

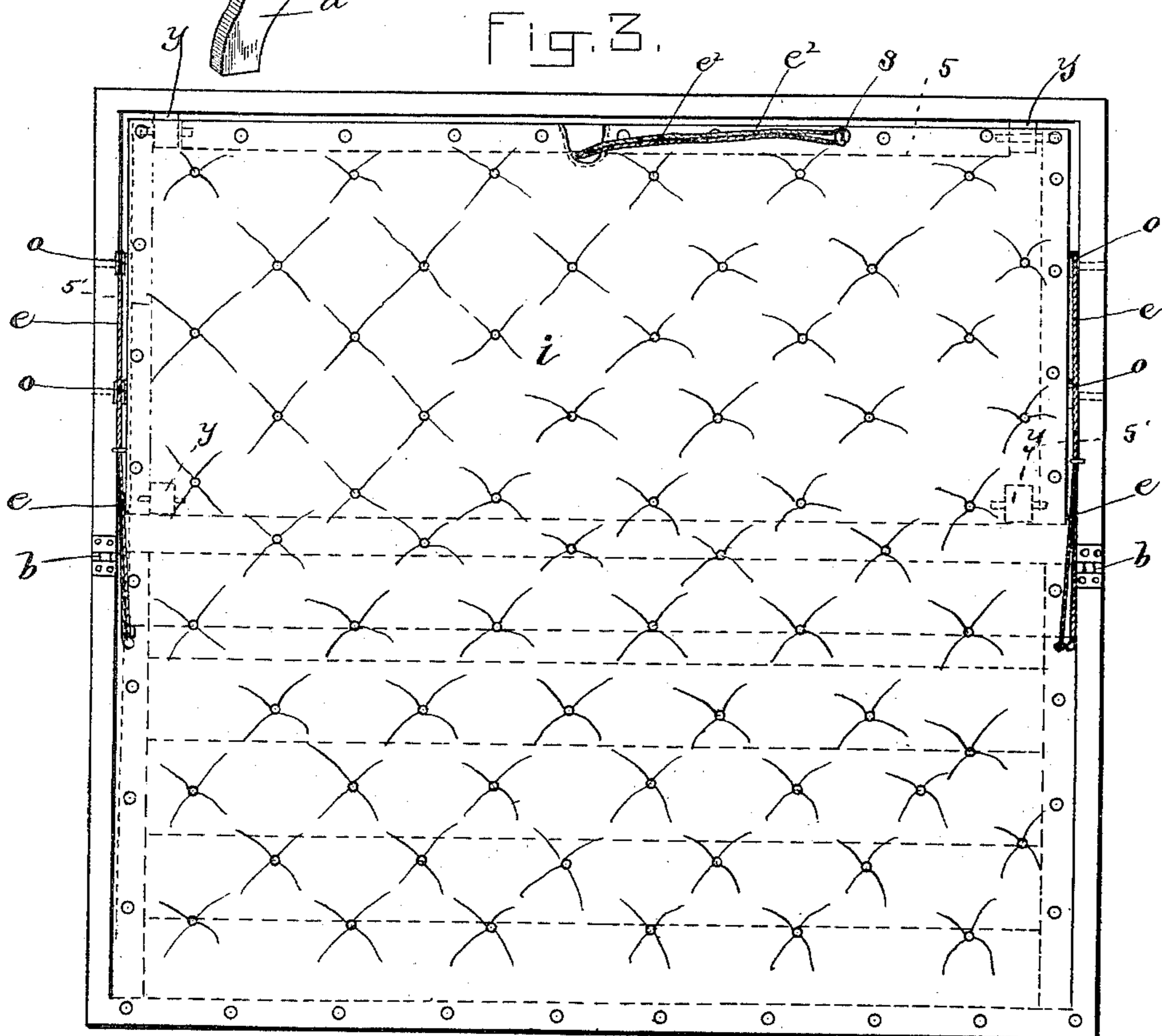
