

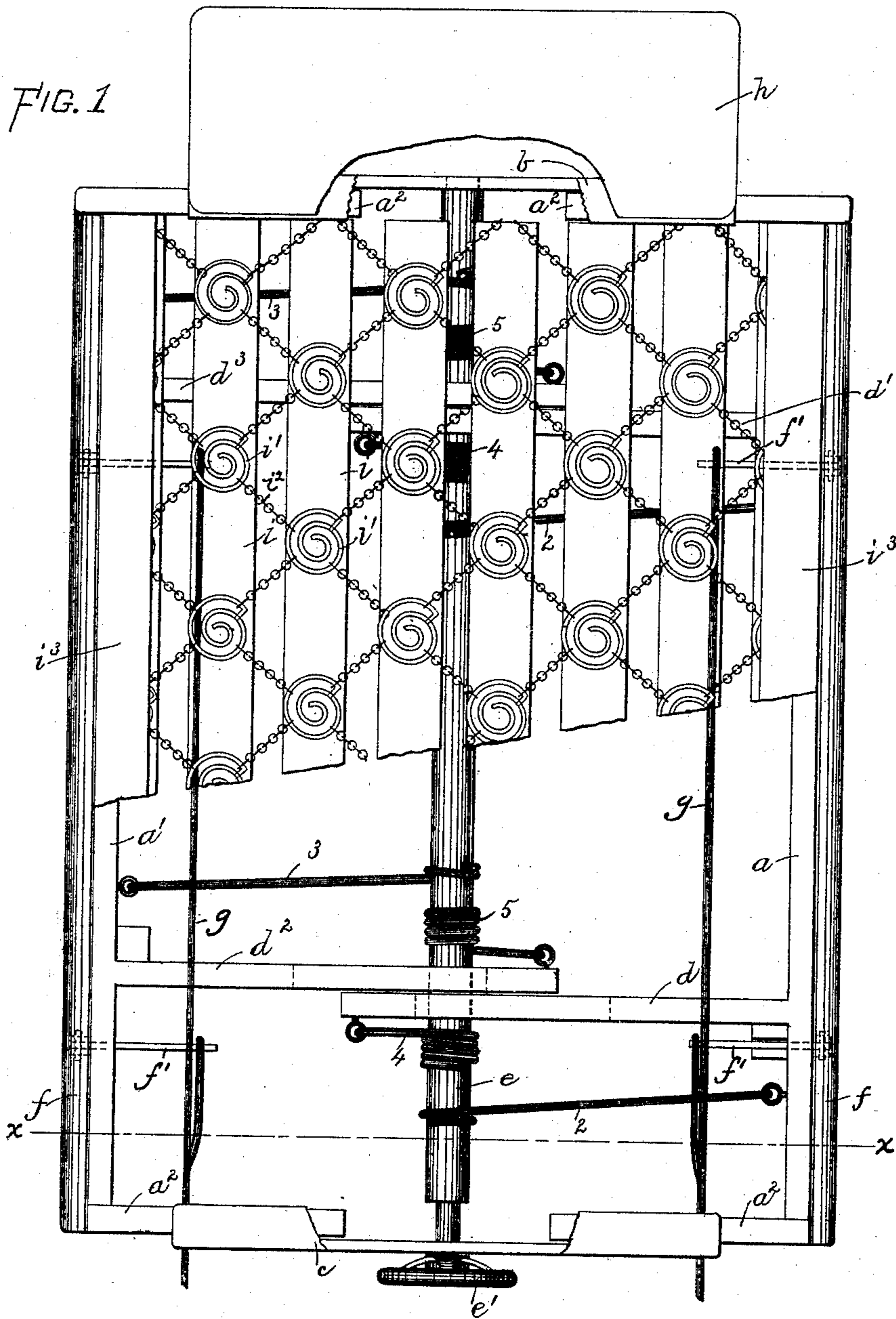
(No Model.)

2 Sheets—Sheet 1.

W. S. BOWIE.
LOUNGE.

No. 482,673.

Patented Sept. 13, 1892.



