(No Model.)

W. I. BUNKER.

SPRING ATTACHMENT FOR PLATFORM ROCKING CHAIRS.

No. 430,601. Patented June 17, 1890.

Fig. 1.

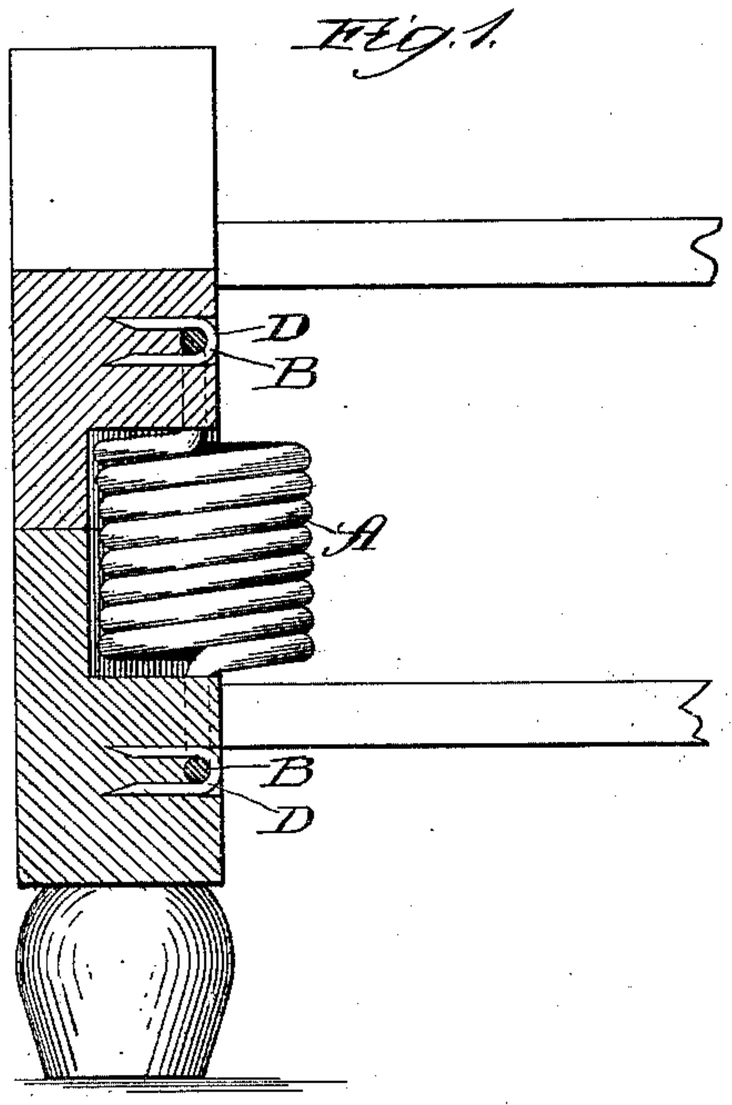


Fig. 2.

