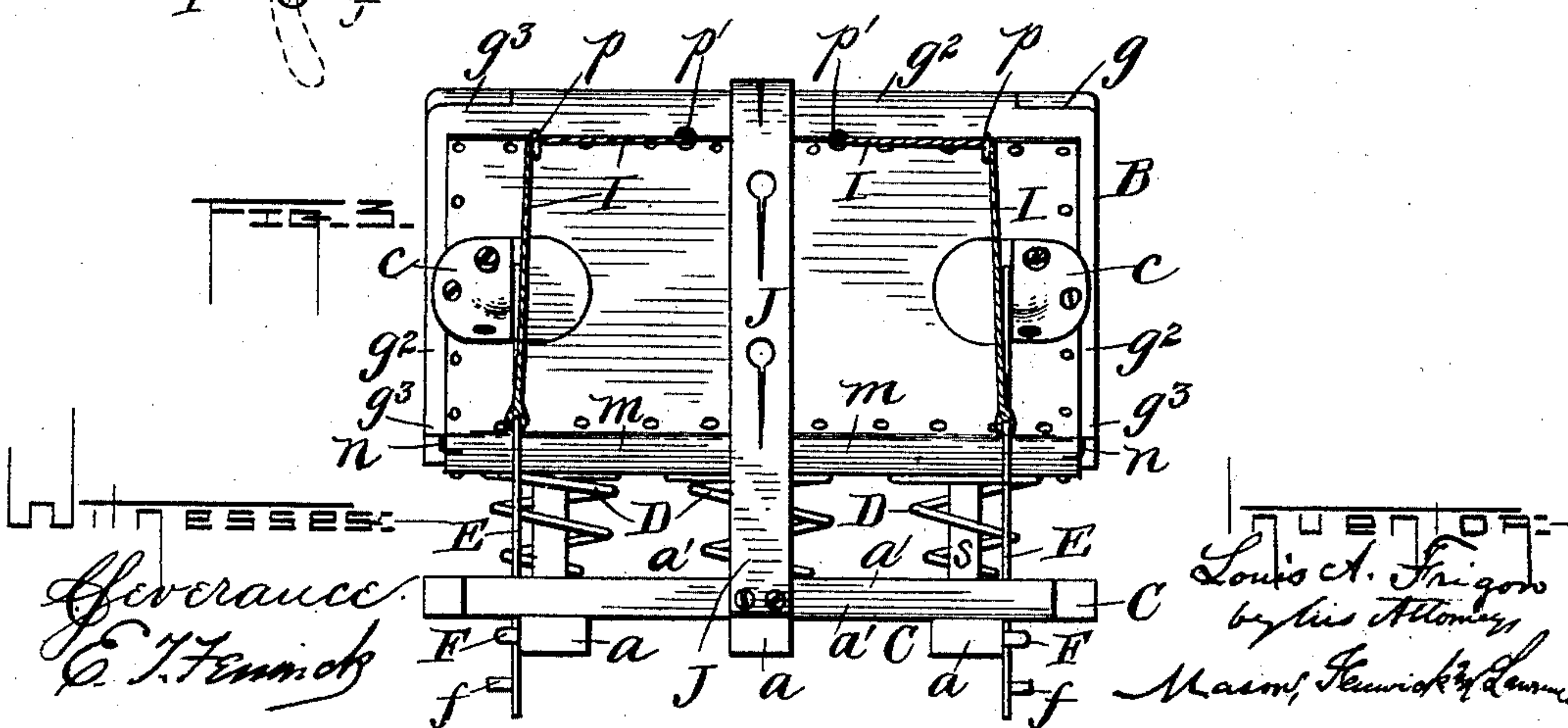
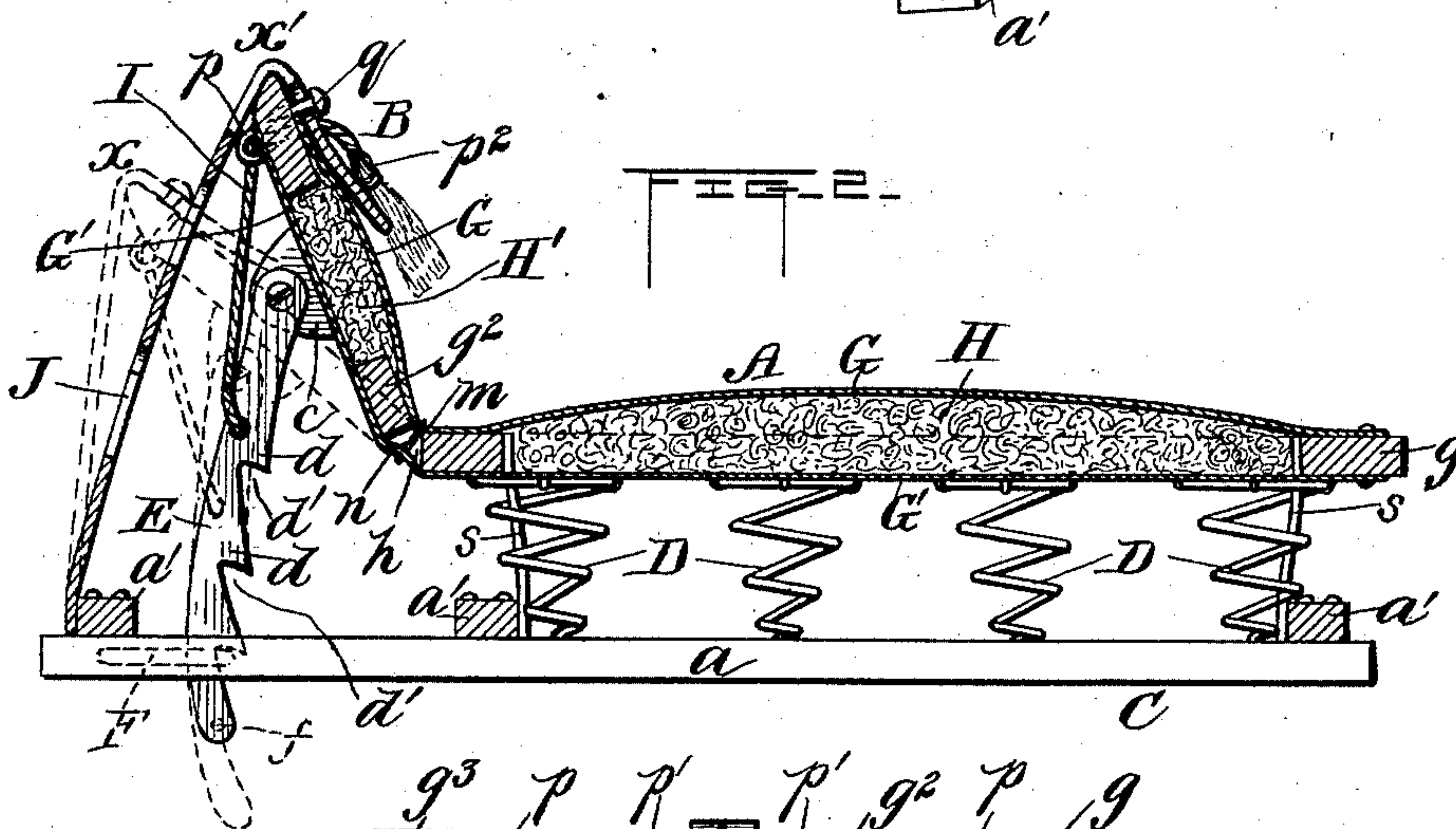
