## L. WILDERMUTH. Spring-Bed Bottoms.

No. 220,557.

Patented Oct. 14, 1879.

FIG. I.

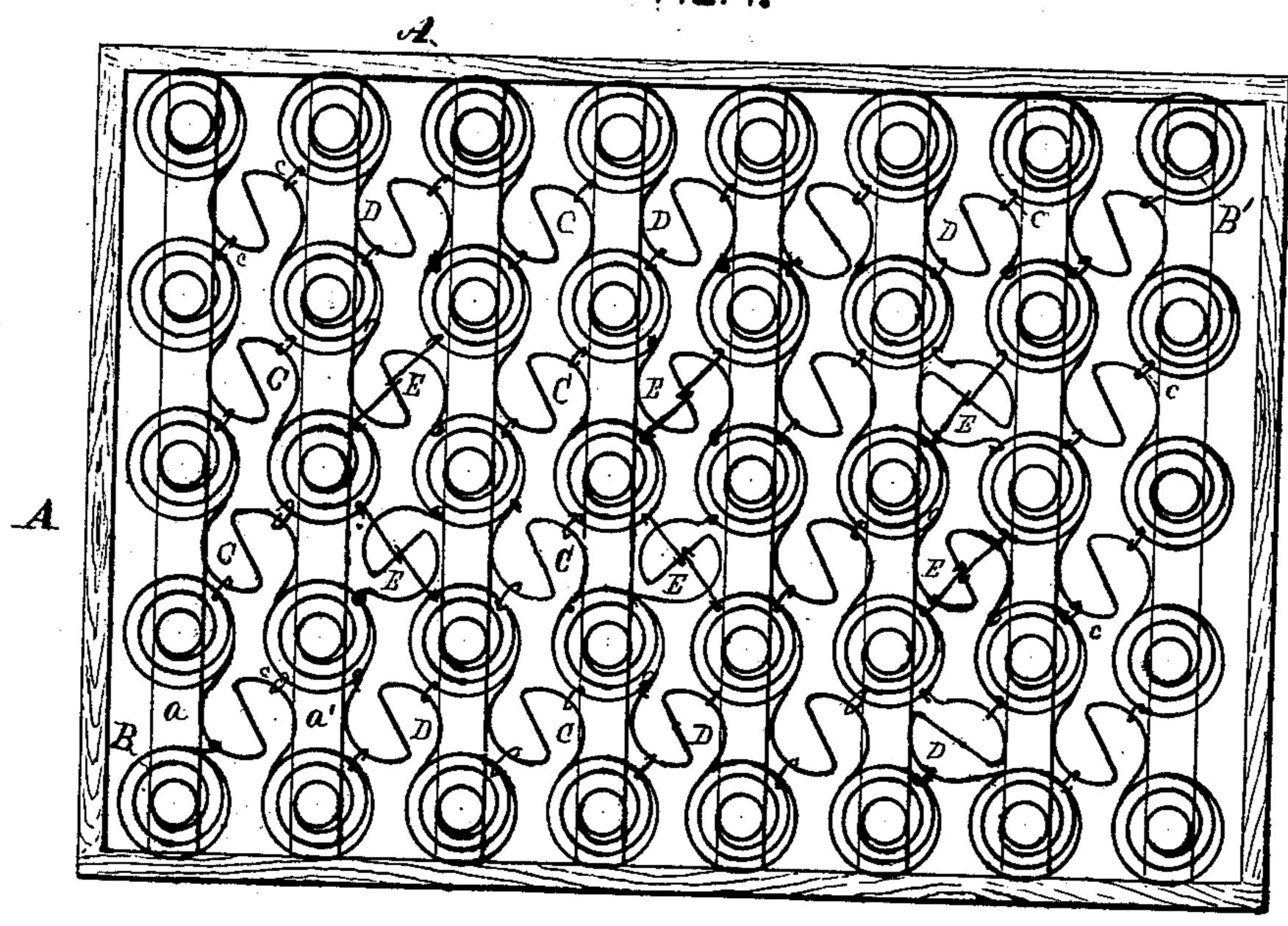


FIG. II.