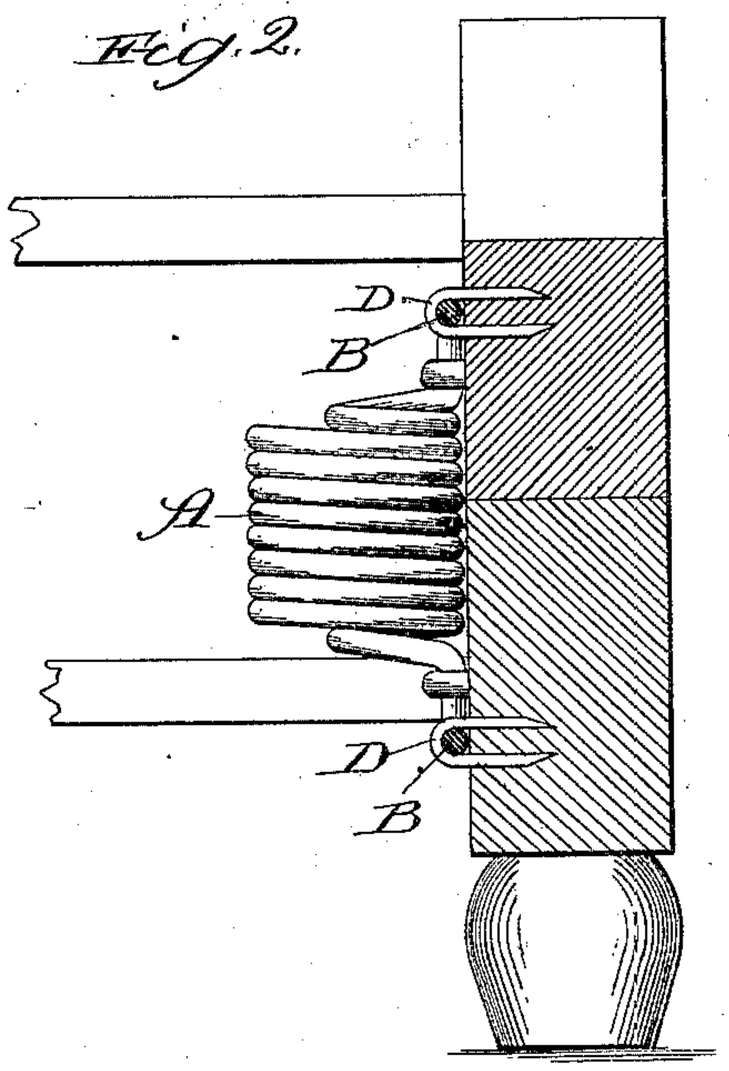


Fig. 3.

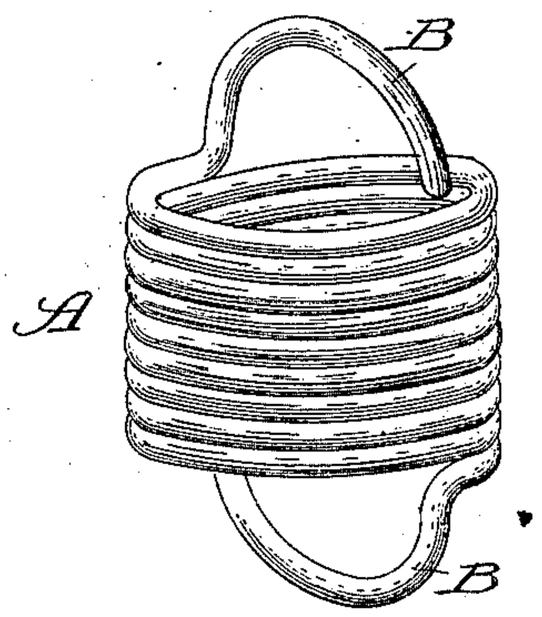
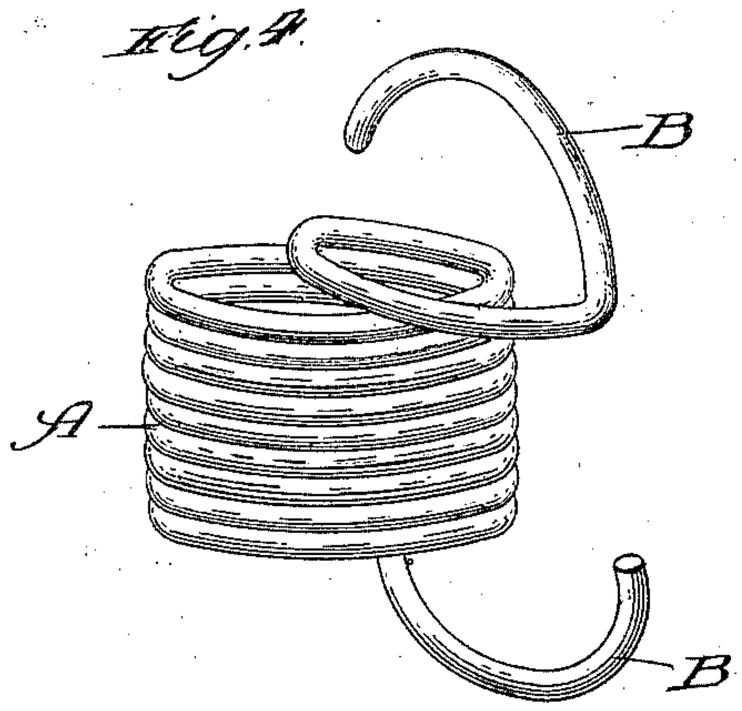


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM I. BUNKER, OF CHICAGO, ILLINOIS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE ROCKER SPRING COMPANY, OF SAME PLACE.

