(No Model.)

H. ROBERTS.

WOVEN WIRE SEAT.

No. 250,843. Patented Dec. 13, 1881.

Fig. 1.

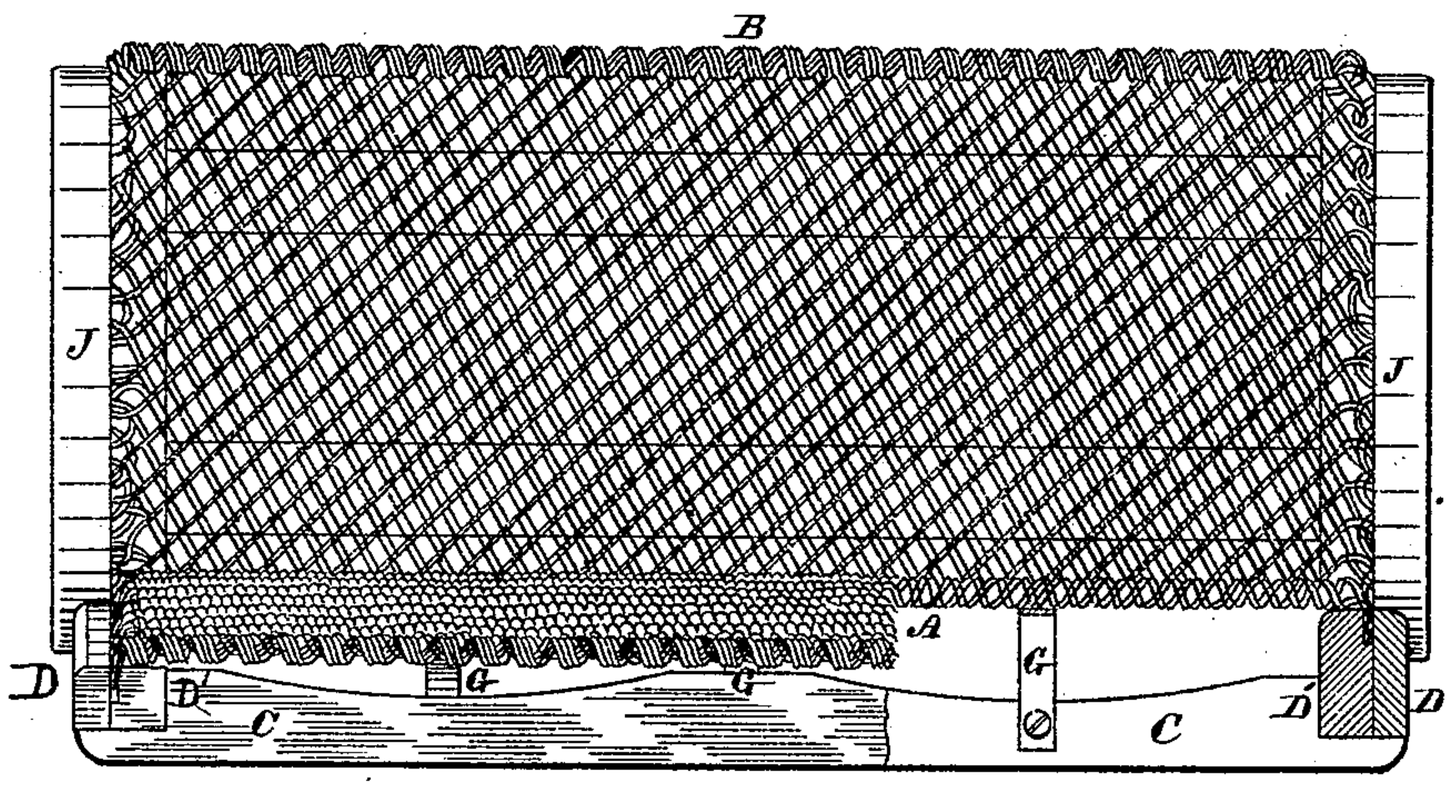


Fig. 2.