Witnesses
Lucy F. Graves.
William C. Jennings

Inventor
William S. Bowie
by A. J. Hayes
att'y.

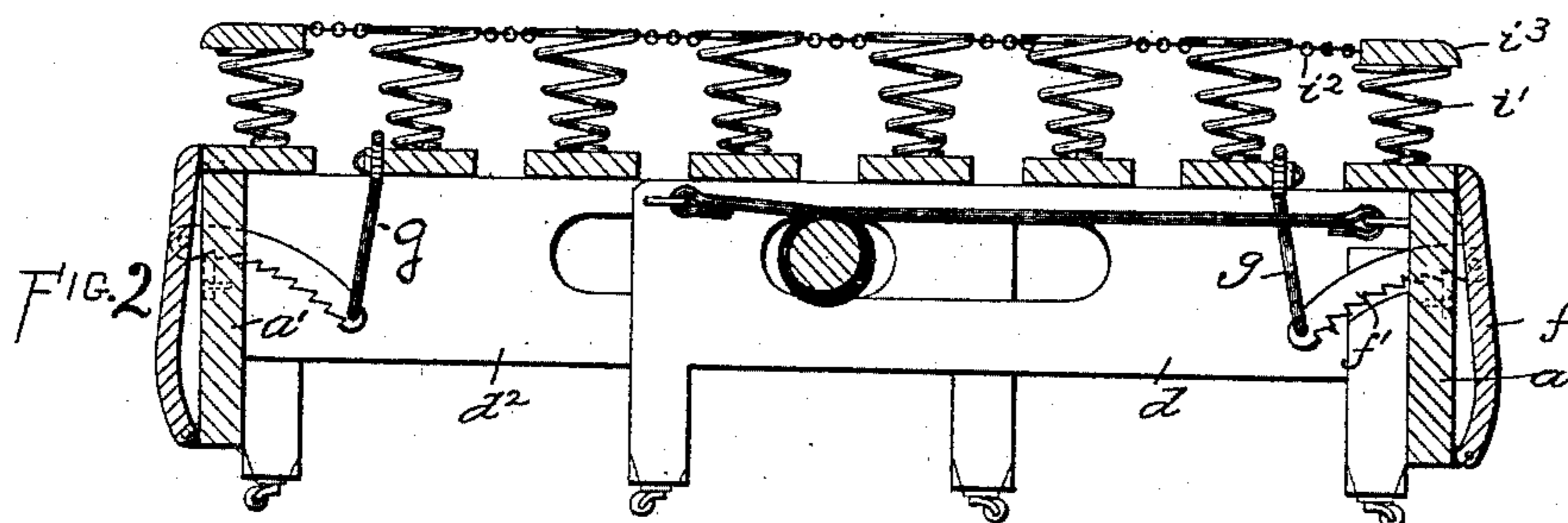
