

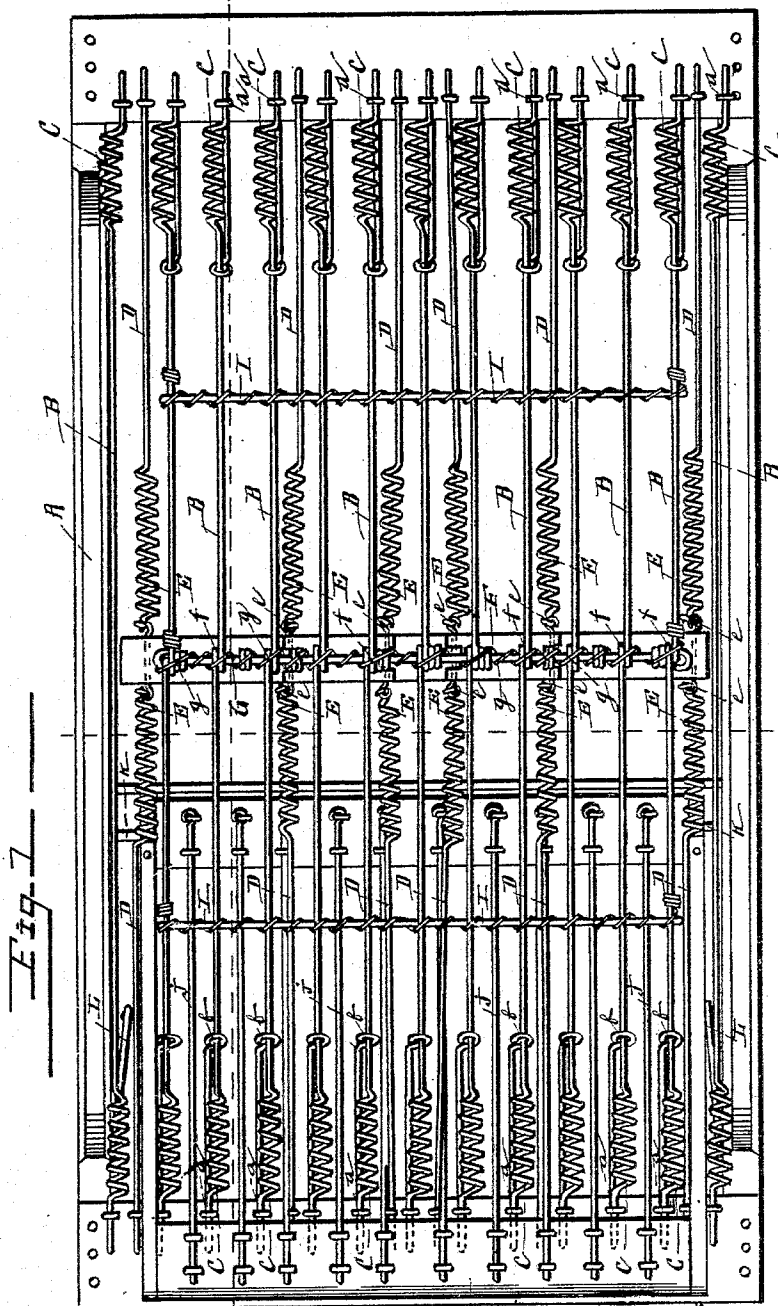
(No Model.)

2 Sheets—Sheet 1.

M. C. SILVER.
SPRING BED BOTTOM.

No. 514,386.

Patented Feb. 6, 1894.



WITNESSES

Geo. M. Anderson
Philo. Masi.

INVENTOR

M. C. Silver
by E. W. Anderson
his Attorney

(No Model.)

2 Sheets—Sheet 2.

M. C. SILVER.
SPRING BED BOTTOM.

No. 514,386.

Patented Feb. 6, 1894.