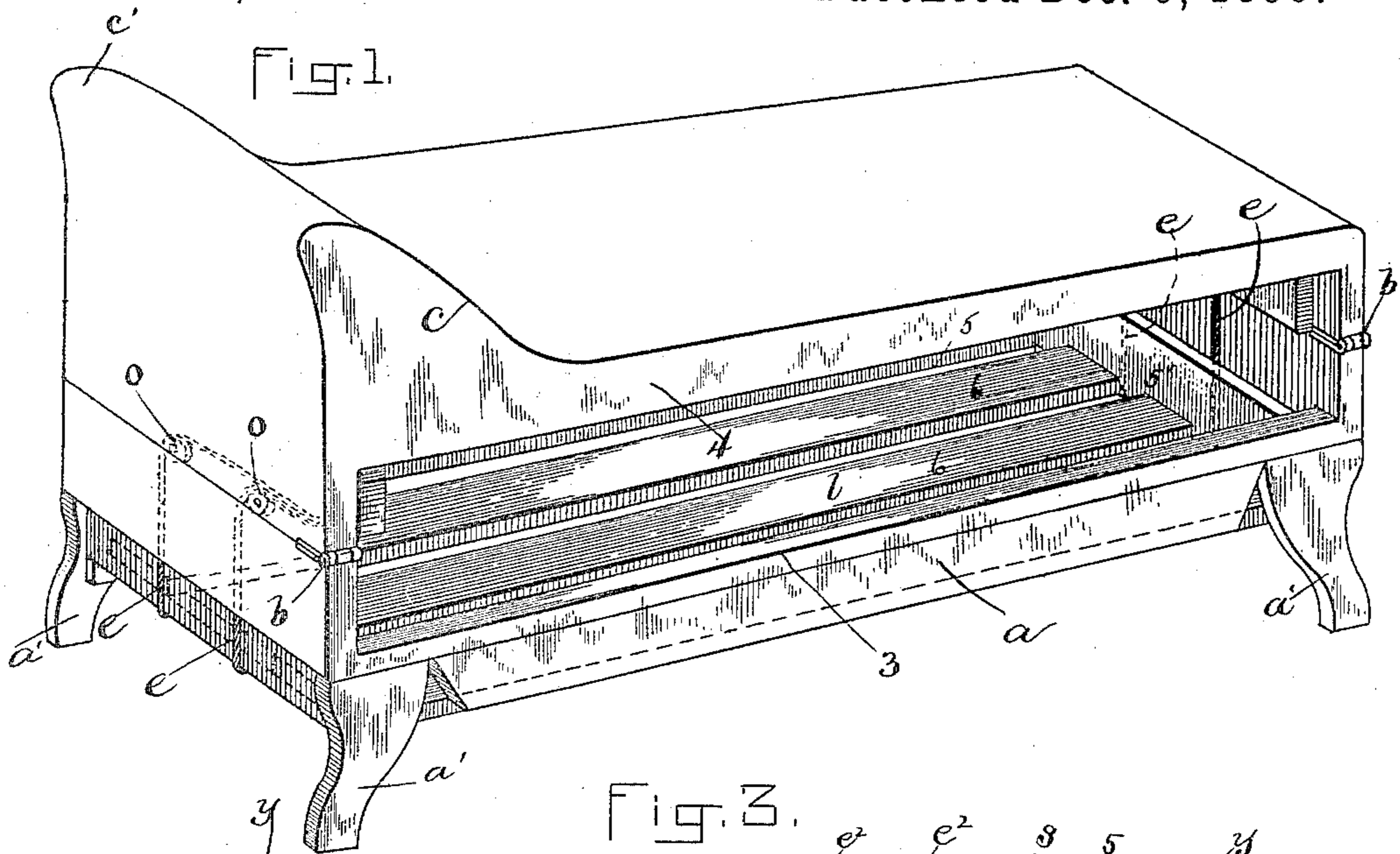
(No Model.)

