

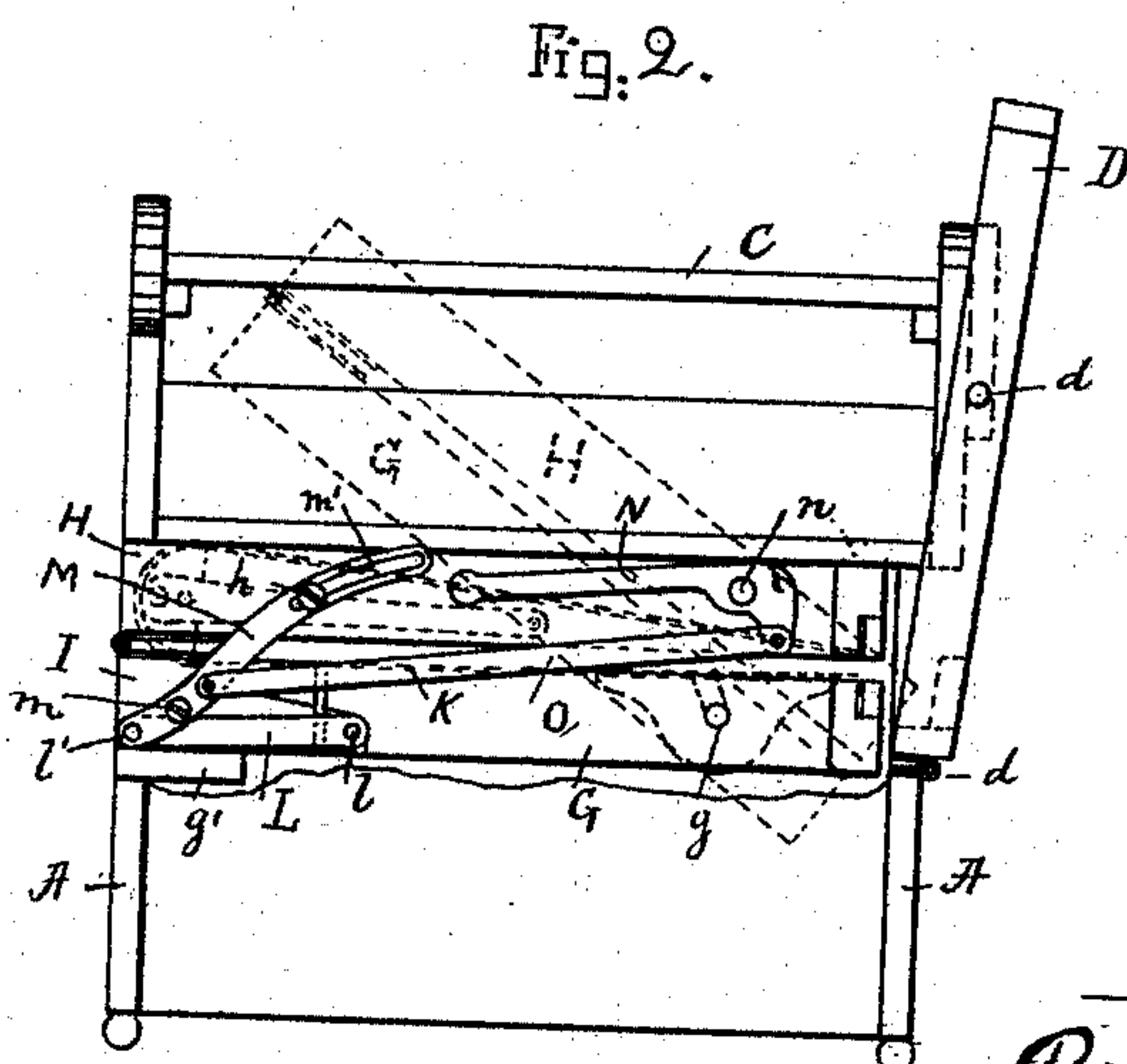
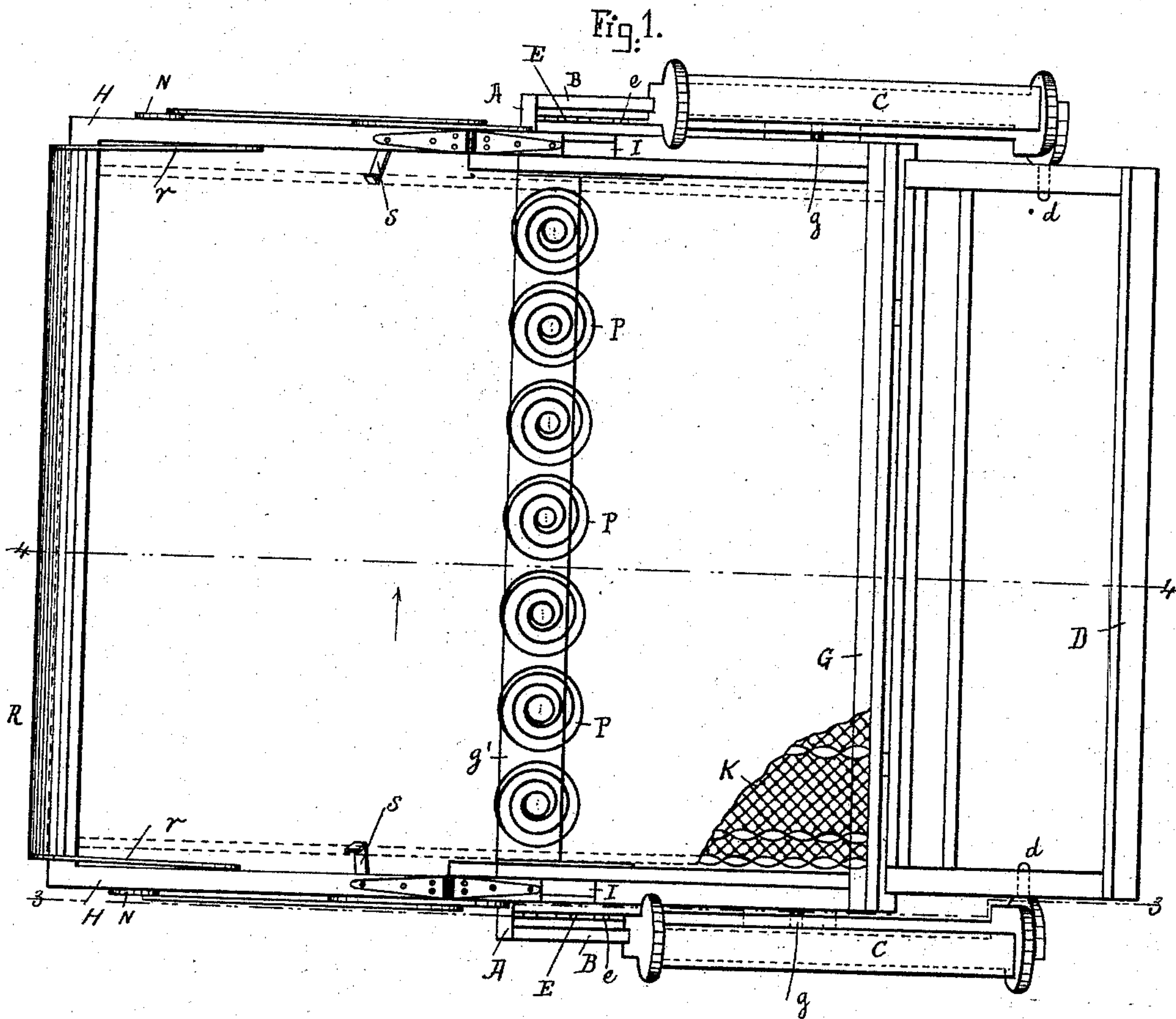
(No Model.)

