S. P. Kittle,

Bed Bottom.

No. 51,061. Patented Nov. 21, 1865.

Fig 1.

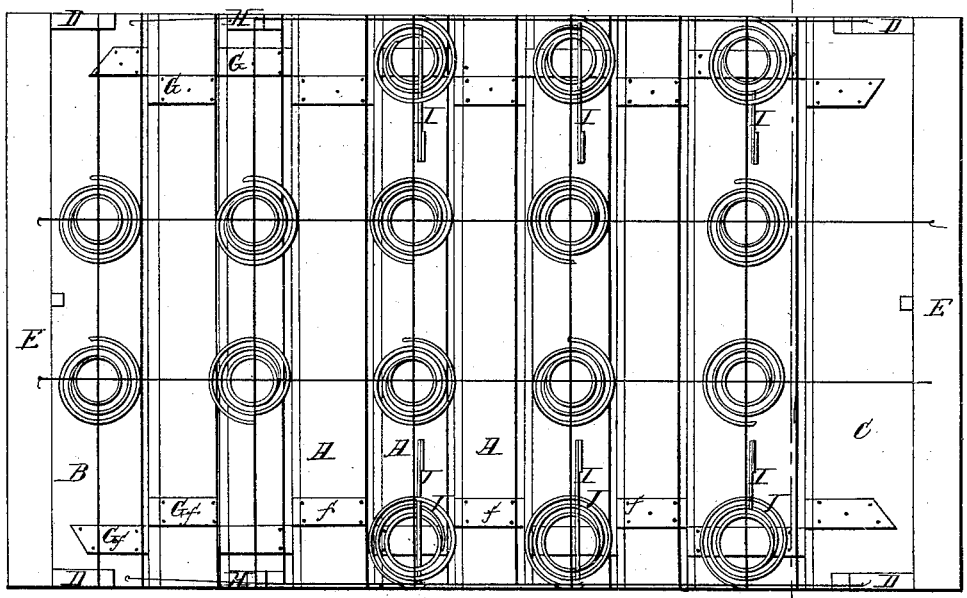


Fig. 2.

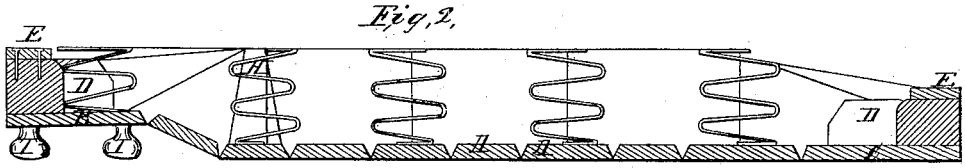


Fig. 4.

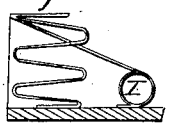


Fig 3

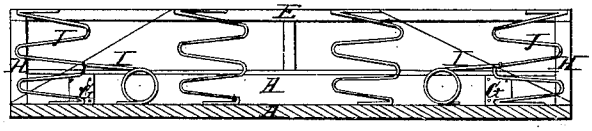
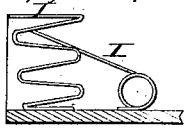


Fig. 5.



Witnesses.
Thos. P. Howe
Chas. E. Hore

Inventor
Samuel P. Kittle

UNITED STATES PATENT OFFICE.

SAMUEL P. KITTLE, OF BROOKLYN, NEW YORK.

SPRING BED-BOTTOM.

Specification forming part of Letters Patent No. **51,061**, dated November 21, 1865.

To all whom it may concern:

Be it known that I, SAMUEL P. KITTLE, of Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in Spring-Beds; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

In the drawings, Figure 1 is a plan of my improved bed or so much thereof as includes the frame and the springs. Fig. 2 is a vertical longitudinal central section. Fig. 3 is a vertical transverse section, showing the parts at the left hand of the line *x x*, Fig. 1. Fig. 4 is also a vertical transverse section in detail, showing one of the modifications of the general plan upon which the braces are attached to the springs. Fig. 5 is also a detailed section, showing another modification of the same thing.

The improvements which constitute my invention consist in, first, constructing the slats to which the springs are attached with beveled edges and weaving these slats together with webbing or strips of cloth extending through the series, so as to form close hinges, in the manner hereinafter described, or weaving in the slats bearing the springs and blocks in place of the others in the same manner; second, connecting the braces of the side springs below the top coil and above the center, as set forth.

In the drawings, A A represent the slats which form the middle portion of the bottom of the bed.

B and C are the head and foot slats, which are made of twice the width, or nearly so, of the inner slats. The head and foot slats have raising-blocks D D upon them, upon which the slats or bolstering-boards E are placed. These bolstering-boards are intended to support the head and foot of the bed or mattress placed upon them and to take the place of springs, thus reducing the expense of construction to a very material extent. They are also more indestructive than springs in the same place, and answer the necessary purposes.

F F are raising-pieces, which are placed under the head-slat of the bed. These I prefer to attach with screws, so that they may be easily and conveniently adjusted, and I prefer to make the one nearest the middle portion of the bed the highest, so as to tip back or incline slightly toward the head of the bed the head-slat, so as to secure the perfect and proper tension of the longitudinal cords, by which the tops of the springs are secured. The slats which form the base or bottom of this bed are secured together by weaving them into tapes G G, the tapes extending through the whole series of slats, forming a web and the slats a weft. The tapes are secured by tacks *f* to the slats as woven in. The springs are secured in position at the top by means of cords in a manner similar to that already known and practiced, and as shown in the drawings.

The side springs may be replaced by means of raised pieces H H, attached to the slats which support the side of the bed. These raised pieces should, however, be tapered or made narrower than the slats, to allow the bed to be rolled up, as shown in the drawings. They should be about two-thirds the height of the springs when the latter are in their normal position.

The side springs which are used may be braced, and should be, by the spring-brace I, as represented in Figs. 1, 3, 4, and 5. These braces I have found the best means of securing these springs from displacement, and upon experimenting upon their use I find that the best mode of applying them is to connect them to the spiral springs J J below the top coil, as answering all the purposes of a brace and at the same time avoiding some of the difficulties which apply to the attachment to the top coil, among which may be mentioned the improper direction of the sweep of the brace when it is attached at the top of the spring.

It will be observed that the breadths of the several slats intervening between the head and foot pieces vary, gradually increasing the width of the slats upon which the springs are supported for the two-fold purpose of securing a greater proximity of the springs in the head and middle than in the foot portion of the bed, and making the sections fit more neatly upon

each other in rolling. These slats are beveled as shown in the drawings, and the springs may be set upon each slat or each alternate slat, as desired. This arrangement is desired for the purpose of giving the necessary proximity of the springs, and at the same time to prevent the canvas which forms the casing at the bottom from being torn when the bed is made.

Having thus fully described my said invention, I claim—

1. The combination of the beveled slats A A and the webs or tapes G G or equivalent, the latter extending through the whole series of slats and the slats being woven in between the webs or tapes, as set forth.

2. Attaching the bracing-springs to the coil-supporting springs at a point below the first coil and above the center of the said supporting-spring, as set forth.

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