2 Sheets—Sheet 1.

W. M. RICKERT.
BED LOUNGE.

No. 442,394.

Patented Dec. 9, 1890.



WITNESSES:

Ernest W. Stauden.
H. E. Brown.

INVENTOR

W. M. Rickert.
Ernest W. Stauden, Attorney.

(No Model.)

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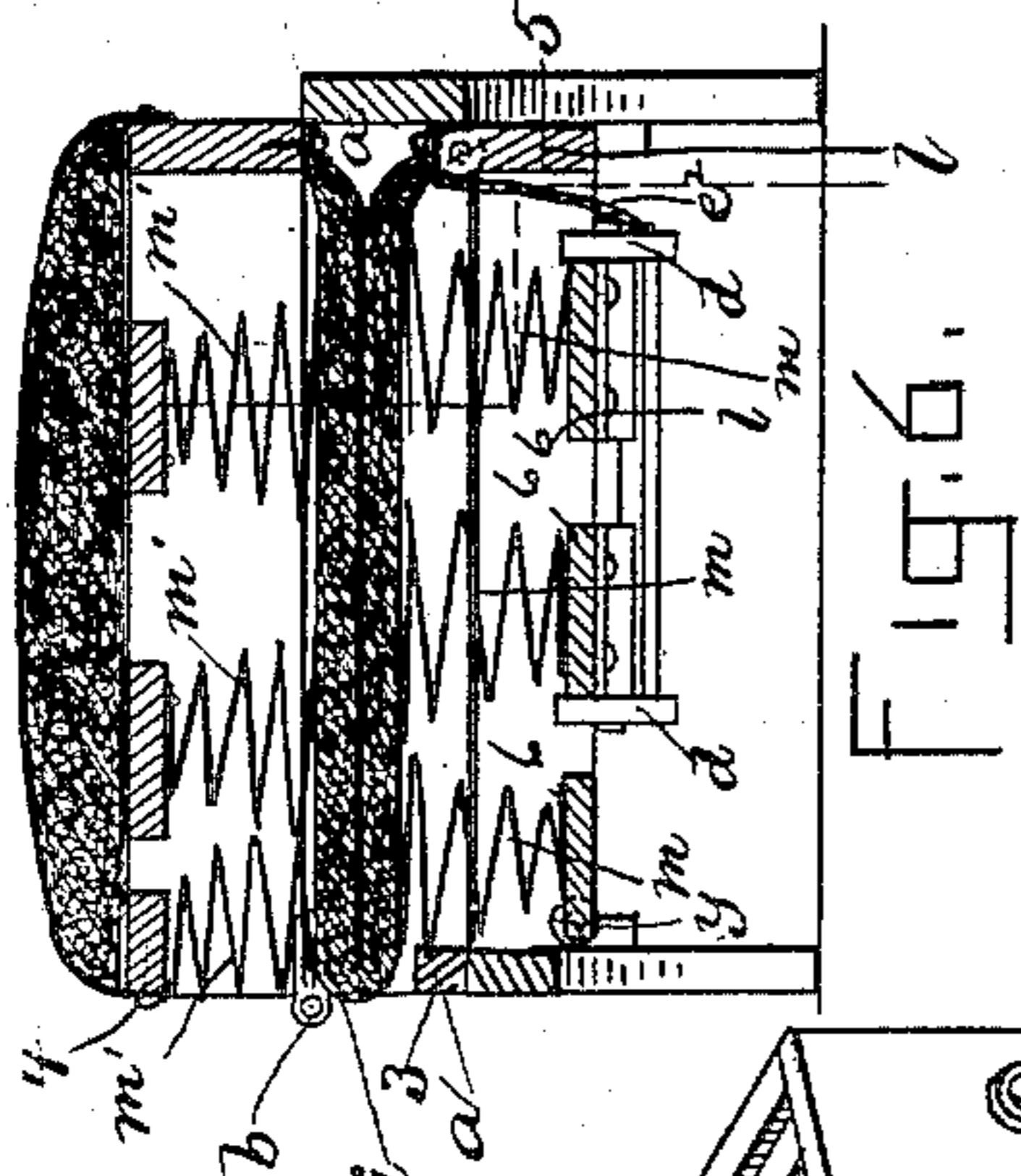


Fig. 6.

