

W. D. HATCH.  
Spring Bed-Bottom.

No. 164,170.

Patented June 8, 1875.

Fig. 1.

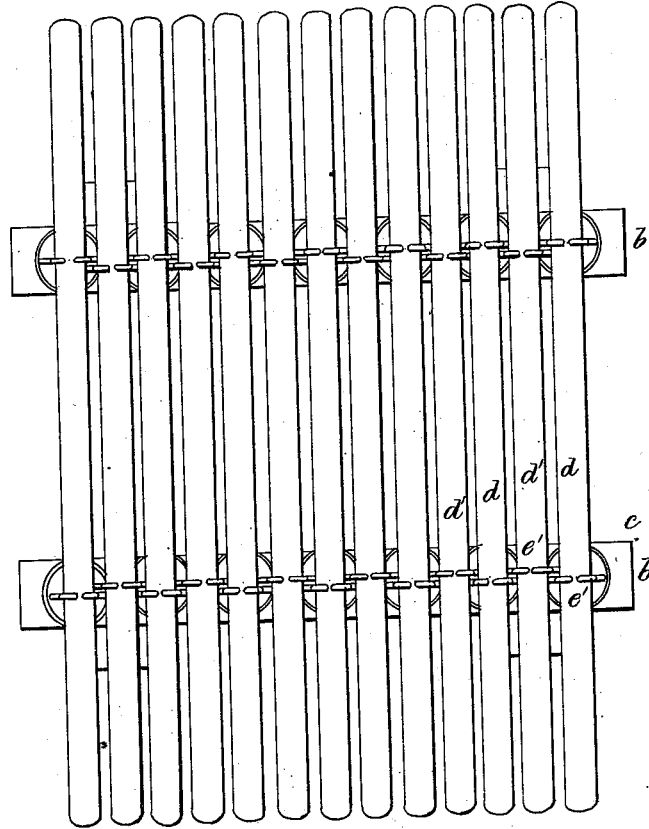


Fig. 2.

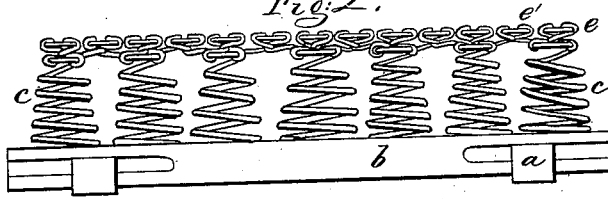


Fig. 4.

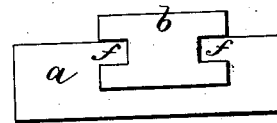
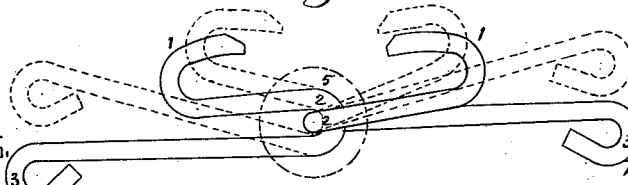


Fig. 3.



WITNESSES.

*Wm. C. Atimer*  
*Wm. Pratt.*

INVENTOR.

*Warren D. Hatch.*

per *Louisa Gregory*

Attys.

# UNITED STATES PATENT OFFICE.

WARREN D. HATCH, OF PETERBOROUGH, NEW HAMPSHIRE.

## IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. 164,170, dated June 8, 1875; application filed November 21, 1874.

*To all whom it may concern:*

Be it known that I, WARREN D. HATCH, of Peterborough, in the county of Hillsborough and State of New Hampshire, have invented Improvements in Spring-Bed, of which the following is a specification:

My invention relates to spring-beds or bed-bottoms; and consists in the combination, with a supporting-frame and slats, of springs and hooks or jaws, adapted to sustain and grasp such slats, as hereinafter described.

Figure 1 is a top view of my improved bed-bottom. Fig. 2 is an end view. Fig. 3 is a view of one of the slat-holding jaws or hooks detached; and Fig. 4 shows the method of connecting the pieces *a b*.

The spring-supporting cross-pieces or bars *b*, having grooves *b'* at each side of each end, are held together by side pieces *a*, mortised, as shown at Fig. 4, so as to leave tongues *f f*, that enter the grooves *b'*. These grooves grow shallow as they go back from the end of *b*, and the pieces *a* may be moved thereon as the wood of the pieces shrinks, and the frame may always be kept rigid.

The springs *c c* may be secured on the supporting-bar *b* in any suitable manner, and on the top of each spring I place and secure a slat-holder, *e*, formed, in this instance of my invention, of wire, bent as shown in Fig. 3, at 1 2 3, the bent portions 2 hooking each with the other, the portions 3 3 grasping the opposite sides of the same spring, and the jaw formed by the bends 1 1 serving to receive a slat.

Instead of wire, I may cast or otherwise form a hook in two parts, providing them with flat portions, as shown by dotted lines 5, Fig. 3, through which a rivet may be passed, forming a joint on which the parts may turn.

Fig. 3 shows this slat-holder or hook in two positions, the full lines showing its position when there is no weight on the slats, and the dotted lines the position the hooks assume when weight is applied to the slats, the jaws then acting to firmly grasp and hold the slats; and they so grasp and hold the slats that, when weight is applied to the slats,

they cannot slip through the jaws and sag or settle. These hooks or jaws *e* receive slats *d*, and another series of slat-holders or hooks, *e'*, like hooks *e*, but, preferably with longer shanks, receive slats *d'*. The ends 3 of these larger hooks *e'* are engaged with adjacent springs, and, besides receiving and holding slats, they serve to confine the springs *c c* together.

The springs and slat-holders or jaws, so connected, do not allow the bottom, composed of slats *d d'*, to move to any extent sidewise or lengthwise.

The slats are supported by the springs, and grasped by the jaws well back from their ends, and in this position the springs yield readily to the weight on the bed, and the slats being very light, and of tough elastic wood, also yield.

The springs and slats may be adjusted with relation to each other as may be desired, and should a slat become bent it may be removed and turned over, or if broken a new one may be quickly inserted. These slats are made about three-eighths of an inch thick, and a little over two inches wide.

With a bed-bottom constructed as described, a weight placed on one side—as, for instance, a person—will not change the position of the slats at the other side. When a weight is applied at each side, the slats and springs will yield to such weights where applied, and the slats at the middle will not sag, but will remain raised, forming a ridge between the depressed parts, and one person may come to, or leave, a bed of this construction, without disturbing the position of the slats forming that side of the bed occupied, it may be, by another person.

Having described my invention, I claim—

1. The combination, with spring-supporting pieces, springs, and slats, of hooked or hinged jaws *e*, attached to the springs and holding the slats, substantially as described.

2. The combination, with the springs and slats, of the hooked or hinged jaws *e'*, grasping the slats and connecting the springs, substantially as described.

3. The slat-holding jaws, hooked or hinged

together, and adapted to receive and retain the slats, substantially as set forth.

4. The combination, with the series of springs, of metallic slat-holders mounted on the springs, and metallic slat-holders connecting the adjacent springs, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WARREN D. HATCH.

Witnesses:

G. W. GREGORY,  
L. H. LATIMER.