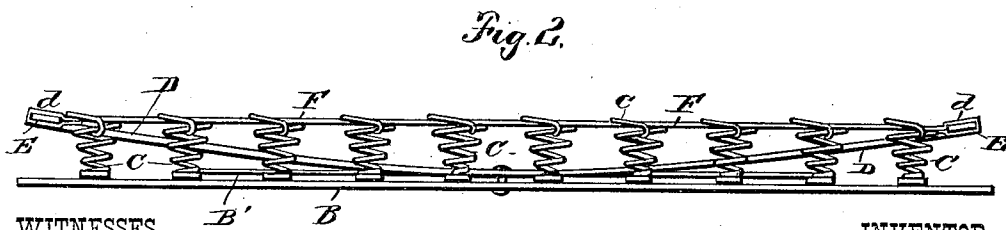
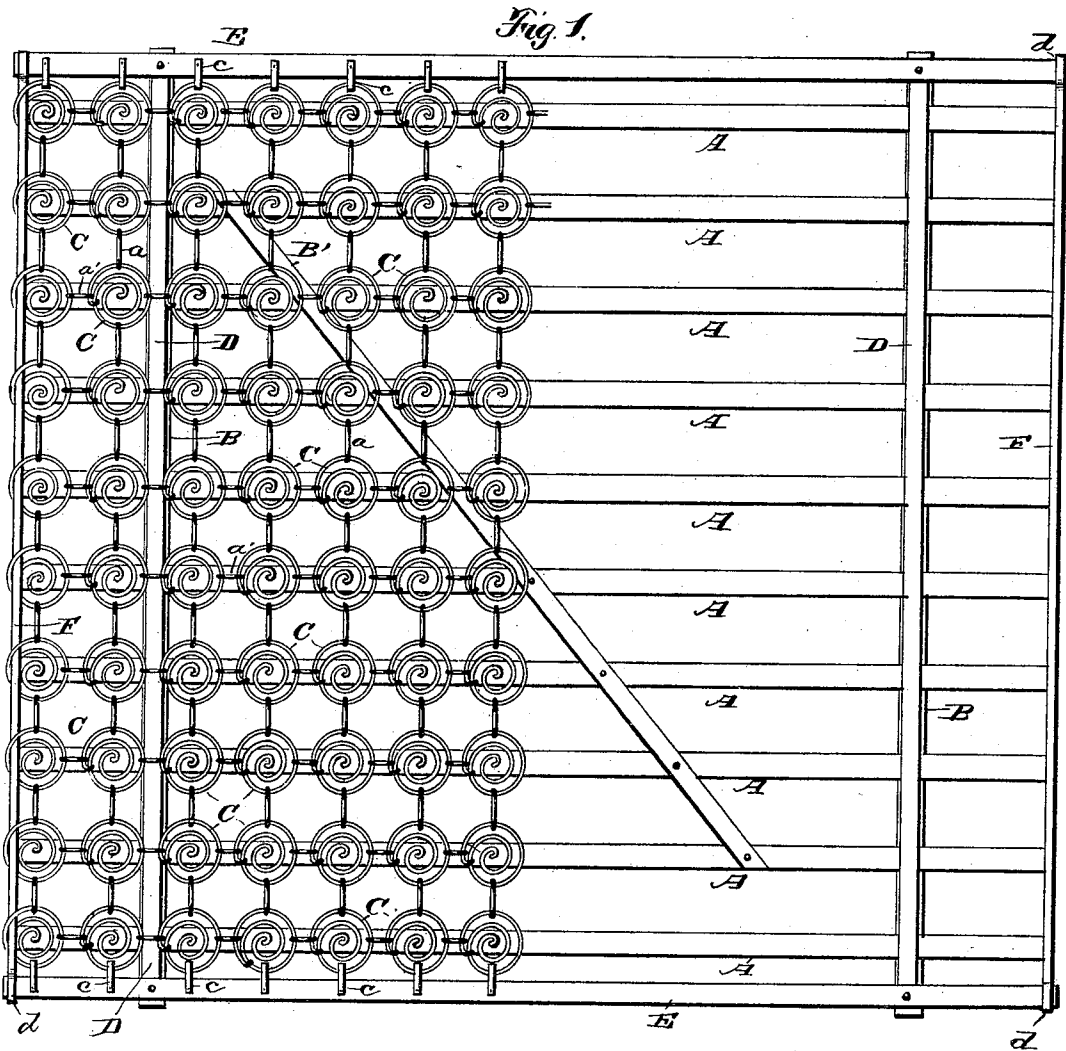


(No Model.)

O. S. & W. S. FOSTER.
SPRING BED BOTTOM.

No. 252,601.

Patented Jan. 24, 1882.



