G. B. KOHLER.

MEANS FOR SECURING SPRINGS TO SLATS.

APPLICATION FILED MAR. 28, 1914.

1,124,031. Patented Jan. 5, 1915.

Fig. 2.

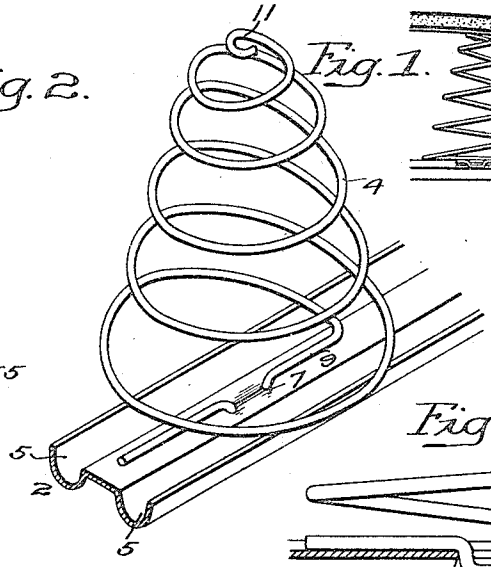


Fig. 1.

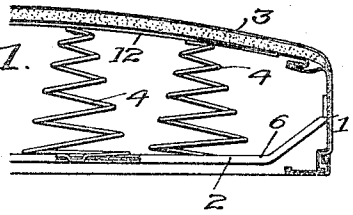


Fig. 4.

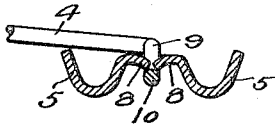


Fig. 3.

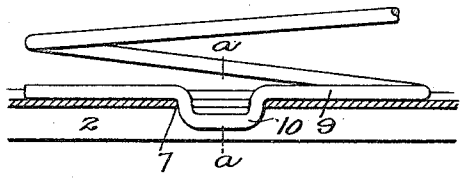


Fig. 5.

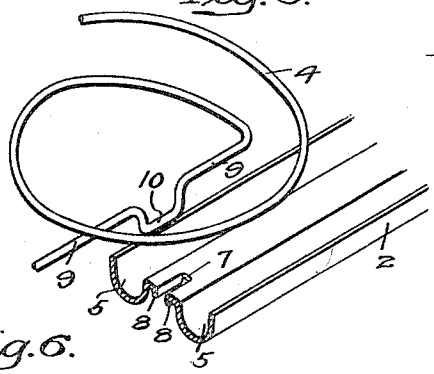


Fig. 7

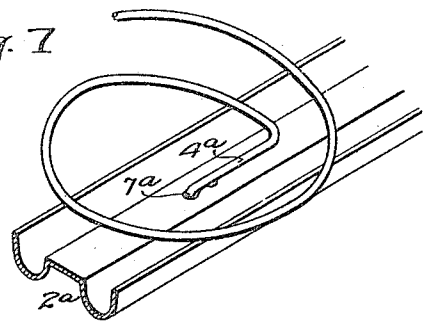


Fig. 6.

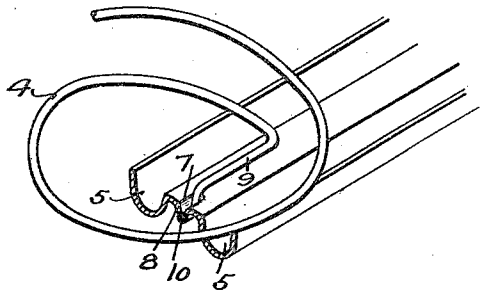
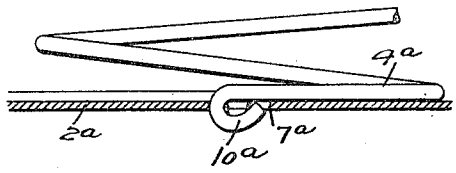


Fig. 8.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE B. KOHLER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE J. G. BRILL COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

MEANS FOR SECURING SPRINGS TO SLATS.

1,124,031. Specification of Letters Patent. Patented Jan. 5, 1915.

Application filed March 28, 1914. Serial No. 827,944.

To all whom it may concern:

Be it known that I, GEORGE B. KOHLER, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Means for Securing Springs to Slats, of which the following is a specification.

My invention relates to certain improvements in the means for securing a spiral spring to a metallic slat, or other support.

The object of the invention is to provide a means for holding the spring to a slat, which will hold the spring securely in position and which will not require the spring to be turned to attach it to the slat.

The invention is adapted for readily holding the springs to car seats and backs, but it will be understood that it can be used for securing springs of any seat or cushion in position.

In the accompanying drawing:—Figure 1, is a sectional view through a portion of a car seat, showing the spring located in position on a slat; Fig. 2, is a perspective view illustrating the means of fastening the spring to the slat; Fig. 3, is a longitudinal sectional view through the slat; Fig. 4, is a transverse sectional view on the line *a*—*a*, Fig. 3; Fig. 5, is a sectional perspective view, showing the spring detached from the slat; Fig. 6, is a sectional perspective view, showing the spring secured to the slat; Fig. 7, is a perspective view illustrating a modification of the invention; and Fig. 8, is a longitudinal sectional view illustrating another modification of the invention.

Referring to the drawings, 1 is the frame of a car seat.

2 is one of a series of slats extending from one side of the frame to the other.

3 is the top section of the seat and 4, 4 are the spiral springs, which rest on the slats and support the top portion 3. The slats are preferably made, as shown in Fig. 2, of ribbed sheet metal having curved flanges 5 at each side. The slats are turned up at each end, as at 6, and are riveted to the frame 1. Each slat is slotted at 7, and the material of the slat is turned down to form flanges 8 at each side of the slot. The lower end of the spring is in the form of a bar 9, depressed at 10. This depression is of such a length that it will snugly fit in the slot 7 and is of such a depth that the flanges 8 can be turned in over the depressed portion 10, as shown in Figs. 4 and 6, so as to hold the bar 9 rigidly in position on the slat 2.

In this type of seat structure, the upper portion 11 of the spring is secured to a cushion plate 12, which supports the upper structure 3 of the seat. Therefore, means must be provided for securing the springs to the slats, or other supports, which will not necessitate the turning of the springs. There are many simple methods of fastening the springs to the slats, but in all instances the springs must be turned. In this instance, the springs can be rigidly secured to the cushion plate and the portion 10 can be inserted in the slot in the slat 2 and the flanges 8 can be bent over this portion, thus firmly securing the springs in position.

In Figs. 7 and 8, I have illustrated a modification of the invention, in which the end of the spring 4^a is bent to form a loop 10^a, which is inserted in the slot 7^a of the slat 2^a and the side walls of the slat are bent into the opening in the loop, thus firmly holding the spring to the slat.

I claim:—

1. The combination of a supporting slat having a slot therein; a flange on each side of the slot; and a spiral spring having a portion extending into the slot, said flanges engaging the extending portion of the spring.

2. The combination of a supporting slat having a slot therein and having a flange on each side of the slot; a spiral spring having a straight bar at the lower end resting directly on the top of the slat, said bar having a depression which extends through the slot in the slat, the said flange extending over the depressed portion of the spring and securing the spring firmly to the slat.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

GEORGE B. KOHLER.

Witnesses:
WM. R. MARTIN,
H. F. MCKILLIP.

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