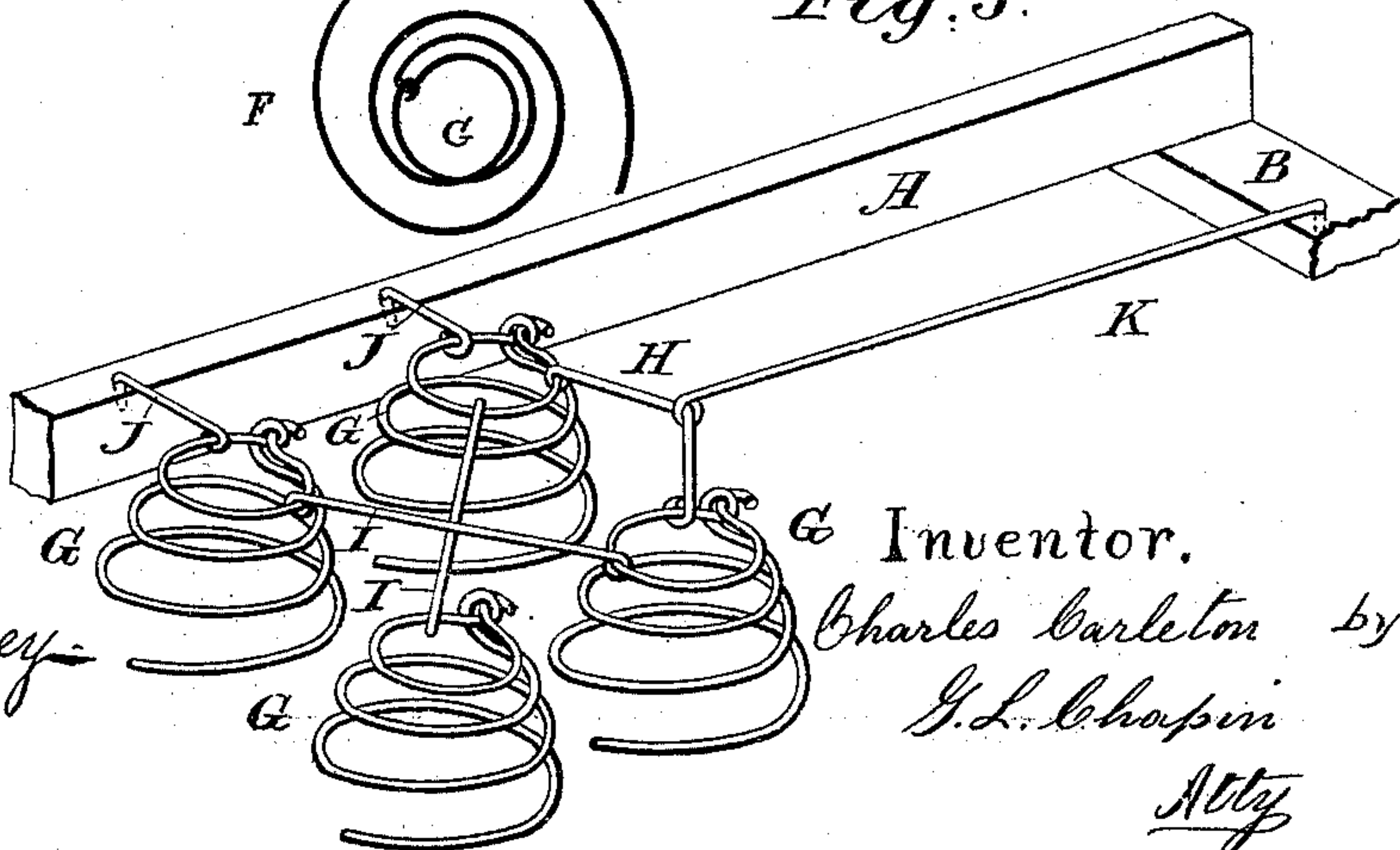
