

2 Sheets—Sheet 1.

Patented Oct. 5, 1886.

FIG. 1.

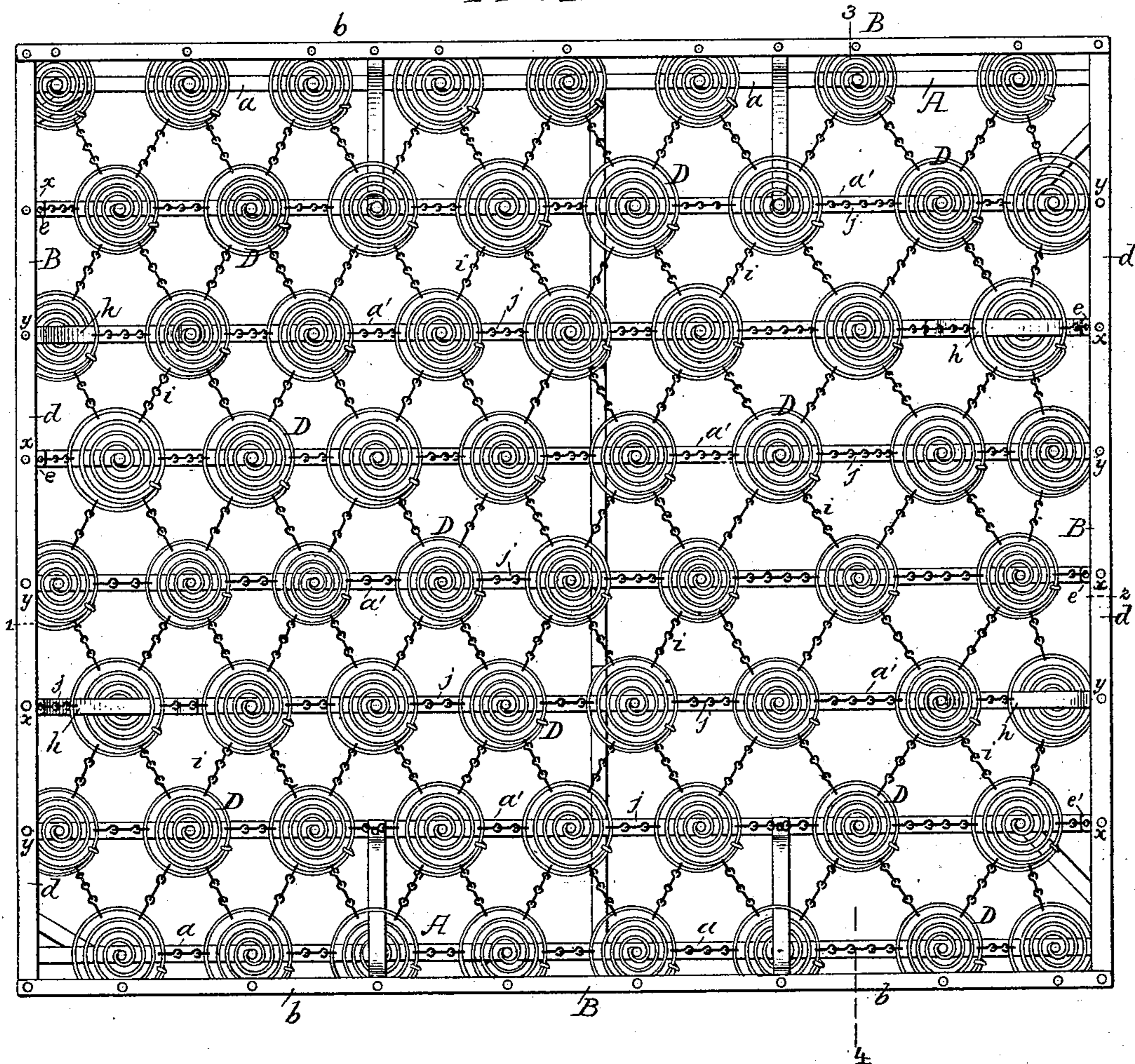


FIG. 2.