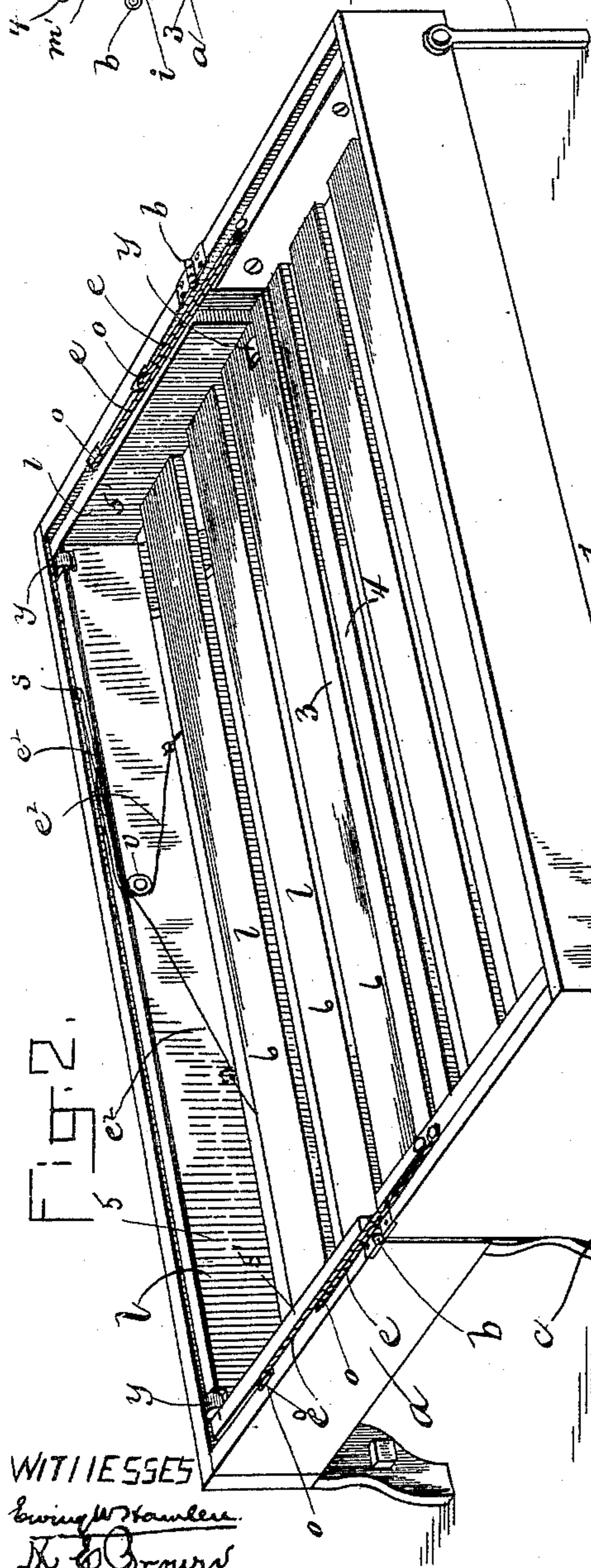


Fig. 2.

