

(No Model.)

S. CROSSMAN.

BED SPRING.

No. 257,851.

Patented May 16, 1882.

Fig. 1.

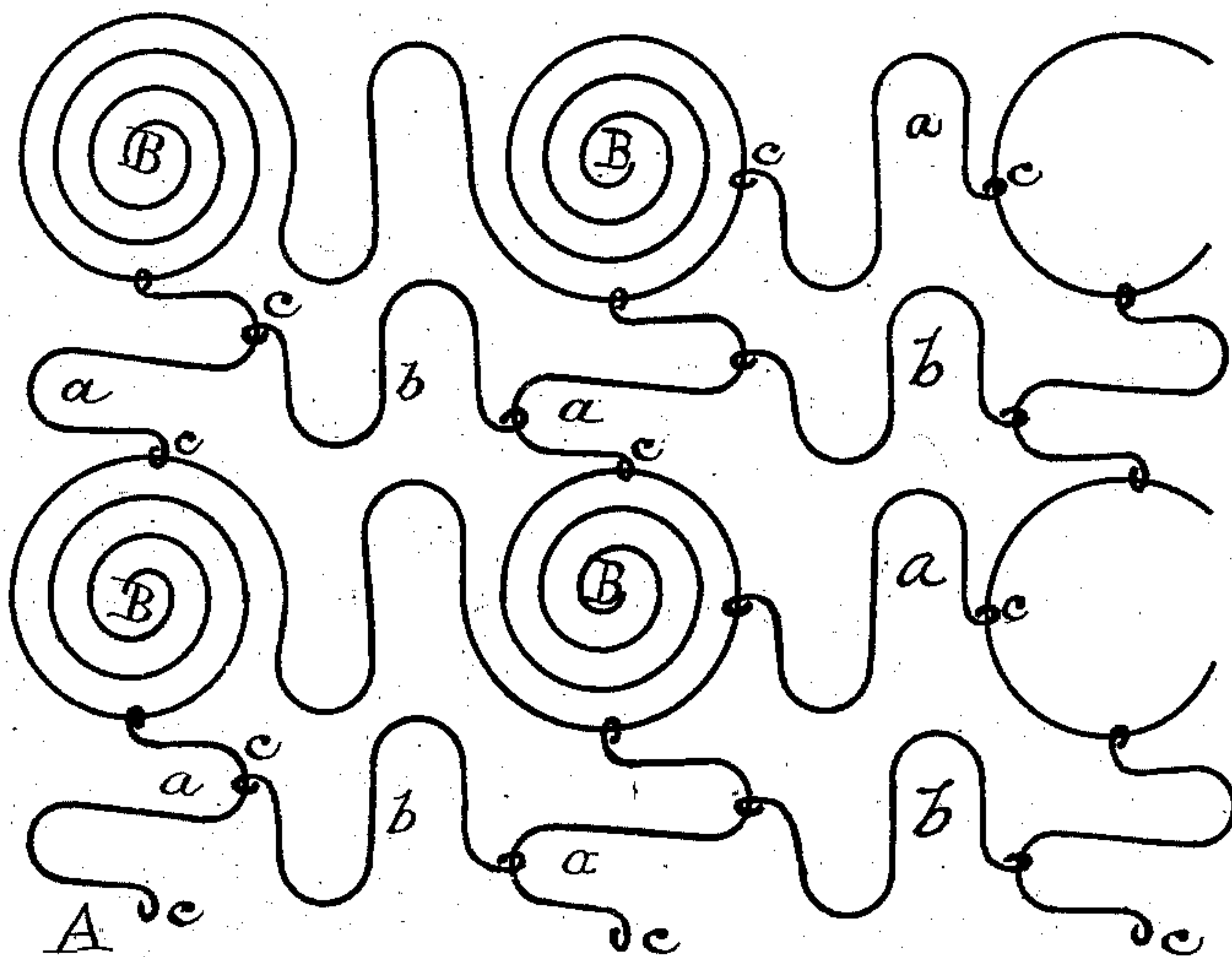


Fig. 2.