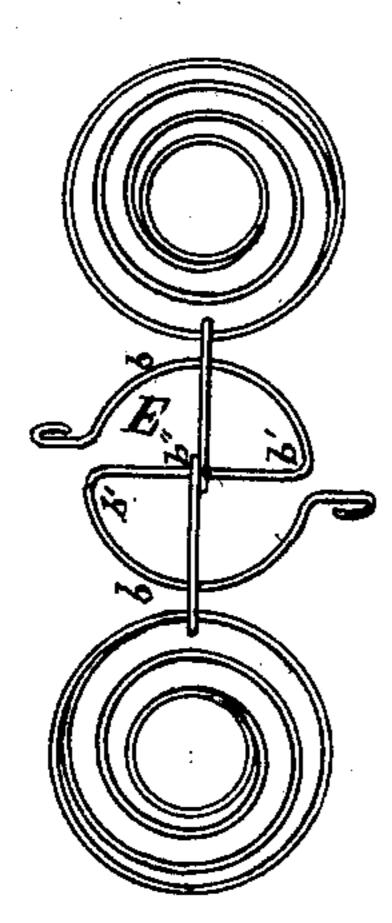


FIG. III.

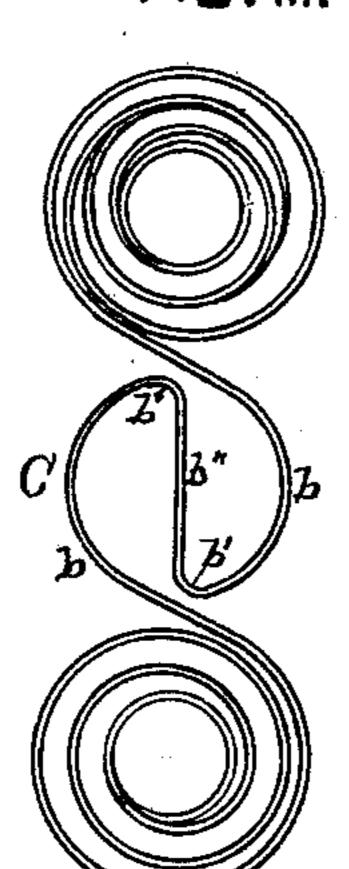
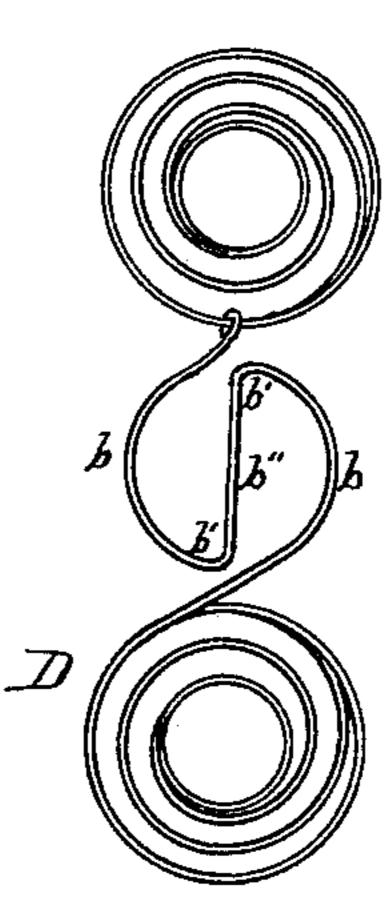


FIG. IV.



WITNESSES.
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A Hayette Millermut

## UNITED STATES PATENT OFFICE.

LA FAYETTE WILDERMUTH, OF NEW LEXINGTON, OHIO.

## IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. 220,557, dated October 14, 1879; application filed July 11, 1879.

