

(No Model.)

G. B. SLOAN, Jr.
SECTIONAL BAND FOR SPRINGS.

No. 537,997.

Patented Apr. 23, 1895.

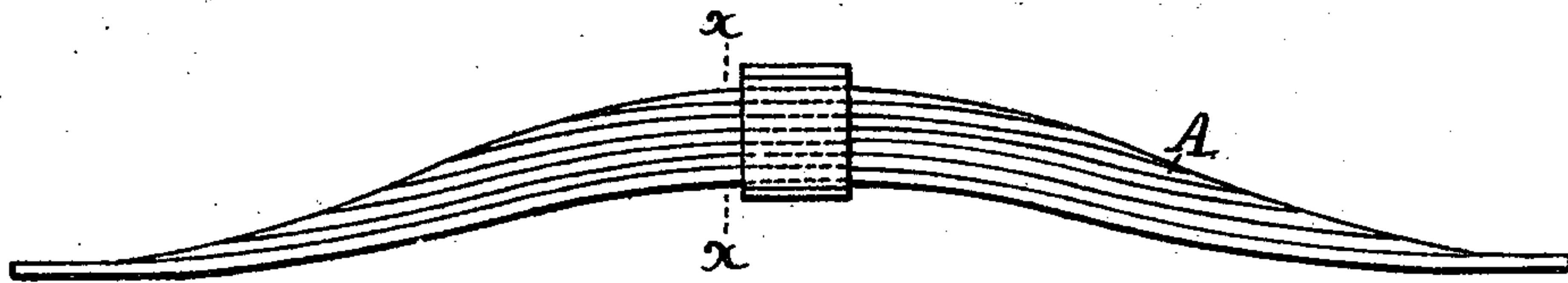


Fig. 1.

