(No Model.)

W. WESTERMANN.

SEAT SPRING FOR CUSHIONED SEATS.

No. 447,142. Patented Feb. 24, 1891.

Fig. 1.

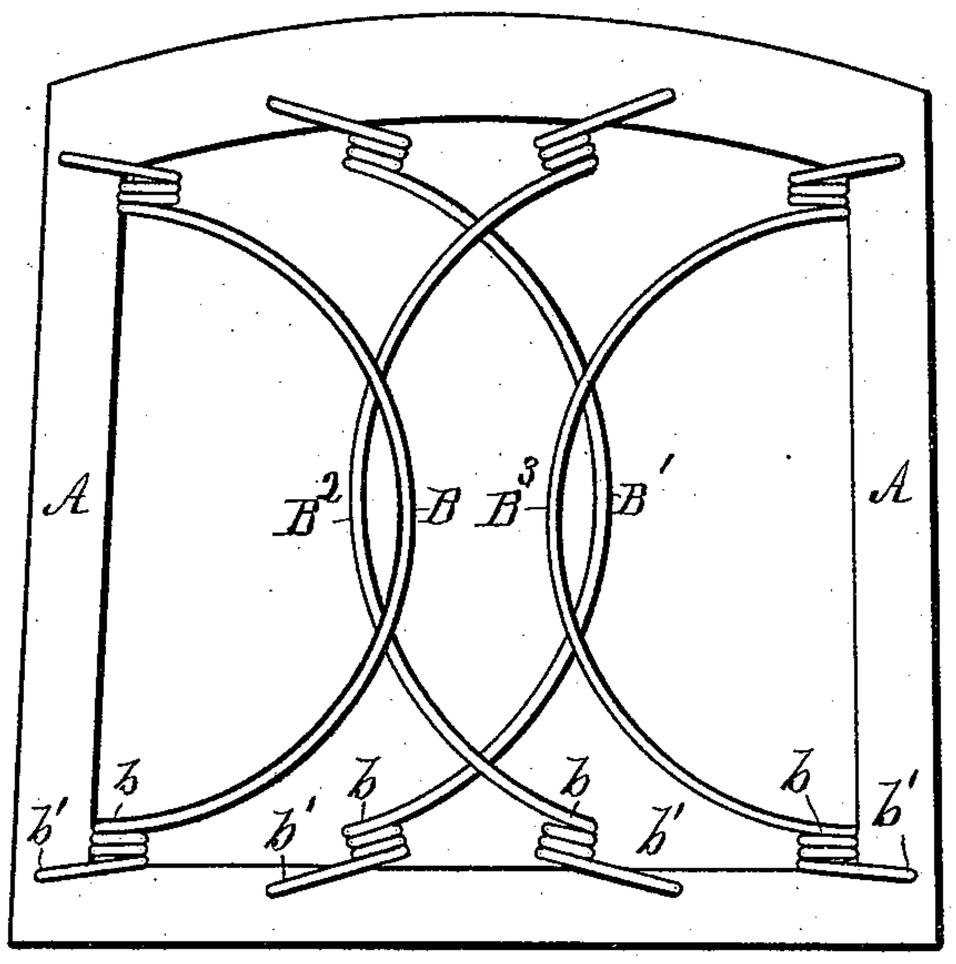


Fig. 2.

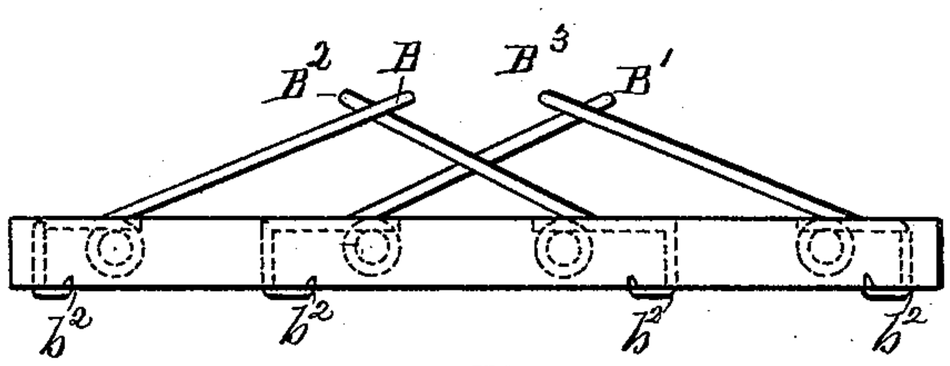


Fig. 3.

