

No. 654,707.

Patented July 31, 1900.

C. D. BROUYETTE.
SPRING BED BOTTOM.

(Application filed July 8, 1899.)

(No Model.)

Fig. 1.

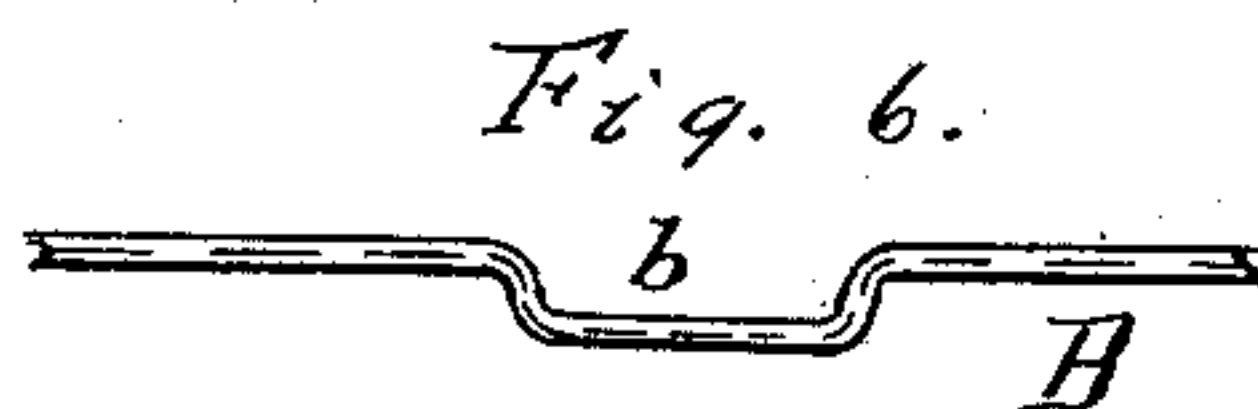
