July 1, 1930. M. S. JONES 1,769,434

SEAT STABILIZER

Filed June 2, 1928

Fig. 1.

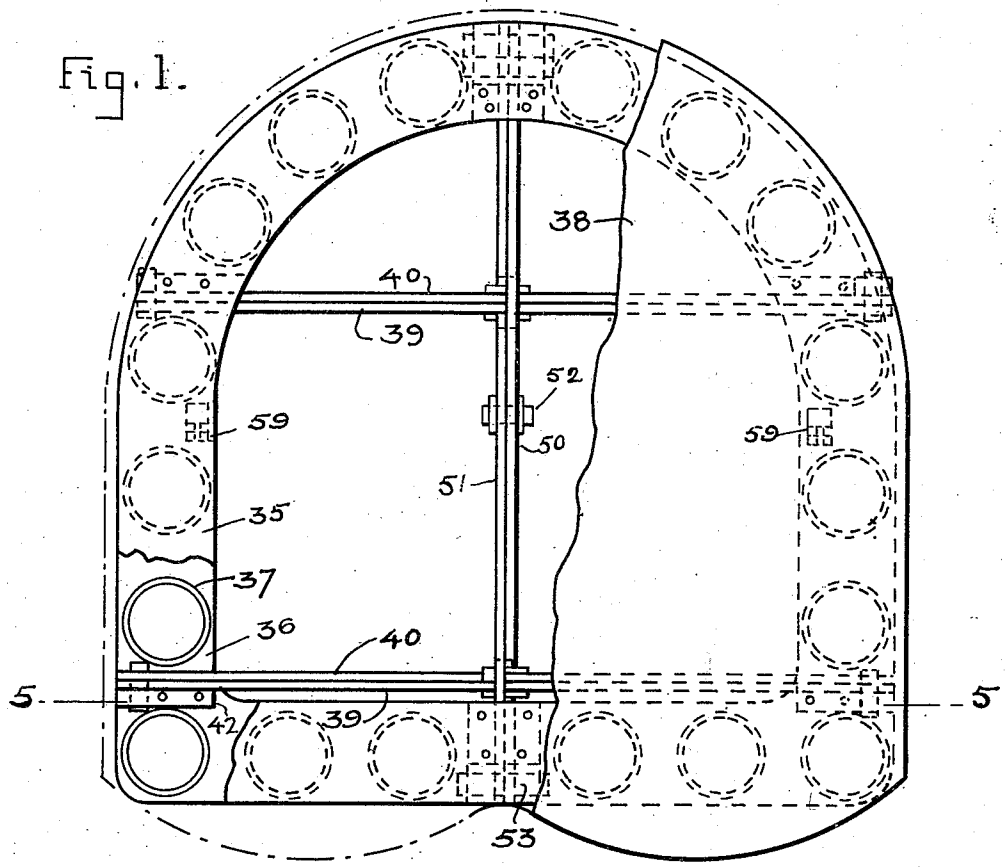
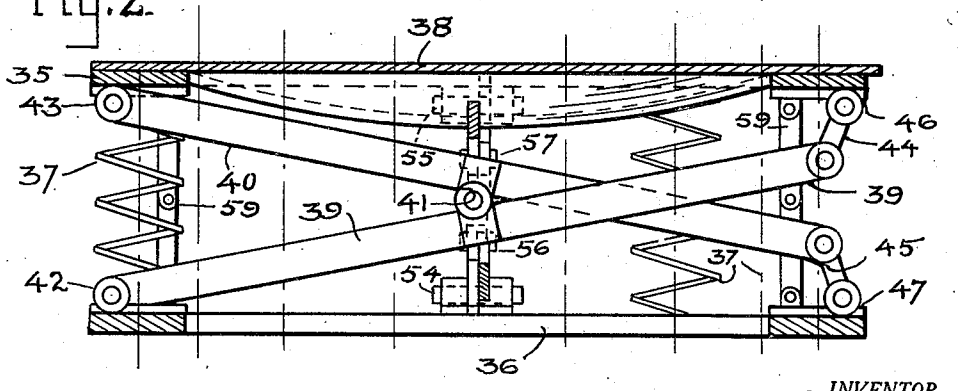


Fig. 2.