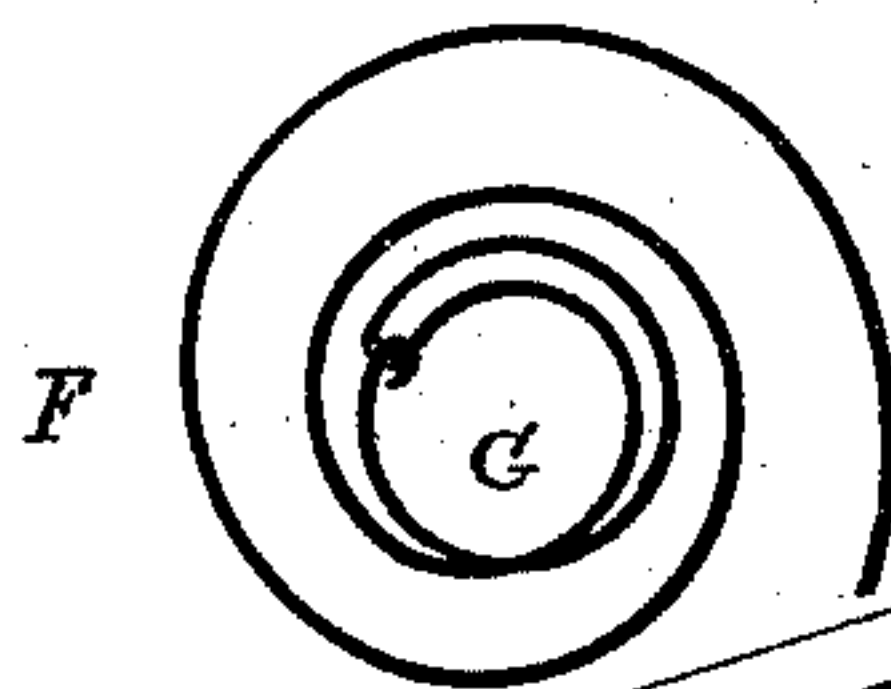
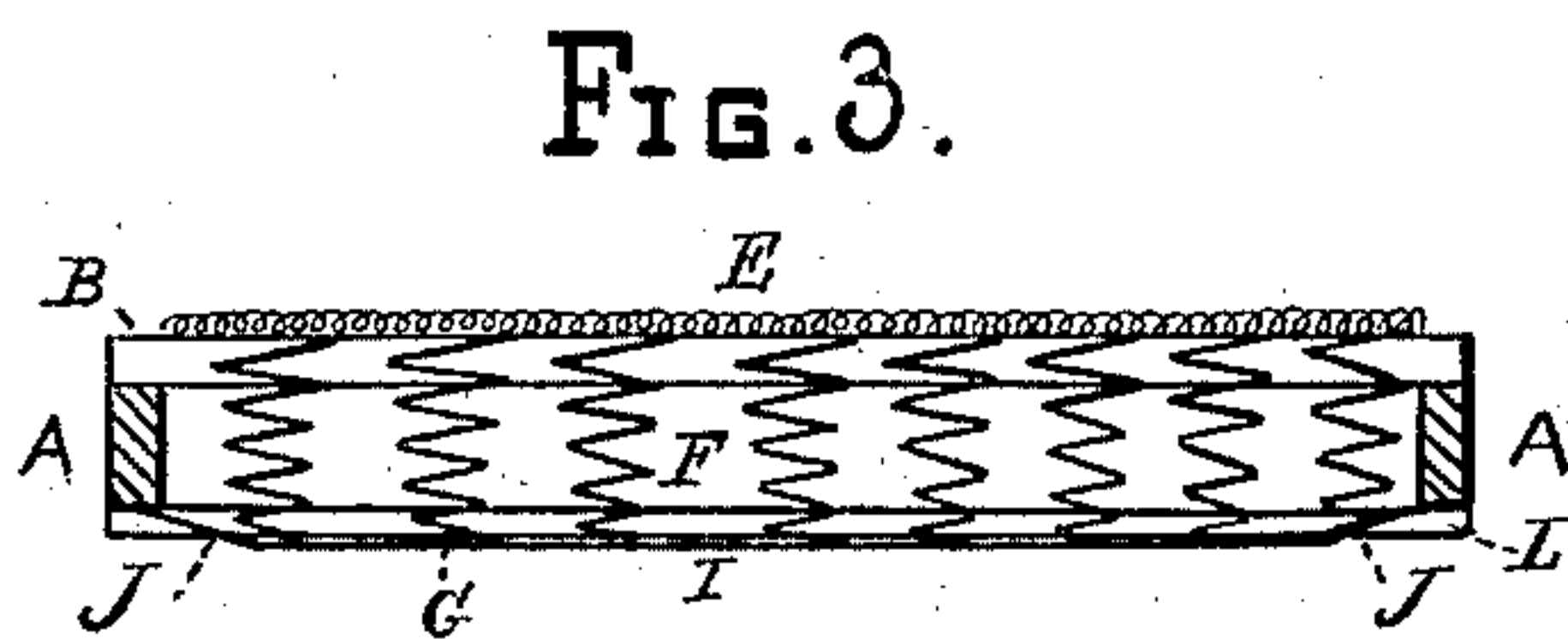
