

(No Model.)

J. COMPIN.
SPRING SEAT.

No. 586,837.

Patented July 20, 1897.

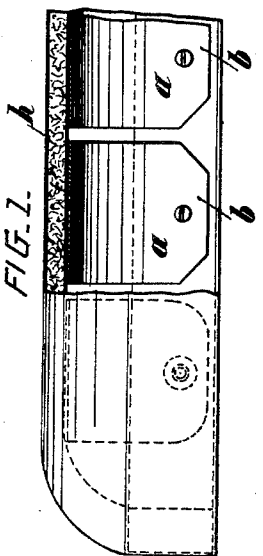
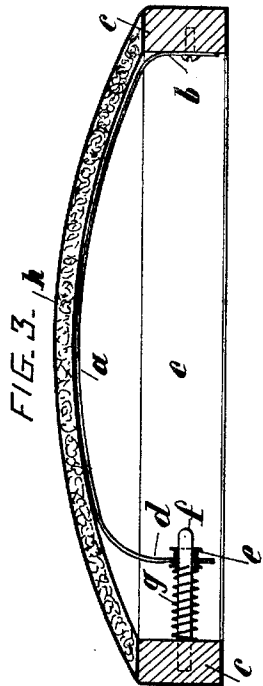
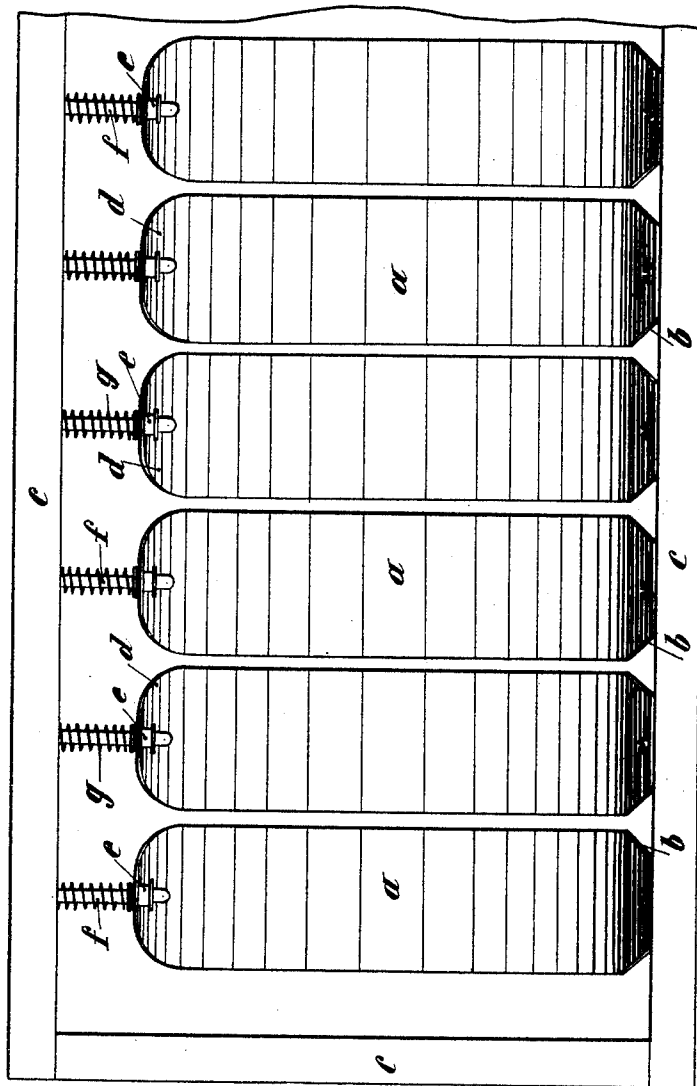


FIG. 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JULES COMPIN, OF MONTARGIS, FRANCE.

SPRING-SEAT.

SPECIFICATION forming part of Letters Patent No. 586,837, dated July 20, 1897.

Application filed March 23, 1897. Serial No. 628,852. (No model.) Patented in France February 3, 1896, No. 253,646; in England February 3, 1896, No. 10,344; in Belgium May 13, 1896, No. 121,346; in Germany May 20, 1896, No. 89,797, and in Austria December 21, 1896, No. 46/5,096.