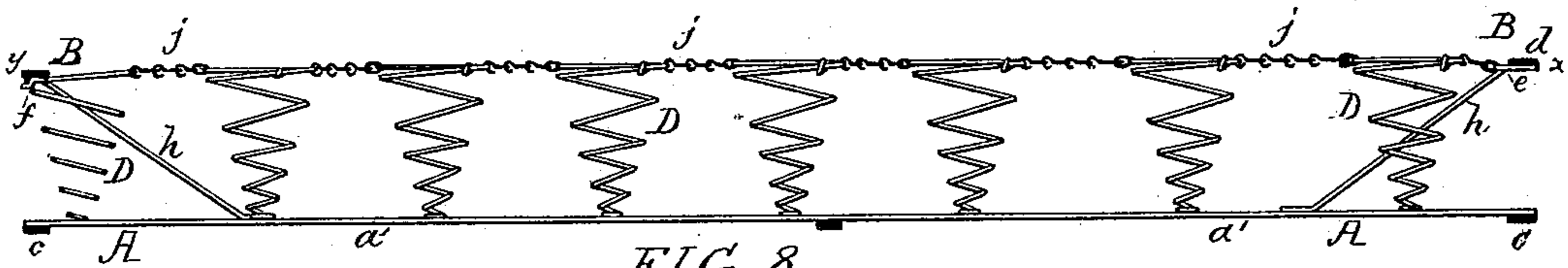


FIG. 8

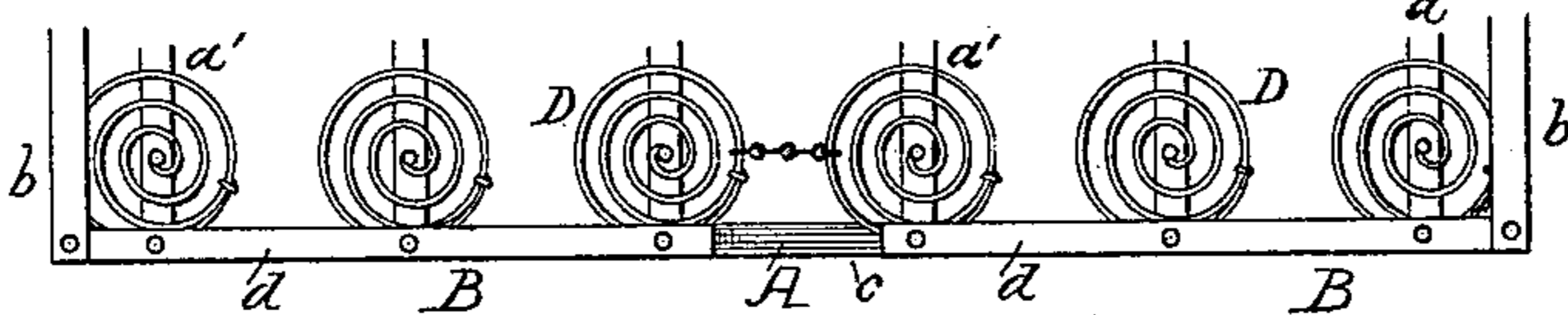


FIG. 9.

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SPRING BED BOTTOM.

No. 350,265.

Patented Oct. 5, 1886.

FIG. 3.

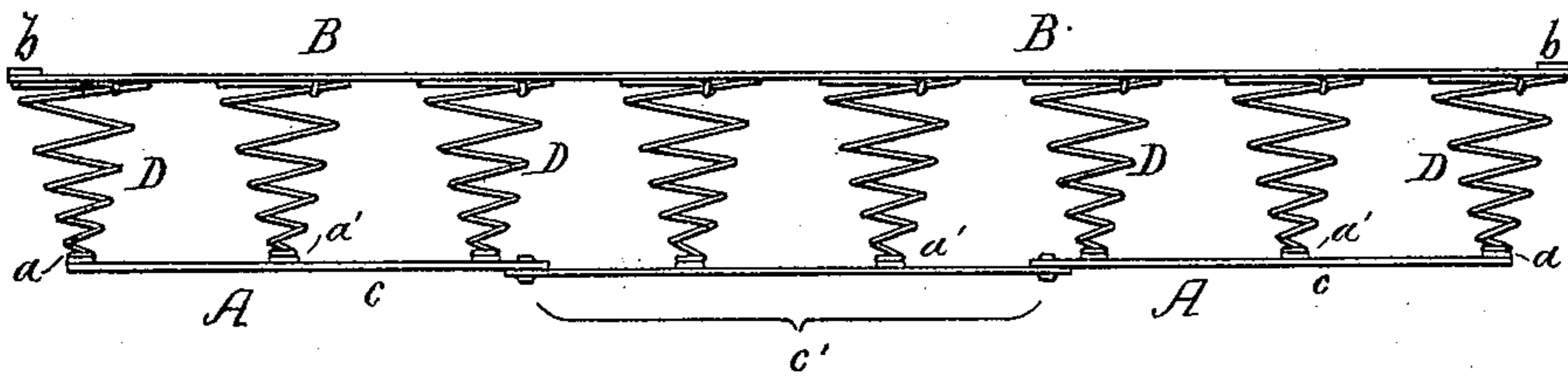


FIG. 4.