SPRING ATTACHMENT FOR PLATFORM ROCKING-CHAIRS.

SPECIFICATION forming part of Letters Patent No. 430,601, dated June 17, 1890.

Application filed July 25, 1883. Serial No. 101,896. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM I. BUNKER, of Chicago, Illinois, have invented certain new and useful Improvements in Spring Attachments for Platform Rocking-Chairs, of which the following is a specification.

The object of my invention is to provide a simple and efficient spring which can be attached directly to the parts of the chair without the use of long projecting brackets.

In the accompanying drawings, Figure 1 shows my improved spring connecting the two parts of a base-rocker, the spring being set into a recess in the base rail and rocker. Fig. 2 shows a spring of somewhat different construction and attached on the sides of the rail and rocker; and Figs. 3 and 4 show detail views of the forms shown in Figs. 1 and 2, respectively.

A is the body of the coil, B B the loops at the ends of such coil, and D staples for securing such loops to the chair.

I have shown two forms of construction of the spring; but prefer the form shown in Fig. 3 and the manner of attachment shown in Fig. 1. In these figures the end of the wire forming the last coil is bent upward from a given point on the spring and is bent over the center of the spring, forming a loop. A downwardly-hanging loop is formed in the same manner at the opposite end of the coil. A recess is then formed in the inside bottom face of the rocker, and a corresponding recess is formed in the upper face of the base-rail of a depth equal to half or a little more than half the diameter of the coil. The loops B B are let into the side faces of the rocker and rail, respectively, and secured by staples or other equivalent means; or the loops may be simply placed on the faces of the rail and rocker and secured thereon.

In the form of construction shown in Fig. 4 the loop is formed by bending the last coil of the spring substantially in the manner shown, or until the vertical plane of the outside of the loop is coincident with the outer edge of the coil. The spring is simply placed at the proper place on the inner faces of the rocker and base-rail and the loops secured to each, respectively, by staples or any equivalent means. These springs are constructed very cheaply. The loops are formed from and as a part of the coil, and, owing to their length of bearing, prevent the lateral displacement of the rockers. The loop affords longer, more secure, and more effective bearings for the spring than is possible where the end of the wire is not extended, and the securing of the loop at more than one point operates to hold the body of the spring rigidly in place, and thus to prevent the turning or twisting which is unavoidable where there is merely a central loop hooked over a single stud, as in the Lord patent, No. 134,688. This manner of securing the loop also enables the whole elasticity of the spring to exert a leverage on the loop and its fastening devices, thus holding the loop rigidly in place, which is not possible where it is loosely secured at one point only, and, the loop being fastened directly to the rocker or base-rail, there are no long projecting studs or parts of brackets in position to be easily broken off by accidents or careless use.

When I speak of securing the spring "directly" to the rocker and base-rail, I simply mean that long projecting studs or brackets are dispensed with; and I intend to cover other forms of fastening devices equivalent to those shown and adapted to secure the loop at different points. By securing the loop at "different points" I mean that the fastening devices are to be applied so as to hold the loop from more than one point, preferably from three, one at the center and one at each side of the center; but it is immaterial how many points the loop is fastened at so long as it is held rigidly, as distinguished from the loose connection formed by hooking a loop over a single stud.

I claim—

1. The combination, with the rocker and base-rail of a platform rocking-chair, of a spiral spring having a loop integral therewith formed by the bending of its last coil substantially at right angles to the plane of the body of its coils, and fastening devices for rigidly securing the same at different points to the rocker and base-rail, substantially as described.

2. As a new article of manufacture, a platform rocking-chair attachment comprising a spiral spring having a loop integral therewith at each end formed by the bending of its last coil substantially at one side of the body of the coil and at right angles to the plane thereof, whereby it may be rigidly secured at different points directly to the rockers and base-rails, substantially as described.

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