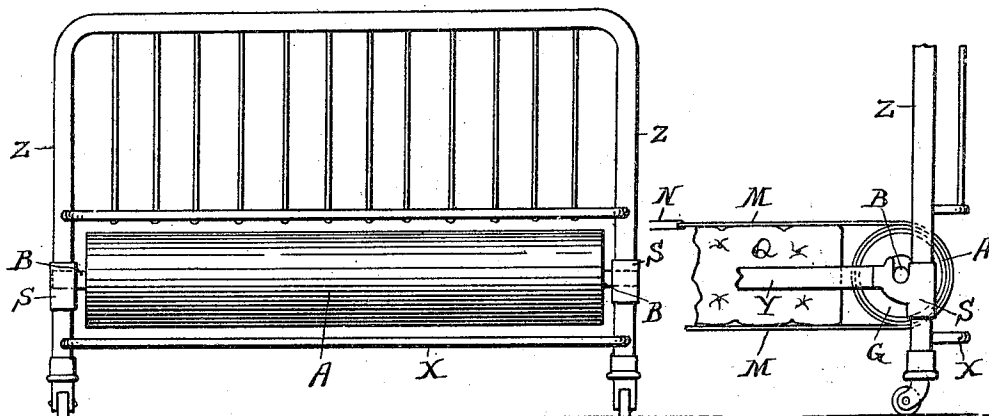
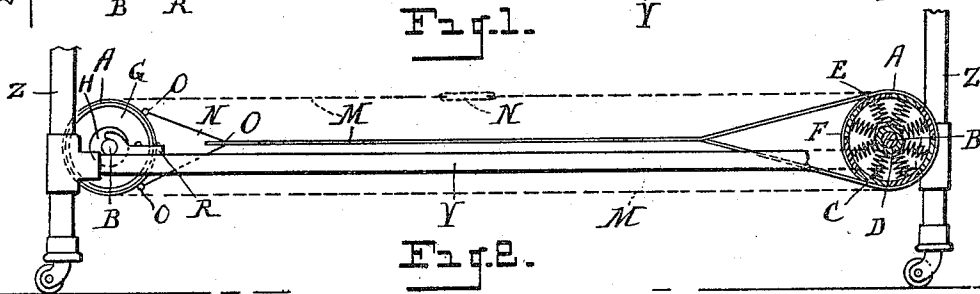
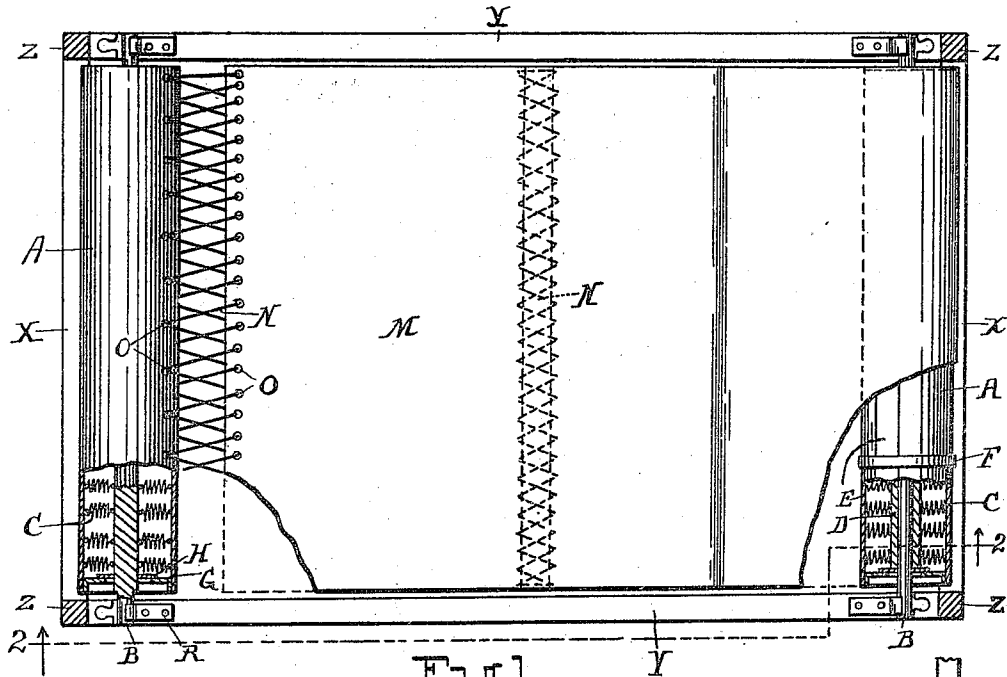


LE VERT CLARK.
 SPRING BED.
 APPLICATION FILED NOV. 7, 1908.

945,911.

Patented Jan. 11, 1910.



Witnesses

O. B. Baenziger.
 Benjamin F. Mulford

Fig. 3.

Fig. 4. Inventor

Le Vert Clark

UNITED STATES PATENT OFFICE.

LE VERT CLARK, OF DETROIT, MICHIGAN.

SPRING-BED.

945,911.

Specification of Letters Patent.

Patented Jan. 11, 1910.

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To all whom it may concern:

Be it known that I, LE VERT CLARK, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Spring-Beds, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in spring beds, in which a special form of spring bolster, the means relied on to give the necessary resiliency, in combination either with the side bedrails of a bedstead or the posts, operates in conjunction with and sustains a web alone, or web and mattress in an elastic way.