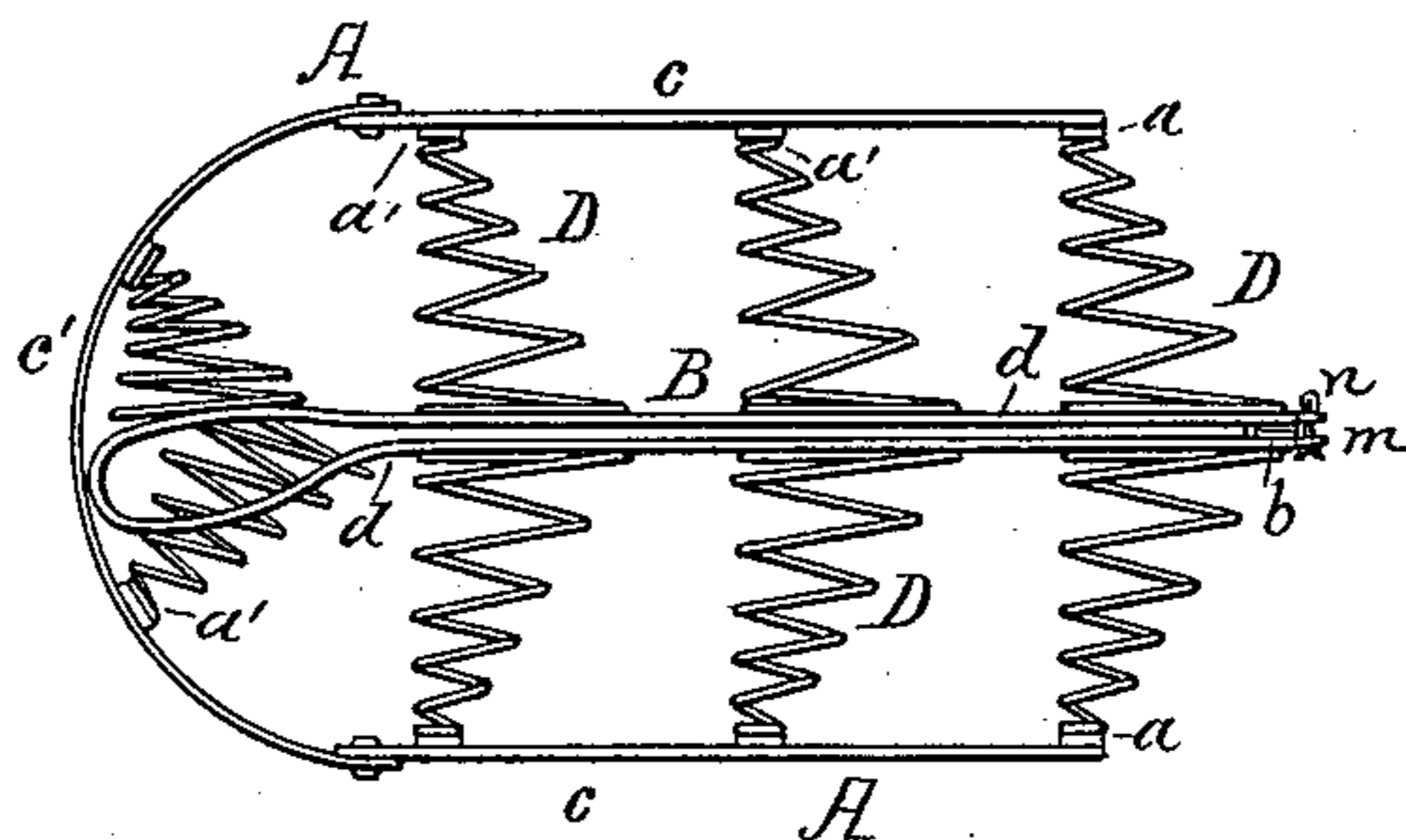


FIG. 5.