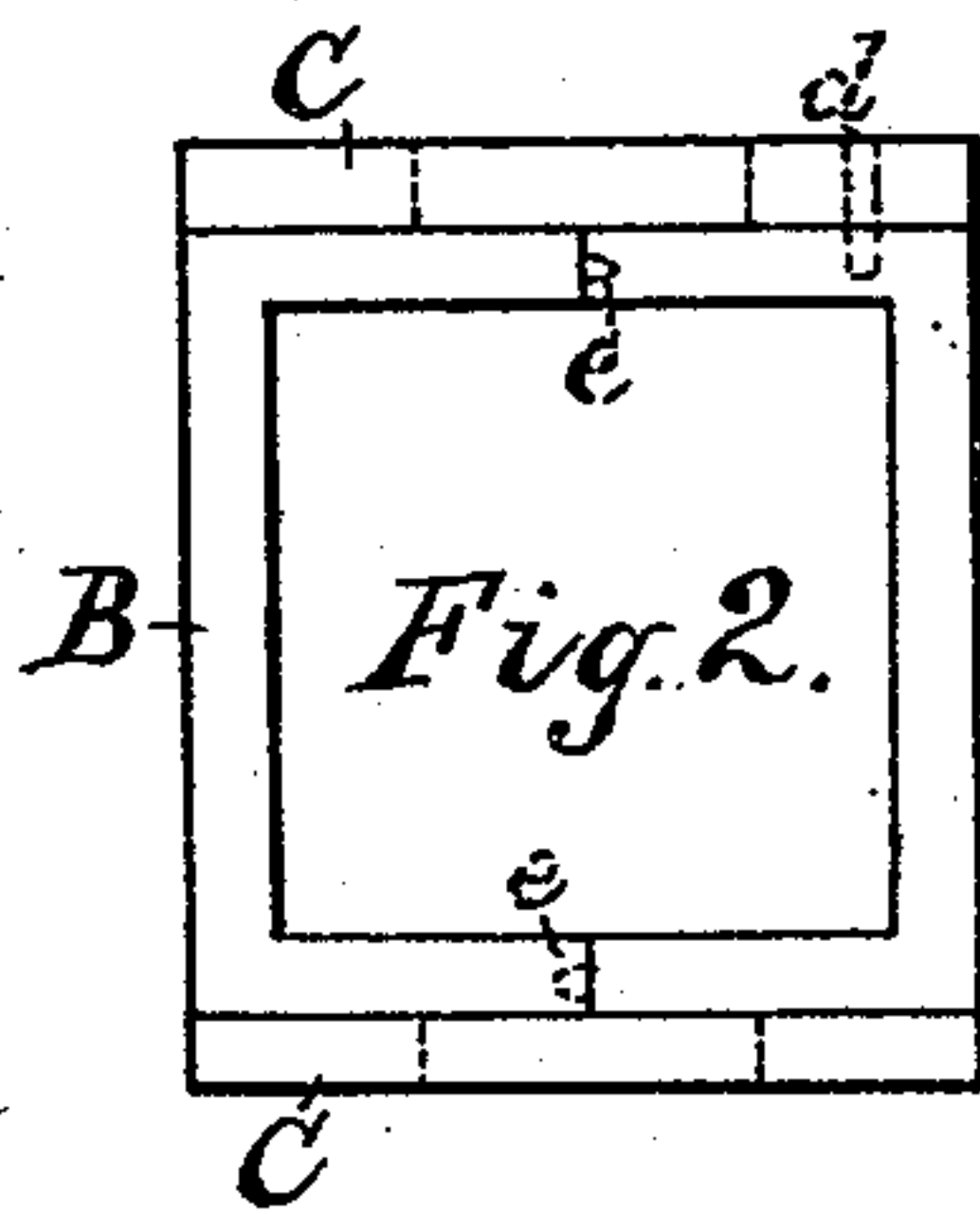


Fig. 2.

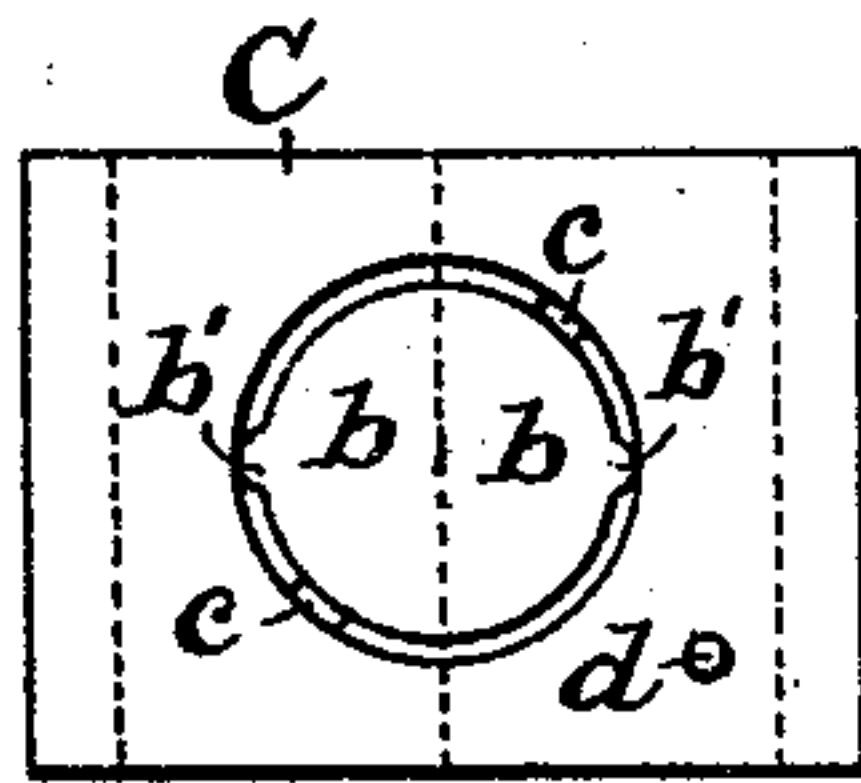


Fig. 3.