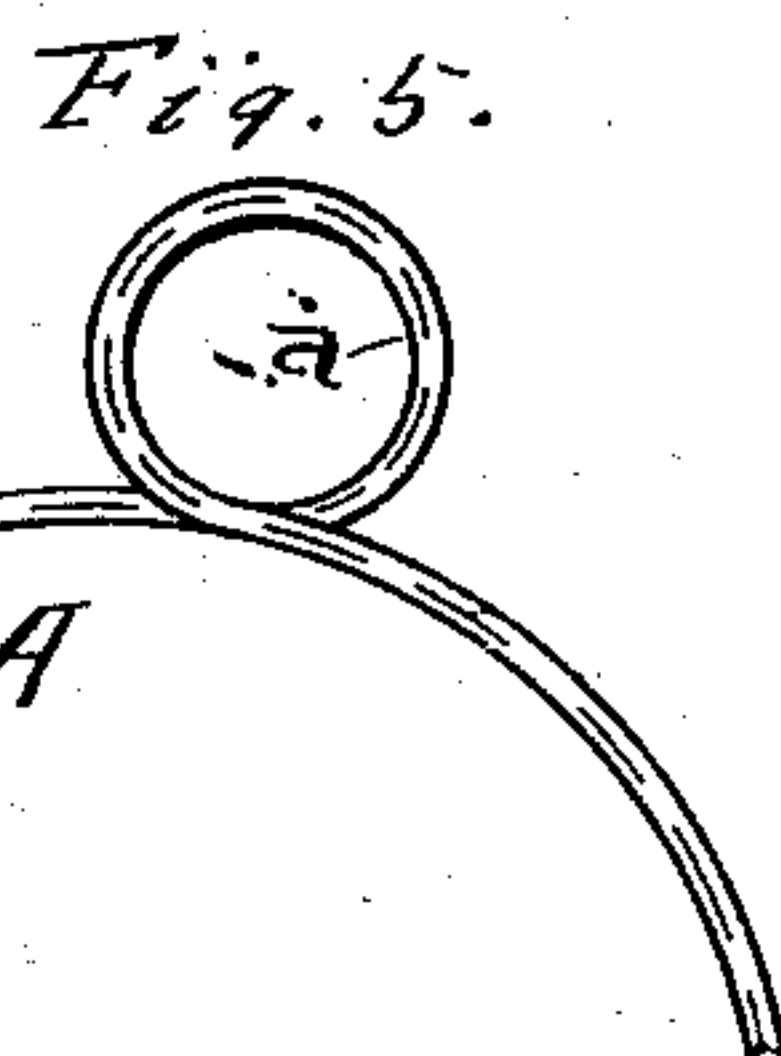
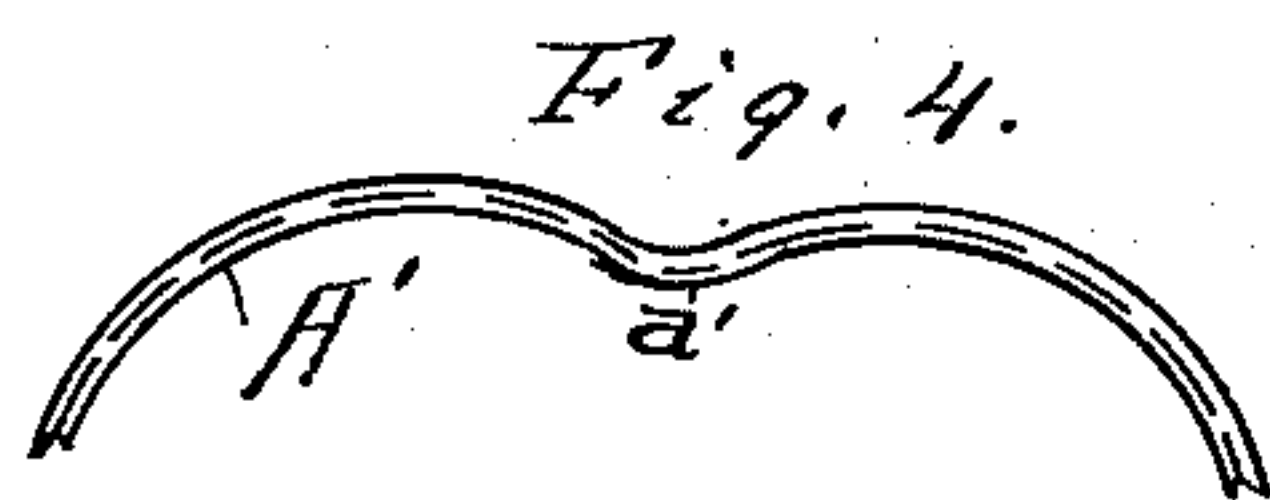
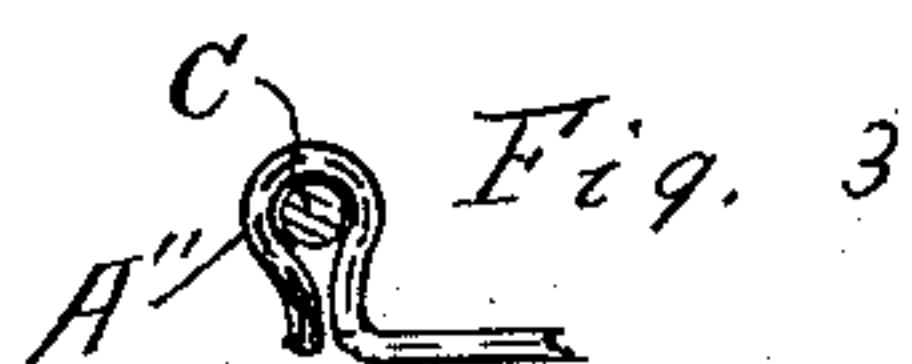