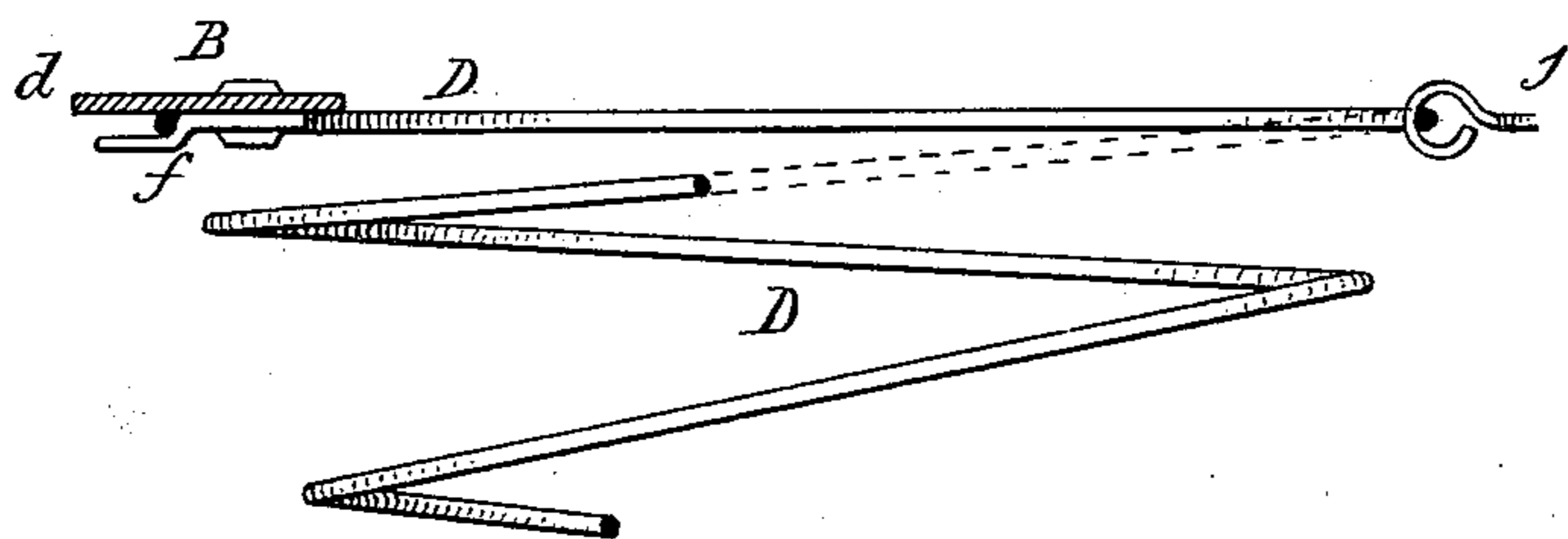


FIG. 6.