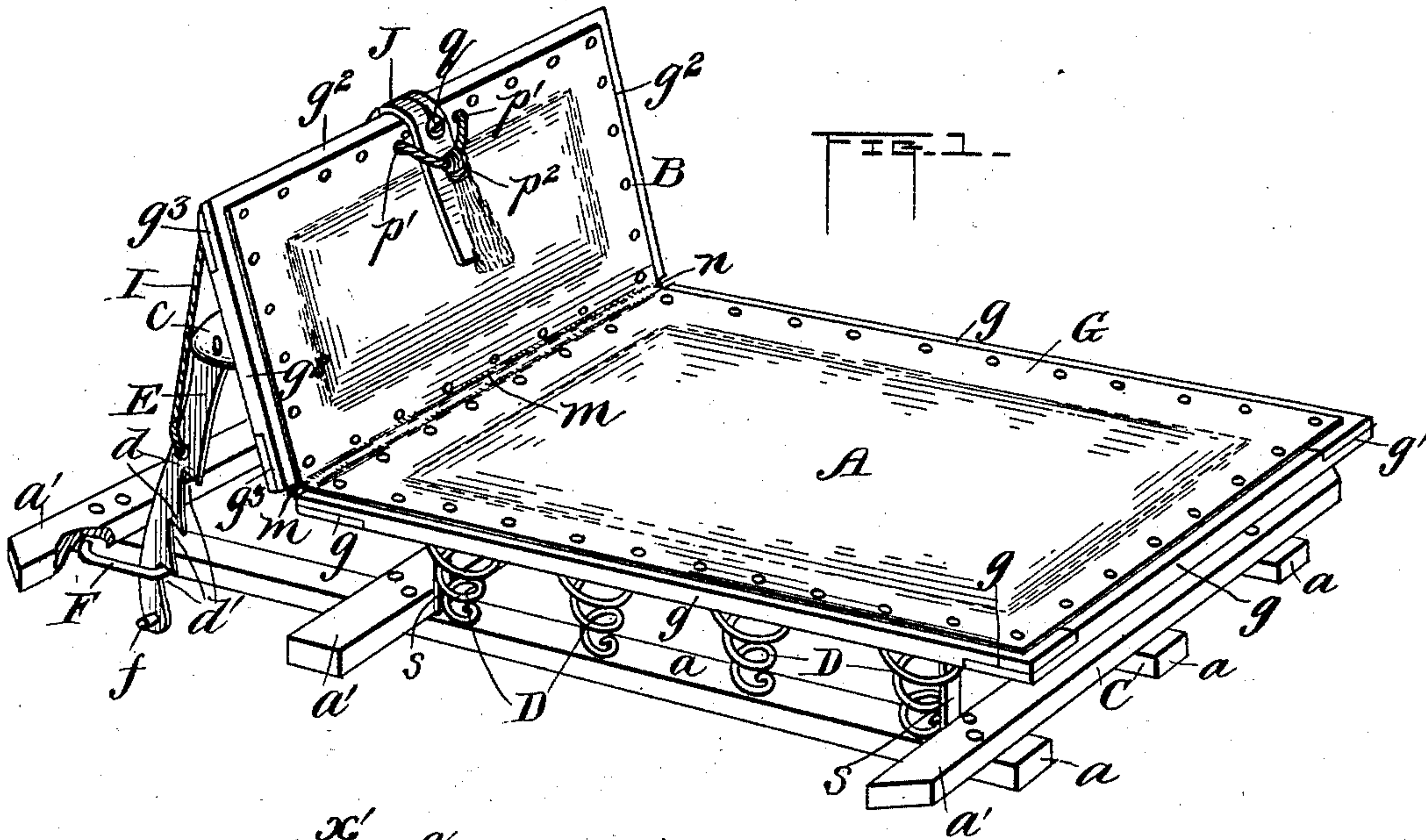