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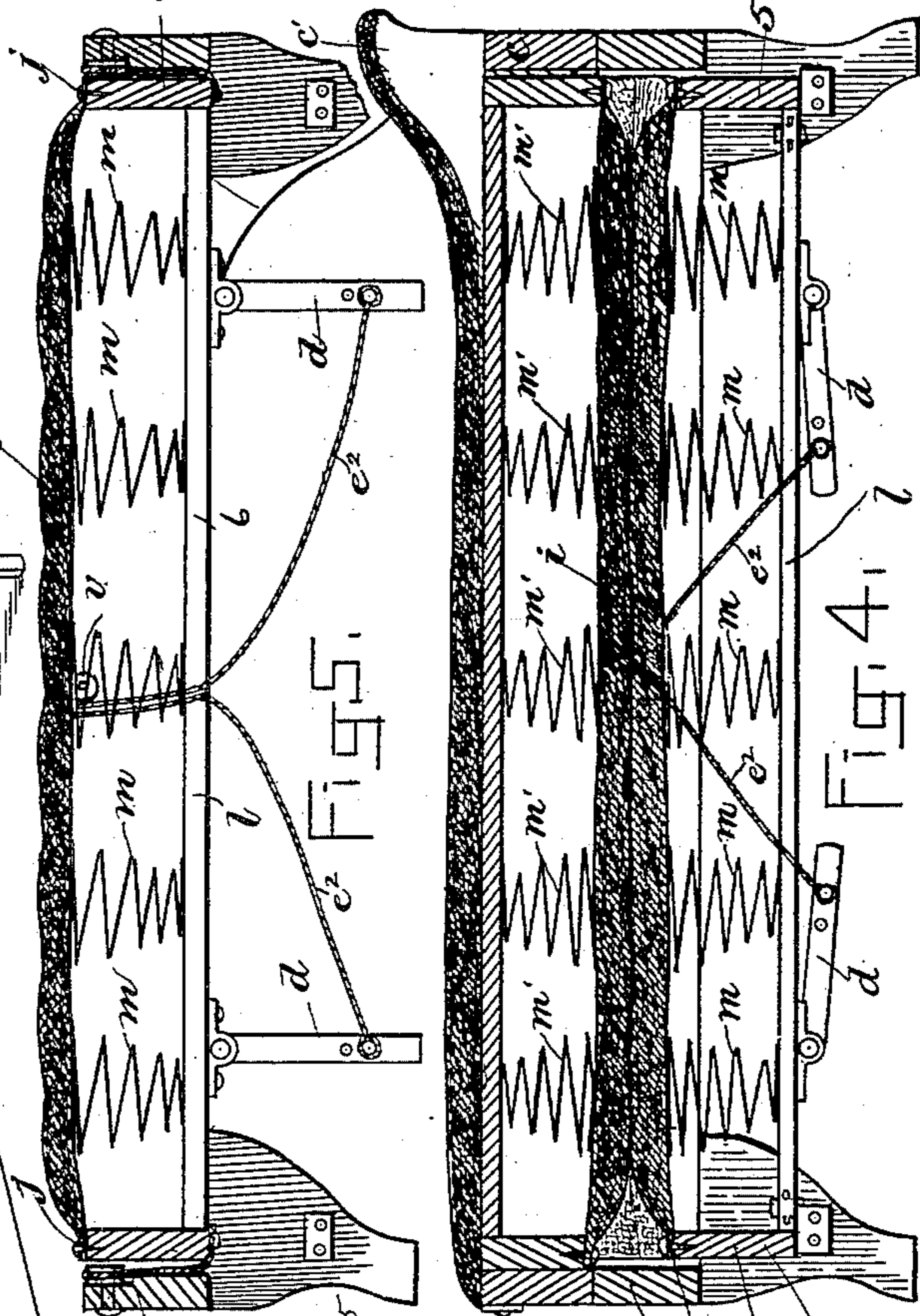


Fig. 5.