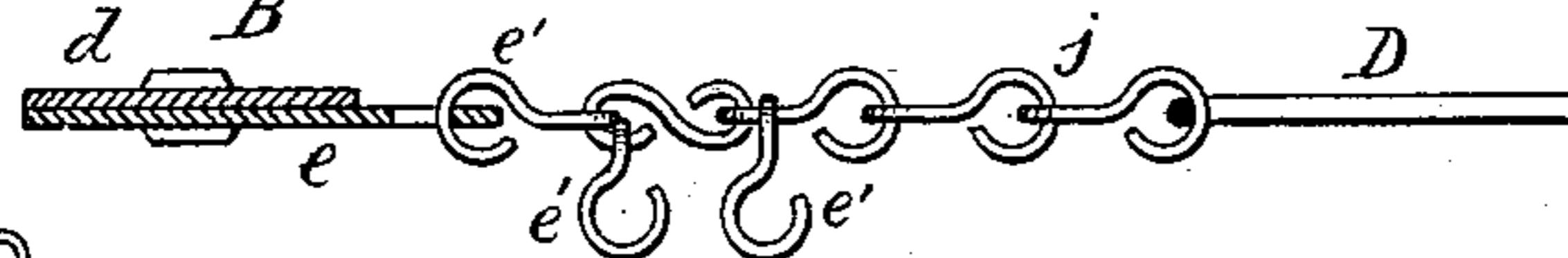


FIG. 10

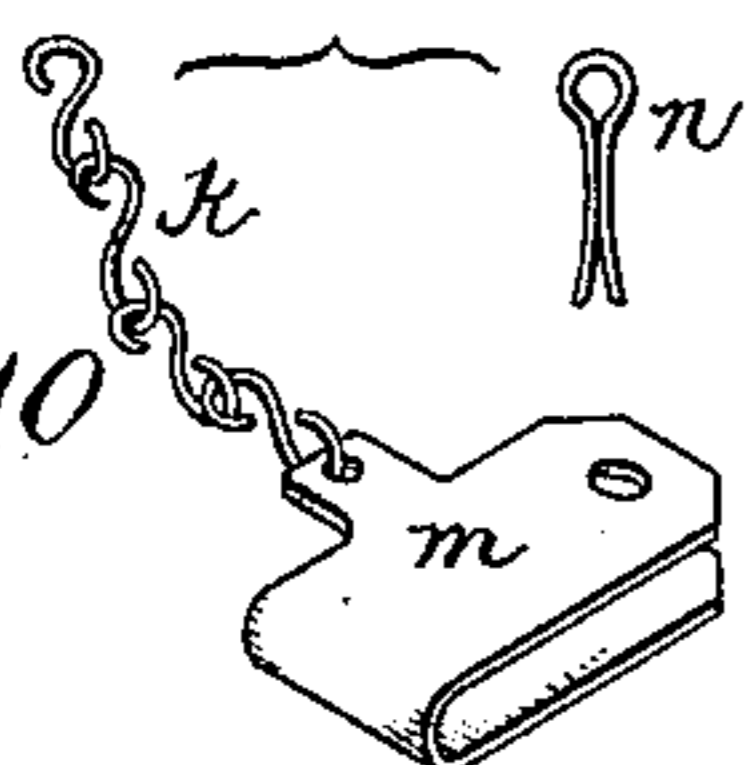
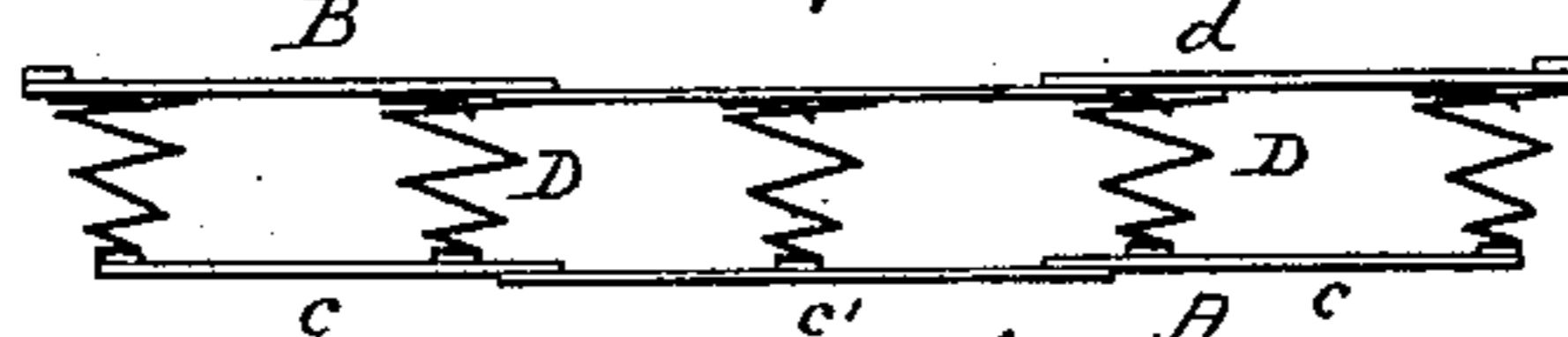


FIG. 7.



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# UNITED STATES PATENT OFFICE.

WILLIAM A. MOONEY, OF PHILADELPHIA, PENNSYLVANIA.

## SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 350,265, dated October 5, 1886.

Application filed April 19, 1886. Serial No. 199,284. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. MOONEY, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Spring Bed-Bottoms, of which the following is a specification.

This invention relates to the construction of that class of spring bed-bottoms having a metallic quadrangular frame with bearing-pieces on which are supported a series of spiral springs, which at the top are secured together and to an upper frame by chains or other suitable devices.

