

(No Model.)

2 Sheets—Sheet 1.

LA FAYETTE WILDERMUTH.

SPRING BED BOTTOM.

No. 298,927.

Fig. 1. Patented May 20, 1884.

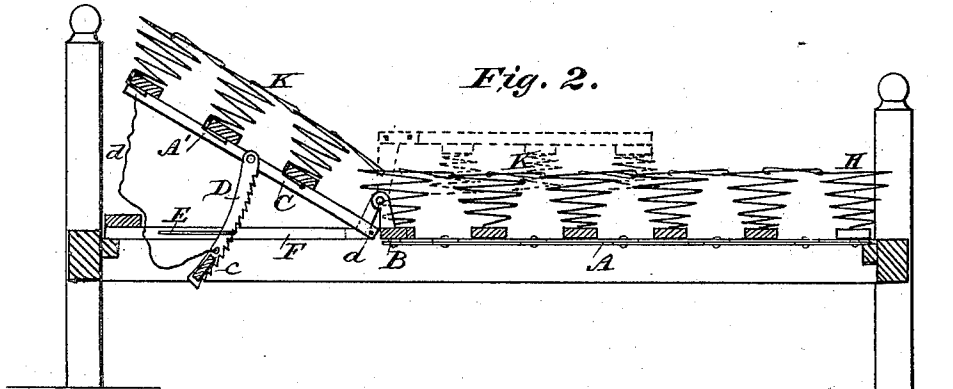
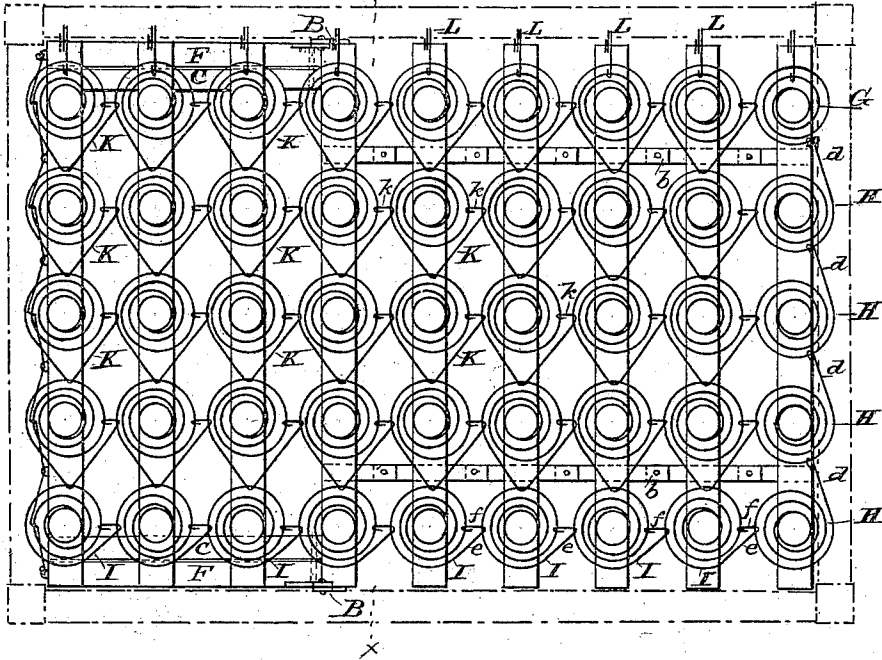
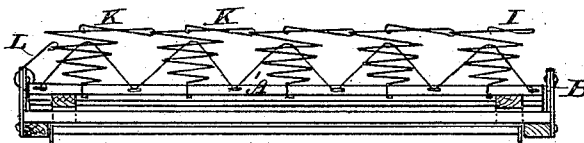


Fig. 3.



Witnesses:

T. C. Brecht,
W. S. Simsabaugh

Inventor:

Lafayette Wildermuth,

By W. S. Simsabaugh

Attorney.

LA FAYETTE WILDERMUTH.

SPRING BED BOTTOM.

No. 298,927.

Patented May 20, 1884.

Fig. 4.

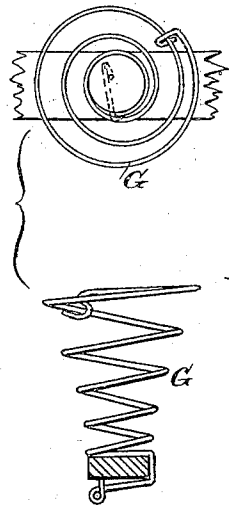


Fig. 5.

