

(No Model.)

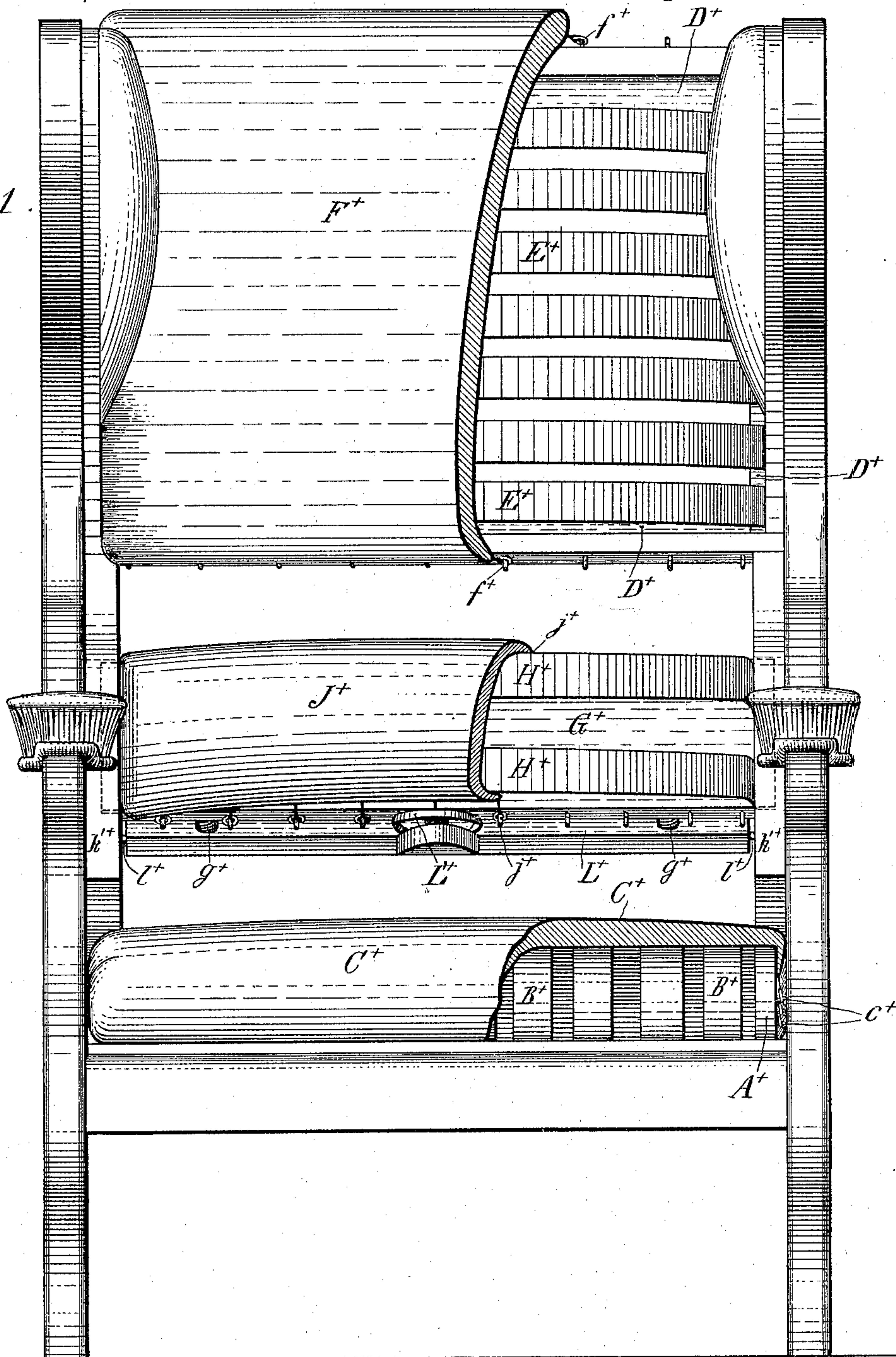
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A. MAUCHAIN.
ADJUSTABLE BACK.

No. 590,045.

Patented Sept. 14, 1897.

Fig. 1.



WITNESSES:

George J. Fackel
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INVENTOR

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(No Model.)