INVENTOR.

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BY

ATTORNEY.

Patented July 1, 1930

1,769,434

UNITED STATES PATENT OFFICE

MINOR S. JONES, OF KNAPP, WISCONSIN

SEAT STABILIZER

Application filed June 2, 1928. Serial No. 282,474.

My invention relates in general to a device for stabilizing furniture springs such as seats, spring mattresses and the like, all of which are constructed of coil springs forming the elastic element. More particularly the invention is intended for improving automobile seats and preventing them from collapsing or swaying over sideways or forward as often is the case when coil springs are unrestricted in their movement.

The invention is disclosed by way of illustration in the accompanying drawings, wherein:

Figure 1 is a top plan view showing the invention applied to a single seat, and;

Figure 2 a sectional view thereof.

The invention is shown as applied to a single seat, which has a top frame 35 and a bottom frame 36 between which are secured coiled springs 37 around the edges, but none in the middle which is open. Each of said frames consists of a substantially flat and curved bar portion. On the top frame 35 I preferably place a pressed sheet metal top 38 having substantially the contour of the top frame, that is to say, straight sides and rounded back but slightly curved front edge. The seat top is secured in any suitable manner to its frame and may be dented in the middle as shown.

Across the seat and between its frames 35 and 36 I provide so-called "stabilizers" of any suitable number, two being shown. Each stabilizer consists of two preferably flat metal bars 39 and 40 which cross each other a little to one side of the middle, where they are interconnected by a hinge joint 41. The left ends of these bars as seen in the figures are journalled respectively to the bottom and top frames 36, 35 by means of hinges 42, 43. The right hand ends of the bars, on the other hand, are journalled to links 44 and 45, respectively. These links are in turn journalled on hinges 46 and 47, which arrangement permits an outward displacement of the right hand ends of the stabilizer bars, and because the bars are of equal length between their journal points, this will prevent the frames 35 and 36 from being relatively displaced horizontally during the compression of the springs 37.

To prevent front and rear displacement of the frames I also provide one or more stabilizers in the length direction of the seat. Two flat bars 50 and 51 are preferably used hinged together as before near their middle as at 52 and hinged in front to the top and bottom frames 35 and 36, respectively, as at 53. Their rear ends are journalled near the rear edges of the frames to hinges 54, 55 through the intermediary of links 56 and 57, respectively.

In order that the coiled springs may not expand beyond a desired amount links 59 may be provided which are normally extended as seen in Figure 2 but which would bend when the springs are compressed.

The advantage of making the seat open in the middle and placing springs directly between the frames and none in the middle is that the springs now are more easily replaced, as for instance for a heavier or lighter load, or in other words for modifying the spring pressure in accordance with a person's weight.

It is evident that other material such as heavy cloth, sole leather, wood or the like may be used instead of pressed sheet metal for the top of the seat; or that it may be upholstered or a cushion or pad placed on top of the seat.

I reserve the right to make any suitable changes in detail of construction or arrangement of parts consistent with the scope of the claim.

What I claim as new is:

In a seat construction the combination of a top and a bottom frame each comprising a flat bar portion, a seat cover mounted on the top frame, a plurality of seat sustaining springs located between and disposed entirely around said frames, a pair of parallel stabilizers arranged in vertical planes and located at the front and adjacent the rear of the frames, a single stabilizer located at right angles to said pair of stabilizers and medially of the seat, each of said stabilizers comprising two intersecting rods having hinged connection intermediate their ends, a direct journal connection between each pair of said rods and the frames, and a hinged joint connection be-

tween the other ends of each pair of rods and the frames, and link members providing restraining elements connecting said frames, substantially as set forth.

In witness whereof, I have hereunto set my hand at Knapp, Dunn County, Wisconsin, this 28th day of May, A. D. nineteen hundred and twenty-eight.

MINOR S. JONES.