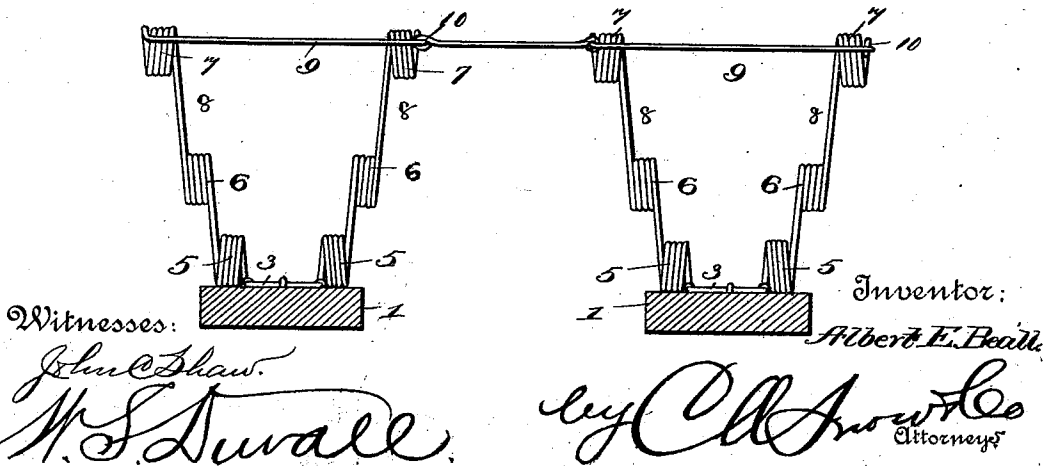
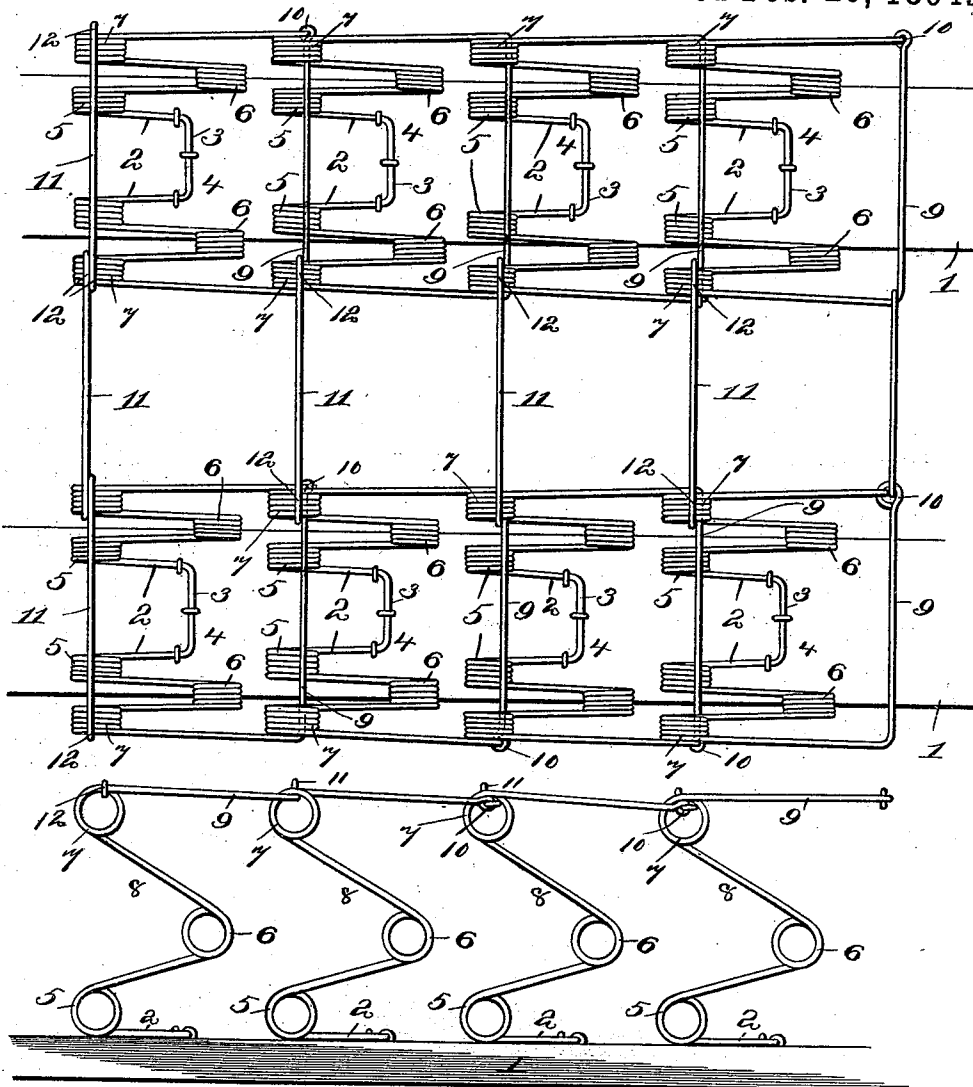


(No Model.)