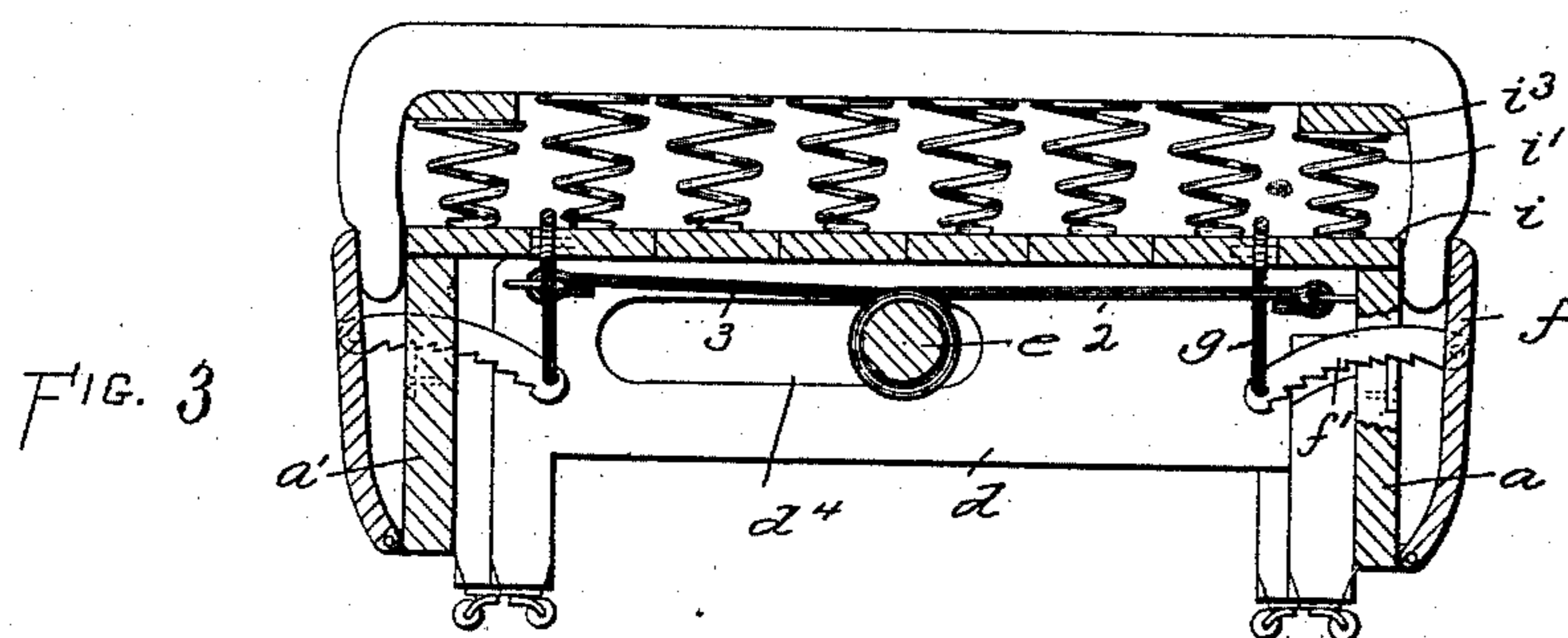
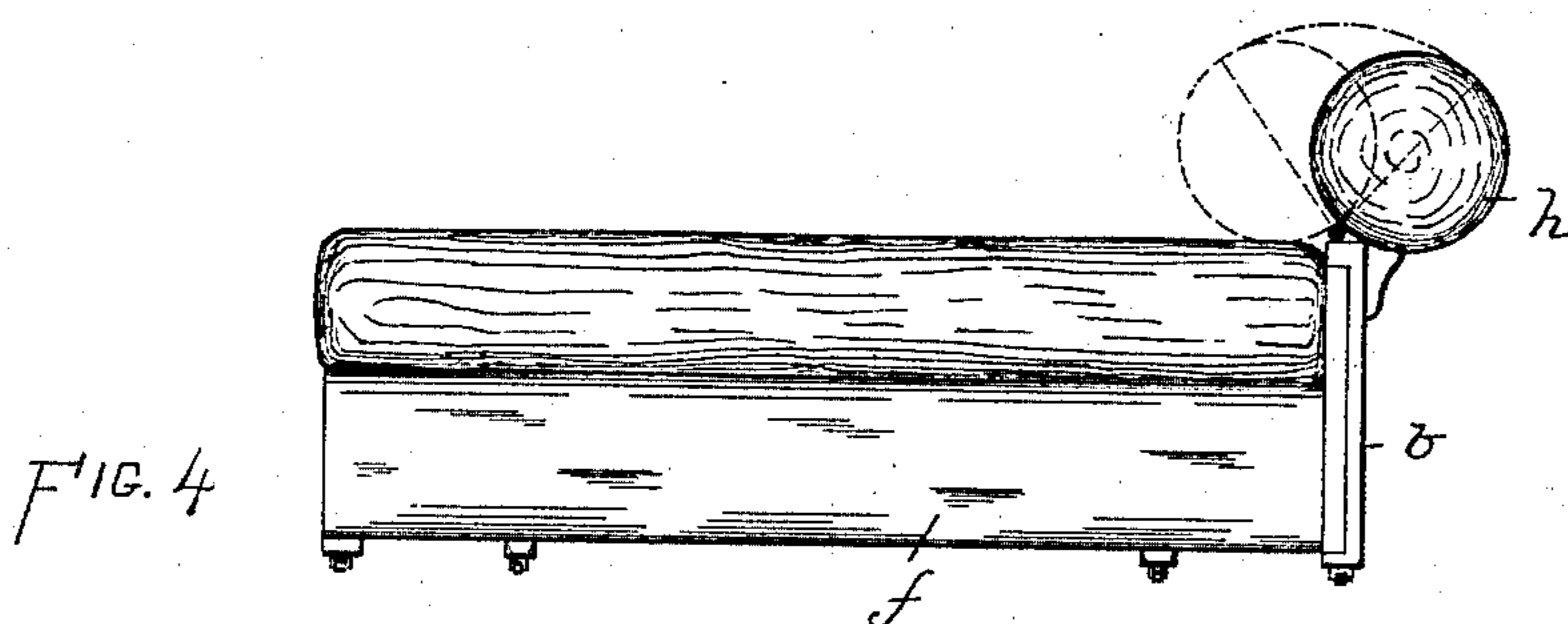
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UNITED STATES PATENT OFFICE.