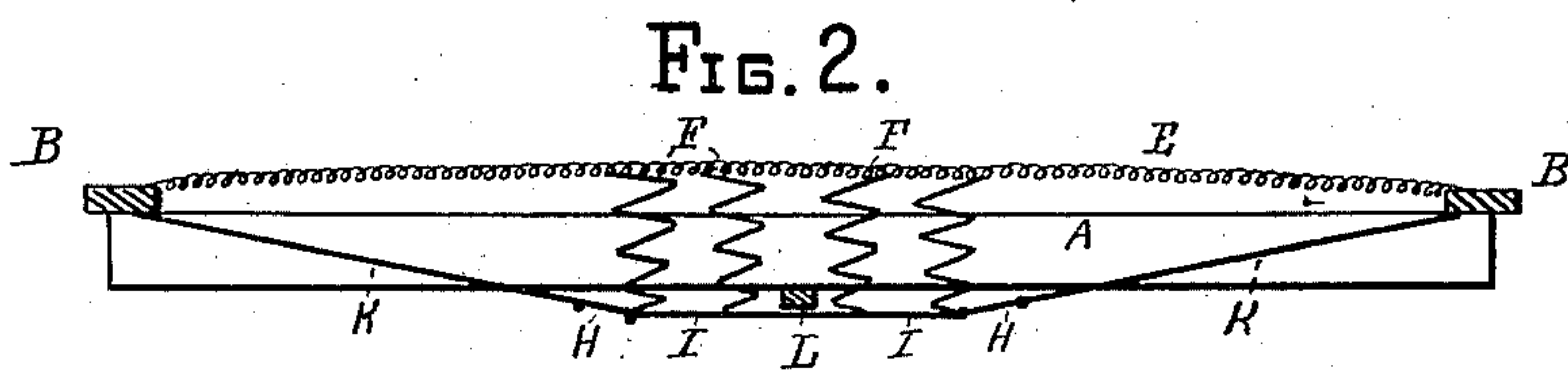
