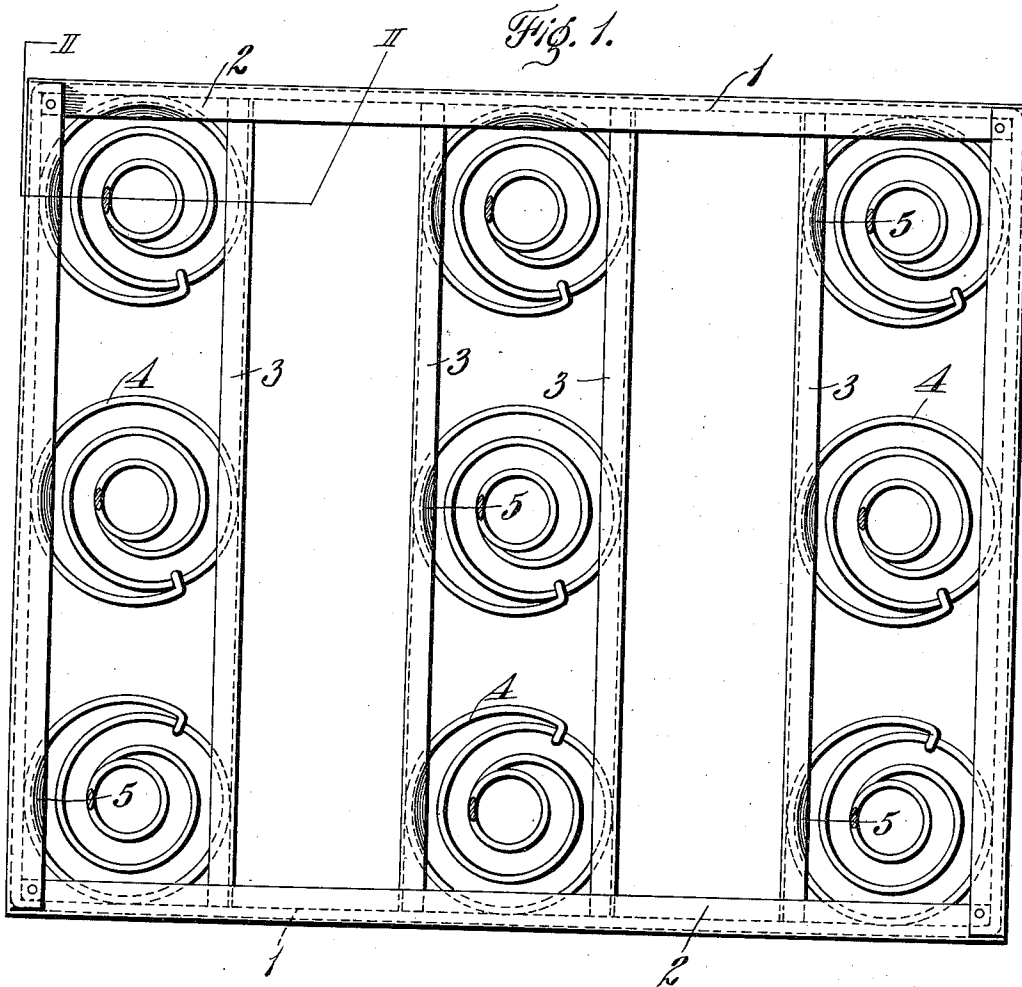


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 REINFORCED RIM SPRING CONSTRUCTION.  
 APPLICATION FILED NOV. 11, 1911.

1,014,736.

Patented Jan. 16, 1912.  
 2 SHEETS—SHEET 1.



Witnesses  
 Chas. W. Stauffiger  
 Anna M. Dorr.

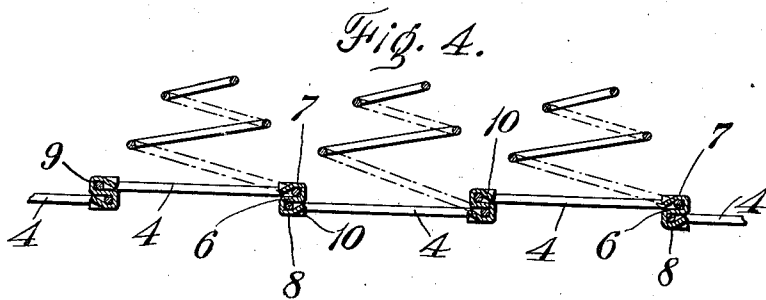
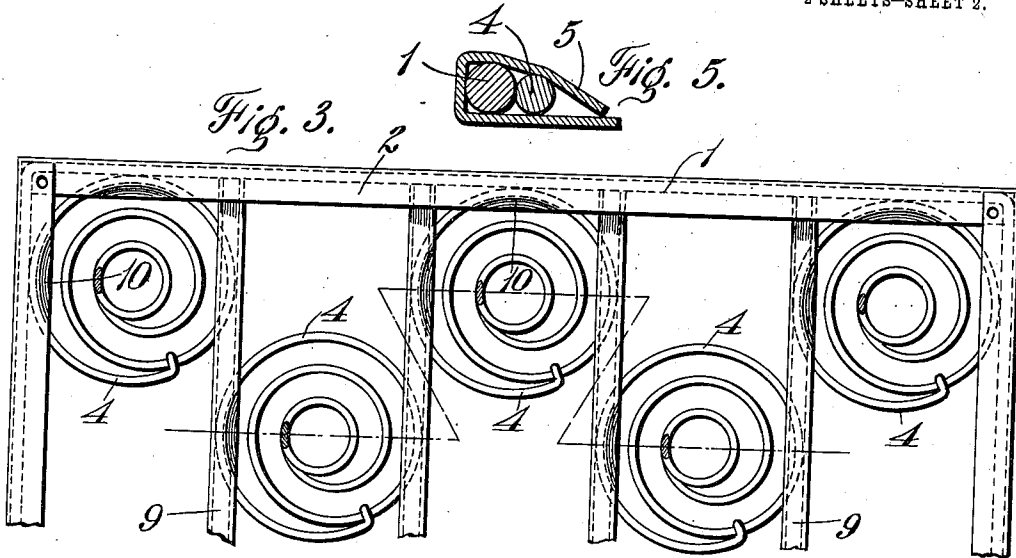
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# UNITED STATES PATENT OFFICE.