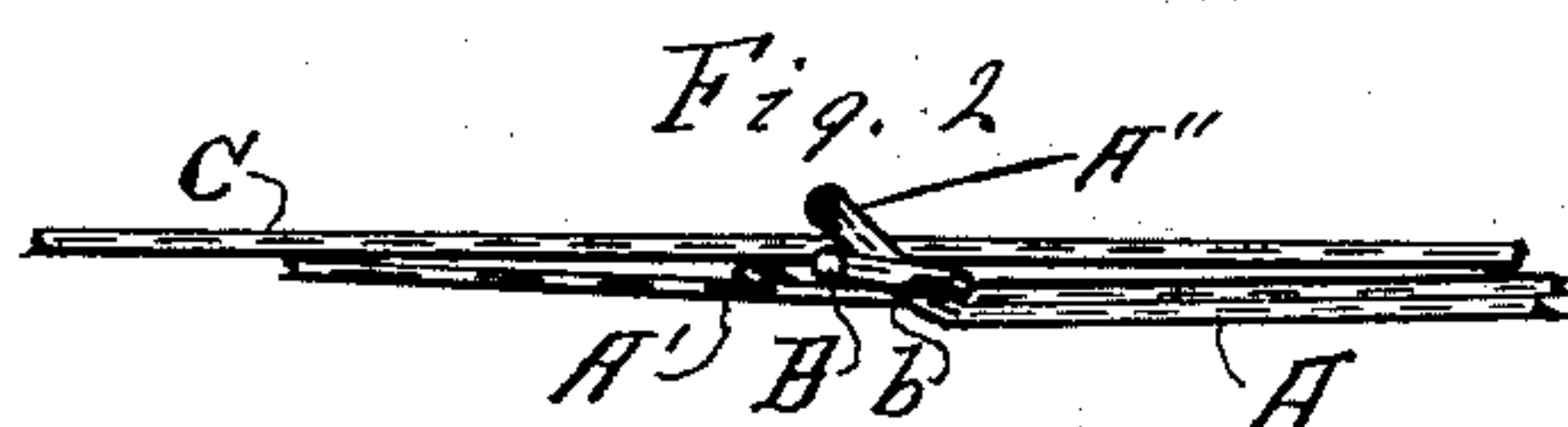
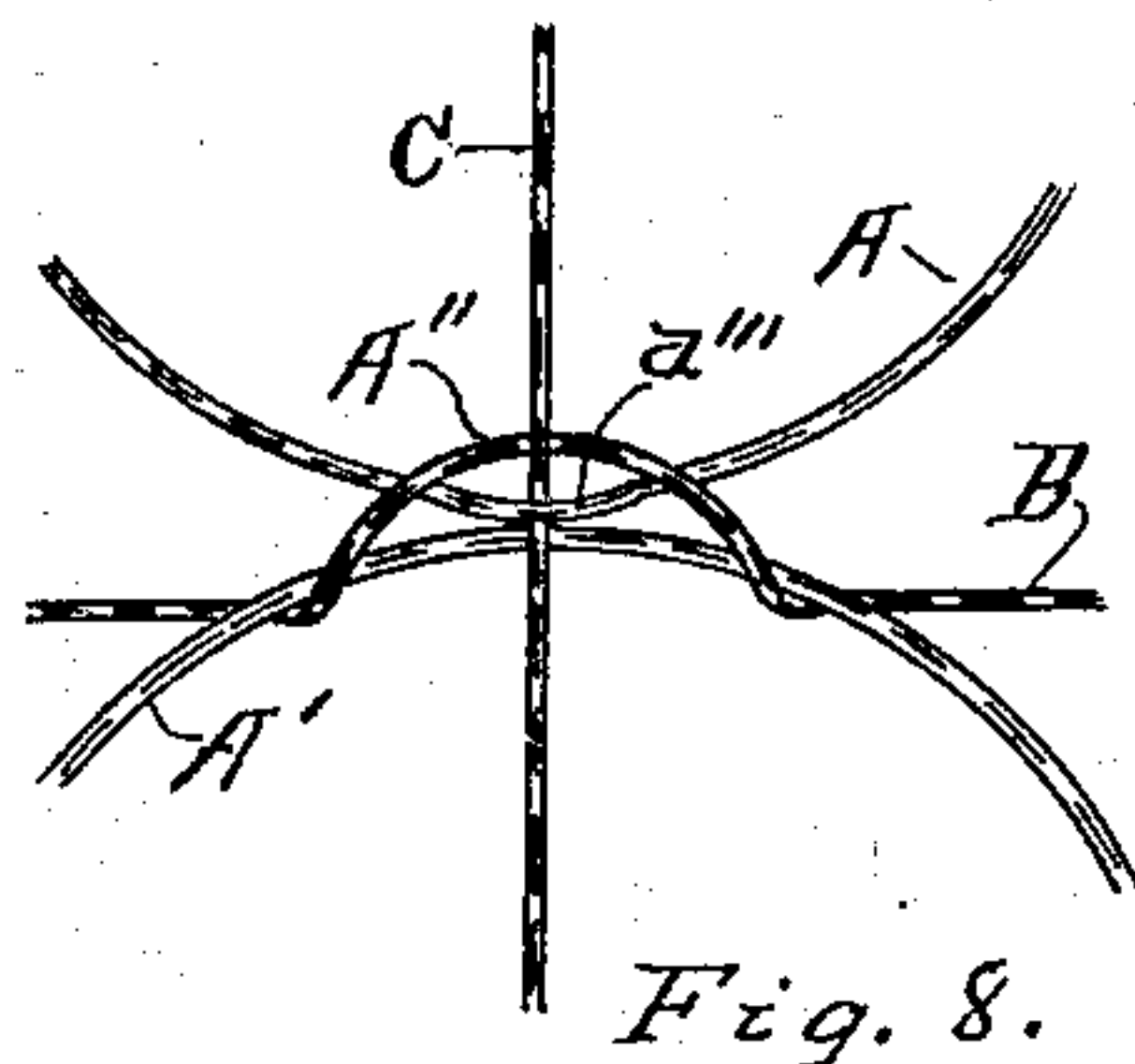