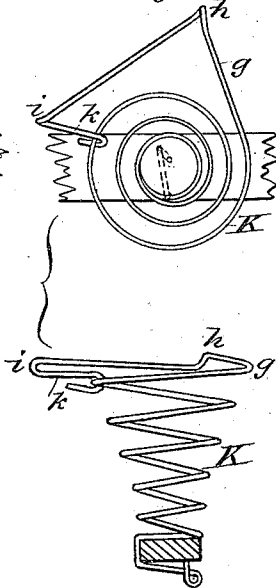


Fig. 6.

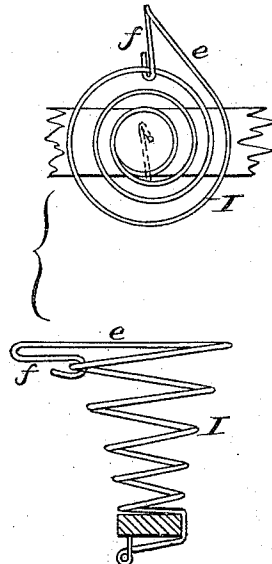


Fig. 7.

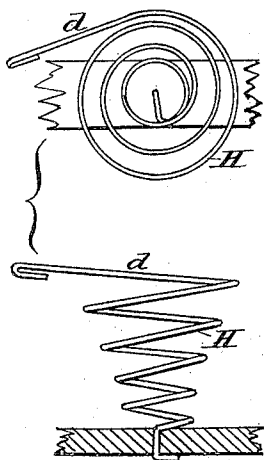


Fig. 8.

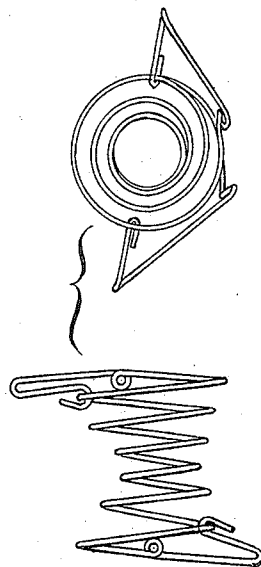


Fig. 9.

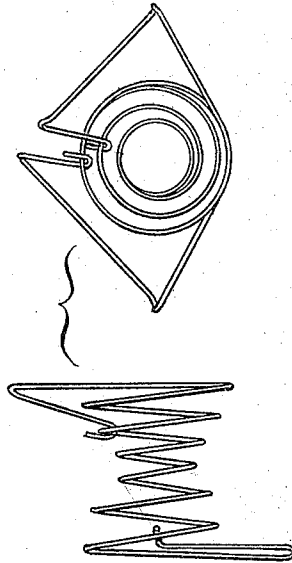
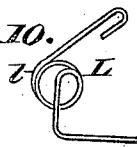


Fig. 10.



Witnesses:

T. C. Bricht
W. J. Sinsabaugh

Inventor:

Lafayette Wildermuth,
By E. J. Sinsabaugh
 Attorney.

UNITED STATES PATENT OFFICE.

LA FAYETTE WILDERMUTH, OF COLUMBUS, OHIO.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 298,927, dated May 20, 1884.

Application filed September 22, 1883. (No model.)

To all whom it may concern:

Be it known that I, LA FAYETTE WILDERMUTH, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Spring Bed-Bottoms, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to produce an adjustable, expansible, and folding spring bed-bottom; and to this end my invention consists of a spring bed-bottom composed of two sections, the slats composing one section being pivoted together by links, adapting the section to be expanded or contracted, while the slats of the other section are connected to a frame which is hinged to the adjustable section and adapted to be raised or lowered and held at any desired angle. My invention consists, further, in certain other features, which will be fully described, and pointed out in the claims.

Figure 1 is a top or plan view of my improved spring bed-bottom. Fig. 2 is a longitudinal sectional view showing the adjustable head-section in an elevated position, and folded in dotted lines. Fig. 3 is a sectional end view taken on the line *xx* of Fig. 1. Figs. 4, 5, and 6 are top and side views of some of the springs which I prefer to use in the construction of a bed-bottom. Fig. 7 is a top and plan view of another form of spring used in the construction of the bed-bottom when desired. Figs. 8 and 9 are top and plan views of double-cone springs, which are adapted to be joined together at the bottom and top, and thus form a complete bed-bottom without being connected to slats. Fig. 10 is a side view of a spring-stay for bracing the outer row or rows of springs.