(No Model.)

L. A. FRIGON.  
SPRING BED.

No. 475,763.

Patented May 31, 1892.



*Inverance*  
*E. J. Hennich*

*Louis A. Frigon*  
*by his Attorney*  
*Mason, Hennich & Leanne*



# UNITED STATES PATENT OFFICE.

LOUIS ADOLPHE FRIGON, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO FERDINAND C. SMITH, OF SAME PLACE.

## SPRING-BED.

SPECIFICATION forming part of Letters Patent No. 475,763, dated May 31, 1892.

Application filed January 20, 1892. Serial No. 418,681. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS ADOLPHE FRIGON, a citizen of France, having legally declared my intention of becoming a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Spring Beds, Couches, or Lounges; 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.

My invention relates to portable spring-beds for invalids and for other purposes; and the same consists in certain novel constructions, combinations, and arrangements of the parts of such beds whereby great durability, lightness, elasticity, ready means of adjustment, and security against casual change in such adjustment are secured, as will be hereafter described and specifically claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved spring-bed with its head-rest adjusted at an angle; Fig. 2, a vertical longitudinal section of the same, in this view the dotted lines indicating a change in the angle of the adjustment of the head-rest; and Fig. 3 is a rear end view of the spring-bed as adjusted in the other figures.

A in the accompanying drawings indicates the horizontal portion of the spring-bed proper, and B the adjustable head-rest portion of the same.

C is a portable skeleton supporting-frame composed of longitudinal strips *a* and transverse strips *a'*, the latter extending laterally some distance beyond the outermost longitudinal strips and also occupying positions some distance inward from the front and rear ends of said strips, as represented.

D are ordinary bed-springs applied between the bed proper A and the frame C, being secured to the ticking or ticking material *G'* of the bed proper and to the slats or strips *a*, as represented.

E are pendent ratchet-toothed curved bars pivoted to brackets *c* on the back of the head-rest portion B. The teeth *d* of these bars form adjusting stop-notches *d'*, which catch

upon open loops F, applied to the rear ends of the outermost longitudinal strips *a*, there being one loop in each of said strips, as shown. By means of the said toothed bars the head portion B can be set at greater or less angle to the portion A, as occasion requires, and this adjustment is very conveniently effected by swinging the bars backward out of locking connection with the open loops F and allowing the head-rest, with the bars, to descend the distance of the length of a ratchet-tooth notch and then swinging the bars forward or allowing them to swing forward by their gravity, so as to form a locking connection with the loops. The adjustment just described effects the lowering of the head-rest; but should it be desired to raise the head-rest the bars are swung backward and raised the distance of the length of a ratchet-tooth notch and allowed to swing forward, so as to form a locking connection with the loops. The two adjustments just described are illustrated in Fig. 2, the dotted lines *x* indicating the lower position and the full black lines *x'* indicating the higher position. At the lower ends of the bars pins *f* are inserted to prevent the bars being raised entirely out of connection with the loops. The means for effecting these adjustments and controlling the adjustment and, also, the special construction of the bed proper and the head-rest portion thereof I will now describe.