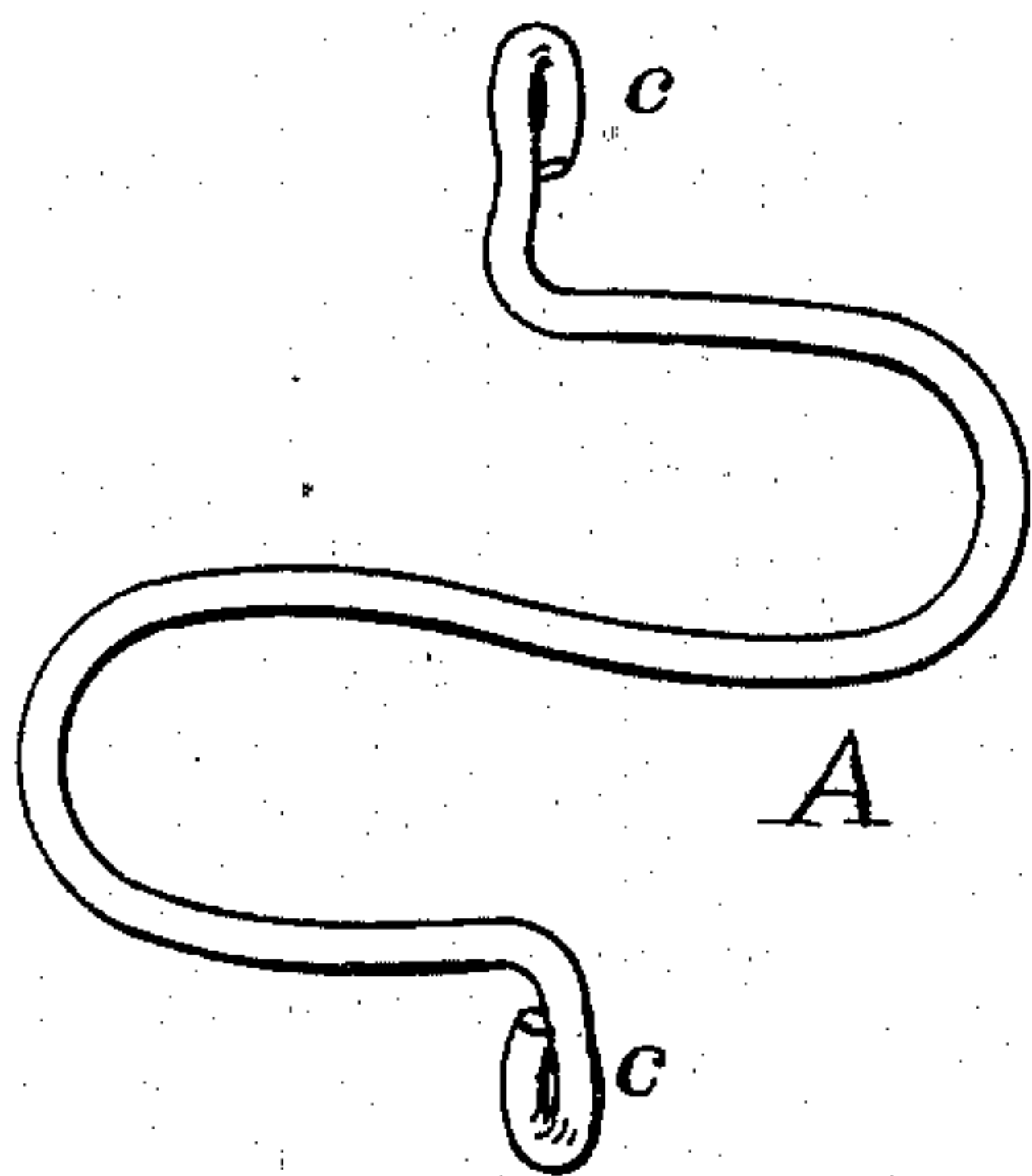
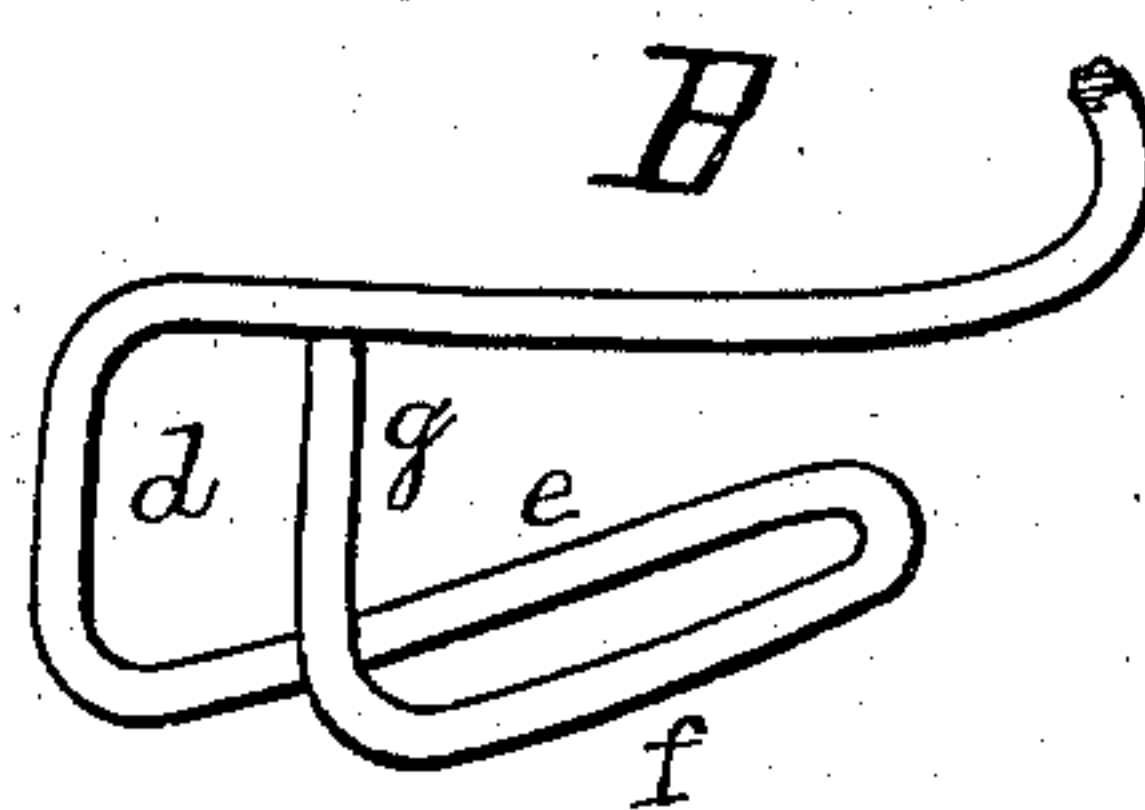


