

(No Model.)

C. J. MENGEL.
SPRING BED BOTTOM.

No. 282,746.

Patented Aug. 7, 1883.

Fig: 1.

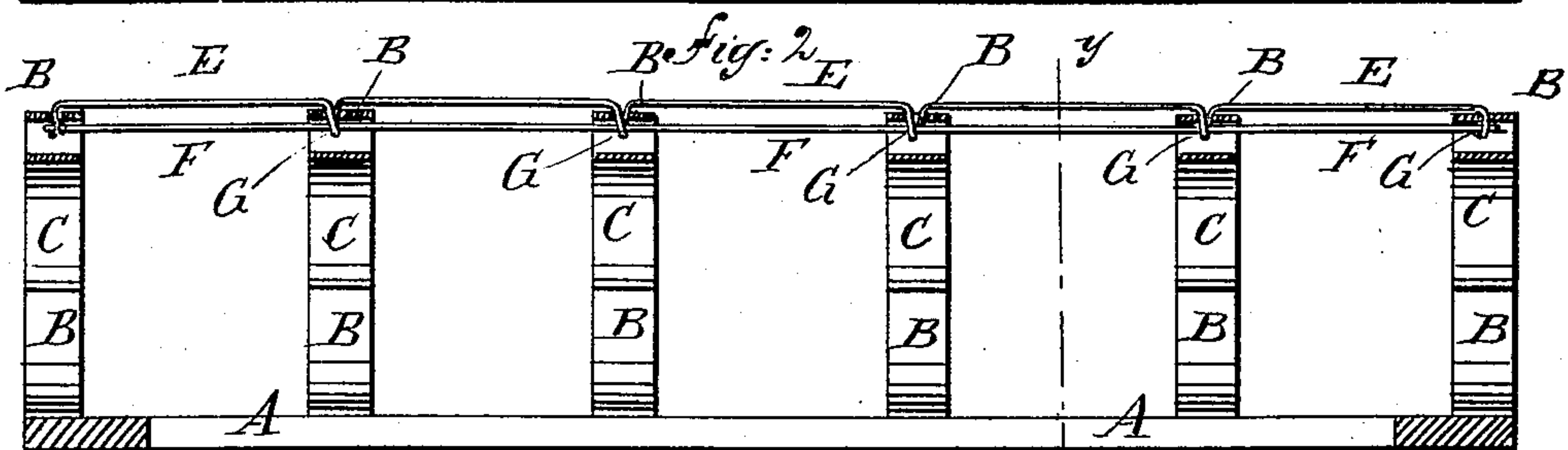
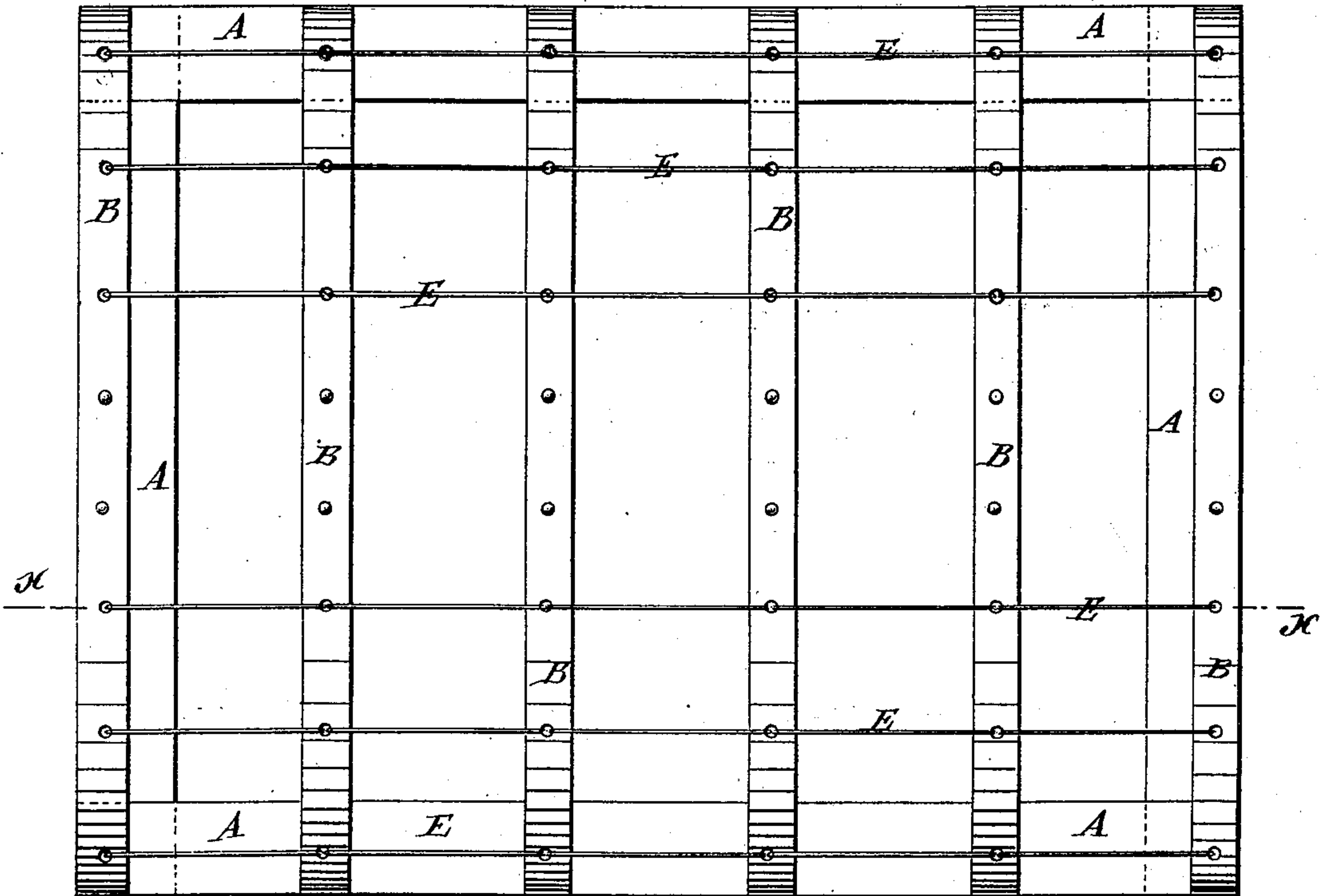
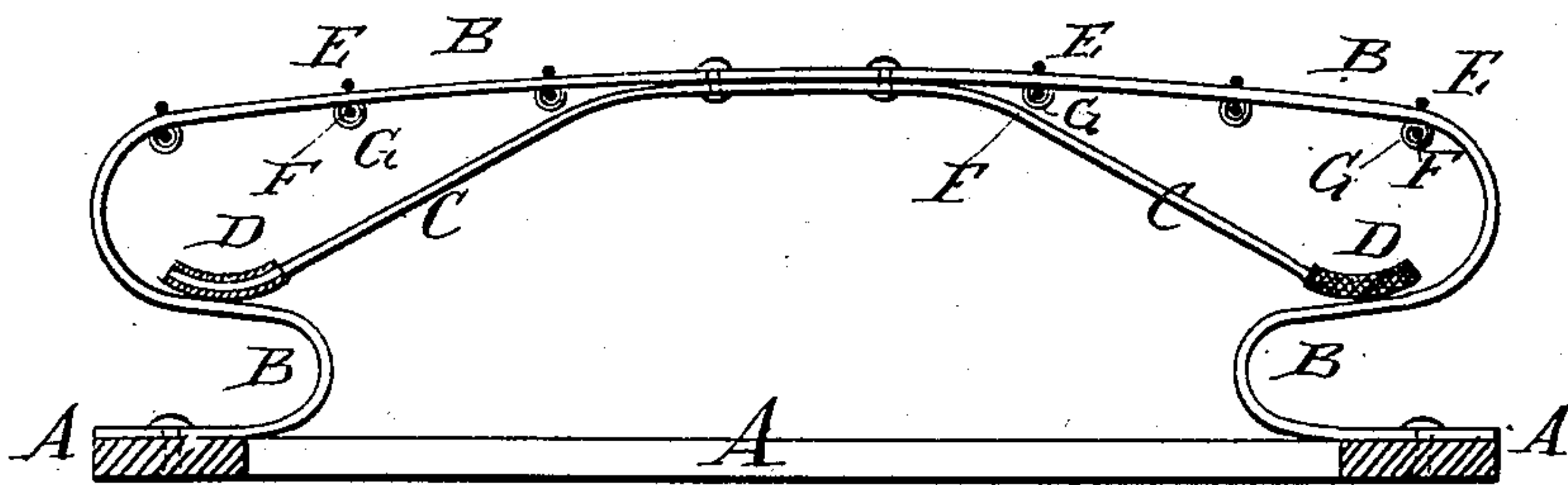


