

No. 610,057.

Patented Aug. 30, 1898.

F. JENSEN.
FOLDING BED.

(Application filed June 9, 1897.)

(No Model.)

3 Sheets—Sheet 1.

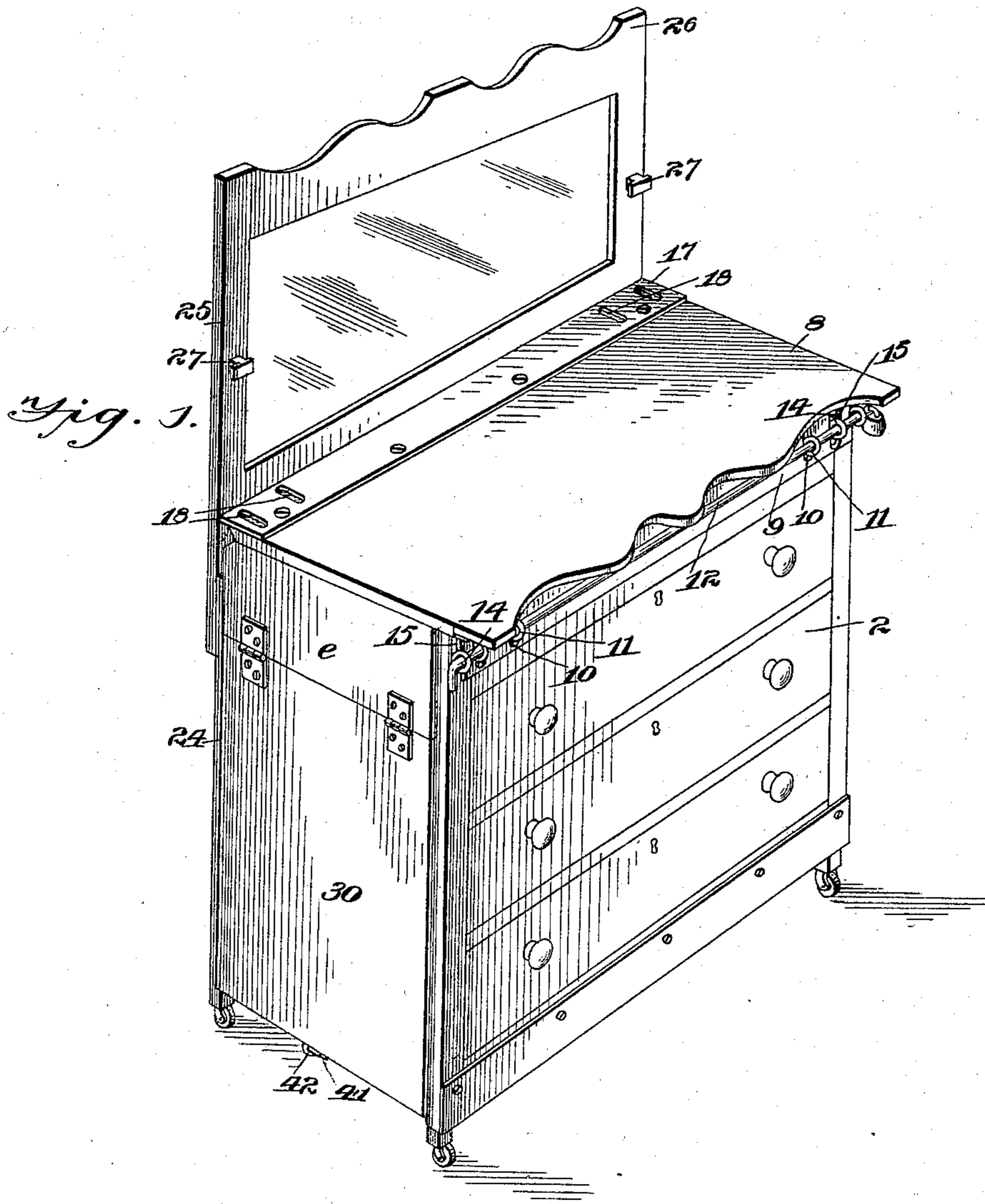
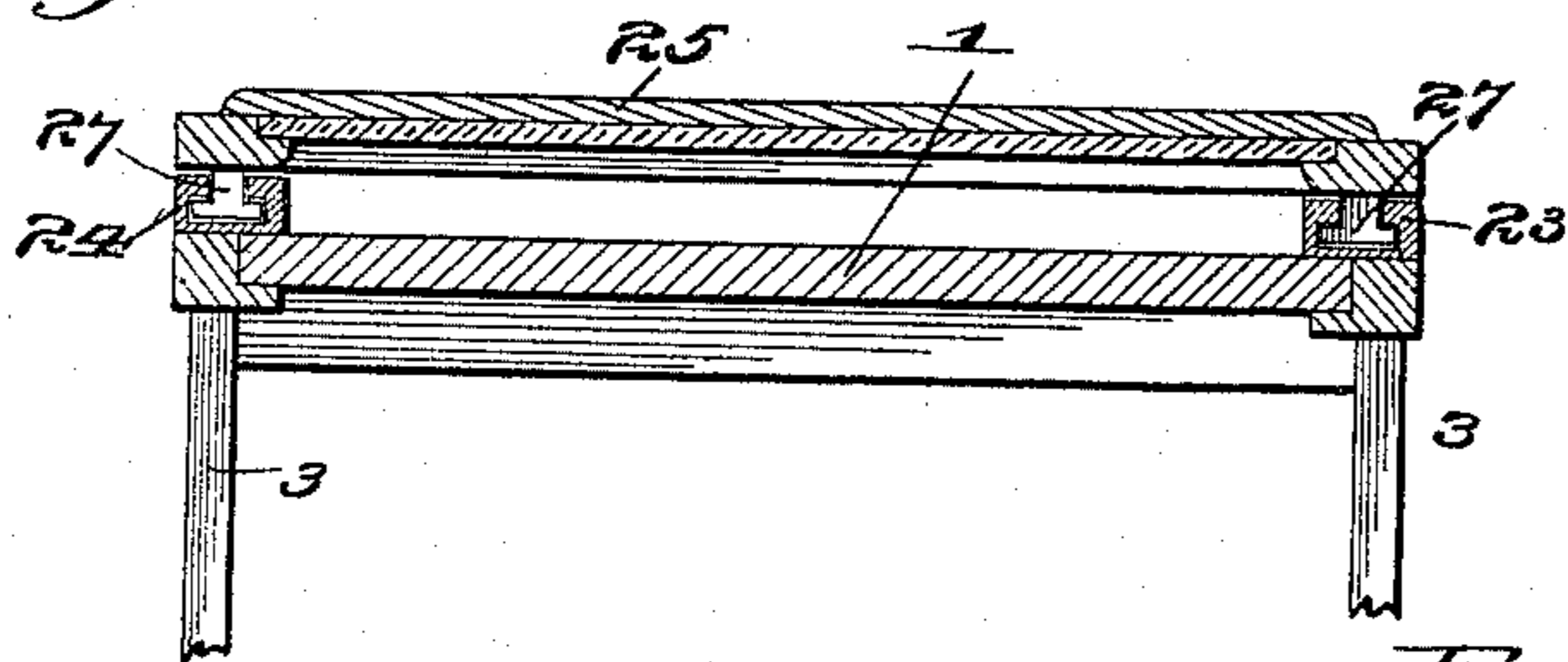