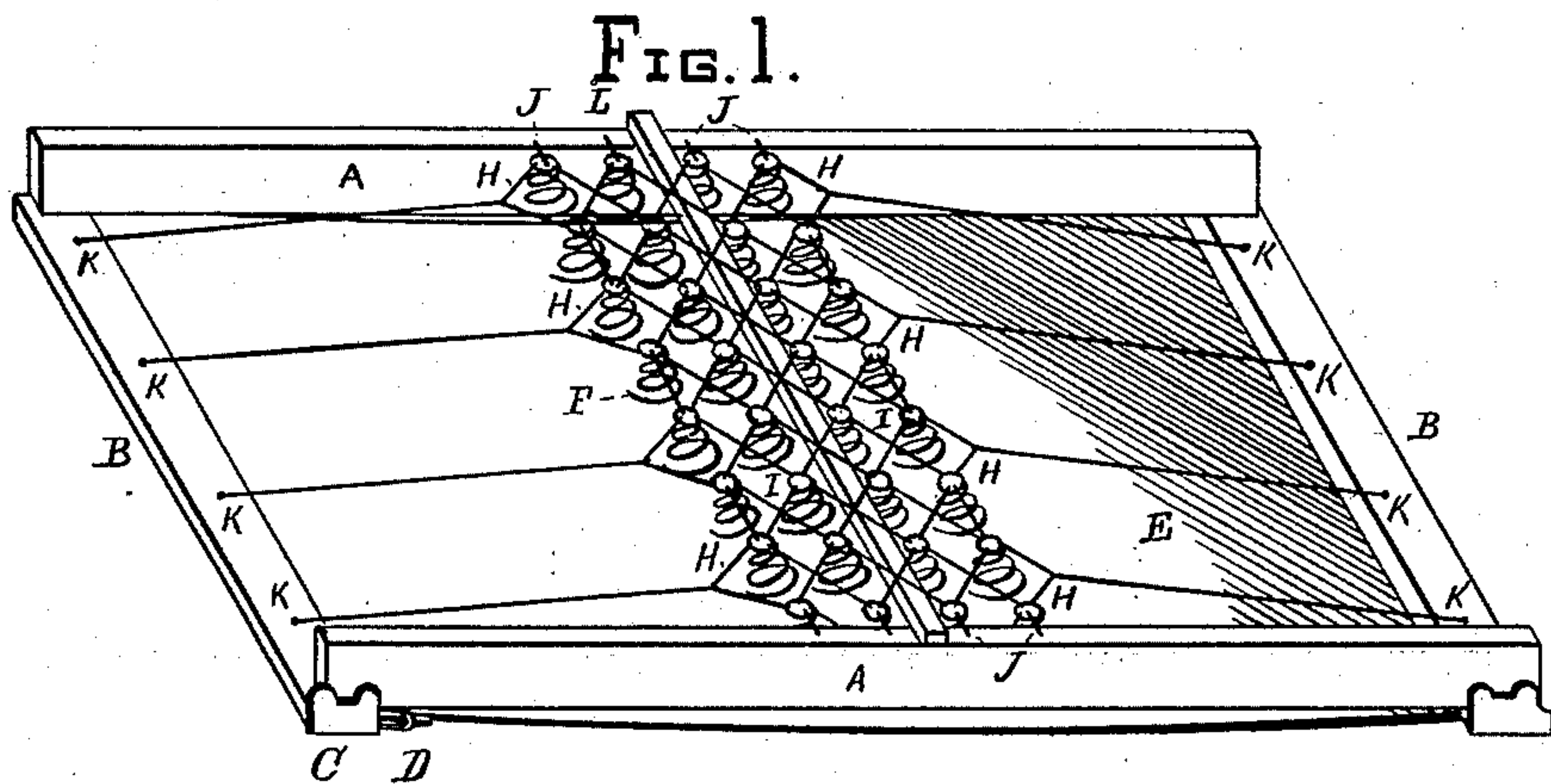