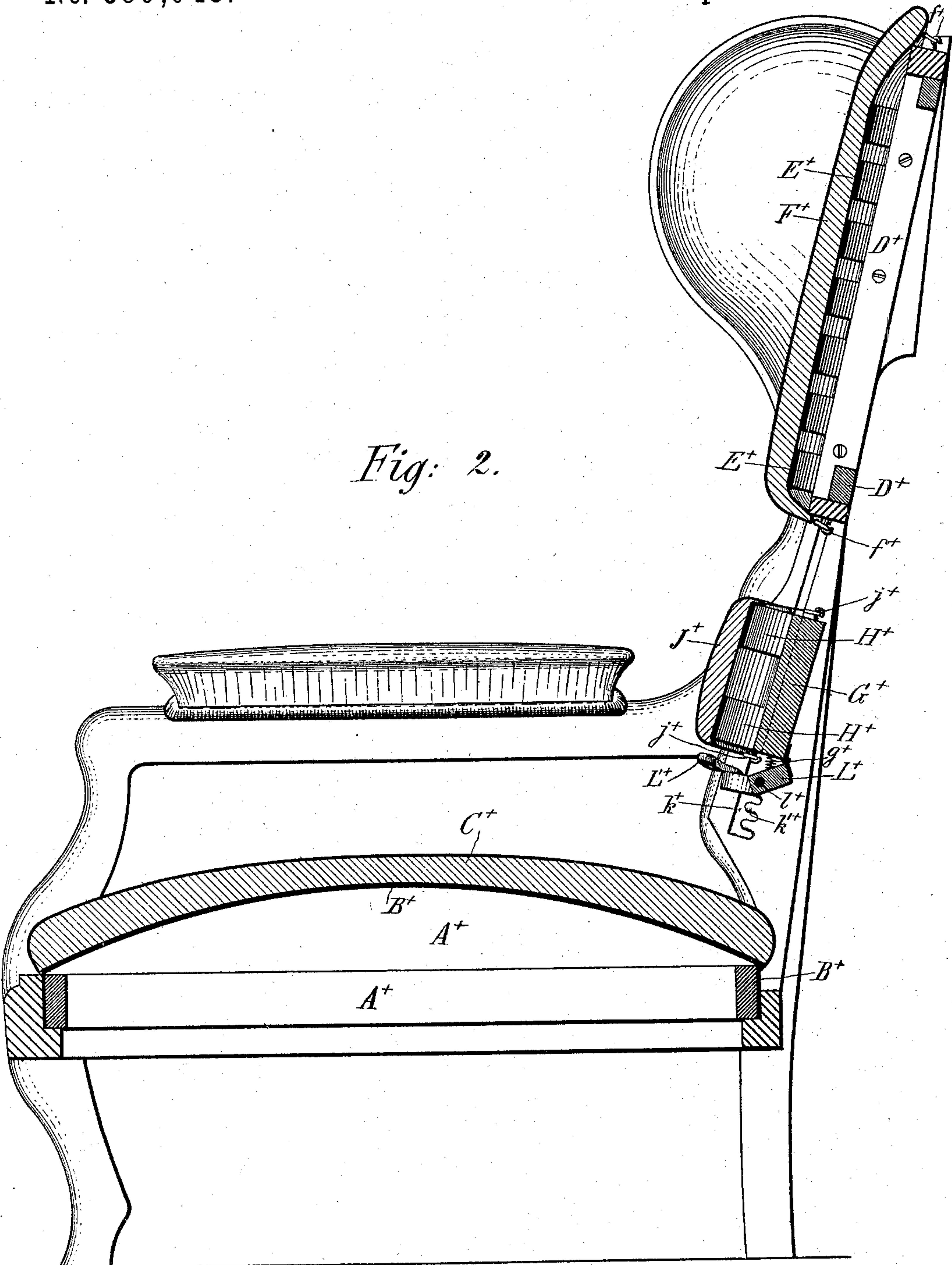
2 Sheets—Sheet 2.

A. MAUCHAIN.
ADJUSTABLE BACK.

No. 590,045.

Patented Sept. 14, 1897.

Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ARMAND MAUCHAIN, OF GENEVA, SWITZERLAND.

ADJUSTABLE BACK.

SPECIFICATION forming part of Letters Patent No. 590,045, dated September 14, 1897.

Application filed January 28, 1897. Serial No. 621,000. (No model.) Patented in France April 8, 1895, No. 246,471; in Switzerland September 6, 1895, No. 10,918; in Germany September 11, 1895, No. 88,164; in Belgium October 5, 1895, No. 117,739; in Italy October 8, 1895, No. 39,931/223; in England November 5, 1895, No. 20,919, and in Austria January 28, 1896, No. 44/356.