To all whom it may concern:

Be it known that I, LA FAYETTE WILDER-MUTH, of New Lexington, in the county of Perry and State of Ohio, have invented a new and useful Improvement in Spring Bed-Bottoms, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a plan view of a bed-bottom composed of my improved springs. Fig. 2 is a plan view of a spring-wire connection connecting the ends of two sets of double springs. Fig. 3 is a plan view of the double spring, showing the peculiar form of the spring-wire connection. Fig. 4 is a plan view of an armed spring as connected to an ordinary spring.

Referring to the drawings, A designates a frame containing the slats to which the springs are secured. I may, however, and shall, when occasion requires it, dispense with the frame A, and apply my springs to the ordinary slats of a bedstead.

It will be observed that I construct my bed of three different kinds of springs, viz: single springs, B and B', of ordinary construction, double springs C, and single springs D, having an arm of peculiar construction. Only two single springs are used; one, B, being placed at one corner, (the commencing-corner,) the other, B', at the diagonally opposite or finishing corner.

Having attached the spring B to the slat a, I next attach one end of the double spring C to the same slat, the other end of said spring C being secured in like manner to slat a' in a diagonal line to the length of the bed-frame. A series of double springs is then secured in a similar manner to the slats a and a' the entire width of the bed.

It will be noticed that by placing the double springs in a diagonal position the slat a will be filled first, and that there will be a space left at the end of the slat a'. This space I fill by attaching the armed spring D to said slat at that point, and direct its arm forward to engage diagonally with a double spring in the next row or series. The next row or series of double springs is secured in a similar or like manner as the first, while two armed springs, D, are used, one at each end of the row and at diagonal corners, to fill up the spaces left va-

cant by the diagonal arrangement of the double

springs.

The arm of one of the single springs is secured in a diagonal direction to the second double spring of the first row or series, while the arm of the other spring is secured to the second double spring of the third row or series of double springs. This arrangement is continued until the entire bed-bottom is constructed, a plain spring of common construction being used at the finishing-corner, as shown at B'.

The adjacent ends of the double springs are connected together by means of the spring-wire connection E, which is provided with a short wire bent around its straight central bar to hold it in position, the ends of which are bent to form hooks. I may, however, dispense with this short wire, and connect to the double springs with short links, which will make the connection more elastic.

The ends of the main wire of the spring-connection E are also bent to form hooks, so that each of these spring-wire connections is provided with four hooks, to engage with two pairs of double springs and fill up the space between them.

The double springs are of peculiar construction, and instead of forming them in the usual manner I bend the portion of wire which connects the two springs outwardly, so as to form two semicircles, b, and sharp return curves b', joined by a straight central section, b'', the curved and straight sections lying in one plane.

It will be noticed that the extension of the armed spring D, as well as the main portion of the spring-wire connection E, are of the same construction in general outline, and when they are arranged as shown and described, I form a compact and continuous surface on which the bed is supported, and a yielding connection in all directions is obtained, which makes the bed self-adjusting.

Small links c are used for connecting the central or connecting portion of the double springs with the spirals of the springs proper, as shown.

manner as the first, while two armed springs, D, are used, one at each end of the row and at diagonal corners, to fill up the spaces left value and wire spring connections E the double

springs can be readily removed in sections of | two slats each, and thus form a convenient and expeditious arrangement for taking down and putting up my spring-bed.

Having thus described my invention, what

I claim is—

1. The spring-connection for spiral springs consisting of wire bent outwardly into two semicircles, b, and sharp return curves b', joined by a central straight section, b'', the curved and straight sections lying in one plane.

2. The double spring C, having its integral connecting portion on the same plane with the tops of the spring bent outwardly into semicircles, and by sharp return curves b' form-

ing a straight central section, b'', connecting said semicircles, whereby a yielding spring-

connection is made, as set forth.

3. In a bed-bottom, the combination of the double springs C and armed springs D, with their spring-connections arranged diagonally, as shown, with the springs B and B', wirespring connections E, and links c, all constructed and arranged substantially in the manner described.

## LA FAYETTE WILDERMUTH.

In presence of— LAWSON A. TUSSING, FRANK MATHEWS.