P. F. ASKER.  
SOFA BED.

2 Sheets—Sheet 1.

No. 500,792.

Patented July 4, 1893.



Witnesses.

*Levinitz, N. Moller.*  
*William C. Bailey*

Inventor

*Per F. Asker*  
by *Alvan Audrién*  
his atty

(No Model.)

P. F. ASKER.  
SOFA BED.

2 Sheets—Sheet 2.

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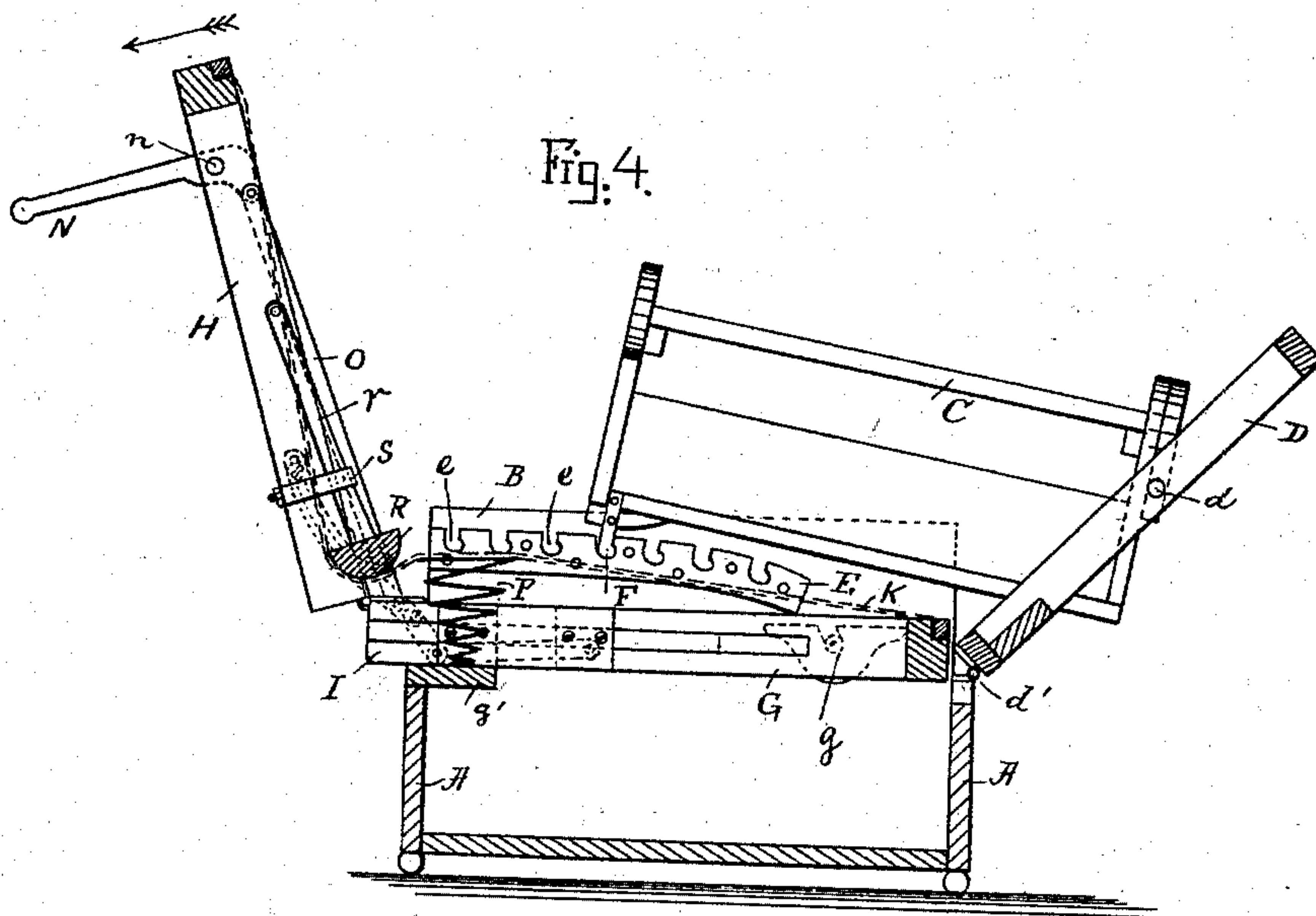
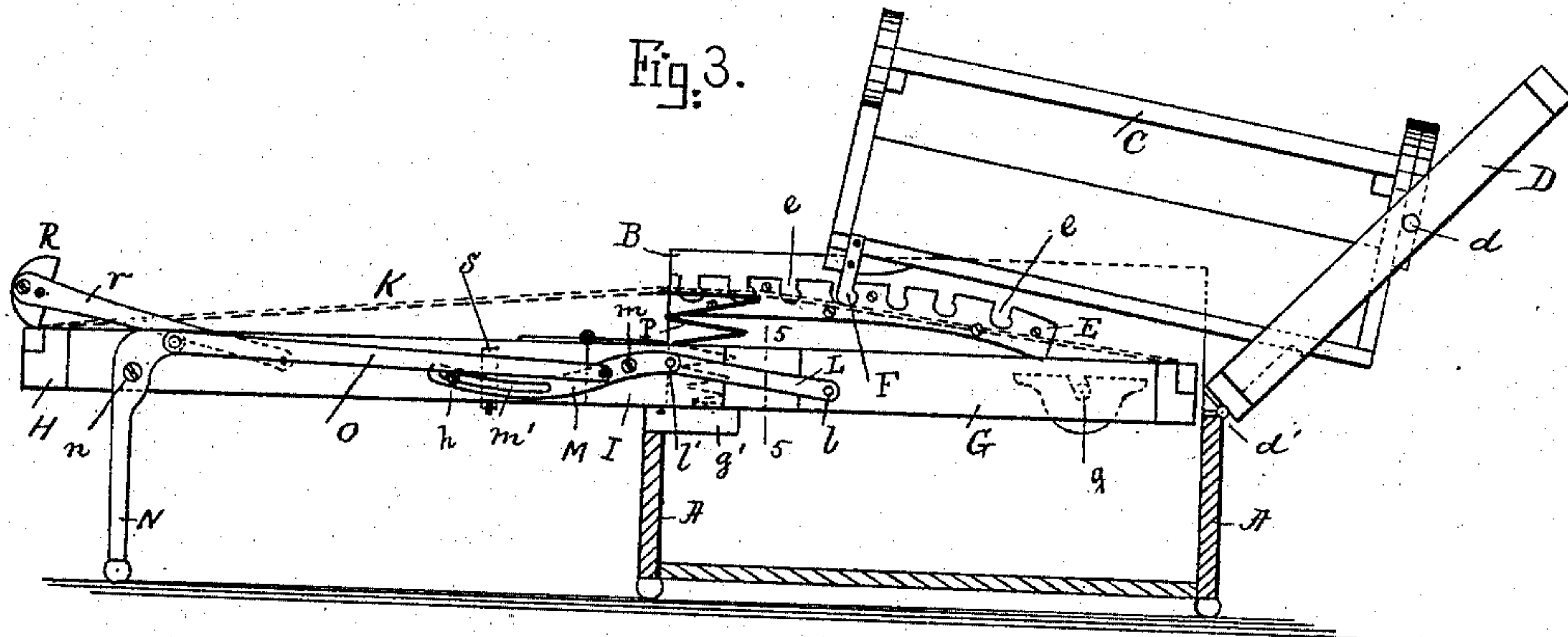
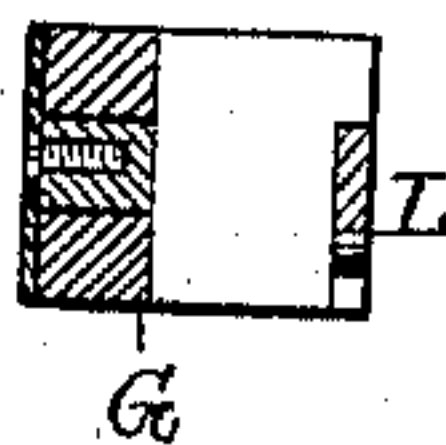


