

G. J. KING.
 SPRING STRUCTURE.
 APPLICATION FILED MAR. 30, 1914.

1,118,136.

Patented Nov. 24, 1914.

Fig. 1.

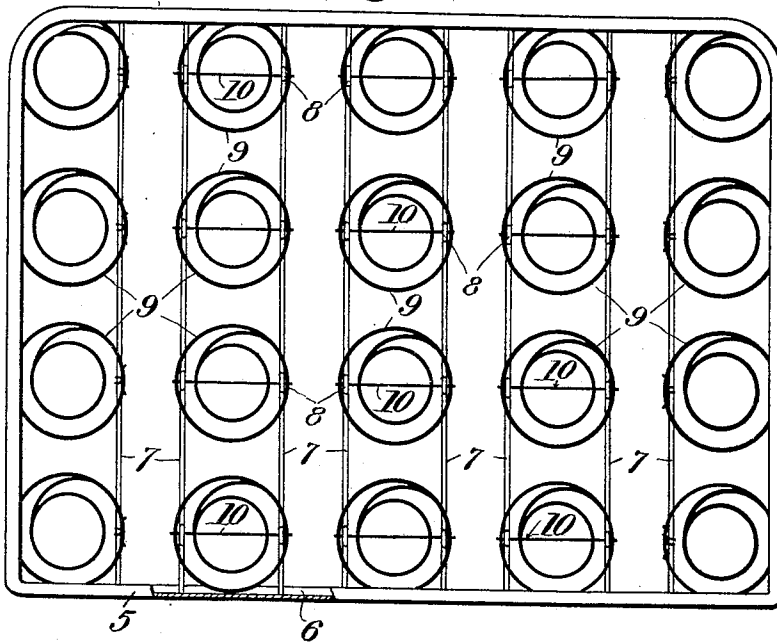
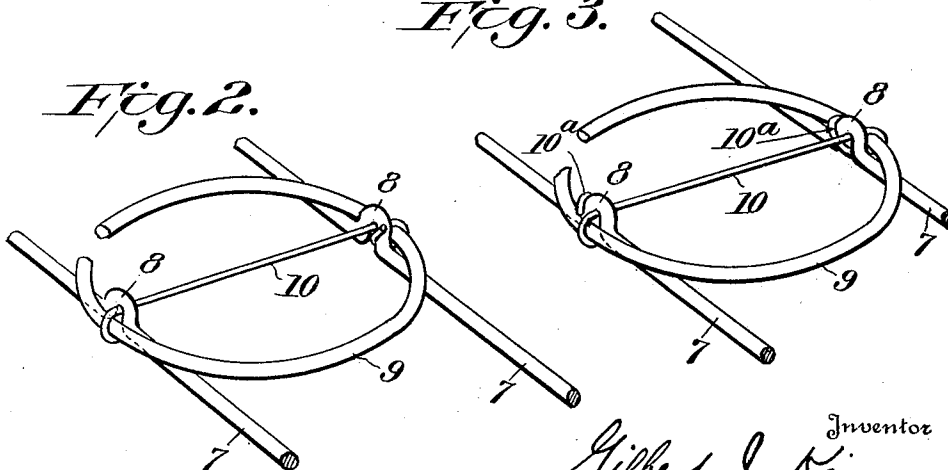


Fig. 3.

Fig. 2.



Witnesses

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SPRING STRUCTURE.

1,118,136.

Specification of Letters Patent.

Patented Nov. 24, 1914.

Application filed March 30, 1914. Serial No. 828,385.

To all whom it may concern:

Be it known that I, GILBERT J. KING, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Spring Structures, of which the following is a specification.

This invention relates to spring structures.

One object is to provide a new and novel means for mounting the springs and fastening them to their supporting means against slipping.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes may be made in the form, proportion, size and minor details without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a top plan view. Fig. 2 is a fragmentary perspective view. Fig. 3 is a detail fragmentary view of a modified form of the invention.

Referring now more particularly to the accompanying drawings, the reference character 5 indicates a frame of any suitable character but which, as shown, has an internal groove 6 in which the ends of the supporting wires 7 may be secured. These supporting wires are preferably arranged in pairs and provided with oppositely disposed upwardly directed kinks 8 which open downwardly. Springs 9 are adapted to have their lower convolutions rest upon the supporting wires with the said kinks 8 projecting upwardly within the lower convolutions of the springs and preferably adjacent the inner surfaces of said convolutions of the springs.

A fastening wire 10 is passed through the oppositely disposed kinks 8 and over the upper surfaces of the lower convolutions of the springs. Each fastening wire has its extremities bent around the lower convolutions of the respective springs and upwardly through said kinks and, if desired, coiled

around the kinks from the inner surfaces 50 of the latter, as shown at 10^a in Fig. 3. This particular means for fastening the springs to the supporting wires against slipping movement is simple and economical and, by virtue of the fastening wires being arranged centrally of the convolutions of the springs, they serve the function not only of fastening the springs on the supporting wires but they also prevent the intermediate coils of double cone springs, such as shown, from being forced downwardly below the supporting wires.

What is claimed is:—

1. A spring structure comprising a frame, spaced supporting wires, each supporting wire having an upwardly directed kink which opens downwardly, a spring having its lower convolution resting on said supporting wires with said upwardly projecting kinks arranged within the lower convolution and adjacent the inner surfaces of the latter, and a fastening wire extending centrally across the spring and through said kinks and bent around the lower convolution of the spring and directed upwardly through the respective kinks.

2. A spring structure comprising a frame, spaced supporting wires, each supporting wire having an upwardly directed kink which opens downwardly, a spring having its lower convolution resting on said supporting wires with said upwardly projecting kinks arranged within the lower convolution and adjacent the inner surfaces of the latter, and a fastening wire extending centrally across the spring and through said kinks and bent around the lower convolution of the spring and directed upwardly through the respective kinks and finally coiled around one side of the respective kinks from the inner surfaces of the latter.

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

GILBERT J. KING.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."