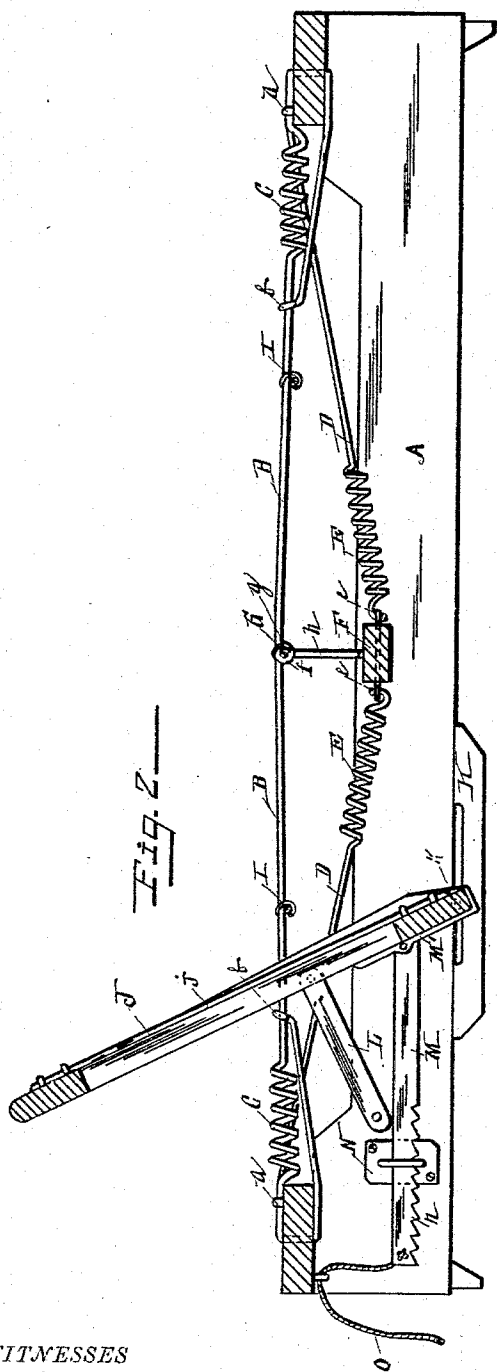


Fig. 2

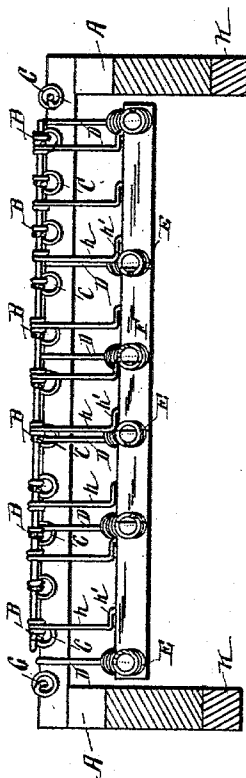


Fig. 3

WITNESSES

James M. Watson
Phil C. Massi

INVENTOR

M. C. Silver
W. W. Anderson
his Attorney

UNITED STATES PATENT OFFICE.

MARVIN C. SILVER, OF TUNKHANNOCK, PENNSYLVANIA.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 514,386, dated February 6, 1894.

Application filed August 31, 1893. Serial No. 484,481. (No model.)

To all whom it may concern:

Be it known that I, MARVIN C. SILVER, a citizen of the United States, and a resident of Tunkhannock, in the county of Wyoming and State of Pennsylvania, have invented certain new and useful Improvements in Spring Bed-Bottoms; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a top plan view of the invention. Fig. 2 is a vertical longitudinal section of the same and Fig. 3 is a vertical transverse section of the same.

This invention has relation to certain new and useful improvements in bed bottoms, and it consists in the novel construction and combination of parts, all as hereinafter described and pointed out in the accompanying claims.

The invention is designed to provide an article of the character above named which will be superior in many respects to those of similar character heretofore known and used, and especially in points of comfort, convenience, strength, and durability, all as will more fully hereinafter appear.

Referring to the accompanying drawings, the letter A designates the frame of the bed bottom, and shown as comprising a head piece, foot piece, side pieces, and transverse stay rod *a*, all secured together in any suitable manner. Stretched between the end pieces of the frame is a series of longitudinal parallel wires B, each of which at the portions next said end pieces, is formed into coils or helices C. The end portions of each of the wires, after leaving the coils, are secured at *a* to the said end pieces, and pass vertically down through small openings therein; and from the under side of said pieces are bent back underneath the coils and terminate in eyes *b*, which are bent around the main portion of the wire a short distance from the coils, all as clearly shown in the drawings, and especially in Fig. 2.

Secured to each end piece of the frame, between the wires B, is a series of wires D which extend obliquely and downwardly to

the central portion of the bed bottom, and terminate each in a coil or helix E. Said helices are attached to small hooks or eyes *e*, or by other suitable means, to a transverse, jointed bar F, which is a little shorter than the width of the frame, and extends across between the ends of the two series of the wires D. The wires D are usually less in number than the wires B, about one wire D to every three of the wires B being generally sufficient, although I do not limit myself to such arrangement.

Each wire B at about its center is bent to form a small depending eye *f*, and through the series of these eyes so formed, extends a transverse rod or wire G. In order to prevent the wires B any lateral movement upon said rod or wire G they are shown as secured by means of a small wire *g* which is wound around said wires B, and the rod or wire G.

The bar F is composed of a plurality of short sections pivotally jointed one to another. Connecting said bar and the rod or wire G is a series of vertical rods *h*, whose upper ends are firmly secured to said rod or wire, and their lower ends to said bar. Where the end of each of the rods *h* enters the bar F, it is given a horizontal bend, as at *h'*, in order to give it a bearing upon said bar F, and enable the latter to support the bed. The rods *h* also hold the two series of wires the proper distance from each other, and are of such length as to normally raise the central portions of the wires B, as shown in Fig. 2. The two lateral wires B are usually not connected to the rod G and bar F.