Fig: 3.



WITNESSES:

Chas. Nida
C. Sedgwick

Fig: 4.



INVENTOR:

C. J. Mengel
BY *Mum & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES J. MENGEL, OF NEW YORK, N. Y.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 282,746, dated August 7, 1883.

Application filed March 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. MENGEL, of the city, county, and State of New York, have invented a new and useful Improvement in Spring Bed-Bottoms, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improvement. Fig. 2 is a sectional side elevation of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a sectional end elevation of the same, taken through the line *y y*, Fig. 2. Fig. 4 is a perspective view of one of the connecting-wire fastenings.

The object of this invention is to provide spring bed-bottoms constructed in such a manner as to be strong and durable, and in which the springs will not be liable to get out of place.

The invention relates to a spring bed-bottom constructed with a frame, to which are attached the **S**-shaped ends of cross-springs. With the cross-springs are connected re-enforcing springs, the ends of which rest upon the middle bends of the **S**-shaped ends of the said cross-springs. The cross-springs are held from lateral movements by longitudinal connecting-wires placed above and below the said springs, and kept in place by passing the lower wires through loops formed upon the upper wires and passed down through perforations in the said springs, as will be hereinafter fully described.

A is a frame of such a shape and size as to fit into a bedstead and rest upon the side cleats or cross-slats of the said bedstead.

B are springs, the ends of which are bent into **S** form, and are attached to the side bars of the frame A.

To the middle parts of the springs B are secured, by rivets or other suitable means, the middle parts of the re-enforcing springs C, the

arms of which are inclined downward and outward, and have their ends curved upward to rest and slide upon the middle bends of the **S**-shaped ends of the springs B. The ends of the springs C are covered or faced with rubber D or other suitable material, to prevent noise when the bed is in use.

The springs B are held from lateral movement by the wires E F. The wires E are placed above the springs B, and have loops G formed in them, which are passed through holes in the said springs B, and are bent or twisted to bring their planes at right angles with the length of the said wires. The wires F are placed beneath the springs B, and are passed through the loops G of the wires E to keep the said wires E in place. The ends of the wires E are passed down through holes in the end springs, B, and are fastened to the ends of the wires F by twisting the said ends together, or by other suitable means.

With this construction the springs B are so connected as to be held from lateral movement, while being allowed to move up and down freely.

Another advantage of this construction is that the pressure upon any part of the bed-bottom will be distributed so that no individual spring will be subjected to an undue strain.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A spring bed-bottom constructed substantially as herein shown and described, and consisting of the frame A, the springs B, having **S**-shaped ends, the re-enforcing springs C, and the connecting-wires E F, as set forth.

2. The combination, with the cross-springs B, of the top and bottom wires, E F, the former passing through said springs and receiving the latter in a loop G, as shown and described.

CHARLES J. MENGEL.

Witnesses:

JAMES T. GRAHAM,
C. SEDGWICK.