(Model.) 2 Sheets—Sheet 1.

W. J. LOWE.

SPRING BED BOTTOM.

No. 254,831. Patented Mar. 14, 1882.

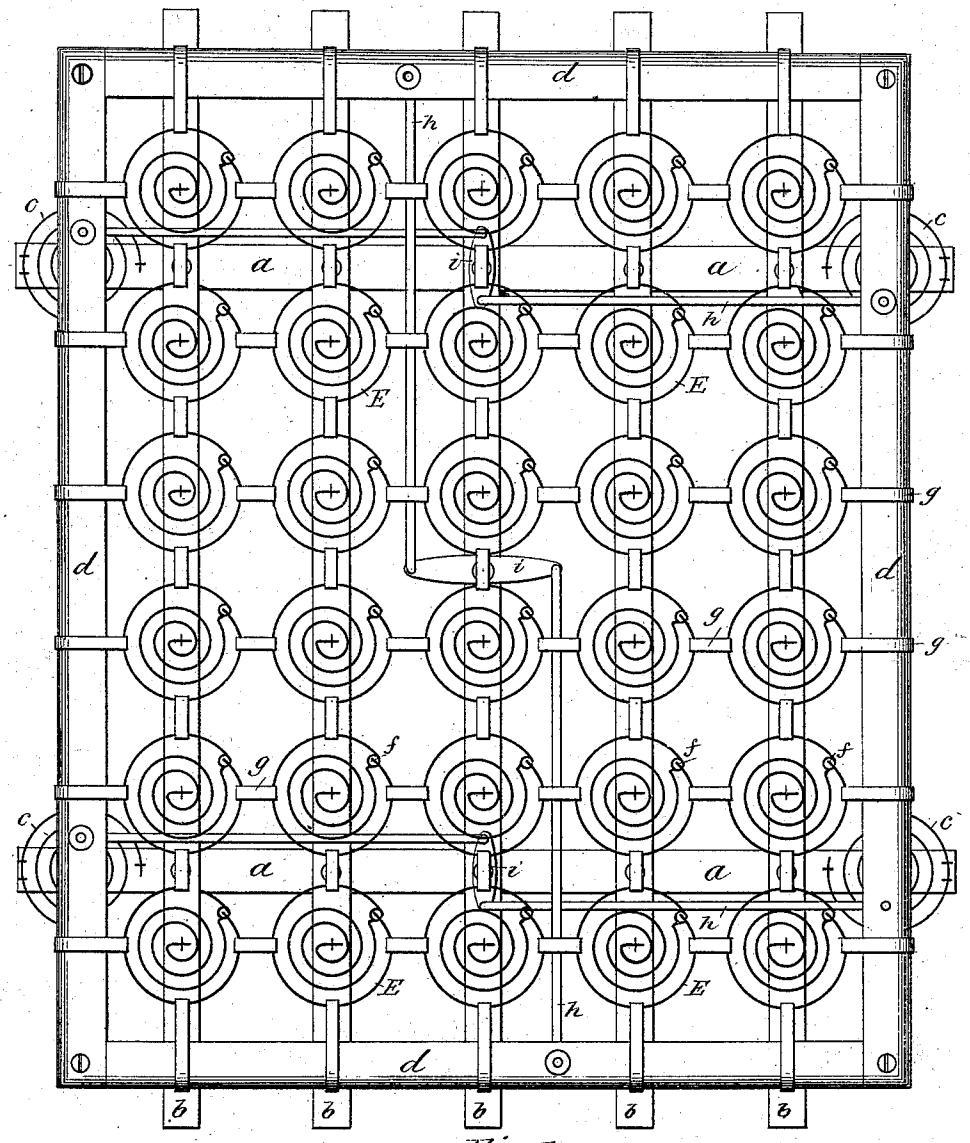


Fig. 1.

Witnesses.

Elmer E. Lowe

Dennis L. Rogers

Inventor

Wm. J. Lowe

N. PETERS. Photo-Lithographer. Washington, D. C.

(Model.) 2 Sheets—Sheet 2.

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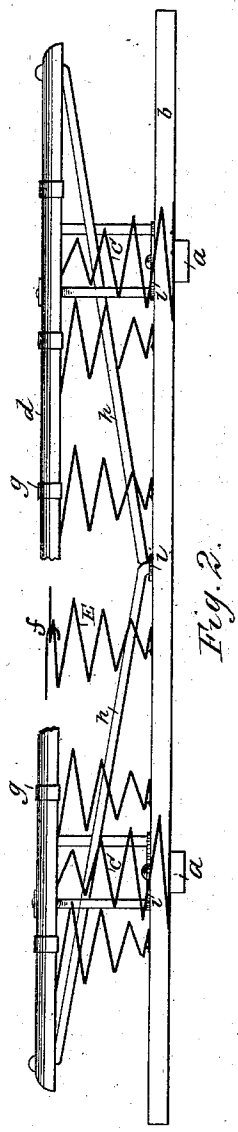


Fig. 2.