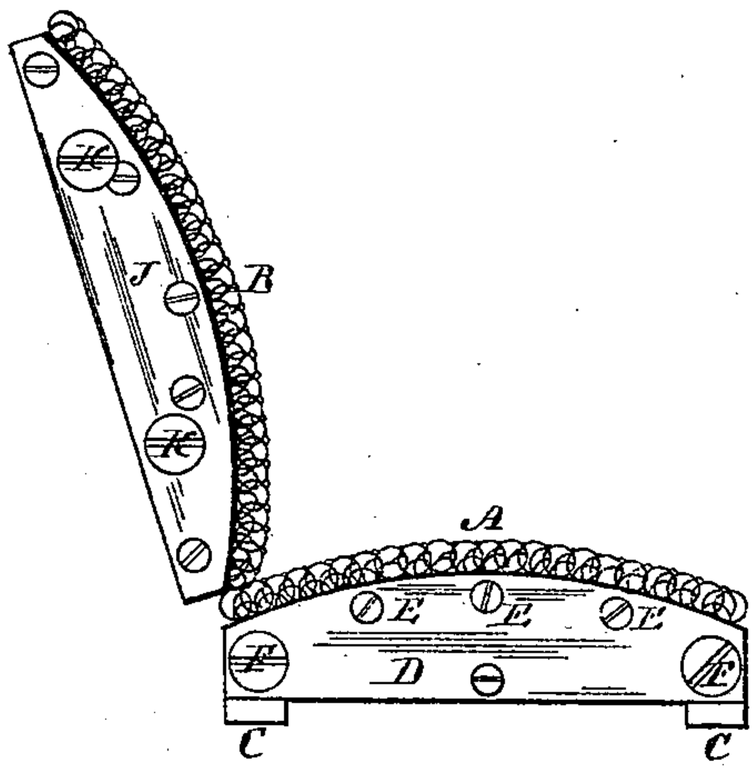
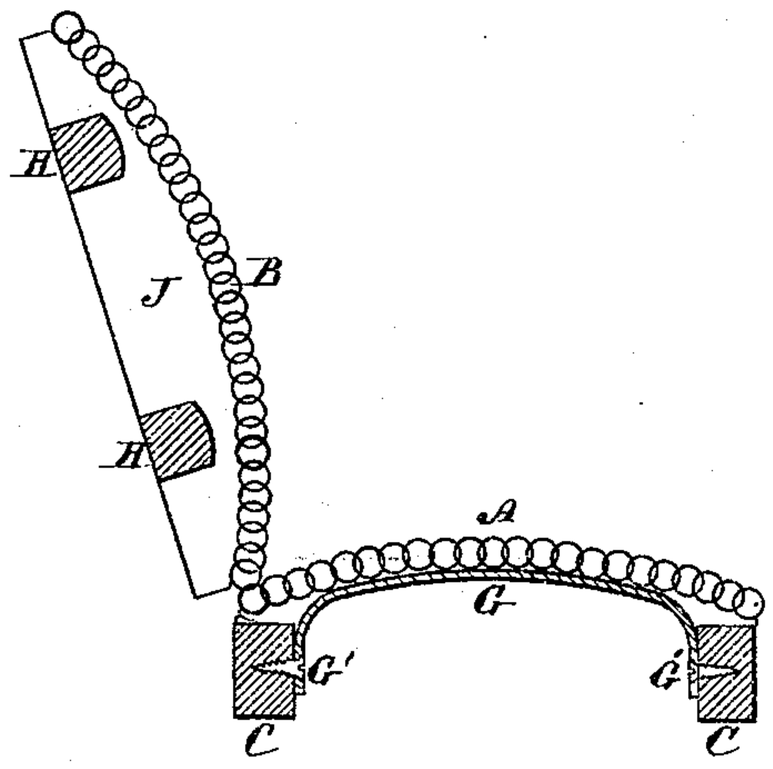


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

HENRY ROBERTS, OF HARTFORD, CONNECTICUT.

WOVEN-WIRE SEAT.

SPECIFICATION forming part of Letters Patent No. 250,843, dated December 13, 1881.

Application filed March 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY ROBERTS, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Woven-Wire Seats; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My invention relates to car-seats, sofas, lounges, &c., in which an elastic coiled wire fabric is stretched upon a frame to form a seat or a basis for the upholstering.

The object of my invention is to avoid and obviate the difficulties which have heretofore been encountered in the use of this material for the purpose named, which have been chiefly a sagging or want of sustaining-power in the middle part of the seat when the fabric was suspended from end to end of the frame.

In the accompanying drawings, illustrating my invention, Figure 1 shows a front view of a seat of my improved construction, not upholstered, in order to show the construction. Fig. 2 is an end view of the same. Fig. 3 is a cross-section through the middle of the seat.

In Fig. 1 one of the front corners is cut away so as to show the interior parts.

A is the elastic wire fabric forming the seat, and B is a fabric of the same kind forming the back of the seat. The supporting-frame of the seat A is constructed with two side bars, C C, and two end bars, D D, recessed into the ends of the side bars and extending slightly above them. The end bars are curved upward so as to give a crowning form to the seat, and are constructed of two parts, D and D′, between which the flattened edge of the fabric is clipped and secured by the screws E. The elastic fabric thus attached to the end bars is stretched so as to give it a suitable tension, and the end bars are secured to the side bars by the screws F, to hold the whole firmly in place.

G G G are thin flexible springs, one or more of which may be used, having a top surface of the form and curve of the under side of the wire fabric, and bending down so as to lie against and be attached to the side bars, C, by means of screws or bolts G′. These springs are intended to yield downward on the top and spread outward at the sides to conform to any depression of the fabric. They form partial and yielding intermediate supports, which prevent the sagging, like a hammock, of the elastic fabric as it ordinarily does to some extent when supported only at the ends, and removes the great objection to its use for seats resulting from this cause.

This seat can be used constructed as above described, or it may be covered or upholstered in the usual manner, applying the covering or upholstering directly upon the top of the elastic fabric, which forms an elastic spring-surface of great strength and durability.

The frame for the back of the seat has end bars of the same construction above described, from which the elastic fabric is suspended from end to end; but the side bars are differently arranged, so as to avoid having a hard ridge upon the top of the back. They are placed sufficiently in from the side of the fabric to admit of the upholstering being carried around the top edge without coming directly upon the hard edge of the side bar, and if used without upholstering the top edge of the fabric presents a yielding surface. This construction is shown in Fig. 3, where H H are the side bars. They are attached to the end bars, J, by the bolts K. The side bars thus coming farther under the curve of the fabric can be made somewhat higher or nearer the fabric, which gives a stronger construction.

What I claim as my invention is—

1. The combination of the yielding flat spring G, extending from side bar to side bar, with the elastic coiled-wire fabric A, suspended from the curved end bars, J, and the side bars, C, substantially as described.

2. The combination of the curved end bars, J, the elastic coiled-wire fabric B, and the side bars, H, placed entirely within the edges and under the curved surface of the fabric B, substantially as described.

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Witnesses:

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