WITNESSES

Geo. S. Seymour.
Herman Moran.

INVENTOR

O. S. Foster.

W. S. Foster.

By Sargent & Sargent. ATTORNEY

UNITED STATES PATENT OFFICE.

OSCAR S. FOSTER AND WILLIAM S. FOSTER, OF UTICA, NEW YORK.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 252,601, dated January 24, 1882.

Application filed October 22, 1881. (No model.)

To all whom it may concern:

Be it known that we, OSCAR S. FOSTER and WILLIAM S. FOSTER, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Spring Bed-Bottoms; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Our invention relates to an improvement in spring bed-bottoms, the object of the same being to provide a neat, strong, and durable bed-bottom adapted by its peculiar construction to transmit the pressure applied to any particular portion thereof to the remaining portion, which equalizes the pressure on the springs throughout the entire bottom, thereby preventing any particular portion of the bed bottom from sustaining the entire load.

With these ends in view our invention consists in certain details in construction and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of our improvement, and Fig. 2 is an end view of the same.

A represents the longitudinal slats, situated at suitable distances apart and secured together by the transverse braces B and the diagonal brace B', the latter extending wholly or partly across the slats, as desired.

C are suitable wire springs secured to the upper surface of the slats A in any desired manner, and connected together on top by the longitudinal and transverse links *a a'*. The links *a'* bind the springs on the same slat together, while the transverse links *a* connect the springs of one slat to the opposite springs of the next slat. When the springs C are thus connected the outside of the outer row of the rectangular frame thus formed has no outer bearing, and if a weight should be applied to the center of the bed the springs at the sides and ends would incline inward and allow the springs under the weight to receive all the pressure. To overcome this defect we provide two or more semi-elliptical springs, D, made of wood or any suitable material, and secure them cen-

trally to the transverse braces B between the springs, with their extreme outer ends projecting slightly beyond the outside rows of springs. To the extreme outer ends of these semi-elliptical springs D the side rails, E, are rigidly secured by mortise-and-tenon joint or in any other suitable manner. These side rails are about the same length as the slats A, and when secured to the springs are adapted to rest parallel to the outer side rows of springs, to which they are connected by metallic loops *e*, which latter pass around the wire of the upper coil of the springs, and the two ends of the same are secured to the side rails by suitable rivets.

F are two flexible metallic straps connecting the ends of opposite side rails, and adapted, in conjunction with the said side rails, to attain the object in view. These metallic straps are provided with looped ends *d*, into which the ends of the side rails are secured by countersink or rivet after the straps have been passed through the upper coils of the springs, substantially as shown in the drawings. When a weight is applied to this improved construction of bed-bottom the pressure on the semi-elliptical springs causes them to partly flatten out, which widens the space between the side rails and prevents the springs at the side of the load from inclining inward. The widening of the space between the side rails also draws the end straps taut, and consequently prevents the end springs from inclining inward.

We can, if desired, use four or more small springs instead of the two semi-elliptic springs shown and described and accomplish the same result. When these small semi-elliptic springs are employed they are secured by one end to the slats or braces, while the opposite end extends outward and upward and is secured to the side rails in the same manner as the large springs.

A spring bed-bottom constructed as described is neat in appearance, durable, and compact in structure, and possesses numerous advantages over a majority of bed-bottoms now in use.

It is evident that slight changes in the construction of the bed might be resorted to without departing from the spirit of our invention; and hence we would have it understood that we do not limit ourselves to the exact construction of parts shown and described, but con-

sider ourselves at liberty to make such changes as come within the spirit and scope of our invention.

5 Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a spring bed-bottom, the combination, with the longitudinal slats having springs secured thereto, the said springs being secured
10 together by suitable links, and side rails secured to the outside rows of springs by suitable metallic loops, of semi-elliptic springs rigidly secured to the side rails, substantially as set forth.

15 2. In a spring bed-bottom, the combination, with the longitudinal slats having springs secured thereto, the said springs being secured together by suitable links, side rails secured to the outside rows of springs by suitable me-

tallic loops, and metallic straps passing through
20 the top coil of the end springs and secured to the side rails in any suitable manner, of semi-elliptic springs the ends of which are rigidly secured to the side rails, substantially as set forth.

3. The combination, with the longitudinal
25 slats A, braces B, springs C, and metallic straps F, of the semi-elliptic springs D, secured to the braces B, and connected at their opposite ends to the side rails, substantially as set forth.

In testimony that we claim the foregoing we
30 have hereunto set our hands and seals.

OSCAR SMITH FOSTER. [L. S.]
WILLIAM SMITH FOSTER. [L. S.]

Witnesses:

HENRY A. DOOLITTLE,
M. L. HUNGERFORD.