To all whom it may concern:

Be it known that I, ARMAND MAUCHAIN, merchant, a citizen of the Republic of France, residing in Geneva, Switzerland, have invented certain new and useful Improvements in Adjustable Backs for Chairs, Sofas, Bed-Rests, and the Like, (for which Letters Patent were granted to me in Switzerland, No. 10,918, dated September 6, 1895; in France, No. 246,471, dated April 8, 1895; in Austria, No. 44/356, dated January 28, 1896; in Germany, No. 88,164, dated September 11, 1895; in Italy, No. 39,931/223, dated October 8, 1895; in Belgium, No. 117,739, dated October 5, 1895, and in Great Britain, No. 20,919, dated November 5, 1895,) of which the following is a specification.

The object of the invention is to provide a piece of furniture—such as a seat, chair, sofa, bench, bed, or the like—with a support for the lumbar region—that is to say, for the part of the spinal column which, being weaker, is most in need of a support.

In the ordinary seats the backs are very seldom arranged so as to answer this purpose, and if they are so arranged for persons of a certain size they do not answer for persons of a different size or build.

It is of great importance from a hygienic point of view to have the lumbar region well supported, not only on account of the rest thus secured for the person who is sitting down, but also because such person will necessarily take without fatigue a position in which breathing can be more freely performed than when sitting down on a seat unprovided with such support.

The above-mentioned purpose is served by what I term a "movable lumbar-back," which may be combined with my fixed dorsal back, adapted to be applied to any piece of furniture used as a seat.

The mobility of the lumbar-back can be obtained by various means, but it must be so constructed that the person who is sitting down on the piece of furniture with which the same is provided may raise or lower the same without abandoning his or her sitting position until he or she feels the back to be in the

right place for supporting his or her lumbar region.

In the accompanying drawings I have shown how my invention may be carried into effect.

Figure 1 is a front elevation of a seat provided with my improved movable lumbar-back. In this figure the part of the cushion of the seat is broken away in view of showing the construction. Fig. 2 is a vertical section through the seat shown in Fig. 1.

The construction shown in the figures consists of a chair the seat and back of which are provided with suitable springs and with a movable lumbar-back the springs of which are stronger than those of the fixed back.

The seat of the chair is formed of a frame A^x , to which the springs B^x are fixed, the latter being disposed in the direction of the depth of the seat. These springs are covered with a covering or cushion C^x , of suitable thickness, which can be of any suitable stuff whatever and which is fixed to the frame A^x with the aid of a suitable system of hooks and eyes, as shown at c^x in Fig. 1.

The fixed back of the chair is formed of a frame D^x , to which are fixed the springs E^x in the direction of the breadth of the back, and the said springs E^x are covered with a covering or cushion F^x , which may consist of any suitable stuff whatever, fixed to the frame D^x , as shown at f^x in the drawings.

The cushions C^x and F^x may be easily removed for the purpose of beating the same. They may be double-faced, one of the faces being covered over with warm stuff for winter-time, the other one with leather or oil-cloth for the summer-time.

The movable lumbar-back consists of a rigid piece G^x , to which are fixed spring-blades H^x , which are stronger than the blades E^x of the back. A covering in any convenient stuff J^x covers the plates H^x and is fixed to the rigid piece G^x with the aid of hooks and eyes at j^x in the drawings.

In the example shown in the drawings the movable lumbar-back is disposed so as to slide into two slots k^x , with which the uprights K^x of the seat are provided. A piece

L^x , connected by the hinge g^x to the rigid piece G^x and actuated by springs j^x , is provided with tenons l^x , which engage under the action of springs j^x in the racks k^x of the uprights K^x , so as to maintain the movable lumbar-back up to the height to which it has been placed.

By pulling the handle L'^x of the piece L^x the tenons l^x of the racks are disengaged, so as to allow the lumbar-back to slide or lower at will.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. The combination of a suitable article of furniture having a seat portion, with a fixed back provided with suitable springs, and a lumbar-back having springs of greater strength than the springs of the fixed back, substantially as set forth.

2. The combination of a suitable article of furniture provided with racks and a suitable seat portion, with a fixed back provided with suitable springs and a lumbar-back adjust-

able upon said racks and having springs of greater strength than the springs of the fixed back, substantially as set forth.

3. The combination of fixed racks, and a spring-seat with a fixed back comprising springs placed in the direction of the breadth of the back, and a movable cushion covering the back-springs, an adjustable lumbar-back comprising a rigid portion, flat springs mounted on the rigid portion of such lumbar-back and being stronger than the springs on the fixed back, a movable cushion covering the flat springs, a spring-actuated movable piece hinged to the rigid portion of the lumbar-back, and pins which engage the teeth of said racks, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARMAND MAUCHAIN. [L. s.]

Witnesses:

E. IMER-SCHNEIDER,
TH. MERL.