WILLIAM S. BOWIE, OF BOSTON, MASSACHUSETTS.

LOUNGE.

SPECIFICATION forming part of Letters Patent No. 482,673, dated September 12, 1892.

Application filed May 9, 1892. Serial No. 432,339. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. BOWIE, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Lounge or Couch Beds, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention relates to that class of beds commonly called "lounge" or "couch" beds, and has for its object to construct the same so that it may be extended transversely or widened to make a full-width bed, or may be closed up and used as a single bed, and when made up and provided with a suitable coverlet serves as and represents an upholstered lounge or couch.

In accordance with this invention the longitudinal side rails are connected to or supported by suitable transverse frames, which support the slats or springs which constitute the bed-bottom, and these transverse slat-supporting frames are movable toward and from each other to vary the width of the bed, and the slats carrying the springs are placed on said frames longitudinally, the side slats being rigidly secured to the side rails or to the supporting-frames, while the intermediate slats are freely movable independently, so that they may be separated when the bed is widened or may be crowded together when the bed is narrowed.

As I intend to use the bedclothing as the upholstery for the lounge, I have provided suitable means for receiving and holding the side edges of the full-width mattress and other bedclothing, whereby it may be held taut.

In order to separate the side rails and connected transverse slat-supporting frames to widen the bed, I have provided a single operating-shaft arranged longitudinally with relation to the bed and supported in suitable bearings and adapted to be turned by a hand-wheel or otherwise, and the parts or sections to be moved transversely are connected with said operating-shaft by intermediate connections—such, for instance, as cords or chains—which are adapted to be wound thereon or unwound, as required.

Figure 1 shows in plan view a lounge or

couch bed embodying this invention, the bedclothing being removed and the parts extended for a full-width bed; Fig. 2, a transverse section of the lounge or couch bed shown in Fig. 1, taken on the dotted line xx ; Fig. 3, a similar section of the lounge or couch bed, the parts being closed up or drawn together and a mattress placed thereon and shown in elevation, the connecting-chains between the springs and the head-board, however, being omitted for clearness; Fig. 4, a side view of the lounge or couch bed when made up as a lounge.

The side rails $a a'$ are connected at each end to end pieces $a^2 a^2$, which are made of suitable length, so that when abutting against each other endwise they will correspond with the width that is desired for the lounge or couch or for a single-width bed. The end pieces $a^2 a^2$ at each end of the bed are inclosed or guided by the head-board b and foot-board c , each of which are preferably provided with casters.