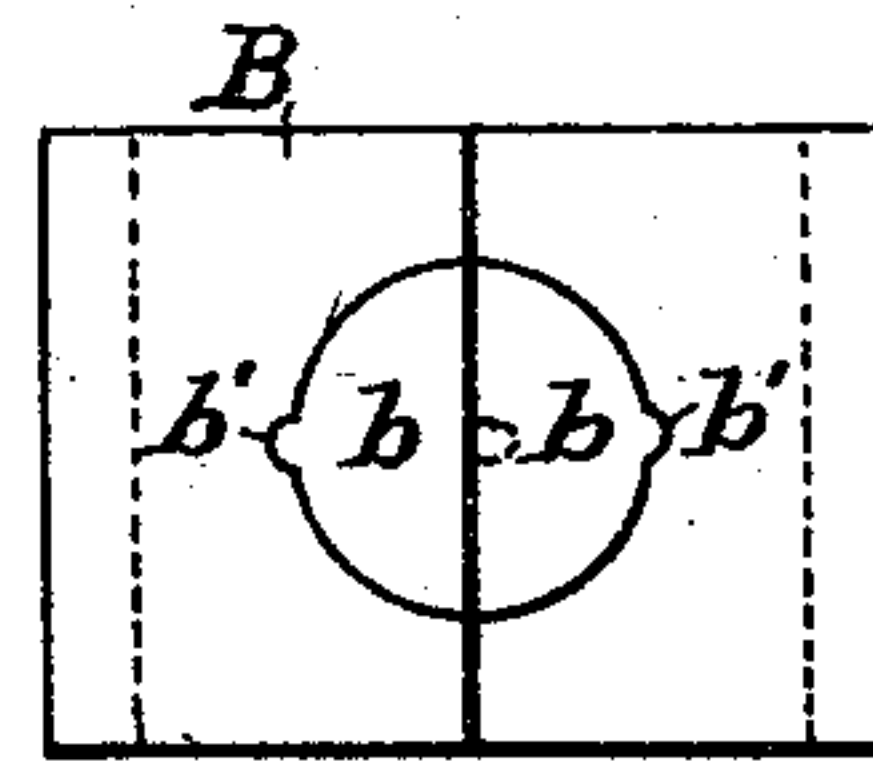


Fig. 4.