The bed-bottom is composed of two sections, A and A', hinged together at *a* by "back-flap" hinges B, so that the section A' can be folded over onto the section A, with the springs on the slats. The slats which compose the section A' are secured to cross-slats C, said slats being provided with ratchet or rack bars D, which engage with long metal staples E, secured to a supplemental frame, F, and by which means the section A' can be adjusted to any desired angle, so as to raise the head of the device to

any desired angle. The slats of the section A are joined or connected by a series of pivoted bars or links, *b*, secured to the under sides of the slats. These links are pivoted together at their ends between the slats, and thus admit of the slats being brought together edge to edge in a straight line, thereby rendering the bed-bottom adjustable to suit beds of different sizes. By pushing the slats of the section A close together and folding the section A' over onto it, the bed-bottom can be made to occupy a much smaller space and be more readily handled when being transported from place to place.

A side view of the bed-bottom as folded is shown in dotted lines in Fig. 2, the section A being extended.

It will be noticed that the ratchet-bars D, for supporting and adjusting the section A', are curved, so that when the section A' is lowered to the same level with the section A the ends of the ratchet-bars will project toward the head of the bed and be out of the way. The ratchet-bars are connected by a bar, *c*, to which a cord, *d*, is attached, and by which means the ratchet-bars are pulled back out of engagement with the staples and the section A' lowered.

Having described the construction of the frame and slats which form the support of the springs, I will now proceed to describe the construction of the springs and their connections which form the bed-bottom, and by which means the bottom can be contracted and folded on itself.

It will be observed that the bottom is composed of four different kinds of springs, or rather the springs have different kinds of terminals or arms by which they are connected together. These springs are shown in plan and side views in Figs. 4, 5, 6, and 7.

G is the corner spring, which may be placed at the starting or finishing corner. It is a plain spiral spring having its upper end bent back and around the upper coil.

H and I are springs used for one side and end of the bottom. The springs H have an extension, *d*, which projects forward and hooks over the adjacent spring, which is on the same slat, while the springs I have an extension, *e*, which is bent to embrace the top coil of the spring on the adjacent slat, with a return-arm,

f, which embraces or hooks over the top coil of its own spiral. (See Fig. 6.) I may use either form of spring—*i. e.*, either spring H or I—for the side and end of the bottom.

5 K is the spring which I use for the main portion of the bed-bottom. It is provided with an arm, *g*, bent to form two angles, *h* and *i*, to embrace two adjacent springs, and a return-arm, *k*, adapted to hook over the top coil
10 of its own spiral. By this construction and arrangement of spring the return-arms *f* and *k* permit the springs to be placed close together when the slats are in contact with each other, and thus the bed-bottom is made adjustable in a longitudinal direction. The arms
15 *f* and *k*, being simply placed around the top coil of the adjacent spring, admit of the section A' being turned or folded over onto the section A. The shank or lower portion of the
20 springs which clasp the slats is bent to conform to the slat, and a coil or coils is made on the end of the wire, so that the extreme end of the wire will project upward and impinge on the under side of the slat. This forms a
25 firm bearing and the spring is held more securely on the slat.

L are bracing or steadying springs, one end of which is driven into the end of the slat, while the other end is bent and adapted to be
30 hooked over one of the coils of the outer spring. This bracing-spring is rendered flexible by means of the coils *l*, made therein, and when placed as described braces the springs of the bed-bottom and prevents the springs from being bent over, and the lateral displacement of
35 the springs is obviated.

In Figs. 8 and 9 I have shown in plan and

side views two forms of double-cone springs with extensions at the bottom and top for engaging with adjacent springs. These springs, 40 when properly connected together, form a mattress which is adapted to be laid on the bottom or slats of the bed. I have seen fit to show these double-cone springs, but do not herein claim them, reserving to myself 45 the right to make a separate application therefor.

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

1. A spring bed-bottom composed of springs 50 and spring-bearing slats, and links pivoted to and connecting said slats, as described, in combination with the hinged and adjustable head-section A and supplemental frame F, as set forth. 55

2. A spring bed-bottom composed of sections A and A' and F, hinged together as described, section A consisting of slats and links pivoted to and connecting the same together, as set forth. 60

3. A bed-bottom composed of a series of spiral springs, said springs having arms *g*, bent to form two angles, *h* and *i*, which embrace the top coils of two adjacent springs, and return-arm *k*, adapted to hook over the top coil of its own spiral, in combination with slats and links pivoted to and connecting the same, as set forth. 65

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

LA FAYETTE WILDERMUTH.

Witnesses:

G. A. MARSHALL,
P. H. CONLEY.