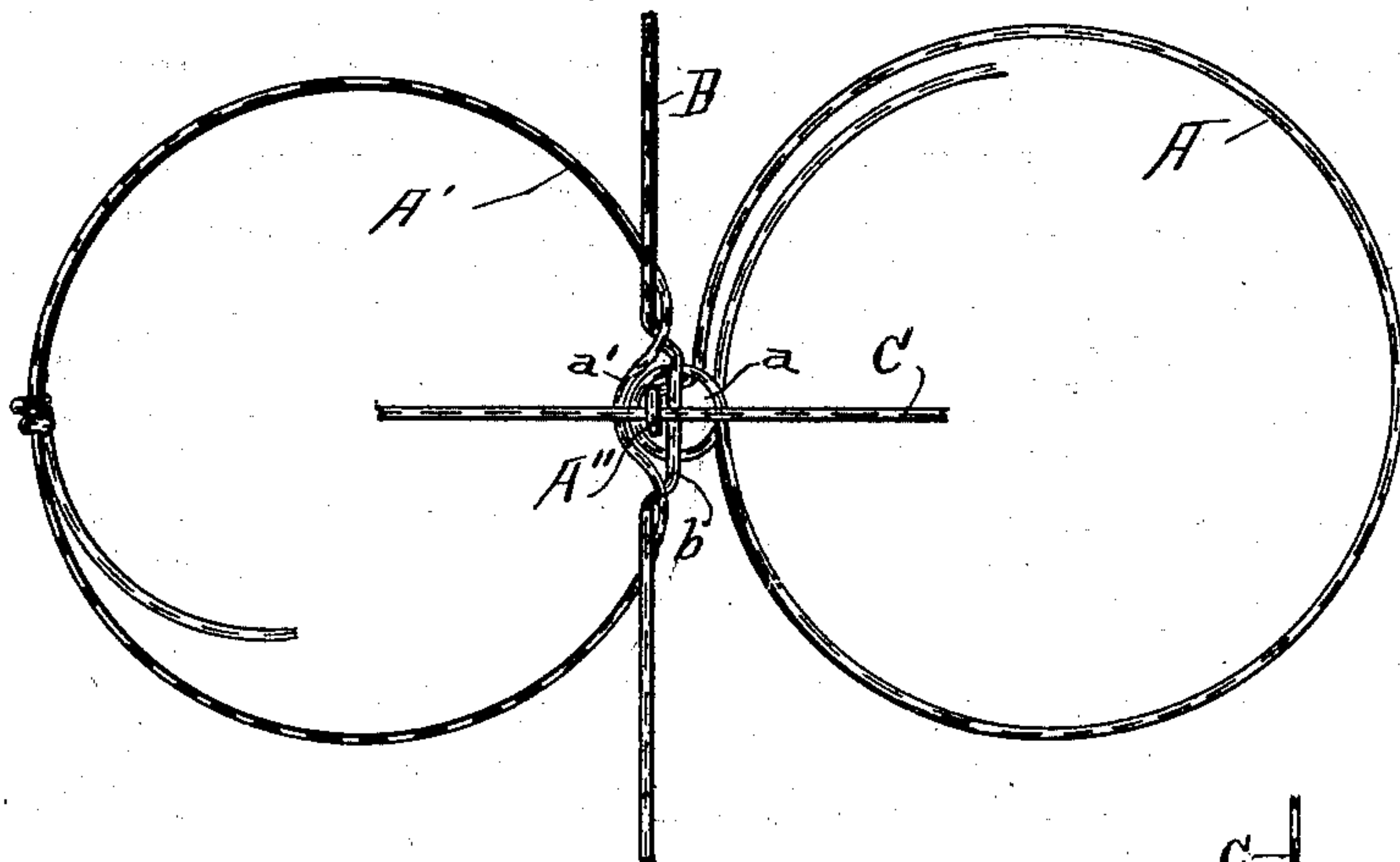
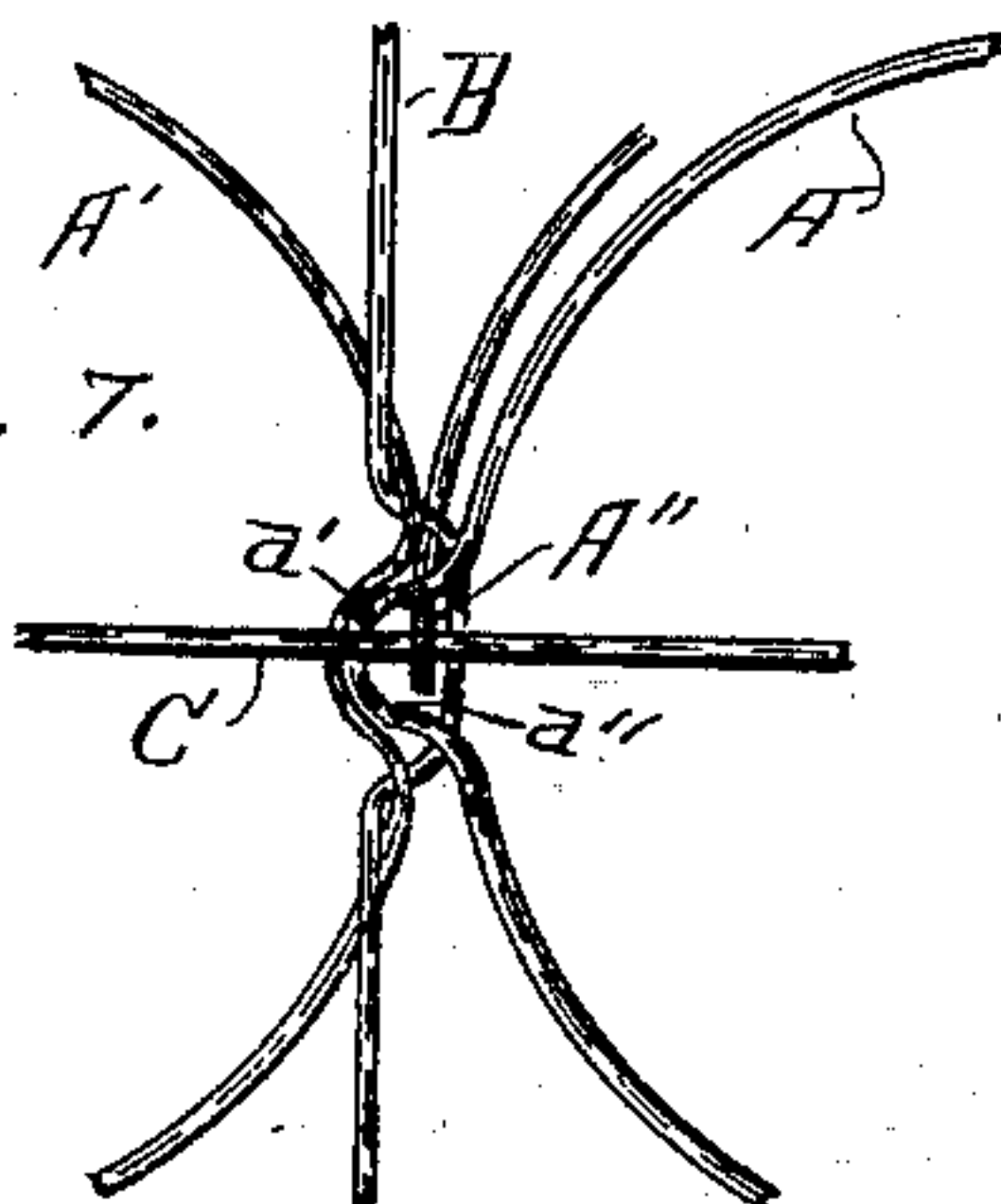