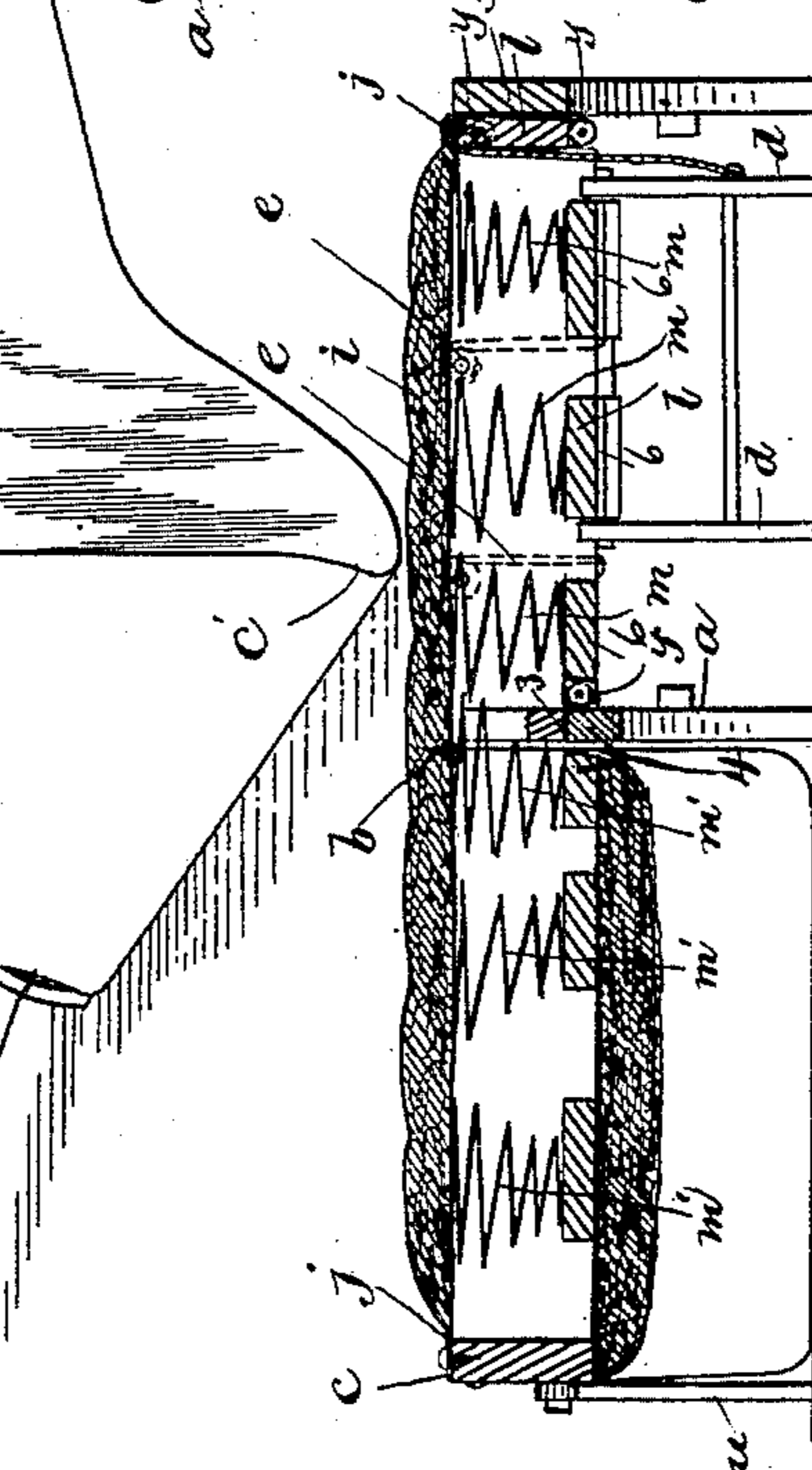


Fig. 7.

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UNITED STATES PATENT OFFICE.

WILLIAM M. RICKERT, OF LACONIA, NEW HAMPSHIRE.

BED-LOUNGE.

SPECIFICATION forming part of Letters Patent No. 442,394, dated December 9, 1890.

Application filed January 17, 1890. Serial No. 337,207. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. RICKERT, of Laconia, in the county of Belknap and State of New Hampshire, have invented certain new and useful Improvements in Bed-Lounges, of which the following is a specification.

This invention relates to a bed-lounge composed of two frames or sections hinged together at the front side of the lounge, the upper section being capable of being swung over to convert the lounge into a bed.

The invention has for its object to provide a lounge of this class in which the mattress or bed-surface which is folded between said sections when the lounge is closed and spread out as a bed when the lounge is opened shall be supported by springs of sufficient height to give the bed desirable softness or yielding quality, and at the same time to prevent the bed from bearing on the side pieces of the frame-sections, which extend lengthwise of the lounge under the center of the bed.