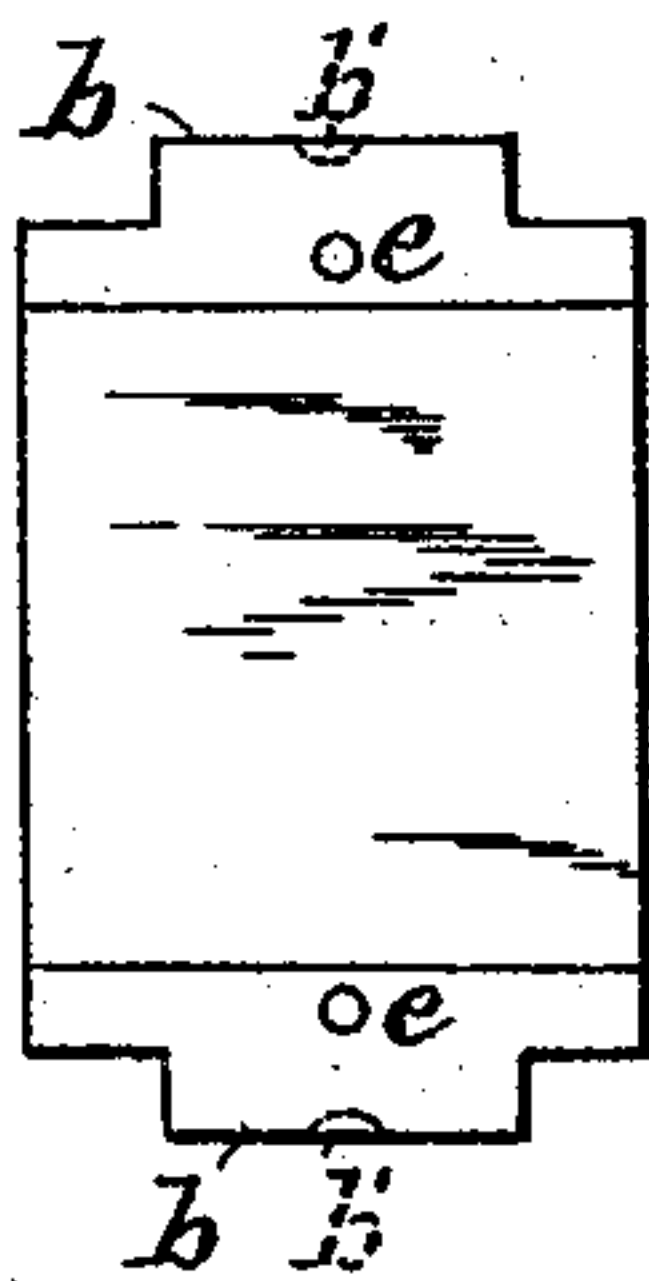


Fig. 5.



Fig. 7.

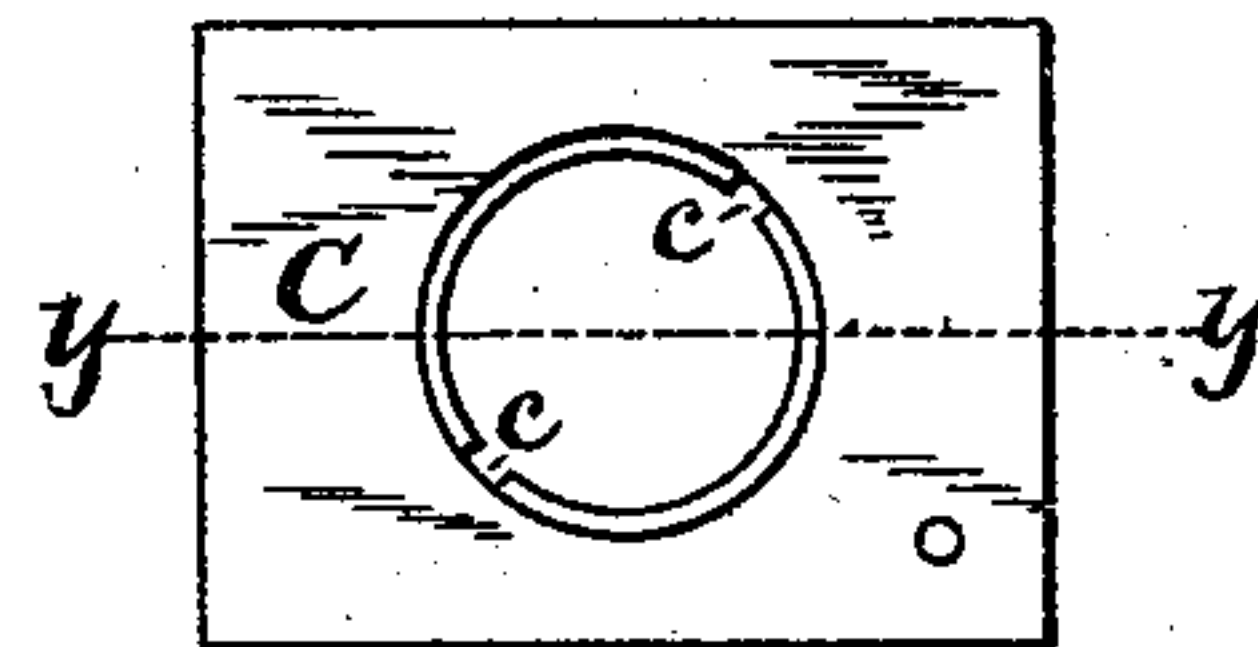


Fig. 6.