Fig. 7.



Witnesses.

A. W. Joannes
Walter L. Allen.

Inventor.

Charles D. Brouette
By John J. Gilley
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES D. BROUYETTE, OF CHICAGO, ILLINOIS, ASSIGNOR TO FRANCIS KARR, OF SAME PLACE.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 654,707, dated July 31, 1900.

Application filed July 8, 1899. Serial No. 723,234. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. BROUYETTE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Knots for Securing the Springs and Tie-Rods in Spiral-Spring Bed-Bottoms, of which the following is a specification.

My invention relates to improvements in the manner of securing the tie-rods to the surface coils of the springs in this class of bed-bottoms; and its object is to so tie the rods as to wholly avert the danger of the springs shifting their position on the rods either laterally or longitudinally of the bottom. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan of two upper coils of a spiral-spring bed-bottom, showing my manner of tying the rods. Fig. 2 is an elevation of the same. Fig. 3 is the end of one coil, showing the manner of securing the same to the lateral tie-rods. Fig. 4 shows the offset in the other coil that coacts with a corresponding offset or circle in the first coil. Fig. 5 shows a plan of the ring-offset that coacts with the offset shown in Fig. 4 in forming the knot. Fig. 6 is a section of the longitudinal tie-rod, showing its offset designed to coact with the several offsets in the coils in forming the knot. Fig. 7 is a plan of sections of the upper coils of the springs, showing an outwardly-projecting offset in one coil and an inwardly-projecting offset in the other coil in lieu of the offset and ring shown in Figs. 1 and 5; and Fig. 8 shows the knot formed without the offsets.

Similar letters refer to similar parts throughout the several views.

In Fig. 1 A represents the top coil of one spring, and A' the top coil of the adjacent spring.

In constructing this knot I usually form an inwardly-projecting offset a' in the coil A' and a corresponding outwardly-projecting ring a , in the coil A, in position to lie imme-

diately in or adjacent to the offset in the coil A', so that the offset b in the longitudinal tie-rod B will, with the tie-rod passing over the coil, pass under and beyond both offsets a sufficient distance, so that I can form a loop A'' in the end of the coil and pass this loop under the offset b in the tie-rod B and thence up through the space between this offset and the offsets in the coils, as shown in Figs. 1, 2, and 7. To complete the knot or tie, I pass the lateral tie-rod C through the loop A'' and over the coils and offsets in such a manner that the tie-rod will be held firmly to place and will hold the loop so that it cannot be drawn back through the ring a , thus forming a firm secure tie or knot between the coils and the tie-rods.

By making the offsets b in the tie-rods B a little more prominent, as indicated at a''' in Fig. 8, I can dispense with the ring a , as in Fig. 7, and can, in fact, dispense with all offsets in the coils, as in Fig. 8; but I prefer the use of the ring and offset shown in Fig. 1, as with them I can secure the knot so perfectly as to wholly avert the danger of the coils or tie-rods slipping in either direction.

In Fig. 7 I have shown an offset a'' upon the coil A in lieu of the ring a , which lies immediately against the outer surface of the coil A', the construction of the knot being otherwise the same as hereinbefore described.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A spiral-spring bed-bottom comprising coiled springs, longitudinal tie-rods having offsets that extend through the respective coils and beyond the adjoining wire of the adjacent coils, a loop formed on each coil to pass between the offsets on the longitudinal tie-rods and the adjacent spring-coils, and lateral tie-rods engaging said loops to form knots or ties between the coils, substantially as and for the purpose set forth.

2. In combination with the surface coils of a spiral-spring bed-bottom, one portion of each coil provided with an inwardly-projecting offset and the adjacent coils having a

corresponding outward offset, longitudinal tie-rods having an offset at each coil arranged to pass through said coil and beyond the offset on the adjoining coil a loop formed
5 upon the end of each coil to pass through the space between the offsets in the tie-rods and the coils, and lateral tie-rods arranged to engage said loops and tie the coils and tie-rods

to form a continuous fabric, substantially as and for the purpose set forth.

Signed at Chicago, Illinois, June 30, 1899. 10

CHARLES D. BROUYETTE.

In presence of—

FRANCIS KARR,
W. HUNTEMANN.