One object of my invention is to render such a bed-bottom stiff and strong, but at the same time capable of being folded into small compass for transportation or storage; a further object of my invention being to permit such an adjustment of the tension of the bed as to adapt it for the proper support of occupants of different weights, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a plan view of my improved spring bed-bottom. Fig. 2 is a longitudinal section on the line 1 2, Fig. 1. Fig. 3 is a transverse section on the line 3 4, Fig. 1. Fig. 4 is a transverse section of the bed folded. Figs. 5 and 6 are detached sections, enlarged, of the devices for attaching the springs to the upper frame; Figs. 7, 8, 9, views of modifications, and Fig. 10 a view of the clamp for securing the bed together when folded.

A is a quadrangular base-frame having stiff side strips *a a* and end strips, the outer portions, *c*, of which are stiff, and the center portions, *c'*, flexible, in order that the bed may be folded, as shown in Fig. 4. Secured to the end strips *c c'* are longitudinal bearing-bars *a'*, to which and to the side strips of the base-frame are secured the bases of the springs *D*, this securing of the springs being effected, in the present instance, by means of rivets.

The top frame, B, is composed of the flexible side strips *b b* and flexible end strips *d d*, the side strips *b* being connected to the upper coils of the springs which are secured to the side strips *a* of the lower frame, as shown in Fig. 1, and the intervening springs throughout the bed being attached to each other, in the present instance, by means of chains *i*.

Referring to Fig. 1, it will be observed that

the lines of chains *j* extend longitudinally and diagonally throughout the area of the bed, the continuity of the chains being only broken by the series of springs to which they are attached. The chains are detachably secured to the strips *d* of the top frame, in order that the flexibility of the bed can be regulated to conform to the weight of the occupant, the bed yielding more readily when the chains are detached from the strips *d* than when they are attached thereto. At *x* the chains are secured to eyes in plates *e*, secured to the bars *d*; but at *y* the springs themselves are secured to hooked cleats *f*, both fastenings being so constructed that the chains and springs can be readily attached or detached, as required. I prefer to support the end strips *d* of the upper frame, B, by braces *h*, secured to the bearing-bars *a'*, as shown in Fig. 2.

As shown in Fig. 6, the chains can be supplied with hooks or rings *e'* of different lengths, so as to make more than two adjustments, and thus increase the range of tension of the chains.

By making the end bars *d d* flexible not only can they be folded when folding the lower frame, but they also yield with the springs to which they are attached when vertical pressure is applied. These bars are wide and thin, so that while they will yield to vertical pressure they are stiff laterally to resist any sidestrains, thus keeping the bed and springs in proper shape at all times. The center of the end bars *d* may be flexible, and each end stiff, as shown in Fig. 7; but I prefer to make the end bars as shown in Fig. 3. In some cases the end bars *d* may be disconnected in the middle and attached to the central spring or springs, as shown in the modifications, Figs. 8 and 9, without departing from my invention.

When the bed is folded, as shown in Fig. 4, I secure the side pieces *b b* together by a clamp-plate, *m*, Fig. 10, attached to one of the springs or bars by a chain, *k*, the clamp being passed over both pieces *b*, and a split pin, *n*, then passed through holes in the plate and bent, as shown in Fig. 4.

I claim as my invention—

1. The combination of the base-frame A, having continuous end strips *c*, capable of being folded at the center, with the top frame, B, connected to said base-frame, and having

end strips *d*, each capable of being folded upon itself, all substantially as set forth.

2. The combination of the base-frame A, having hinge portions *c' c'*, the springs D, and  
5 the top frame, B, having flexible end strips *d d*, capable of yielding when the said frame A is folded, all substantially as set forth.

3. The combination of the base-frame A, springs D, secured thereto, and the top frame,  
10 B, having flexible end strips, to which the upper portions of the end springs are secured, all substantially as specified.

4. The combination of the base-frame A,

springs D, secured thereto, and the top frame, B, having side strips *b*, to which the upper 15 portions of the side springs are secured, and flexible end strips to which the end springs are detachably secured, all substantially as described.

In testimony whereof I have signed my name 20 to this specification in the presence of two subscribing witnesses.

WILLIAM A. MOONEY.

Witnesses:

JOSEPH H. KLEIN,  
HENRY HOWSON.