A. E. BEALL.
SPRING BED.

No. 514,898.

Patented Feb. 20, 1894.



UNITED STATES PATENT OFFICE.

ALBERT E. BEALL, OF HUBBARD, IOWA.

SPRING-BED.

SPECIFICATION forming part of Letters Patent No. 514,898, dated February 20, 1894.

Application filed May 2, 1893. Serial No. 472,663. (No model.)

To all whom it may concern:

Be it known that I, ALBERT E. BEALL, a citizen of the United States, residing at Hubbard, in the county of Hardin and State of Iowa, have invented a new and useful Spring-Bed, of which the following is a specification.

My invention relates to improvements in spring-beds; the objects in view being to provide a bed in which the springs will have practically only a vertical movement and consequently will retain their resiliency a greater length of time; cannot be pressed out of shape; and the bed-bottom as a whole will conform to its original contour regardless of any excessive weight that might be applied to any one part of the bed.

With these objects in view the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claim.

Referring to the drawings:—Figure 1 is a plan view of a portion of a bed-bottom embodying my invention. Fig. 2 is a side elevation of the same. Fig. 3 is an end elevation.

Like numerals of reference indicate like parts in all the figures of the drawings.

1—1 designate a pair of slats, and to the same at intervals in transverse alignment is arranged a series of springs.

In constructing a spring of the character herein shown I employ a blank of spring-wire of sufficient length, bending the same at each side of its center to form a lower U-shaped base portion 2, having opposite terminals 3 in the same plane thereof, clipping said terminals in the construction of the bed to the slats as shown at 4. These terminals extend a short distance beyond the clips 4, and are coiled outwardly upon themselves forming the lower coils 5, the terminals then extend in an inclined manner upwardly above and out of alignment with the lower portions of the terminals to points slightly in rear of the bent or base portion 2, and are again coiled in opposite directions forming the intermediate coils 6, after which they extend forward to points beyond and out of alignment with the lower coils 5 and are coiled for a third time forming the upper coils 7 forming substantially V-shaped duplicate springs. One of the terminals is longer than its companion, but each is rearwardly extended as at 8, the

longer terminal being bent at a right angle as at 9, and the two ends of the terminals bent to form hooks 10 which interlock. This completes the construction of a spring; and it will be seen that all of the coils are out of vertical alignment with each other, so that the spring may be compressed wholly within itself, the coils 7 taking at one side and in front of the lower coils 5; and, furthermore, that the several branches of the terminals are also out of alignment, so that the spring may be compressed to the thickness of one coil. A series of these springs being secured upon a slat the transverse portion 9 of each spring is passed through the upper coils 7 of the companion spring adjacent thereto, so that it will be seen that the springs are in a manner interlaced, and that any strain upon one will be imparted to the others adjacent thereto. The terminals between each of the coils being inclined it will be seen that any rolling pressure brought thereagainst, as the body of a person moving from one side of a bed to the other, will be counteracted by the inclination given the spring terminals, and the result will be simply a vertical collapse or compression of the spring.

If desired, and it is preferred to do so, the upper coils of each pair of longitudinally opposite springs may be connected by short sections of wire 11, the same having their ends bent to form hooks 12 for effecting the engagement. In this manner the several series of springs are tied together in a longitudinal manner as well as a transverse.

From the foregoing description in connection with the accompanying drawings, it will be seen that I have constructed a spring bed that will be resilient and readily conform to the person or body occupying the same; which will form a continuous web for supporting the mattress; which is free or devoid of any sharp portions or other projections that can in any way injure the mattress; and finally, the springs have only a vertical movement and therefore maintain their shape and resiliency a great length of time.

Having described my invention, what I claim is—

In a spring bed bottom, the combination with the slats; of aligned duplicate pairs of springs arranged on each slat, each pair of

springs consisting of parallel V-shaped vertically disposed spring portions shaped from a single piece of wire and having a lower intermediate U-shaped attaching base portion
5 extended from their lower terminals, spring coil eyes located at their intermediate apices and upper and lower arm extremities, and upper horizontal terminals extended beyond the upper coil eyes, one of said terminals being
10 longer than the other terminal and bent at right angles to pass laterally through the upper coil eyes of the next adjacent pair of

springs and engaging the extremity of the shorter terminal, and connecting-wires connecting the adjacent laterally opposite pairs 15 of springs, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALBERT E. BEALL.

Witnesses:

T. W. STROTHER,
A. B. BOYLAN.