It has for its object the construction of a simple, cheap, and durable resiliency device or unit, which in its combinations may constitute an integral part of the bedstead, or be made to be used with an ordinary bedstead and be easily and quickly removable therefrom.

In the drawings:—Figure 1 is a plan view, partially in section of a spring bed embodying this invention. Fig. 2 is a side view, in part, and a cross section, on the line 2—2 of Fig. 1. Fig. 3 is an end view as modified from Fig. 1. Fig. 4 is a side elevation of a detail of Fig. 3.

Figs. 1 and 2 show the spring bolster in combination with the side rails of the bedstead; in which X represents the two end bedrails, Y the two side bedrails, and Z the posts at each of the four corners of an ordinary bedstead.

B is the shaft of the spring bolster encompassed by a series of spiral springs C, whose longitudinal axes are radial to the shaft inside the drum A. The shaft engages at each end with the side rails Y by means of the bracket R, attached to the bedrails, or by any other suitable means. The spiral springs in the left of Fig. 1 are represented as tensile springs attached at one end to the drum portion and at the other end to the shaft portion. The radial springs in the right of the figure may be of the compression variety seated on the blocks D next to the shaft, or directly on the shaft. The outer ends of the shaft are seated against staves or slats

E in parallel relation to the centrally disposed shaft, which slats are drawn inwardly and secured by hoops F, like straight staves of a cylindrical barrel, to constitute the drum portion A. Either variety of springs may be used.

G represents an end closure or drumhead covering each end of the drum and perforated therethrough, for the shaft B, which perforation is covered by a disk H, fitting close around the shaft B, either inside or outside of the drumheads, which disks slide over the faces of the drumheads when the drum oscillates, when weight is put upon it while the shaft is stationary. The perforation is made large, as not to permit the drumhead to come in contact with the shaft, during said oscillation of the drum. The disk also is sufficiently large to cover the perforation, but not large enough to touch the drum during the oscillation thereof.

M is a web, which may be used as shown by the solid lines, slung around the drum at each end of the bedstead, or may be slung around only one drum and the other end laced to the other drum at the points O by the adjustable cord N; or the web may extend around both drums like a belt around two pulleys, as shown by the dotted lines in Fig. 2, and its ends fastened together by the adjustable cord N or by other means.

In Figs. 3 and 4 the shaft B of the spring bolster unit engages with the bedpost Z by means of the bracket S, attached to the bedpost, or by any other suitable means. The shaft B may take the place of the end rails X to form an integral part of the head and foot pieces of the bedstead, the rails X may then be omitted altogether or moved above or below the spring bolster; which latter method of holding the unit to the bedstead differs from that shown in Fig. 1, in that in Fig. 1 the shaft B is held to the side bed rails and not to the head and foot pieces of the bedstead as in Fig. 2.

In Figs. 1 and 2 the removal of the side rails Y obviously takes with them the elastic medium or spring bolster from the bedstead; but in Figs. 3 and 4 the removal of the side rails Y leaves the unit engaged with the head and foot pieces or bedposts Z of the bedstead, of which head or foot pieces they may form an integral part, as described.

Q represents a stuffed mattress which may

be placed between the head and foot bolsters to space the upper and lower portions of the web M.

The spring bolster, considered as a unit, is 5 capable of complete revolution on its axis, so as to bring all the springs into play, from time to time, in equal ratio. And when in use the axis of the drum will be drawn away from the shaft whereby the shaft is made 10 slightly eccentric with the drum when the latter oscillates; by which function the springs in the drum impart elasticity to the bed.

What I claim is:—

15 1. In a spring bed, an elastic spring bolster comprising in combination a drum portion, a centrally disposed shaft longer than the drum, and engaging at each end with portions of the bedstead, a series of spiral 20 springs inside the drum having their longitudinal axes radial to the shaft, drumheads perforated therethrough, having the perforation large enough to prevent contact between the drumheads and the shaft, disks 25 around the shaft covering and sliding over said perforations, but not large enough to come in contact with the drum portion when oscillating, substantially as described.

30 2. A spring bed comprising in combination a spring bolster unit at the head and foot; each of which units consists of a drum, a centrally disposed shaft longer than the drum and extending therethrough, and engaging at each end with portions of the bedstead, spiral springs seated around the shaft 35 portion inside the drum with their axes radial to the shaft, drumheads perforated therethrough, the perforations large enough

not to touch the shaft when the drum oscillates, disks around the shaft, covering and 40 sliding over said perforations in the drumheads, without coming in contact with the drum when the drum oscillates, means for directly connecting the drum portions of the units at the head and foot so that a mattress, 45 may be sustained by said units in an elastic way, substantially as described.

3. A spring bed comprising in combination an elastic unit, designated as a spring 50 bolster, constituting an integral part of the head piece and a similar bolster constituting an integral part of the foot piece, respectively, of a bedstead, each of which bolster units consists of a drum, a centrally disposed 55 shaft longer than the drum, engaging at each end with portions of the bedstead as an integral part of the head and foot pieces thereof, spiral springs seated around the shaft with their longitudinal axes radial to the shaft portion inside the drum, drum- 60 heads perforated therethrough, the perforations so large as not to touch the shaft when oscillating, disks around the shaft covering and sliding over said perforations, but not 65 so large as to permit contact between the disks and the drum, during the oscillation of the drum, a web connecting the head and foot spring bolsters, substantially as described.

In testimony whereof, I sign this specification in the presence of two witnesses. 70

LE VERT CLARK.

Witnesses:

FREDERICK W. MELLOR,
ALFRED M. LOW.