J. N. VALLEY.

Spring Bed-Bottom.

No. 207,462. Patented Aug. 27, 1878.

Fig. 1.

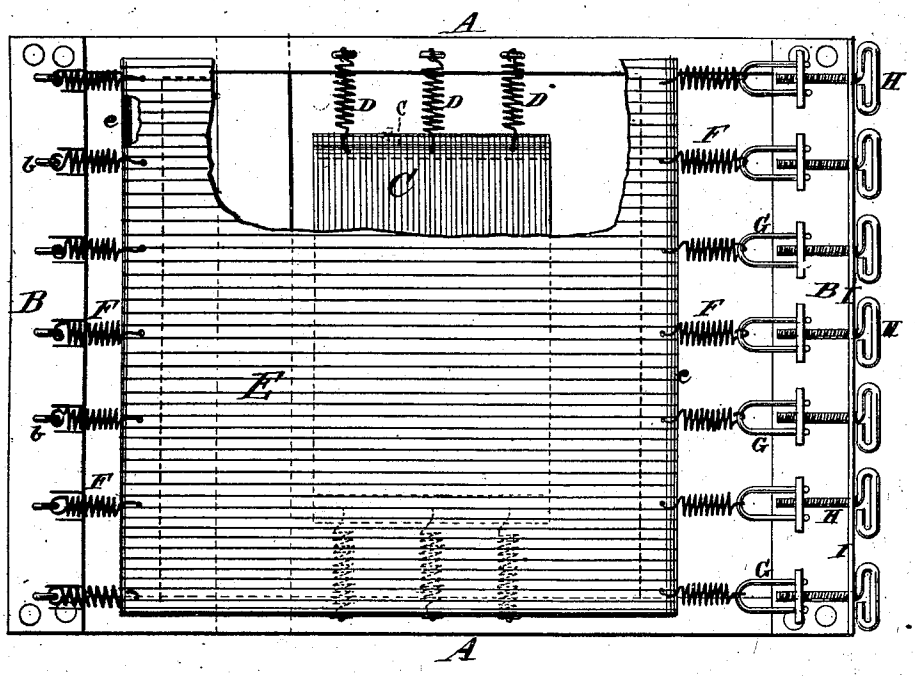
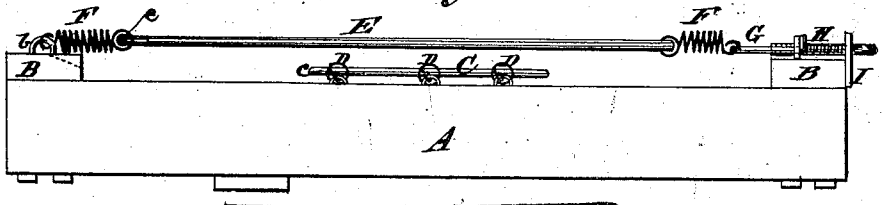
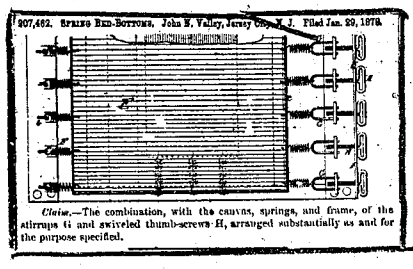


Fig. 2.





WITNESSES:

Francis. M. Ardle.

C. Sedgwick

INVENTOR:

J. N. Valley

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN N. VALLEY, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. **207,462**, dated August 27, 1878; application filed January 29, 1878.

To all whom it may concern:

Be it known that I, JOHN N. VALLEY, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Spring Bed-Bottom, of which the following is a specification:

The object of my invention is to provide an improved and adjustable elastic bottom for beds, and in which the tension of the springs may be varied to suit the weight of the occupant.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

In the accompanying drawing, Figure 1 is a plan view of my improved adjustable spring bed-bottom. Fig. 2 is a side view of the same.

Similar letters of reference indicate corresponding parts.

A are the side bars, and B the end bars, of the frame of the bed-bottom. C is a sheet of canvas, straightened and strengthened by wire rods *c* sewed in at the edges and stretched across the frame, being attached to the side bars A by spiral springs D, fastened with one end to the edge of the canvas C and with the other to staples or other fastening on the side bars A. The end bars B are placed on top of the bars A, and the main canvas E, edged with wire rods *e*, and provided with spiral end springs F, in the manner of the smaller canvas C, is stretched between the end bars B, thus leaving a space between E and C to allow of a certain deflection of the main canvas E before the weight comes on the smaller, C. The latter is arranged at about the middle of the bed-bottom, where the greatest heft is applied, so as to present an increased resistance at the point where the weight is the greatest.

In order to adjust the tension of the springs F, and the consequent elastic flexibility of the upper spring-bottom E, according to the weight it is intended to support, I connect each of the springs F at one end of the canvas E to an end plate or board, I, on the frame by a stirrup, G, and a screw, H, the latter being swiveled in holes in the end board I, and screwing into a threaded hole in the cross-head of the stirrup G by turning the handle of the screw H. The springs F at the opposite end of the canvas E are secured by staples *b*, or their equivalents, to the end bar B of the frame, so that by operating the adjusting-screws H the springs F at both ends of the canvas will be acted upon at the same time, and the tension of the spring-bottom uniformly regulated. The stirrups G are kept from turning with the screws H by contact with the end bar B.

I do not limit myself to any particular form or material for the parts here shown, as they may be varied without departing from my invention.

I am able to regulate the tension of the canvas C by reason of the screws H operating in the stirrups independently of each other, the slack in any particular portion of the canvas being readily taken up without straining any other part.

What I claim as new is—

The combination, with the canvas, springs, and frame, of the stirrups G and swiveled thumb-screws H, arranged substantially as and for the purpose specified.

JOHN NAPOLEON VALLEY.

Witnesses:
C. SEDGWICK,
A. W. ALMQUIST.