The bed proper consists of a skeleton frame formed of wooden bars *g*, united at their ends by scarfed or lapping joints *g'*. The head-rest is formed of similar bars *g''*, united at their ends by similar joints *g'''*, and to the top and bottom of both of these frames strong ticking or sacking material *G G'* is tacked, as illustrated in Fig. 1 and also in the other figures.

At the junction of the head-rest portion with the bed proper a slight space *h* is left between the frame-pieces of the respective portions of the bed, in order that a flexible joint *m* shall be formed between the head-rest and the bed proper by means of the ticking material, and at this joint the upper and lower pieces of ticking material are stitched together near each side of the bed, as illus-



trated at *n*. By this construction a very enduring wooden edge is secured all around the bed proper and head-rest portion, there only being a slight separation at the place *h*, where the joint is formed on each side, and means are afforded by the wooden frame-bars of both the bed proper and the head-rest portion for securely tacking and stretching the ticking material of the bed proper and head-rest.

In the drawings a filling *H H'* is represented as applied between the ticking material, and while this is preferable such filling, of either hair or cotton, may be dispensed with. It may be also practicable to leave out all of the lower ticking material, except that which forms the joint at *m*, and to attach the springs to the portion *H*; but it is far preferable to construct the bed as represented.

To each of the side bars having ratchet-teeth, a cord *I* is connected, and these cords are carried up to staples *p* on the back of the head-rest and passed through said staples and through holes *p'* in the head-rest and united to a tassel *p<sup>2</sup>* at the center of the front of the head-rest.

To the rear end of the portable supporting-frame *C* a perforated adjusting-strap *J* is fastened and carried up over the top of the head-rest portion and temporarily secured to a button *q*, secured in the upper frame-bar of the head-rest portion, as shown. By means of the cords and this perforated strap a person lying upon the bed or the nurse can, by pulling the tassel and unbuttoning the strap, disconnect the ratchet-toothed bars from the locking-loops *F* and lower the head-rest, and by allowing the bars to swing forward to locking positions with the loops effect the desired adjustment and also retain said adjustment by buttoning the strap *J* through another of its adjusting-holes to the button *q*. This operation would lower the head-rest. To raise the head-rest, it is only necessary to move the bars backward, (after unbuttoning the strap and raising them and the head-rest,) and then to allow the bars to swing forward to their locking position with the loops and then to rebutton the strap by means of a properly-located hole.

The within-described spring-bed is adapted to be set within a bedstead and supported by the inner ledges thereof in the same manner as an ordinary spring-bed frame. If such manner of use is not desired, the skeleton

frame *C* might be provided with supporting-standards or applied in a lounge-frame in any suitable manner, so as to be capable of moving up and down on its springs and of having its head-rest adjusted at different angles, as described and illustrated.

For insuring a parallel up-and-down movement of the bed proper and limiting its upward movement under the influence of the springs flexible straps *s* are provided, said straps yielding with the springs to a downward weight.

What I claim as my invention is—

1. The combination of the supporting-frame, the frames of the bed proper and head-rest, ticking material applied to the last-mentioned frames, so as to form thereof the joint between the head-rest and bed proper, springs arranged upon the supporting-frame and connected to the bed proper, limitation-straps attached to the supporting-frame and bed proper, and suitable adjustable supports attached to the supporting-frame and the head-rest, substantially as described.

2. The combination of the supporting-frame, the frames of the bed proper and head-rest, ticking material applied to the last-mentioned frames, so as to form thereof the joint between the head-rest and bed proper, springs arranged upon the supporting-frame and connected to the bed proper, the pendent pivoted ratchet-toothed bars attached to the head-rest, the open loops attached to the supporting-frame, the cords connected to the ratchet-toothed bars and passed through the head-rest and united at the center thereof, and the perforated retaining-strap attached to the supporting-frame, and the button for said strap attached to the head-rest, substantially as described.

3. In a spring-bed, the combination of the bed proper, the adjustable head-rest jointed to said bed proper, the supporting-frame, springs on said frame and connected to the bed proper, the pendent pivoted ratchet-toothed bars attached to the head-rest, the open loops attached to the sides of the supporting-frame, and the springs arranged on said frame between it and the bed proper, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

LOUIS ADOLPHE FRIGON.

Witnesses:

THOS. KELL BRADFORD,  
FRANK M. KING.