It will be observed that the bar F serves to support the central portion of the bed which bears the greater weight, while its jointed construction allows every portion of the bed and bed bottom to yield in correspondence to the weight which such portion sustains. It will be further observed that while the coils or helices C are free to act under any reasonable weight, they are prevented from sufficient endwise extension to injure them by reason of the eyes *b* which serve as stops to limit their elongation beyond a certain point.

The wires B may be further supported by means of transverse equalizing rods or wires I. In the drawings I have shown one such rod or wire about midway between the rod or

wire G and each end piece of the frame. These rods or wires, in connection with the rod or wire G, serve to equalize the strain over the entire bottom, and prevent an undue strain upon any one portion of the bottom.

A further feature of the invention consists in the provision of a head rest J, which is shown as consisting of a rectangular frame with a filling *j* of wires firmly secured at their end portions to said frame. Said frame is of such width as to permit it to work between the side pieces of the frame A, its filling wires passing between the wires of the bottom proper. At each lower lateral portion of the frame of the head rest is a projecting stud or pin *k* which works in a slotted guide piece K secured to the side pieces of the frame A.

L L are links, one at each side, and connecting the lateral portions of the head rest with the inner faces of the side pieces of the frame A.

M M, are extension bars, one each side, and pivoted each at one end in a slotted plate M' on the lower under corner portion of the rest, and at the other end working loosely in guides N carried by the inner faces of the side pieces of the frame A, near the head end. Said bars are provided each with a series of notches or teeth *n* which are arranged to engage the guides and support the head rest at any desired degree of inclination. The bars M, M may be lifted from engagement with the guides by means of a cord O, or other suitable means. An important feature of this head rest consists in the fact that when raised up it does not shorten the bed in the manner of ordinary head rests, and also in its great facility for adjustment.

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

1. In a bed bottom, the combination of a frame, a series of longitudinal wires stretched between the end pieces of said frame, a coil or helix at each end portion of said wires, a transverse rod or wire secured to the central portions of said wires, a jointed transverse bar underneath said rod or wire and rigidly connected thereto and a series of wires attached to said bar at one end portion and to the end pieces of the frame at their opposite portions, substantially as specified.

2. In a bed bottom, the combination of a frame, a series of longitudinal wires connecting the end portions of said frame, a coil or helix at each end portion of each of said wires, means for limiting the endwise elongation of said coils or helices, a rod or wire extending transversely of the central portions of said wires and secured to each, a transverse jointed bar below said rod or wire and rigidly connected thereto, a series of wires attached to said bar and to each end piece of the frame,

and a coil or helix in each of said wires, substantially as specified.

3. In a bed bottom, the combination of the frame, the longitudinal wires B having the coils or helices therein, the transverse equalizing wires or rods I and G, the transverse jointed bar beneath the wire or rod G, and the wires D having each a coil or helix therein, substantially as specified.

4. In a bed bottom, the combination with a frame, of a series of longitudinal wires connecting the end pieces of said frame, a coil formed in each of said wires near its end portions, said end portions being each secured to the frame, passed down therethrough, and bent back underneath the coil, and terminating in an eye bent around the main portion of the wire near the coil, and serving as a limit to its elongation, substantially as specified.

5. A bed bottom comprising a frame, the longitudinal wires B having each a coil or helix near each end, and extended and bent at its end portions to form guards for said coils or helices, the transverse equalizing wires or rods I and G, the jointed bar F below the wire or rod G, the vertical rods connecting said wire or rod G and bar F, and having a bearing on the latter, and wires D connected at one end to said bar F and at the other end to the respective end pieces of the frame, and having each a coil or helix therein near that end portion which is connected to the bar F, substantially as specified.

6. In a bed bottom, the combination with the wires B, and the transverse rod or wire G to which said wires are secured, of the bar F underneath said wire or rod G, and formed from a plurality of sections loosely jointed one to another, a series of rods connecting said bar with the wire or rod G, and having each a bearing on said bar, and a series of wires connected to said bar and running to the frame, substantially as described.

7. A bed bottom, comprising a frame, a series of longitudinal wires stretched between the end pieces of said frame, a coil or helix in each end portion of said wires, a transverse rod or wire secured to the central portions of said wires, a jointed transverse bar below said rod or wire and rigidly connected thereto, a series of wires connected to said bar at one end portion of each, and at their opposite end portions to the end pieces of the frame, and a head rest section adjustably hung in one end portion of said frame, substantially as specified.

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

MARVIN C. SILVER.

Witnesses:

HOWARD FLANDERS,
S. C. STOKES.