(No Model.)

# E. M. HULSE.

## SPRING LEG FOR COUCHES.

No. 599,333. Patented Feb. 22, 1898.

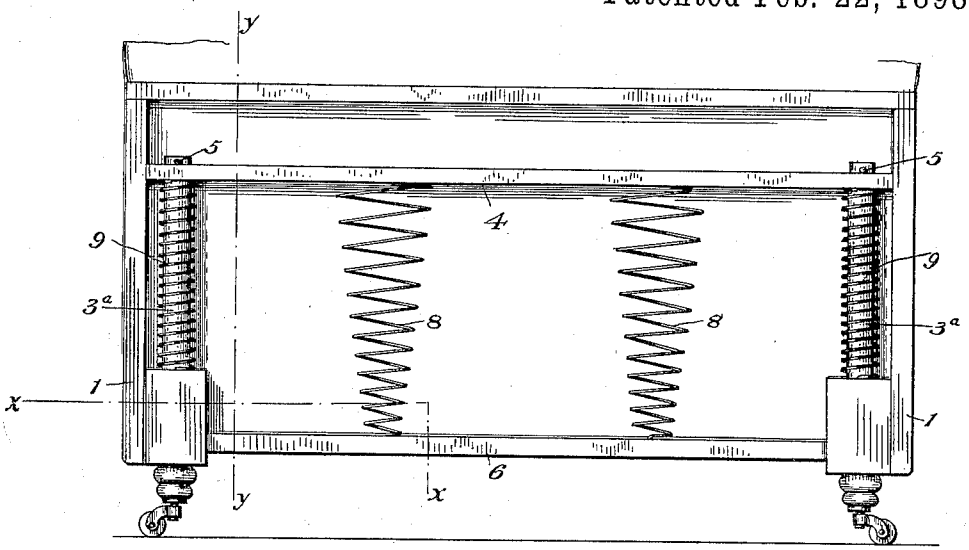



Fig. 1.

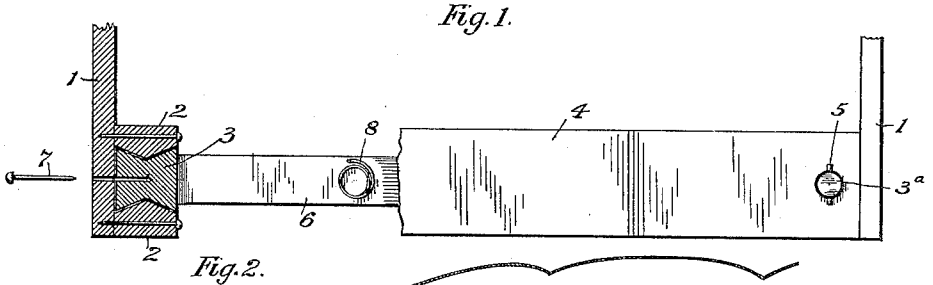



Fig. 2.

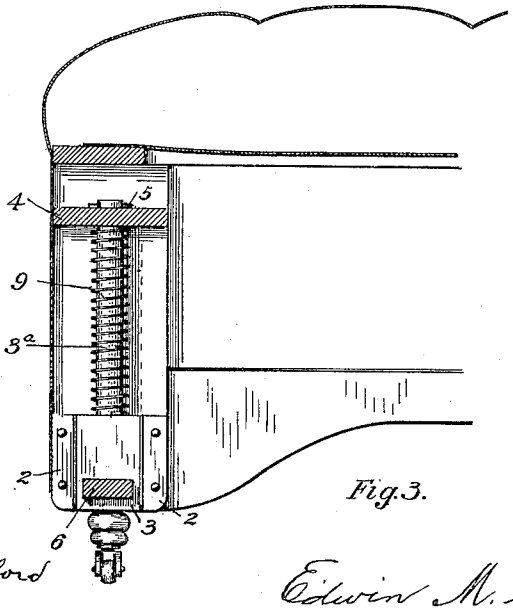



Fig. 3.

WITNESSES:

Edwin L. Bradford

Geo. M. Coffenhaver,

INVENTOR

Edwin M. Hulse,

BY

Finckel & Finckel,

ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

EDWIN M. HULSE, OF COLUMBUS, OHIO, ASSIGNOR TO THE HULSE-ANDERSON COMPANY, OF SAME PLACE.