To these ends the invention consists in the combination, in a folding lounge or other like article of furniture, of a frame composed of a supporting or base section having the usual legs, and a hinged upper or seat section having springs which support the portion of the mattress attached to said section, a vertically-movable frame inclosed in the base-section and connected with the hinged section by cords which raise said frame when the hinged section is opened and permit its depression when the hinged section is closed, said frame being formed at its ends and at one side to support said mattress, its other side being cut away to avoid contact with the mattress at the center of the bed, and mattress-supporting springs supported by the frame below said raised ends and side, the vertical movability of the frame and its connection with the hinged section of the lounge enabling it to drop when the lounge is folded and rise when the lounge is opened, so that the springs with which it is provided may be of suitable height for ease and softness when the lounge is being used as a bed without increasing the height of the structure when it is used as a lounge, all of which I will now proceed to describe.

Of the accompanying drawings, forming a

part of this specification, Figure 1 represents a perspective view of the frame of my improved lounge, portions of the upholstery and springs and covering being removed and the sections being shown folded together. Fig. 2 represents a similar view showing the upper section swung over in the position it occupies when the lounge is converted into a bed. Fig. 3 represents a top view of the complete lounge converted into a bed. Fig. 4 represents a longitudinal section of the lounge. Fig. 5 represents a longitudinal section through the supporting-section of the lounge, showing the lounge converted into a bed. Fig. 6 represents a transverse section of the lounge in its folded condition, and Fig. 7 represents a transverse section of the lounge converted into a bed.

The same letters and numerals of reference indicate the same parts in all the figures.

In the drawings, *a* represents the supporting-section of the lounge-frame, to which are rigidly fixed the usual legs *a'*.

c represents the upper section of the lounge-frame, which is connected to the supporting-section *a* by hinges *b b*, and is provided at one end with a suitable head *c'*.

i represents the mattress, which is attached along one edge and along portions of its ends to the swinging section *c*, the opposite edge of the mattress and the remaining portions of its ends being attached to the frame *l*, which is inclosed in the supporting-frame *a* and is adapted to rise and fall therein.

The frame *l* is provided with a series of springs *m*, which support the portion of the mattress lying over said frame, and the lounge-section is provided with a series of springs *m'*, which support the remaining portion of the mattress.

The frame *l* is connected by cords *e e* with the lounge-section *c*, said cords being guided by pulleys *o* on the supporting-section *a*, and arranged so that when the section *c* is folded over upon the section *a* the frame *l* and the springs and the portion of the mattress supported thereby will be depressed, as shown in Figs. 4 and 6; but when the section *c* is swung over to convert the lounge into a bed the frame *l* and its springs and the portion of the mattress supported thereby will be raised

until the upper ends of said springs are at the same height as the upper ends of the springs *m'*, as shown in Fig. 7.

The front rail 3 of the supporting-section *a* and the front rail 4 of the hinged section *c* are cut away, as shown in Fig. 1, so that when the lounge is opened as a bed a space of considerable depth will exist between the central portion of the mattress and the upper edges of said rails 3 and 4, as shown in Fig. 7.

The frame *l* is composed of a side piece 5, end pieces 5' 5', and a bottom composed of slats or bars 6 6, supporting the springs *m*. Said side piece and end pieces project above the slats 6, and their upper edges support the corresponding edges of the mattress, which is suitably secured thereto, the springs *m* being accommodated below the mattress-supporting edges. The frame *l* has no raised side piece at the side opposite the side piece 5, so that it presents no raised portion at the center of the bed, but leaves the mattress entirely free at this point. It will be seen that the springs *m*, raised and lowered by the frame *l* when the lounge is opened and closed, may be made of suitable length to give an easy support to the mattress when the lounge is opened without making the lounge too high when it is folded, said spring dropping below the upper surface of the section *a* when the lounge is folded and rising to the proper height when the lounge is opened as a bed.