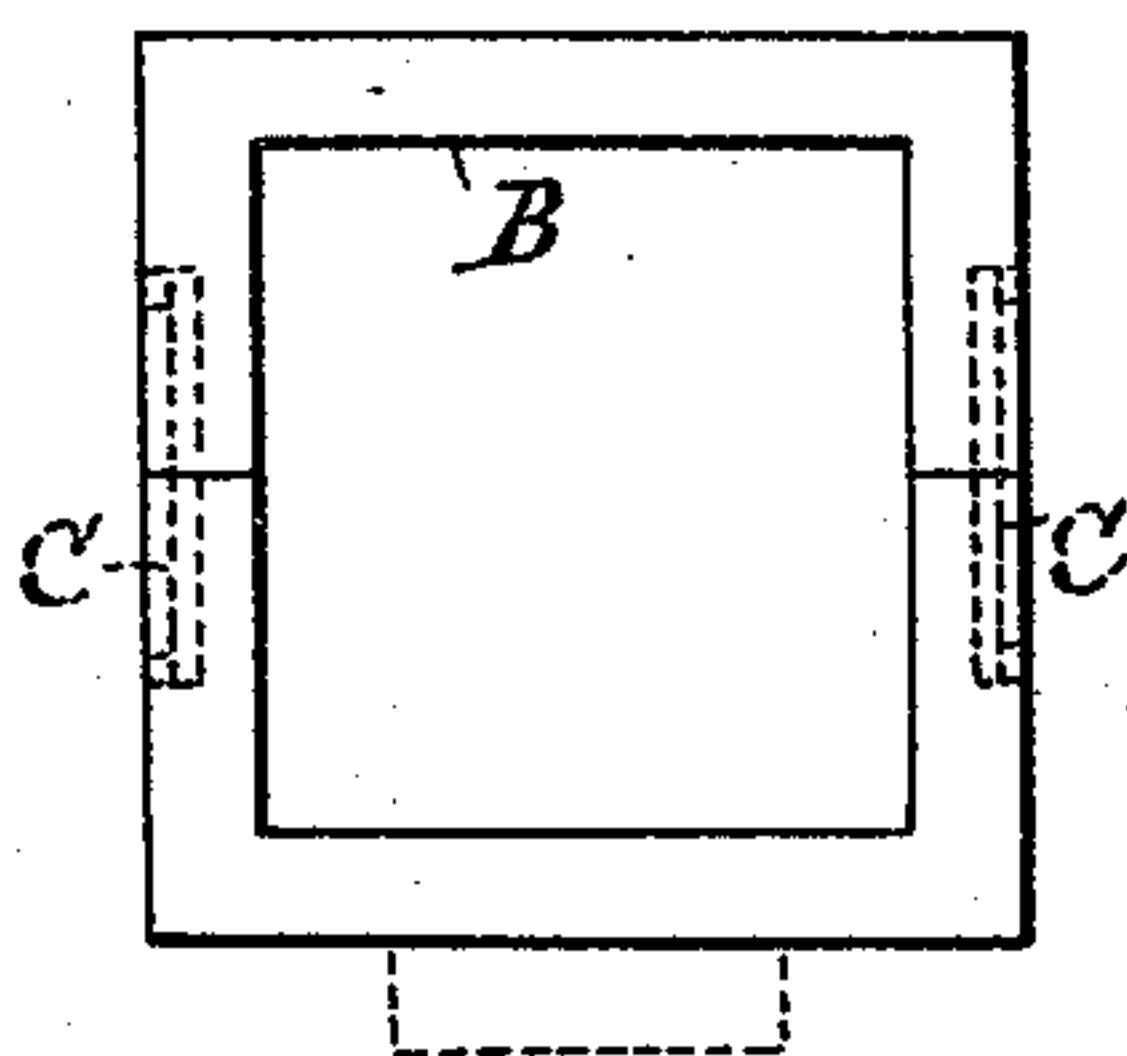


Fig. 8.