## SPRING-LEG FOR COUCHES.

SPECIFICATION forming part of Letters Patent No. 599,333, dated February 22, 1898.

Application filed September 16, 1897. Serial No. 651,852. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN M. HULSE, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Spring-Legs for Couches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to secure elasticity, and therefore ease and comfort, in a couch filled or upholstered with tow or other common and comparatively inelastic but cheap material. I attain this object by means of spring-legs constructed substantially as hereinafter described, and pointed out in the claims.

In the annexed drawings, illustrating an embodiment of my improvements, Figure 1 is an end view of the couch. Fig. 2 is a horizontal sectional view on the plane indicated by the line *x x*, Fig. 1; and Fig. 3 is a sectional view on the line *y y*, looking toward the inner side of the side piece of the couch.

1 designates the rigid side pieces of the couch-frame, and rigidly secured by any suitable means to the inner side of each of the side pieces 1 are tongued blocks 2, with their tongued faces parallel to and facing each other. Placed and fitting between each pair of these blocks is a leg 3, that is grooved to movably receive the tongues of the blocks 2. The upper portions of the legs are preferably turned around, as indicated at $3^a$, and the extreme upper end is passed through a hole in a horizontally-arranged strip of wood 4, immovably secured between the sides of the couch. Encircling the upper portion $3^a$ of the leg is a coiled spring, made flat at its ends to rest squarely on the shoulder of the larger portion 3 of the leg and also against the under side of the strip 4, so that when the couch is forced down by the weight of a person said spring shall be compressed and when the couch is relieved of its weight the spring shall restore the couch to its normal position. In order to prevent the leg from falling out, I shall pass a pin 5 transversely into the leg above the blocks 2 or above the bar 4, so that its protruding portion shall come into contact with the said block or bar and thus act as a stop to prevent the accidental displacement of the leg. I propose, also, in some cases, to further brace the side pieces and the legs, to connect the pairs of legs at each end of the couch with a bar or strip of wood 6, and secure between the bars 6 and 4 coil-springs 8 of substantially the form shown.

Instead of coil-springs in the legs I may interpose between the bar 4 and legs other forms of springs; but because of its compactness and strength the coil-spring appears at present to be preferable.

The tonguing and grooving of the connection between the leg and blocks 2 provides a guide for the leg in the vertical motions of the couch, and to prevent any squeaking or other irritating noises that might be produced by such movements the parts may be previously soaked in oil and coated with plumbago or other antifriction material.

From the foregoing it will be obvious that a couch-leg thus constructed will give to the couch an elasticity highly agreeable to a person sitting or reclining thereon, and in the manufacture of the couch a large saving in cost may be effected, because in the upholstering numerous expensive springs or expensive hair or other filling will not be necessary to render the couch tolerable in use. Some persons, however, prefer a hard inelastic couch, and such may be accommodated by simply passing a pin, nail, or key 7 transversely through the side of the couch and into the leg, thus preventing any vertical or spring motion of the couch upon the legs.

What I claim, and desire to secure by Letters Patent, is—

1. In a couch, the combination with the side pieces 1, of sockets or guides 2 rigidly secured thereto, legs movable in said guides or sockets, a guide or bar 4 through which the legs also pass, and springs 9 between the legs and the guide or bar 4, substantially as shown and described.

2. In a couch, the combination with the side pieces 1, of sockets or guides 2 rigidly secured thereto, legs movable in said guides or sockets, a guide or bar 4 through which the legs also pass, springs 9 between the legs

and the bar or guide 4, and a pin 7 to engage the legs to lock the same, substantially as shown and described.

3. In a couch, the combination with the side pieces 1, of sockets or guides 2 rigidly secured thereto, legs movable in said guides or sockets, a guide or bar 4 through which the legs also pass, springs 9 between the legs and the bar or guide 4, and a bar 6 connecting pairs of the legs, substantially as shown and described.

In testimony whereof I hereunto subscribe my name this 13th day of September, 1897.

EDWIN M. HULSE.

Witnesses:
GEORGE W. ALFRED,
GEORGE M. FINCKEL.