.

No. 887,929. Specification of Letters Patent. Patented May 19, 1908.

Application filed September 18, 1907. Serial No. 393,562.

To all whom it may concern:

Be it known that I, JOHN W. EFAW, a citizen of the United States of America, and a resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Bed-Bottoms, of which the following is a specification.

My invention has for its primary object the provision of an improved construction of the above type, which is comparatively simple, the various parts being so arranged and constructed as to lend to the ease and comfort of the occupant of the bed while preventing sagging of the woven wire fabric of the main frame.

With the above and other objects in view, to be referred to as the description progresses, the invention resides in the construction, arrangements and combinations of parts hereinafter described, and succinctly defined in the cla ms hereto annexed.

Referring now to the accompanying drawing, in which like numerals of reference indicate like parts throughout the several views: Figure 1 is a bottom plan view of my invention, and Fig. 2 is a longitudinal section thereof.

Reference numeral 1 indicates the main frame of the bed bottom, which may be of any desired construction, although I have illustrated the same as comprising the end and side rails 2 and 3 respectively.

4 and 5 indicate spaced frames arranged one above the other, with the upper disposed in substantially the same plane as the upper face of frame 1. Frames 4 and 5 are of open formation, being substantially rectangular in form and preferably formed of spring wire. As shown these frames are arranged across frame 1 approximately midway the length thereof, at which point the greatest weight is imposed when a body is resting thereon, and the lower of these frames is supported by supports 6, comprising longitudinally disposed bands of spring metal, to frame 1, said supports being secured to said lower frame, as by having their inner end portions bent around the side rails thereof, and having their outer ends connected by springs 7 to the end rails of frame 1. Ties 8, of spring metal serve to yieldingly support frame 4 and connect the same to the supports 6.

Reference numeral 9 indicates the spiral springs the convolutions of which increase in diameter toward both ends from an approximately central point. Springs 9 are arranged vertically and have their end portions arranged within the frames 4 and 5, the upper ends of said springs being substantially flush with the upper face of frame 4. Springs 9 are preferably arranged in rows, being connected together at top and bottom by suitable flexible means, as wires 10, 10′. Wires 10, 10′ after having been secured to the end or large convolutions of the springs, as by being bent around the same, are secured to the end rails of frames 4 and 5. The respective rows of springs 9 are also secured to each other and to the side rails of frames 4 and 5 by links 11, consisting of short lengths of resilient wire.

12 indicates a suitable woven wire spring which is placed over frame 4 and the top portions of springs 9, and secured to the end rails of frame 1, in any desired manner.

In my improved construction, by reason of frame 4 being yieldingly supported by springs 9 and ties 8, it will be permitted to lower to a certain degree, independently of any lowering of frame 5, when subjected to downward pressure. When, however, any great weight or pressure is placed on frames 4 and 5, their supports 6, by reason of springs 7, will permit of their both yielding in a downward direction. It will further be observed that in lieu of rigid elements, such as slats for supporting the spiral springs as frequently employed in the prior art, I connect springs 9 to frames 4 and 5 by resilient wire connections, and said frames being constructed as set forth, renders the bed bottom of a very elastic nature.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States of America, is:—

1. In a bed bottom, in combination with a frame, open frames arranged one above the other and being yieldingly held apart, said frames extending across said first named frame, means yieldingly connecting said last named frames to said first named frame, a plurality of coil springs extending between said last named frames with their upper ends substantially flush with the upper surface of the upper of said frames, and flexible means connecting said springs to said last named frames.

2. In a bed bottom, in combination with the frame, substantially rectangular open wire frames arranged one above the other

across said first named frame, vertically arranged spiral springs extending between said last named frames, flexible means secured to said last named frames and to the adjacent portions of said springs, whereby said frames are yieldingly held apart, means connecting said springs together, and yielding means connecting the lower of said last named frames with said first named frame.

3. In a bed bottom, in combination with the frame, a substantially rectangular open frame arranged across said first named frame, longitudinal supports fixed to said last named frame, resilient means connecting said supports to said first named frame, an upper open frame, resilient means connecting the same to said supports, spiral springs extending from within one of said last named frames into the other, and flexible connections between said last named frames and said springs.

4. In a bed bottom, in combination with the main frame, longitudinally disposed bands, an open frame, said bands having their inner ends secured to said open frame, springs connecting the outer ends of said bands to said first named frame, a second open frame arranged above said first named open frame, resilient ties secured to said bands and to said last named frame, rows of coil springs extending between said open frames, and links connecting said coil springs to said open frames, for the purpose specified.

5. In a bed bottom, in combination with the main frame, longitudinally disposed bands, an open frame, said bands having their inner ends secured to said open frame, resilient means connecting the outer ends of said bands to said first named frame, a second open frame arranged above the said first named open frame, resilient ties secured to said bands and to last named frame, and rows of coil springs extending between said open frames and being connected thereto.

Signed at Seattle, Washington this 10th day of September 1907.

JOHN W. EFAW.

Witnesses:
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