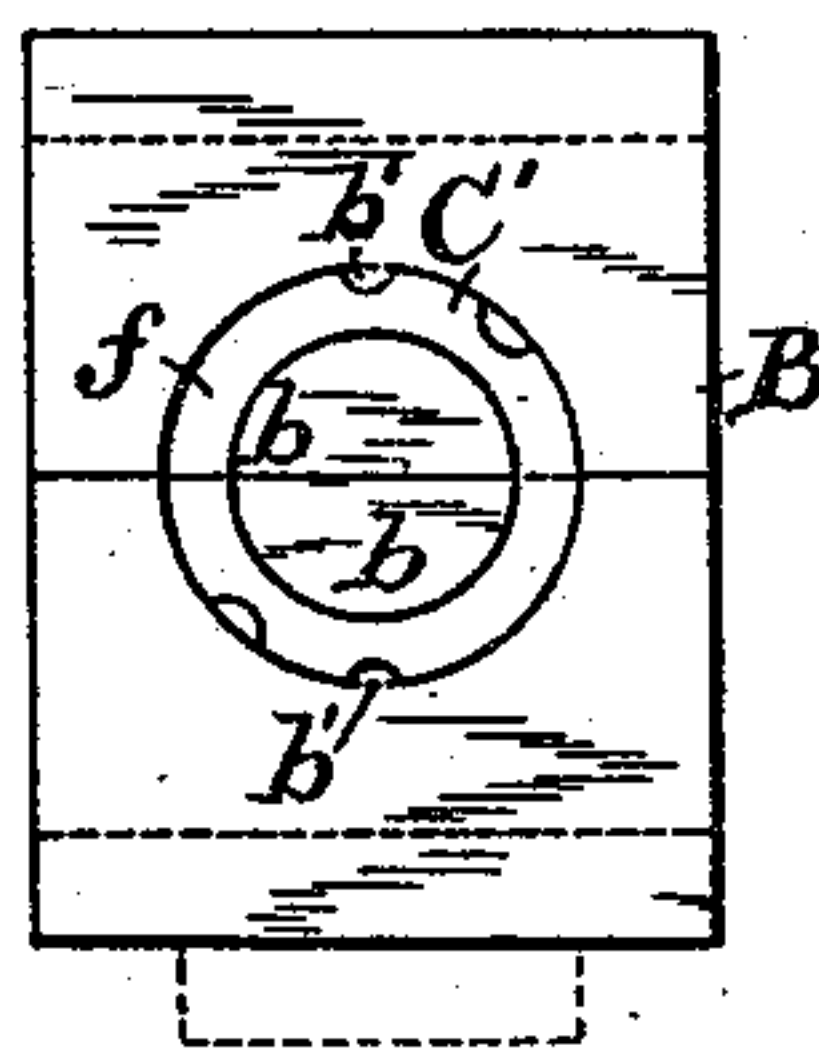


Fig. 9.