Secured to the side rail a are two transversely-extended and parallel-arranged slat-supporting frames $d d'$, also preferably provided with casters, and secured to the side rail a' are two like transversely-extended and parallel-arranged frames $d^2 d^3$, also provided with casters. These frames $d d' d^2 d^3$ each have an elongated slot or opening, as d^4 , which receives a roller or shaft e , having additional bearings, if desired, in the head and foot boards $b c$, said shaft e constituting the operating-shaft. On one end of the roller or shaft e a hand-wheel e' is secured, by means of which it may be turned, yet any other suitable device may be provided for turning it. Cords or chains $2 2$ are connected to the side rail a , near the ends thereof, and thence wound around and attached to the roller or shaft e . Like cords or chains $3 3$ are connected to the side rail a' , near the ends thereof, which are also wound around the roller or shaft e in the same direction as the cords or chains 2 and attached to said roller or shaft. Cords or chains $4 4$ are connected to the frames $d d'$ and thence wound around the roller or shaft e in the same direction and attached thereto, and cords or chains $5 5$ are connected to the frames $d^2 d^3$, thence wound around the roller

or shaft *e* in the same direction as the cords or chains 4 4, and attached to said roller or shaft. The cords or chains 2 2 3 3 are wound on the roller or shaft *e* in a direction opposite to the cords or chains 4 4 5 5, so that as the said roller or shaft is turned in one direction and the cords or chains 2 2 3 3 wound thereon, the side rails *a a'* will be moved toward each other together with the parts attached thereto, while the cords or chains 4 4 5 5 will be unwound, and when said roller or shaft is turned in the opposite direction the cords or chains 4 4 5 5 will be wound thereon, moving the frames *d d'* and *d² d³* from each other and the parts to which they are attached, and the cords or chains 2 2 3 3 will be unwound. Thus it will be seen that the frames are moved toward and from each other by winches; but it is obvious that they may be moved by any other suitable means.

Slats *i*, carrying springs *i'*, rest upon the transverse slat-supporting frames *d d' d² d³*, the springs *i'* being connected together by chains or cords *i²*, and the outside slat at each side of the bed is secured to the side rail, so that as said side rails are separated one from the other the slats attached thereto and moving therewith will operate by means of the chains or cords *i²* to separate all the slats. These outside slats, which are attached to the side rails, are provided with springs like the other slats; but upon said springs I prefer to secure an additional slat, as *i³*, to present a defined edge over which the bedclothing may be drawn.

By connecting the parts forming the bed-bottom together, and also to the side rails, as shown, it will be seen that as the roller or shaft *e* is turned in one or the other direction to move said side rails the slats will be correspondingly moved. Thus a person standing at one end of the bed or lounge may widen or narrow it, as desired, by simply turning the single operating-shaft *e*.

To the lower edge of each side rail *a a'* side pieces *f* are pivoted, and each of said side pieces are provided with two curved ratchet-toothed bars *f'*, passing through holes made in the side rails and engaging the edges thereof to hold the said side pieces in a vertical position, or substantially so. Cords *g* are connected to the ends of the said ratchet-toothed bars, which pass up through holes made in one of the slats and thence to the foot of the bed, so that they may be raised and disengaged from the side rails, thereby releasing the side pieces.

By referring to Fig. 3 a full-width mattress is shown placed upon the closed apparatus, and the side edges of the said mattress, it will be seen, are turned down and placed between the side pieces *f f* and side rails *a a'*, which constitute pockets to receive said edges, after which the said side pieces are pressed hard against the mattress and locked. The side edges of the bedclothing are thus held by the side pieces *f f* when the bed is made up as a

lounge or couch, and when so made up a suitable coverlet will be provided for it, so that it will have the appearance of an upholstered lounge or couch.

If it should be desired to extend the bed at one side and not the other, it will only be necessary to hold stationary that side which it is desired not to extend, while permitting the opposite side to be extended.

A head-rest *h* is pivoted to the head-board *b*, which, by referring to Fig. 4, it will be seen, may be turned into different positions—as, for instance, to serve as a rest or support for a person lying on the bed or for use in connection with the apparatus when converted into a lounge.

I claim—

1. In a lounge or couch bed, two transversely-movable slat-supporting sections and slats carrying springs thereon, the side slats being rigidly secured to their supports, and the intermediate slats being free to move on their supports and connected with the side slats, combined with a single longitudinal operating-shaft *e* and intermediate connections between said shaft and said transversely-movable sections, whereby the latter are extended and retracted by the operation of the former, substantially as described.