Fig. 5.



Inventor.

Per F. Asker  
by Alban Andren  
his atty.

Witnesses.

Lauritz N. Høller.  
William C. Euley



# UNITED STATES PATENT OFFICE.

PER F. ASKER, OF BOSTON, MASSACHUSETTS.

## SOFA-BED.

SPECIFICATION forming part of Letters Patent No. 500,792, dated July 4, 1893.

Application filed April 12, 1893. Serial No. 470,036. (No model.)

*To all whom it may concern:*

Be it known that I, PER F. ASKER, a citizen of Sweden, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Sofa-Beds, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in sofa beds and it is carried out as follows, reference being had to the accompanying drawings, wherein—

Figure 1 represents a plan view of the invention when used as a bed. Fig. 2 represents an end view when folded together as a chair or sofa. Fig. 3 represents a cross section on the line 3—3 shown in Fig. 1. Fig. 4 represents a cross section on the line 4—4 in Fig. 1 showing the device in the act of being changed from a sofa or chair to a bed or vice versa; and Fig. 5 represents a detail cross-section on the line 5—5 shown in Fig. 3.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

A represents the box shaped base portion which is adapted to contain the bed clothes, &c., when the device is used as a chair or sofa. To the sides of said base A are secured the upwardly projecting ribs B, B, which serve as guides for the arm rests C, C, the rear ends of which are pivoted at *d, d*, to the back D as shown. The lower edge of said back D is pivoted at *d'* to the rear upper portion of the base A as shown. For the purpose of holding the back D at any desired inclination relative to the base, I secure to each of the stationary ribs B, B, a notched bar E, the notches or recesses *e* of which are adapted to receive and securely hold locking projections F, F, secured to the lower front portions of the arm rests C, C, as shown. By locating the projections F in any of the recesses *e*, the back D may be adjusted from a vertical to a horizontal and intermediate positions and firmly held in any such desired positions according to the use for which the furniture is required.

