T. R. JONES.

SPRING-BED BOTTOM.

No. 189,104. Patented April 3, 1877.

Fig. 1.

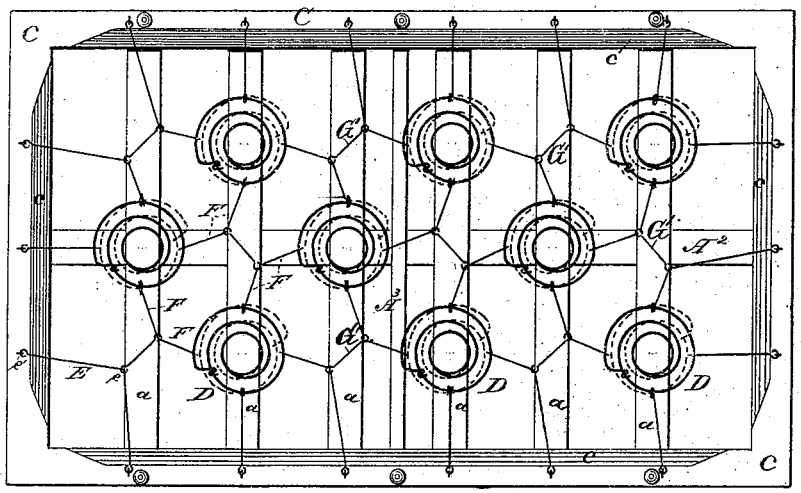


Fig. 2.

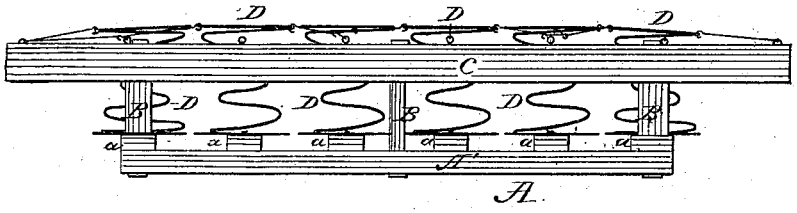
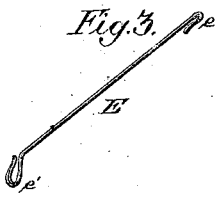


Fig. 3.



Attest:

E. E. Court.

Jno. P. Brookes.

Inventor:

Theodore R. Jones,

by Louis Bagger & Co.,

His attys.

UNITED STATES PATENT OFFICE.

THEODORE R. JONES, OF UTICA, NEW YORK.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **189,104**, dated April 3, 1877; application filed December 21, 1876.

To all whom it may concern:

Be it known that I, THEODORE R. JONES, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Spring Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a top plan, Fig. 2 is a side elevation, and Fig. 3 shows, in detail, one of the hooks E detached.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to spring bed-bottoms; and it consists, first, in the improved construction of the frame, and, secondly, in the construction of the hooks, by which the springs nearest to the frame are connected thereto, all as hereinafter more fully shown and specified.

In the drawing, A is the lower part of the frame. This consists of two longitudinal bars, A^1 A^1, having transverse slats *a a*. In order to insure strength a third bar, A^2, may be secured under the middle of slats *a*, as shown. A^3 is a cross-brace connecting bars A^1 A^1. The employment of this cross-brace enables the frame to be made of very light material, preventing it from bending and warping. At the ends and middle of bars A^1 are uprights B, upon which rests the upper frame C, it being secured by bolts passing through uprights B. Frame C is somewhat longer than frame A, so as to accommodate the springs placed upon the end slats of the latter. The inner sides of the bars forming frame C are beveled, as shown at *c c*, for the purposes hereinafter described. D D are the springs. In placing these upon the bottom I prefer to arrange them diagonally, as shown, the object of this being to provide an easier bed by causing the body of the occupant to rest upon a larger number of springs than could be the case if they were placed at right angles. The outer springs, or those nearest to frame C, are connected therewith in the following manner: E E are links or hooks consisting of pieces or strips of wire having at each end an eye or hook. One of the ends *e* is hooked over the upper coil of the spring, and the other end is bent, as shown at *e'*, and secured by means of a self-clinching staple-hook to the upper side of frame C. The inner sides of this frame being beveled, the links E are permitted to work perfectly free when the springs are depressed, this being also partly due to the fact of their being bent at *e'*. Apart from this, this method of connecting the springs to the frame is very efficient in keeping the former in position, and it is preferable to those bed-bottoms in which the connecting-links are secured to the under side of the upper frame, inasmuch as it leaves no space for the mattress and bed-clothing to settle down in, the result of which usually is that the springs and links become prematurely worn out and unfit for use.

The tops of every four springs are connected by means of wire hooks F in the following manner: Over the upper coil of each of the four springs, one end of each hook (or link) is secured; the other ends of the links F are then connected by means of a fifth link, G', two of the links F being hooked onto each end of the link G'. By connecting all the springs of the bed in this manner a very large number of joints is produced, thus permitting the bed to easily adapt itself to the occupant, and yet dividing the pressure evenly over the entire surface of the bed.

The operation and advantages of my improved spring bed-bottom will be readily understood from the foregoing description.

The double frame A C serves to protect the springs and keep them in place. The couplings by which the springs are connected with each other and with frame C equalize the wear upon the springs, and connect them firmly enough to keep them in place, and prevent them from slipping over, and yet, as will be found by experiment, each spring may be depressed almost independently of the rest, an object which, owing to the fact that a softer and easier bed is produced, is of great importance in the manufacture of spring-beds, and, in fact, in all kinds of furniture where

springs are used, and which is accomplished almost to perfection by my improved method of coupling or connecting the springs.

My improved construction of the coupling-links E, in combination with the slanting or inclined sides of frame C, permit all of the springs, even those closest to the frame C, to be depressed to their full capacity, thus giving additional elasticity and comfort to the bed.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The double frame for spring-beds, herein described, consisting of frame A, uprights B, slats *a*, cross-bar A^3, and upper frame C, the inner sides of which are beveled, substantially as and for the purpose herein shown and specified.

2. In a spring-bed-bottom, the upper frame C of which has inwardly-beveled sides, the link E for connecting the outer springs with the said frame, consisting of a piece of wire having eyes *e e'*, the one of which, *e'*, nearest to the frame is bent, for the purpose of enabling said link to work freely against the frame, substantially as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THEODORE R. JONES.

Witnesses:
GEORGE W. JONES,
WALTER J. ASHTON.