LEONARD A. YOUNG, OF DETROIT, MICHIGAN.

REINFORCED-RIM SPRING CONSTRUCTION.

1,014,736.

Specification of Letters Patent.

Patented Jan. 16, 1912.

Application filed November 11, 1911. Serial No. 659,726.

*To all whom it may concern:*

Be it known that I, LEONARD A. YOUNG, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Reinforced-Rim Spring Construction, of which the following is a specification, reference being had therein to the accompanying drawings.

In spring constructions for seats of railway coaches, vehicles, and the like, it is desirable that the parts be as few as possible and also present a smooth exterior to prevent wear and tear on any upholstery applied thereto.

This invention relates to a spring seat construction wherein the multiplicity of clips and like fastening devices common in structures of this sort, is avoided, and whereby the spring members may be spaced if desired during the time of the assembly of the parts without any special fitting of the supporting members prior to the time of assembling.

Another feature of the invention is the rigidity and lightness of the spring in the base frame.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims:

Referring to the drawings, Figure 1 is a plan view of a spring construction that embodies features of the invention; Fig. 2 is a view in detail on or about line II—II of Fig. 1; Fig. 3 is a plan view, partially broken away, of a modification of the construction, and Fig. 4 is a view in detail in section of the modification. Fig. 5 is a view in detail in section of the construction of the rim frame.

In the drawings, a rim frame 1, preferably of wire or the like, has each of its side and end members infolded in a clamping strip 2. The latter is formed of a metal piece bent along its longitudinal axis into substantially U-form and disposed with the lateral margins extending toward the interior of the frame in substantially the plane of the latter.

Cross strips 3, corresponding in form to the clamping strips, are secured near their extremities in spaced relation to each other and to the clamping strips to the rim frame or the clamping strips of the latter. Such cross strips are disposed with their lateral

margins toward the adjacent margins of the companion clamping strip.

Upright springs, of conventional hour glass, conical or cylindrical type, have their base coils 4 inserted between the mating flanges of the pairs of clamping strips and cross strips, and are secured against displacement longitudinally of the strips by the portions 5 of the latter lying within the segments of the base coils, such portions being pressed together as indicated. Obviously, the springs may be spaced as desired when assembled. If the springs are disposed between alternate pairs of strips, as indicated in Fig. 1, the cross strips have the U-form described. If however the construction shown in Fig. 3 is desired with springs between each pair of strips, the intermediate members are formed of strips bent into S-shape, the middle rib 6 of each strip lying substantially parallel to the upper flange 7 and the lower flange 8 thereof. Such strips, indicated at 9 in Figs. 3 and 4, allow the interposition of springs between each pair, the marginal portions of the outer flanges within the segment of each spring being depressed as indicated at 10 to hold the spring securely in place.

By using this construction, a very rigid frame is obtained in which the springs are secured at intervals desired for each particular construction, as the strips do not have to be punched or otherwise machined before the parts are assembled and the strips may be made and placed in stock of any length, and then cut to meet special requirements. The clips or other holding devices commonly used in spring seat construction are omitted and the exterior of the frame presents smoothly rounded surfaces against which any upholstery which is applied thereto cannot catch and tear.

Obviously, changes in the details of construction may be made without departing from the spirit of my invention and I do not care to limit myself to any particular form or arrangement of parts.

I claim as my invention:—

1. A spring construction comprising a rim frame, clamping strips reinforcing the frame members throughout the length thereof and having pairs of inwardly extending flanges, cross strips in spaced relation secured near their extremities to the rim frame with pairs of flanges disposed toward the flanges of the

adjacent portions of the frame and spring members whose lower coils are gripped between the flanges of adjacent clamping and cross strips.

- 5 2. A spring construction comprising a rim frame, clamping U-shaped strips embracing the frame members with the flanges extending inwardly, cross strips secured to the frame and provided with pairs of flanges  
10 extending toward the corresponding portions of the U-strips and adjacent cross strips and springs whose lower coils are gripped between the pairs of flanges of the companion pairs of the U and cross strips.

3. In a spring construction, a spring supporting strip folded longitudinally to form oppositely disposed lateral flanges in substantially parallel, spaced relation to opposite faces of the middle portion of the strip for gripping springs inserted between the said flanges and adjacent portion of the strip. 15 20

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

LEONARD A. YOUNG.

Witnesses:

C. R. STICKNEY,  
A. M. DORR.