The seat is composed of two frames, namely: an inner portion G and the outer portion H as shown in the drawings. The frame G is pivoted at or near its rear portion, at *g, g*, in any suitable manner to the sides of the base

A or its connections so as to permit said frame G and the frame H to be swung upward as shown in dotted lines in Fig. 2, when placing the bed clothes in the box base A or removing them therefrom as the case may be.

In suitable grooves in the ends of the seat frame G are located sliding blocks I to which is hinged the frame H as shown in the drawings.

K represents a wire or other elastic or flexible mattress, one end of which is secured to the rear of the frame G and the other end to the forward end of the frame H as shown. For the purpose of automatically stretching and keeping taut the said wire mattress when the furniture is used as a bed I employ the following connecting mechanism between the seat frames G, H, and the sliding blocks I, I.

To each end of the seat frame G is pivoted at *l* a link L, the outer end *l'* of which is pivoted to a lever M hung at *m* to the sliding block I as shown in Figs. 2 and 3. The lever M has a slot *m'* at its opposite end which receives a pin or screw *h* secured to the seat frame H as shown. From the above it will be seen that during the swinging motion of the frame H from the position shown in Fig. 2 to that shown in Figs. 1 and 3, in the direction of the arrow in Fig. 4 the slotted lever M will be swung outward on its pivot *l'* and by so doing causes the blocks I, I, to slide out on the frame G until the outer frame H is brought to a horizontal or nearly so position shown in Figs. 1 and 3. As the frame H is pivoted to the blocks I, I, it will be seen that said frame H is moved automatically outward, with the said blocks, as it approaches its horizontal or nearly so position by which the wire or equivalent mattress K is stretched and made taut.

The outer end of the frame H is supported on legs N, N, which are pivoted at *n, n*, to the said frame H and connected by means of links O, O, to the slotted levers M, M, by which arrangement the pivoted legs N, N, are automatically moved into a vertical position when the frame H is swung into the position shown in Fig. 3, and automatically moved to a horizontal position when said frame is swung to the sofa or chair position shown in Fig. 2.

P, P, represent coiled springs interposed between the wire mattress K and a brace *g'* on the under side of the frame G as shown.



I have only shown one row of springs P but additional ones may be employed on either of the frames G and H for the proper support of the mattress K without departing from the spirit of my invention.

R represents a pivoted foot board attached to arms *r, r*, which are pivoted about midway to the frame H as shown in Figs. 1, 3 and 4, thus enabling said foot board to be swung outward when the furniture is to be used as a bed, as shown in Figs. 1 and 3, and to be swung inward when said furniture is to be used as a sofa or chair as shown in Fig. 2.

The foot board R is preferably rounded or made of a semi-cylindrical section as shown in the drawings so as to produce a rounded forward edge of the chair or sofa when the furniture is used for such purpose as shown in Fig. 2.

S, S, are suitable hooks or catches of any well known form for the purpose of locking the foot board levers *r, r*, to the frame H after the foot board has been swung to the position shown in Fig. 4 preparatory to closing the frame H over the frame G.

The furniture may be made as a chair or lounge adapted to be converted into a single bed or it may be more or less wide to serve as a sofa and adapted to serve as a double bed when expanded as may be desired.

The improved furniture is to be properly upholstered to suit the buyer, such upholstery or trimming being however not shown in the drawings.

Having thus fully described the nature, construction, and operation of my invention, I

wish to secure by Letters Patent and claim—

1. The improved furniture consisting of a base A and a seat frame G pivoted thereto combined with blocks I, I, adapted to slide in the latter and a frame H pivoted to said sliding blocks and intermediate connecting mechanism substantially as described whereby the mattress K attached to said bed frames is automatically stretched during the unfolding of the bed as and for the purpose set forth.

2. In a chair or sofa bed, a seat frame G pivoted to the furniture base and sliding blocks I, I, in the frame G and a secondary seat frame H pivoted to said blocks combined with a link L pivoted to the frame G, a lever M pivoted to the block I and connected to the link L and frame H, substantially as and for the purpose set forth.

3. In a chair or sofa bed, a base and a seat frame G pivoted thereto and a secondary frame H pivoted to sliding blocks I, I, combined with pivoted supports N, N, on said frame H and automatic connecting mechanism to said frames and sliding blocks substantially as described for the automatic operation of said pivoted supports during the opening and closing movements of the said frame H as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 4th day of April, A. D. 1893.

PER F. ASKER.

Witnesses:

ALBAN ANDRÉN,

ELLA M. HENDRICKSON.