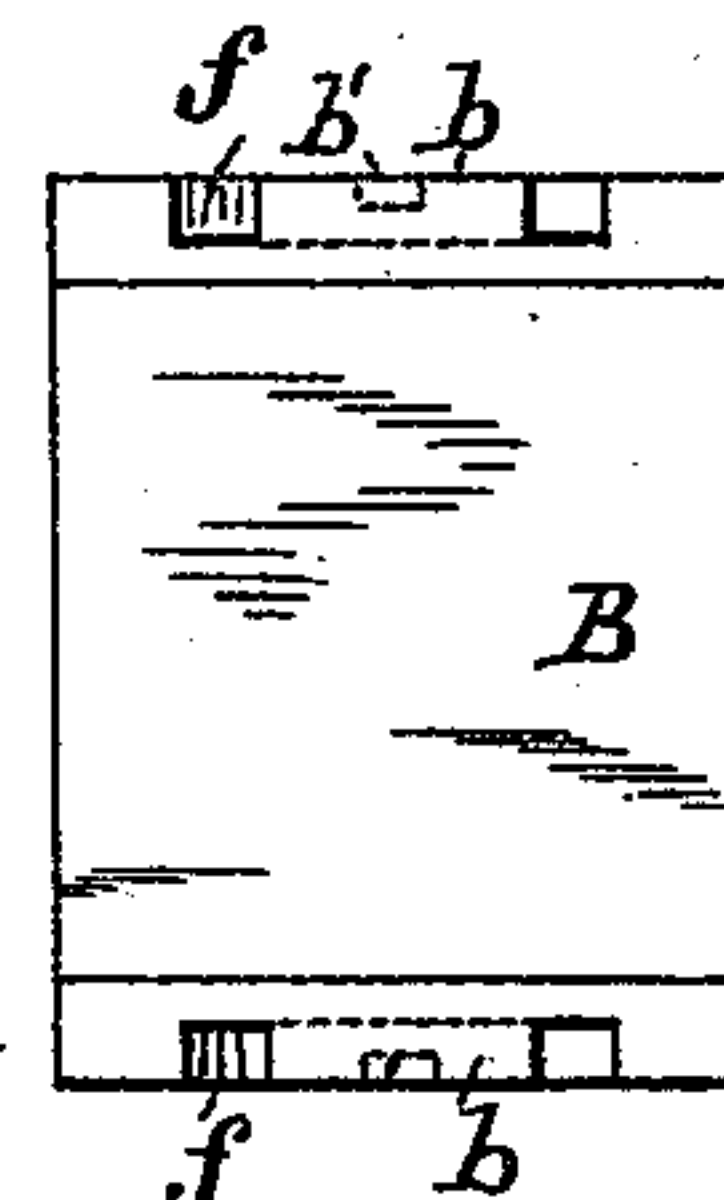


Fig. 10.

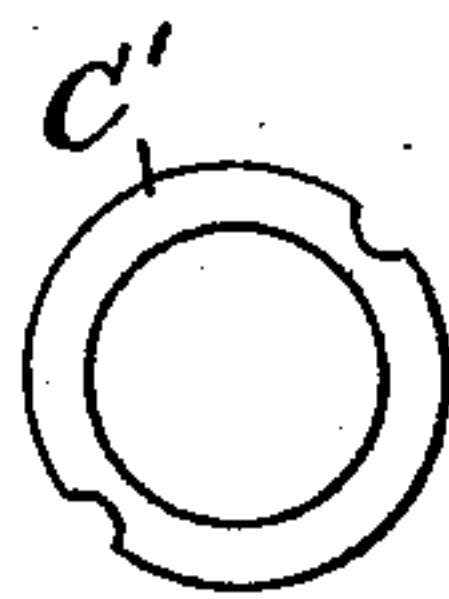


Fig. 11.

Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE BEALE SLOAN, JR., OF OSWEGO, NEW YORK.

SECTIONAL BAND FOR SPRINGS.

SPECIFICATION forming part of Letters Patent No. 537,997, dated April 23, 1895.

Application filed November 9, 1894. Serial No. 528,292. (No model.)

To all whom it may concern:

Be it known that I, GEORGE BEALE SLOAN, Jr., of Oswego, in the county of Oswego, in the State of New York, have invented new and
5 useful Improvements in Sectional Bands for Springs, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to bands for leaf-
10 springs such as full or semi-elliptic springs, and the object is to provide a band which may be quickly and readily applied to or removed from a spring when the latter becomes broken.

15 When a leaf in a spring becomes broken, the broken leaf can be removed and a new one inserted easily and quickly without injury to the band.

To this end my invention consists in the
20 combination of a band for leaf springs divided into sections, and suitable means whereby the sections may be locked together, and my invention consists in certain other combinations of parts hereinafter described and specifically
25 set forth in the claims.

In the drawings hereto annexed and forming a part of this specification, Figure 1 is a side elevation of a semi-elliptic leaf spring provided with a band embodying my invention.
30 Fig. 2 is a side view of the same band enlarged, removed from the spring, and taken on line *x, x*, of Fig. 1. Fig. 3 is a top plan view of the band. Fig. 4 is a top plan view with the top plate or locking device removed.
35 Fig. 5 is a view of the inner side of one of the parts of the band. Fig. 6 is a top plan view of the plate or locking device removed from the band. Fig. 7 is a sectional view of the plate taken on line *y, y*, of Fig. 6. Fig. 8 is
40 a side elevation of a modified form of a divided or sectional band. Fig. 9 is another side view of the same. Fig. 10 is the inner side view of the parts of the band; and Fig. 11 is one of the rings or locking devices for
45 holding the parts together.

