

F. Forst,
Bed Bottom,

N^o 4,578.

Patented June 16, 1846.

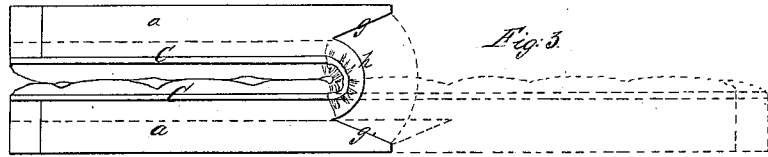


Fig. 3.

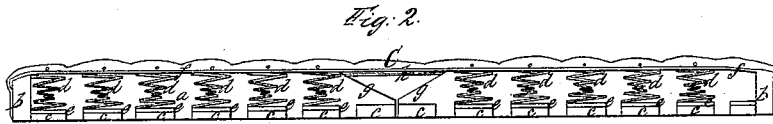


Fig. 2.



Fig. 1.

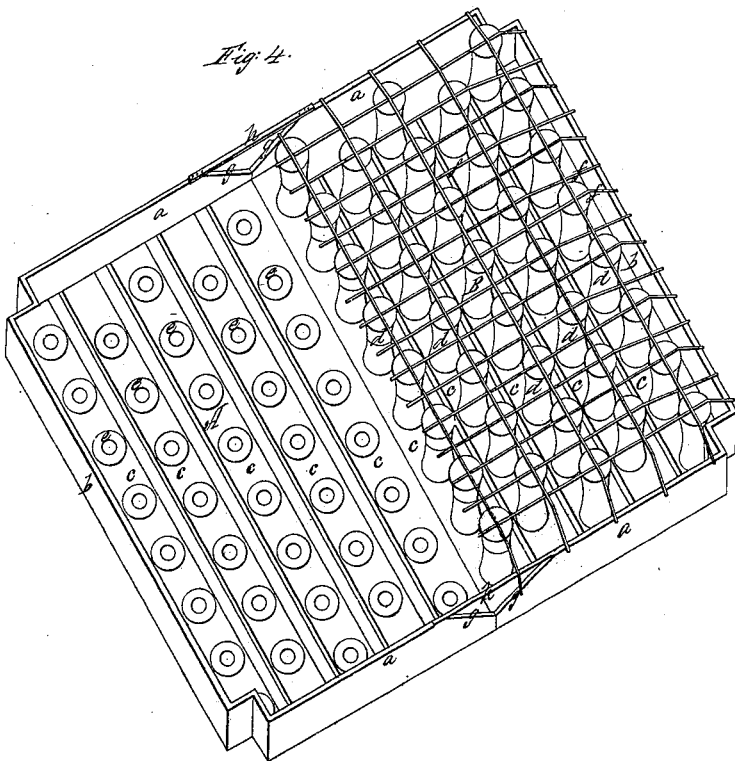


Fig. 4.

UNITED STATES PATENT OFFICE.

FREDERICK FORST, OF PHILADELPHIA, PENNSYLVANIA.

SPRING-MATTRESS.

Specification of Letters Patent No. 4,578, dated June 16, 1846.

To all whom it may concern:

Be it known that I, FREDERICK FORST, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Spring-Mattresses, and that the following is a full, clear, and exact description of the principle or character thereof, which distinguishes my invention from all other things before known, and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a longitudinal elevation; Fig. 2, a longitudinal vertical section; Fig. 3, a longitudinal elevation of the mattress doubled over, and Fig. 4, a perspective view with the mattress removed to exhibit the arrangement of springs and hinges.

The making of spring mattresses has been attended with much inconvenience in consequence of the size and difficulty of moving them, as the lower part which forms the bed for the springs is an unyielding wooden frame. To avoid this inconvenience they are frequently made in two parts, laid side by side, which leaves a hard ridge along the middle of the bed; but by my improvement I effect the desired end without injury to the elasticity of the entire surface, by making the length of the lower frame in two parts, the side pieces of which, where they come together, are sloped down and connected together by strong webbing or other suitable material, and then the covering properly stuffed, is attached to the upper edge of the two frames and the connecting webs or other ligaments which form the hinges to admit of bending or turning one half over onto the other.

In the accompanying drawings (A, B) represent the two parts of the frame formed by side and end pieces (*a, a*) and (*b, b*) connected with each other and with slats (*c*) to which the double spiral springs (*d*) are attached in the usual, or any desired manner.

In Fig. 4, one half is represented without the springs, but with the plates (*e*) to which they are secured; and the other half with the springs, the tops of which are held down by cords (*f*) passing over them and attached to the side and end pieces of the frame. Where the two halves of the frame come together the side pieces (*a, a*) are sloped down, as at (*g, g*), and connected together by strong pieces of web (*h, h*), or other

suitable material, properly secured to the side pieces, beyond where the slope commences. The mattress (C) is then in a proper manner attached to the side and end pieces of the frame and the connecting webs (*h, h*). The length of these two webs, between the points of attachment, is sufficient to admit of the folding of the mattress, as represented in Fig. 3, and the open space formed by the sloping of the side pieces, where they come together, and the bottom of the mattress is sufficient to give free play to the bulging of the mattress when it is being folded up, and at the same time affords a free ventilation.

It will be observed that the springs act in the same manner under that part of the mattress which lies over the open space, as they do elsewhere, the same space being left between the range of springs on each side of the opening, as between the other rows. And it will be obvious that the facility with which this mattress can be bent or folded will admit of placing the two parts at any desired angle for the ease of invalids. This method of constructing mattresses is peculiarly applicable to sofa and bureau bedsteads which require the cushion or mattress to bend, that one part may be folded over the other, or raised up to form the back cushion, the union of the two parts forming a regular curve which adds to its beauty and to the ease of persons reclining on it. I wish it to be distinctly understood that I do not limit myself to the making of mattresses in two parts only, but to extend it to any number of parts required so long as the union is formed in the manner substantially as herein described.

What I claim as my invention and desire to secure by Letters Patent is—

Making the frame to which the springs are attached, in two parts, connected together by means of strong webs, straps, or other substance substantially similar, in combination with the mattress, as herein described, whereby mattresses attached to a frame and resting on springs may be folded or turned up for moving them and for the ease of invalids, as fully specified above.

FREDERICK FORST.

Witnesses:

JOHN A. WHITS,
ENOCH MARPLE,
WM. H. WRIGHT.