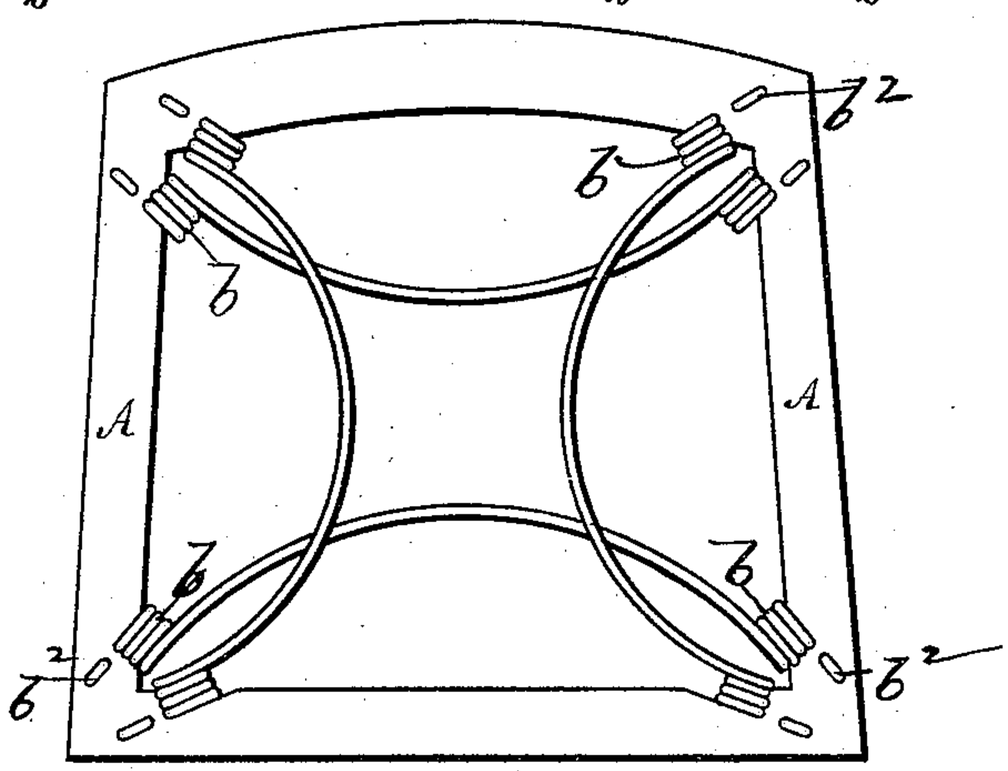
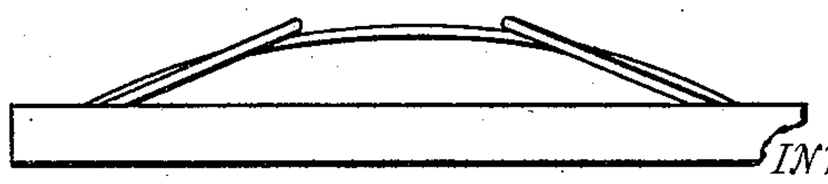


Fig. 4.



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UNITED STATES PATENT OFFICE.

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SEAT-SPRING FOR CUSHIONED SEATS.

SPECIFICATION forming part of Letters Patent No. 447,142, dated February 24, 1891.

Application filed September 13, 1890. Serial No. 364,896. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WESTERMANN, a citizen of the United States, residing at Louisville, county of Jefferson, State of Kentucky, have invented a certain new and useful Improvement in Seat-Springs for Cushioned Seats; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has for its object to provide a novel, simple, and efficient spring-seat; and it consists in the combination, with a seat-frame, of a series of springs overlapping and bearing upon each other for mutual support and each composed of a curved strip having both of its end portions formed with coils and bearing-arms, said coils located within the seat-frame flush with or below its top surface, and the bearing-arms resting on the latter and rigidly engaged with the frame.

The invention also consists of other features of construction and combination or arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a plan view of the frame of a chair illustrating my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a plan view illustrating a variation. Fig. 4 is a side elevation of the same.

In carrying out my invention, A represents a seat-bottom. This may, of course, be any seat-bottom—as, for instance, for a chair, sofa, car-seat, or the like.

B, B′, B², &c., represent the springs. They are each coiled at each end, as shown at *b*, and the extreme ends *b′* are carried outward and passed down into and preferably through the seat-frame, and there secured, and if passed through the seat-frame, as shown, the extremity may be turned and clinched, as shown at *b²*. The portions *b′* form horizontal bearing-arms, which rest upon the flat surface of the seat-frame, so that any downward pressure upon the spring is communicated directly to these portions *b′*, and through them transmitted direct downward upon the seat-frame, the said frame itself serving as a resistance or fulcrum to prevent any downward movement of the coils *b* when the seat is in use. The coils *b* are preferably arranged, as shown, so that they shall lie wholly beneath or flush with the upper surface of the seat-frame. In the position shown they are out of the way of the upholstery, and are where they are not liable to be injured or distorted by any accidental means. It is manifest that these springs may be arranged in a variety of ways so long as they overlap each other for mutual support. As shown in Fig. 1, they may cross the seat from front to rear, the springs B and B³ turning toward the center and overlapping the springs B′ and B², which are arranged along the middle and turn toward the ends. So, also, as shown in Fig. 3, springs arranged on opposite sides of the seat and projecting inwardly may overlap the springs which project inwardly from the two remaining sides.

It will be observed that in this contrivance but very little spring metal is employed, and that the device is wholly devoid of any other elements than the plain seat-frame and the said springs and does not require the presence of a rung or rod as a fulcrum for the springs. The complete structure is therefore exceedingly cheap and simple.

What I claim is—

1. The combination, with a seat-frame, of a series of curved springs overlapping and bearing upon each other for mutual support and having each end portion formed with coils *b* and a bearing-arm *b′*, said coils located flush with or below the top surface of the seat-frame, and the bearing-arms resting on the latter, extending through the frame, and clinched to the under side of the latter, substantially as described.

2. The combination, with a seat-frame, of a series of springs overlapping and bearing upon each other for mutual support, and each composed of a curved strip of wire having both of its end portions formed with coils *b* and bearing-arms *b′*, said coils located within the seat-frame flush with or below its top surface, and said bearing-arms resting on the latter and rigidly engaged with the frame, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

WILLIAM WESTERMANN.

Witnesses:

J. S. GAMBLE,

MILES WELLER.