Referring specifically to the drawings, A indicates a spring which, as shown in Fig. 1, is built up of leaves of different lengths and is termed a semi elliptic spring. I do not,
50 however, limit myself to the application of my invention to semi elliptic springs for it will be obvious that if the invention can be

applied to these it can also be applied to all other leaf springs, as full, quarter elliptic springs, or straight springs.

B indicates the band for holding the leaves
55 together. This band is divided into two parts as shown clearly in the drawings, each part being the same in size and shape as the other part. The band is divided centrally and preferably on a vertical plane as shown in Figs. 1 to 5 inclusive, but it may be divided in other
60 suitable ways as for instance in the way shown in Figs. 8, 9 and 10. In these figures the band is shown divided on a horizontal
65 plane so that the locking devices are on the sides of the band instead of on the bottom and top thereof.

Referring to the first seven figures of the drawings, it will be seen that each part of the
70 band has on both its top and bottom sides a semi circular projection, *b, b*, which projections, when the parts of the band are placed together properly, will form two circular projections. Each of these circular projections
75 is provided with small lips or extensions *b', b'*, on diametrically opposite sides. These projections together with the lips engage the locking plate, the lips serving to hold the
80 plate to the band.

C, C are the locking devices or plates which are designed to hold the parts of the band together. Each locking device or plate is provided in its center with a hole just large
85 enough to admit the projections, *b, b*, and this plate has recesses, *c, c*, on diametrically opposite sides of the hole but in a line lying at an angle to a side edge of the plate, to pass over the said lips, *b', b'*.

When a plate or locking device, C, is placed
90 in position to inclose the circular projections on the band, the lips pass through the recesses and the plate drops down to the side of the band. Then the plate, C, is rotated on the projection until it lies square with the
95 side of the band. The said plate may be held against rotation or displacement by any suitable means, as by a small pin, *d*, passed through the plate and band as shown in the drawings. In order to allow for the rotation
100 of the plates, C, C, when the plates are equal in thickness to the length of the projections on the band, I countersink the holes in the plates as shown. If the plates were thin this

would not of course be necessary. In order that the parts of the band will register accurately, I provide each part with a small projection, *e*, which enters a cavity in the opposite part as will be understood.

The locking devices, *C'*, *C'*, shown in Figs. 8, 9 and 11 are in the form of rings with recesses in their outer edges on diametrically opposite sides. The rings are made of thin steel and inclose circular projections, *b*, *b*, on the sides of the band, but the locking devices having a ring form are provided with circular cavities or grooves, *f*, *f*, surrounding the projections to lie in. The lips, *b'*, *b'*, are in this case not on the projections, *b*, *b*, but are formed on the outer walls of the circular grooves, *f*, *f*. After the rings are inserted in the grooves they are rotated more or less to carry the recesses therein away from the lips, *b'*, *b'*.

I do not wish to be limited to constructions herein shown and described as it will be obvious that these constructions may be varied in many ways without departing from my invention.

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

1. A rectangular band for leaf springs divided centrally into two parts, a locking device on each of two sides of the band, and means on said sides to engage the locking devices, substantially as and for the purpose set forth.

2. A band for leaf springs divided into two parts equal in size and corresponding in shape to each other, and a pair of locking devices for holding said parts together and releasing said parts when desired, as and for the purpose described.

3. A band for leaf springs divided centrally and vertically in two parts, a locking device on the top and bottom sides of the band, and means on said sides of the band to engage the locking devices, as set forth.

4. A rectangular band for leaf springs divided centrally in two parts, semi circular projections on each part lying opposite each other and plates provided with apertures to inclose said projections, as set forth.

5. A rectangular band for leaf springs divided centrally in two parts, semi circular projections on each part lying opposite each other and provided with lips, and plates provided with apertures to inclose said projections and recesses in the sides of the apertures, as and for the purpose described.

6. A band for leaf springs divided centrally into two parts, a locking device on each of the divided ends to hold the parts together, and suitable means to secure the locking devices against displacement, as set forth.

In testimony whereof I have hereunto signed my name.

GEORGE BEALE SLOAN, JR. [L. S.]

Witnesses:

ISAAC E. POOL,
GEO. B. SLOAN.