Fig. 3.



Witnesses:

E. J. Stocking
Charles Hunt

Inventor:

Samuel Crossman

H. J.

Att.

UNITED STATES PATENT OFFICE.

SAMUEL CROSSMAN, OF MIDDLEVILLE, MICHIGAN.

BED-SPRING.

SPECIFICATION forming part of Letters Patent No. 257,851, dated May 16, 1882.

Application filed February 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL CROSSMAN, a citizen of the United States of America, residing at Middleville, in the county of Barry and State of Michigan, have invented certain new and useful Improvements in Bed Springs and Links; and I 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 or figures of reference marked thereon, which form a part of this specification.

My invention relates to a spring and link for bed-bottoms, shown and described in an application pending herewith, though not claimed therein; and it consists in a peculiar-shaped link, in combination with a peculiar-shaped connection in twin springs, and in said link as constituting a member of the component parts of coiled-spring bed-bottoms, as hereinafter fully described, and specifically set forth in the claims.

Figure 1 is a plan of a set of springs peculiarly adapted to my link, as shown therein employed; and Fig. 2 is a detached view of said link, and Fig. 3 a detail, showing the clamp at the lower end of the springs.

The object of my invention is to construct, arrange, and connect spiral or coil springs in such a manner that the entire surface of the bed-bottom formed thereof shall be such as will support the mattress at all points and at the same time shall yield to pressure applied in all directions thereon—that is, vertically, laterally, longitudinally, or diagonally, in a downward direction—and at the same time have a generally pleasing appearance in outline. To accomplish this object mechanically each spring is constructed with such a connecting portion to its mate that in form it is adapted to harmonize with the form of the link employed to connect said springs with others than its mate, and at the same time have or possess in that form of connecting portion elasticity in like directions relative to its outline as does said connecting-link. I apply the name “connecting portion” to that which unites two springs and is integral therewith, and the name “connecting-link” to that which unites two springs and is not integral, but attached thereto.

My link A, as shown clearly in Fig. 2, is S-shaped, with loops *c c*, and also the connecting portion of the springs should be S-shaped, either single, double, as shown, or any number of S-shaped convolutions. It will be observed that the links A connecting springs not mates are longitudinally and transversely disposed in the bottom in uniform relative position, as shown at *a a a a*, while when connecting links and not springs, as at *b*, they are turned at right angles to the position just referred to, so that they are adapted to be attached to the prominent curves of either the springs or themselves, and are as arranged elastic in the same direction as the part to which they are connected, whereby a pleasing appearance in outline is secured to the whole bed-bottom, in addition to the mechanical adaptability of the individual elements of the bottom to each other, and a yielding elastic support in all directions and uniform in area—that is, having no unsupported or rigid points therein. The bottom coil of each spring is adapted to be attached or fastened to the slats by means of a clamp, B, formed integral with the spring by bending the wire contiguous to the lower coil thereof downward at *d* and then inward at *e*, and returning, as at *f* and *g*, leaving the end *g* abutting against the under surface of the coil, as shown in Fig. 3.

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

1. In a bed-bottom, the combination of twin springs having S-shaped connecting portions, with a yielding connecting-link of substantially S shape, substantially as shown and described.

2. As an article of manufacture, the yielding connecting-link A, being substantially S shape, and adapted to be attached to the coils of a spring, substantially as shown and described.

3. In a bed-spring, the clamp B, consisting of the parts *d e f g*, formed integral with the spring, and having the end *g* abutting against the under surface of the final coil thereof, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL CROSSMAN.

Witnesses:

WM. L. COBB,

JONATHAN E. MOYER.