To all whom it may concern:

Be it known that I, JULES COMPIN, of the city of Montargis, Loiret, France, have invented Improvements in Spring Seats and Backs for
5 Chairs, Sofas, Cushions, and the Like, (for which I have obtained Letters Patent in France for fifteen years, dated February 3, 1896, No. 253,646; in Belgium for fifteen years, dated May 13, 1896, No. 121,346; in Germany
10 for fifteen years, dated May 20, 1896, No. 89,797; in Austria for fifteen years, dated December 21, 1896, No. 46/5,096, and in England for fourteen years, dated February 3, 1896, No. 10,344,) of which the following is a full, clear,
15 and exact description.

This invention relates to an improved method of constructing chairs, sofas, cushions, and the like in which leaf-springs are employed, the method being applicable to all kinds of
20 seats, chairs, benches, and the like, as well as to the backs of seats.

In order to give a clear idea of the invention, I have shown a seat constructed in accordance therewith in the accompanying
25 drawings.

Figure 1 is a sectional elevation of a portion of a bench or seat. Fig. 2 is an under side plan of the seat, and Fig. 3 is a transverse section of the same.

30 In the three figures similar letters refer to similar parts.

The leaf-springs *a* are placed parallel to one another, and each spring is preferably fixed by one of its extremities *b* to the frame *c* of
35 the bench or seat, while the other suitably-bent movable extremity *d* is arranged to engage with an appropriate sleeve or eyelet *e*, mounted on a stud or rod *f*, around which a spiral spring *g* is placed.

40 It will be evident that when a pressure is exerted upon the bulged or convexed part of the leaf-springs *a* the movable extremities *d* thereof, engaging with the sleeves *e*, will slide along the rods *f* and compress the spiral
45 springs *g*. As soon as the pressure ceases the springs *g* will return the leaf-springs *a* to their original position.

The bench or seat thus constructed is not only very elastic, but has its elasticity so distributed that the part acted on does not re-

act upon the other parts of the bench or seat in the manner usual with seats constructed according to methods hitherto used.

In order that a variable elasticity may be obtained, the spiral springs are made more or
55 less powerful, so as to offer more or less resistance to compression.

The leaf-springs may of course be made movable at both of their extremities. In this case one or more spiral springs would be ar-
60 ranged to set upon each of these extremities in the manner described.

The covering *h*, arranged upon the top surface of the leaf-springs, may be of any suitable kind.

I claim—

1. The combination with a frame, of a flexible covering, a leaf-spring one end of which is attached to the frame and the other end of which is free, a rod carried by the frame and
70 with which the free end of the leaf-spring has connection, and an expansive spiral spring carried on the rod and engaging the leaf-spring.

2. The combination with a frame, of a flexible covering, a leaf-spring one end of which is fixed to the frame and the second end of which is free, a rod carried by the frame and having slidable connection with the free end
80 of the leaf-spring, and a second spring carried by the rod and pressing the leaf-spring.

3. The combination with a frame, of a flexible covering, a leaf-spring one end of which is attached to the frame and the second end of which is free, a rod carried by the frame, a
85 a thimble sliding on the rod and held by the free end of the leaf-spring, and an expansive spring embracing the rod and pressing the thimble.

4. The combination of a bowed spring, and a yielding bearing engaged by one side of said bowed spring, the bearing yielding laterally with reference to the spring as pressure is applied to the arch of said bowed spring.

5. The combination of a bowed spring, a rigid rod on which one end of the bowed spring is slidable, and a spring carried by the rod and engaging the bowed spring so as to yieldingly hold the end of the bowed spring which
100 end is slidable on the rod.

6. The combination of a bowed spring, and
a yielding bearing engaging one end of the
spring, the bearing moving forward and back
as pressure is applied to the arch of the spring,
5 and the bearing serving to maintain the spring
arched in normal position.

The foregoing specification of my improve-

ments in spring seats and backs for chairs,
sofas, cushions, and the like signed by me
this 4th day of March, 1897.

JULES COMPIN.

Witnesses:

EDWARD P. MACLEAN,

ALBERT MOVERNE.