2. In a lounge or couch bed, two longitudinal side rails and two transverse slat-supporting frames connected to each side rail and movable transversely therewith, and several longitudinal slats carrying springs, mounted on said transverse supporting-frames, the side slats being rigidly secured to their supports and the intermediate slats being free to move on their supports and connected with the side slats, combined with the longitudinal operating-shaft *e* and intermediate connections between said transversely-movable parts and said shaft, whereby the bed may be extended and retracted by turning said shaft, substantially as described.

3. In a lounge or couch bed, two longitudinal side rails and two transverse slat-supporting frames connected to each side rail and movable transversely therewith, end pieces *a²*, also connected to said side rails, and several longitudinal slats carrying springs, mounted on said transverse supporting-frames, separable transversely, combined with the longitudinal operating-shaft *e* and intermediate connections between said transversely-movable parts and said shaft, whereby the width of the bed may be varied by turning said shaft and a single-width head-board and foot-board formed to present guides for said end pieces *a²*, substantially as described.

4. In a lounge or couch bed, two longitudinal side rails and two transverse slat-supporting frames connected to each side rail and movable therewith, and several slats carrying springs, supported on said frames, combined with the longitudinal operating-shaft *e* and cords or chains connecting said shaft with the

transversely-movable parts, whereby the latter are extended or retracted by said shaft, substantially as described.

5 In a lounge or couch bed, two longitudinal side rails, and two transverse slat-supporting frames connected to each side rail, having slots or openings d^4 , slats carrying springs, placed on said slotted frames, combined with a single longitudinal operating-shaft e ,
10 placed in said slots or openings d^4 , and intermediate connections between said shaft and the transversely-movable parts, whereby the bed is extended or retracted by the operation of said shaft, substantially as described.

15 6. In a lounge or couch bed, two transversely-movable sections, slats carrying springs placed thereon, the side slats being rigidly secured to these supports and the intermediate slats being free to move on their supports, and the slats i^3 , placed on top of the springs on said rigidly-secured side slats, combined with a full-width mattress placed on said springs and pockets to receive the side edges of said mattress when the bed is
20 closed up and used as a lounge, substantially as described.

7. In a lounge-bed, two transversely-movable slat-carrying frames, slats independently movable thereon, and springs borne by said
30 slats, combined with the side pieces ff to hold the side edges of the bedclothing, substantially as described.

8. In a lounge-bed, two transversely-movable slat-carrying frames, slats independently movable thereon, and springs borne by said
35 slats, combined with side pieces $f f$ and a locking or retaining device therefor, substantially as described.

9. In a lounge or couch bed, two transversely-movable sections, slats carrying
40 springs thereon, the side slats being rigidly

secured to their supports and the intermediate slats being free to move on their supports and connected with the rigidly-secured side slats, combined with a full-width mattress placed
45 on said springs and pockets at the sides of the transversely-movable sections to receive the side edges of said mattress when the bed is retracted and used as a lounge, substantially as described. 50

10. In a lounge or couch bed, two transversely-movable slat-supporting sections and slats carrying springs thereon, the side slats being rigidly secured to their supports and the intermediate slats being free to move on
55 their supports and connected with the rigidly-secured side slats, and means for extending and retracting said sections transversely to widen or narrow the bed, combined with a full-width mattress placed on said springs and
60 pockets to receive the side edges of said mattress when the bed is retracted and used as a lounge, substantially as described.

11. In a lounge or couch bed, two transversely-movable slat-supporting sections and
65 means for extending and retracting them, combined with a series of slats carrying springs, supported on said sections, the outside slats being rigidly secured to the sections and the intermediate slats being free to move
70 independently on their supports and connected with each other and with the rigidly-secured side slats, whereby they will be separated as the slat-supporting sections are extended, substantially as described. 75

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM S. BOWIE.

Witnesses:

BERNICE J. NOYES,
LUCY F. GRAVES.