

United States Patent Office.

JAMES T. COWLEY, OF LOWELL, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE AMERICAN METALLIC CUSHION COMPANY, OF WEST VIRGINIA.

SEAT OR CUSHION.

SPECIFICATION forming part of Letters Patent No. 569,784, dated October 20, 1896.

Application filed March 2, 1896. Serial No. 581,463. (No model.)

To all whom it may concern:

Be it known that I, James T. Cowley, of Lowell, county of Middlesex, and State of Massachusetts, have invented new and useful Improvements in Seats or Cushions; and I hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the construction of a seat or cushion in which spring-wires are used instead of the usual spiral springs or hair, and it is adapted to be used in connection with furniture, carriages, or any articles in which a flexible or pliable cushion is required.

My invention consists of certain novel features hereinafter described, and particularly pointed out in the claims.

In the drawings which accompany this application and which illustrate a construction embodying my invention, Figure 1 is a plan view of the top of the seat or cushion with the cover omitted. Fig. 2 is a cross-section on the line a a, Fig. 1. Fig. 3 is a cross-section through the cushion, in which the under part of the cushion is provided with springs to support the upper part or seat-springs of the cushion. Fig. 4 is a detail view of one of the bottom springs.

Like letters of reference refer to like parts

throughout the several views.

The frame B is composed of one or more parts having one or more sleeves C, which fit around the ends of the adjacent parts, and the said ends are covered by the said sleeves C to permit of the expansion and contraction of the frame B, owing to weight applied to and removed from the cushion, and thus also lowing the cushion to yield under weight.

Around the frames B, located at the top and the bottom of the cushion, the eyes D² of a series of springs D, which compose the seat, are arranged, and between the said eyes D² the springs are provided with a coil D', located around a suitable support A, which may be made of wire, coiled spring, wire cord, or any suitable supporting medium, and the seat or cushion, which is composed of a series of such wires, is incased in a suit-

able cover E. Now when weight is applied to said seat or cushion the springs D yield under the weight, and the eyes D², surrounding the frame B, will tend to move in toward the center of the seat or cushion.

By constructing the frame B with the loose sleeves C surrounding the ends of the frame B this frame is allowed to close together or contract when weight is applied to the seat or cushion and the ends approach each other 60 within the sleeves C, and when the weight is removed therefrom the action of the springs D, returning to their normal position, will expand the frame B to its original position and withdraw the ends of the frame B in the 65 sleeves C apart.

By providing the frame B with the sleeves C the movement of the springs D, which tend to close together when weight is applied thereto, is taken up by the contracting of the 70 frame B within the sleeves C, and when the weight is removed the springs withdraw the frame B from its contracted position within the sleeves C and the seat or cushion resumes its original shape.

Referring now to Fig. 3, the seat or cushion above described is shown as applied to a cushion requiring a square edge E', suitable for a settee or chair. The upper part or seat-springs of this cushion is constructed the same 80 as described in Figs. 1 and 2, and in order to provide a square section, as shown at E', the lower ends of the springs D are joined to a frame D³ within the cushion:

A series of suitable supporting-springs G 85 are arranged within the cushion provided with a coil G' and eyes G² and G³, and the upper eyes G² surround and support the frame A, and through each lower eye G³ a suitable fastening device G⁴ passes and secures the 90 said springs to a suitable base.

Instead of the two armed springs G, as above described, there may be used the common spiral springs H to support the upper seat-springs D of the cushion.

Instead of securing the eyes D² of the springs D to the frame D³, as above described, the eyes may extend inwardly toward the center and be linked together, as shown at F F'.

I do not limit myself to the arrangement 100

and construction shown, as the same may be varied without departing from the spirit of my invention.

Having thus ascertained the nature of my 5 invention and set forth a construction embodying the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a seat or cushion, a series of spring-10 wires, and means for supporting said wires adapted to contract under the action of weight

on said seat or cushion.

2. In a seat or cushion, a series of springwires, and means for supporting said wires 15 to which the ends of said spring-wires are connected adapted to contract under the action of weight on said seat or cushion.

3. In a seat or cushion, a series of springwires provided with a coil between the ends 20 thereof, a support to which said spring-wires are connected located in the said coils, and supporting means to which the free ends of said wires are connected adapted to contract under the action of weight on said seat or 25 cushion.

4. In a seat or cushion, a series of springwires provided with a coil between the ends thereof, a support to which said spring-wires are connected located in the said coils, and

30 independent supporting means to which the

upper and lower ends of said wires are connected and adapted to contract under the action of weight on said seat or cushion.

5. In a seat or cushion, a series of springwires provided with a coil between the ends 35 thereof, a support to which said spring-wires are connected located in the said coils, supporting means to which the free ends of said wires are connected adapted to contract under the action of weight on said seat or cush-40 ion, and a series of under supporting-springs adapted to support the springs forming the

seat or cushion.

6. In a seat or cushion, a series of springwires provided with a coil between the ends 45 thereof, a support to which said spring-wires are connected located in said coil, and an upper and lower contracting frame to which the upper and lower ends of said wires respectively are connected and adapted to contract 50 under the action of weight on said seat or cushion.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 13th day of 55 December, 1895.

JAMES T. COWLEY.

Witnesses:

FRANK COBURN, A. E. HUMPHREYS.