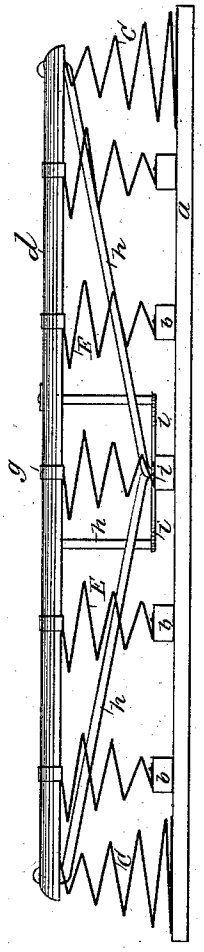


Fig. 3.

Witnesses.

Elmer E. Lowe

Dennis L. Rogers

Inventor.

Will J. Lowe

N. PETERS. Photo-Lithographer. Washington. D. C.

UNITED STATES PATENT OFFICE.

WILL J. LOWE, OF GRAND RAPIDS, MICHIGAN.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 254,831, dated March 14, 1882.

Application filed August 25, 1881. (Model.)

To all whom it may concern:

Be it known that I, WILL J. LOWE, of the city of Grand Rapids, Michigan, have invented a new and useful Improvement in Spring-Bottoms for Beds, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to the construction of a spring bed-bottom so constructed and arranged as to present an even upper surface upon which the mattress is to rest, and which will be strong and durable, retain its shape, and upon which the pressure will be equally resisted at all points, and so equalized and adjusted as to prevent sagging down either at the middle or at either side and prevent any lateral or swaying motion; and it consists of an upper and lower frame, the lower being constructed of common bed-slats, five or more being laid at suitable distances apart (so as to be lengthwise of the bed) and supported and fastened by two cross-pieces, to which they are firmly secured, thus forming a firm foundation upon which the other parts of the structure are to rest. The ends of the cross-pieces project a suitable distance and support four heavy spiral wire springs, upon which the upper frame rests. The upper frame is a simple right-angled parallelogram constructed of four strips of wood suitably joined at the ends. The four opposite sides of the upper frame are connected together, and further connected with the lower by four or more rods having their upper ends securely fastened to the upper frame and their lower ends to opposite ends of short bars or levers secured to the center slat by a bolt, allowing the levers a lateral motion in such a manner that pressing down upon one side causes a corresponding strain upon the other.

This device I call my "equalizer;" and the objects are, first, to prevent the frame from spreading apart; second, to prevent the upper frame from shoving or swaying laterally and overtopping the other; third, to strengthen and ventilate the entire structure.

I design putting two of these equalizers at the sides and one at each end of the bed.

My invention also consists of an improved method of constructing the springs, which may be called "conical spiral wire springs." Each spring is so constructed as to be self-supporting and is formed of spring-wire. Each spring, after being coiled in proper shape, has the large end bent into the shape of a hook. This hook is hooked into a loop or eye formed by taking a bend and a round turn in the wire so as to form the loop or eye at a suitable distance back, that the end, when coming around the last time, is hooked in as above set forth, thus securing the end and preventing the spring from spreading. This method of forming the spring is an essential feature in the construction of my bed, as will be seen. The springs so constructed are secured at suitable distances and in any required numbers to the lower frame at the apex, leaving the base upward. They are then connected with the upper frame and with each other by loops of hoop-iron, or other material, in the usual manner.

In the drawings, Figure 1 shows a plan view of my bed. Figs. 2 and 3 are end and side elevations respectively.

Similar letters of reference refer to corresponding parts.

a a represent the longitudinal slats; *b b*, the cross-pieces; *c c*, the large springs supporting the frame; *d d*, the frame; *e e*, the body-frame of the hook and eye; *g g*, the loops; *h h*, the rods; *i i*, bars bolted to the center slat, so as, in connection with the rods, to form double-action levers or equalizers, as above described.

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

1. In a spring bed-bottom, the combination, with the upper and lower frames and the intermediate springs, *c*, of the longitudinal rods *h h*, and pivoted connecting-bar *i*, and the transverse rods *h h*, and pivoted connecting-bars *i*, arranged near the forward and rear ends of the bed-bottom, substantially as and for the purpose herein shown and described.

2. In a spring bed-bottom, the combination, with the upper and lower frames, the intermediate springs, *c*, and the springs E, having the hook and eye *f*, of the longitudinal rods *h h*, and pivoted connecting-bar *i*, and the transverse rods *h h*, and pivoted connecting-bars *i*, arranged near the forward and rear ends of the bed-bottom, substantially as and for the purpose herein shown and described.

WILL J. LOWE.

Witnesses:

DENNIS L. ROGERS,

EDWIN A. BURLINGAME.