(No Model.)

C. CARLETON.  
SPRING BED BOTTOM.

No. 314,427.

Patented Mar. 24, 1885.



Witnesses, &  
A. G. Morey  
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Atty



# UNITED STATES PATENT OFFICE.

CHARLES CARLETON, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE CARLETON  
SPRING BED COMPANY, OF SAME PLACE.

## SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 314,427, dated March 24, 1885.

Application filed May 20, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES CARLETON, a citizen of the United States, residing at the city of Chicago, county of Cook, and State of Illinois, have invented new and useful Improvements in Spring Bed-Bottoms, of which the following is a specification, reference being had to the accompanying drawings, illustrating the invention, in which—

Figure 1 is an inverted perspective representation of a bed-bottom embodying my invention; Fig. 2, a vertical longitudinal section on line Z, Fig. 1, but with the bottom right side up instead of being inverted; Fig. 3, a cross-section of the bottom right side up; Fig. 4, an enlarged view of one of the coil-springs inverted. Fig. 5 is an enlarged perspective view of a portion of the bed-bottom.

The present invention relates to an improvement in that class of bed-bottoms which consist of a woven-wire mattress re-enforced by coil-springs placed underneath thereof; and the special improvement consists in the lower ends of the springs supporting the mattress being supported by wires attached thereto and to the end and side rails of the frame that is supporting the furniture-springs wholly by the tensile strength of the attaching-wires, instead of supporting them on slats fastened to the under edges of the side rails to the frame, as is now done. By this means a bed-bottom proper is wholly formed of metal, and the elastic or spring part and the connection of the parts is such that the means for stretching the woven-wire mattress will also stretch the wires which hold the furniture-springs suspended properly with reference to the woven wire.

In practice the springs supporting the woven wire are in form inverted truncated cones, and the wires at their smaller ends are twisted or locked to form rings, to which the supporting-wires are attached. The several springs are at their lower ends connected by wires running diagonally and by wires leading to the sides and ends of the frame. The state of the art shows that woven-wire mattresses have been supported by furniture-springs, the lower ends of which are supported on slats secured to the frame. It has also been common to

support upholstered mattresses by numerous coil-springs resting on slats at the bottom of the supporting-frame; but in neither of these anterior devices is there any provision made for stretching or putting in tension the devices which support the bottom ends of the springs either simultaneously with the stretching of the woven-wire fabric or otherwise.

Bed-bottoms have been constructed in sections of woven wire and each section supported by coil-springs, and the coil-springs supported by wires running from end to end of the frame. It has also been the custom to support the vertical coil-springs between two fabrics which are attached to a frame. Therefore the distinction in my device over others is, that any movement of the end rails affecting the tension of the woven-wire fabric in a like manner affects the spring-supports by shortening their lengths, and therefore giving to them an increased supporting power to correspond with the increased supporting power given to the woven wire by the tightening process. The lower ends of the springs terminate in rings, which are connected together by diagonal wires, and also secured to the side rails by short links of wire, and to said rings are fastened hooks or links, which suspend the coil-springs from the same end rails to which the mattress is attached.

In the drawings, A represents the side rails, and B the end rails, of an ordinary woven-wire spring bed-bottom, the end rails being fitted to slide in the clips or iron supports C, or one end rail so to slide that by means of ordinary set-screws, D, the wire mattress E may have given to it an increased tension after a settlement of the parts has taken place.

Nothing new is claimed in the parts thus enumerated, only so far as they conduce to form elements which operate in conjunction with my improvement.

F F F, &c., may represent any desired number of furniture-springs placed beneath the woven-wire fabric E, with the wires at their larger ends laced or woven into the fabric by hand in rows, as shown. The lower ends of these springs are the smaller parts thereof, and terminate in rings G, as more clearly shown at Fig. 4, for the convenience of connecting



them together, and also fastening them to the frame A B. Four rows of springs are placed centrally under the fabric E; but the number of rows of springs and the number of springs in a row will depend on the size of the wire mattress and the support it is to have. I prefer, however, for an ordinary four foot four inch by six foot four inch mattress to employ the number of springs shown. Diagonal wires I connect with the rings G. The springs at the short sides of the rows and nearest to the side rails are connected to said rails by wires J. Wires H at the outer sides of the long rows connect with the rings G of the springs F, and are angular in form, and to the angular parts of the wires, link wires or hooks K being fastened to the end rails, B, of the mattress-frame. By this construction it will be observed that the wire links K, rings G, and wires I and H form a continuous connection with the end rails, B, so that the turning of the set-screw D will tighten the mattress E, and simultaneously draw on the link-wires K and compress the springs F,

so that there is retained a uniform supporting power to both springs and mattress.

I claim—

1. In an improvement in spring bed-bottoms, the frame A B, the wire mattress E, and spiral springs F, which are truncated cones in form, with their smaller ends terminating in rings G, in combination with the ring-connecting wires I, the side wires, J, the angle-wires H, and the inclined wires K, connected with the angle-wires and with the end rails, B, of the frame, substantially as and for the purpose set forth.

2. The combination of woven-wire mattress E, frame A B, springs F, and wires I, J, H, and K, and set-screws D, for tightening the mattress and wires simultaneously and giving a uniform tension to the mattress and springs, as and for the purpose specified.

CHARLES CARLETON.

Witnesses:

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