I am aware that a movable frame has been inclosed in the base-section of a bed-lounge and connected by cords with the hinged section, so that it will be raised and lowered when the hinged section is opened and closed; but I am the first, so far as I am aware, to combine with the base and seat sections of a bed-lounge a movable frame having raised supports for one side edge and portions of the two ends of a mattress and a bottom depressed below said supports and a series of springs supported by said bottom, said springs being raised with the frame by the opening of the lounge and depressed by the closing thereof.

To support the springs *m* and the frame *l* which carries them, I provide said frame with two pairs of legs *d d*, which are hinged to the bottom of the frame *l* and are adapted to be drawn up against said bottom when the frame *l* is depressed, as shown in Figs. 4 and 6, and swing downwardly, so that their lower ends will rest upon the floor and support the frame *l* when the latter is raised, as shown in Figs. 5 and 7.

e'' e'' represent cords, which are attached to the legs *d d* and pass therefrom through the frame *l* and to the top of the mattress, where they are united and form a loop, which is adapted to be engaged with a stud or projection *s* on the upper edge of the frame *l*. When the lounge is converted into a bed, the loop formed by the cords *e''* is disengaged from the stud *s*, and the legs *d d* thereupon swing downwardly by their own weight to the

position shown in Figs. 5 and 7. When the lounge is to be folded, the operator draws upwardly on the cords *e''* and engages said loop with the stud *s*, the movement of the cords involved by this operation drawing the legs upwardly against the frame *l*, as shown in Figs. 4 and 6, so that said legs do not prevent the depression of the frame *l* in the operation of folding the lounge. The cords *e'' e''* pass over a pulley *v*, secured to the frame *l*, as shown in Fig. 5.

u represents a leg or brace, which is pivotally secured to the hinged section *c* at the end opposite the head portion *c'*, said leg and the head portion *c'* resting on the floor and supporting the hinged section when the lounge is converted into a bed.

The frame *l* is provided with rollers *y*, bearing on the inner surfaces of the side bars of the supporting-section *a* to facilitate the vertical movements of said frame.

I claim—

1. In a bed-lounge, the combination of the base-section having a front rail 3, the upper edge of which is depressed, the upper or seat section hinged to the base-section and having a front rail 4, the lower edge of which is elevated, said rails 3 and 4 being formed so that they are below the upper portions of the sections when the lounge is opened as a bed, the mattress attached at one edge and at portions of its ends to the seat-section, the springs within the seat-section arranged to support a portion of the mattress when the lounge is opened, the vertically-movable frame inclosed in the base-section and having the raised side 5 and raised ends 5' 5', to which the other edge and the remaining portions of the ends of the mattress are secured, said frame being cut away at the side opposite the side 5, so that it presents no upward projection at the center of the lounge when the latter is opened as a bed, connections between said movable frame and the seat-section, whereby said frame is raised and depressed by the opening and closing of the lounge, and springs supported by the bottom portion of the frame and supporting the portion of the mattress that is attached to said frame, said springs being depressed with the frame when the lounge is closed and raised with the frame when the lounge is opened, so that the springs may be of suitable height to give an easy support to the mattress and prevent a hard center without giving the lounge-seat an excessive height when the lounge is closed, as set forth.

2. In a bed-lounge, the combination, with the base-section having a portion of its front board removed and the upper or seat section hinged to said base-section and also having a portion of its front board removed, of the vertically-movable frame inclosed in the base-section, having bottom slats or bars and raised ends and front, the rollers *y*, secured to said base-section for guiding said frame, the cords connected to said movable frame and to said

upper or seat section, and the pulleys *o* for
said cords, the supporting-legs for said mov-
able frame, the cords connected to said legs
and engaging a stud of said frame, the mat-
5 tress connected to said upper or seat section
and to the ends and front of said frame, and
the supporting-springs therefor, substantially
as set forth.

In testimony whereof I have signed my
name to this specification, in the presence of 10
two subscribing witnesses, this 10th day of
January, A. D. 1890.

WILLIAM M. RICKERT.

Witnesses:

S. S. JEWETT,

W. A. PLUMMER.