Fig. 5.



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Fig. 2.

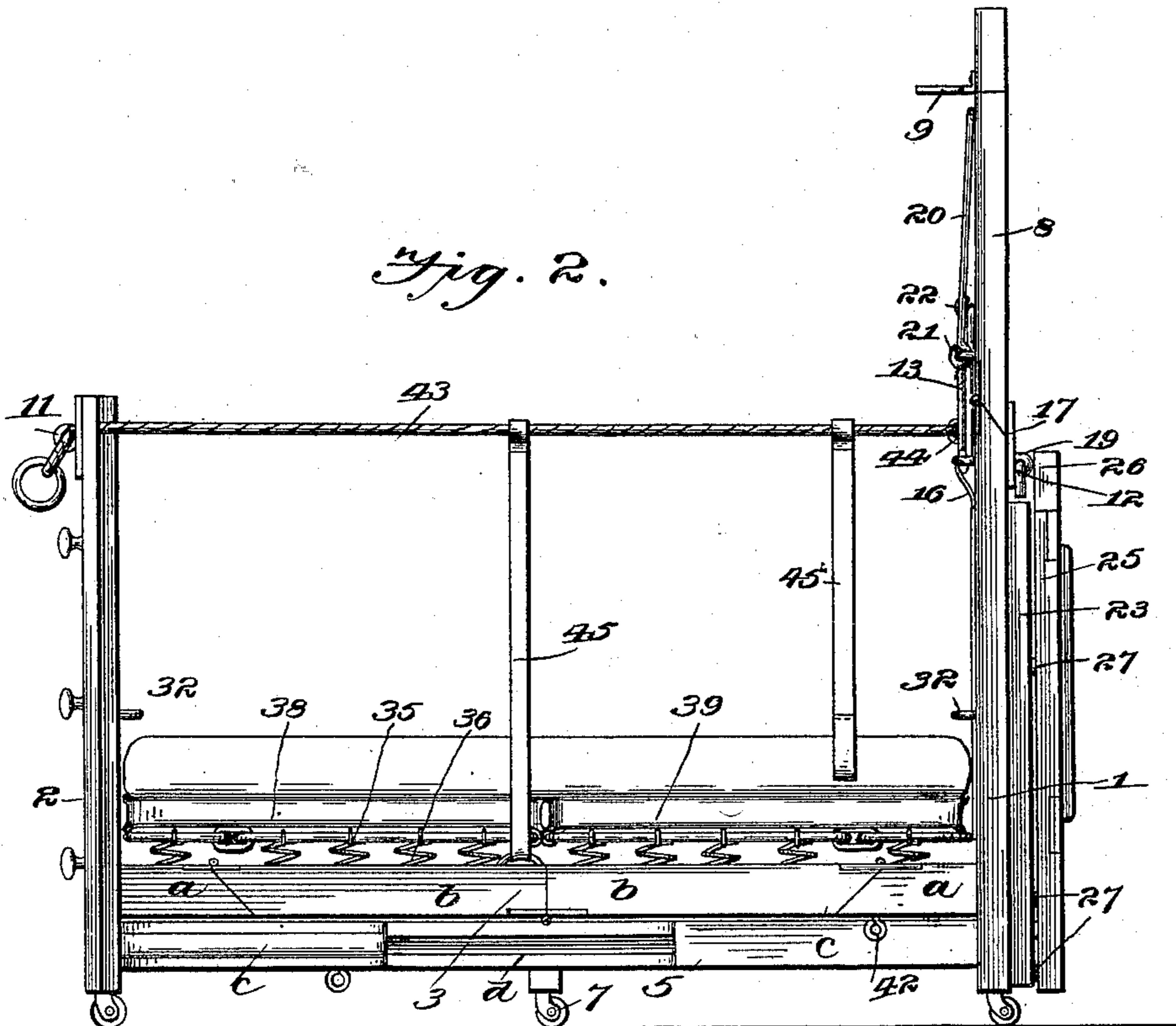
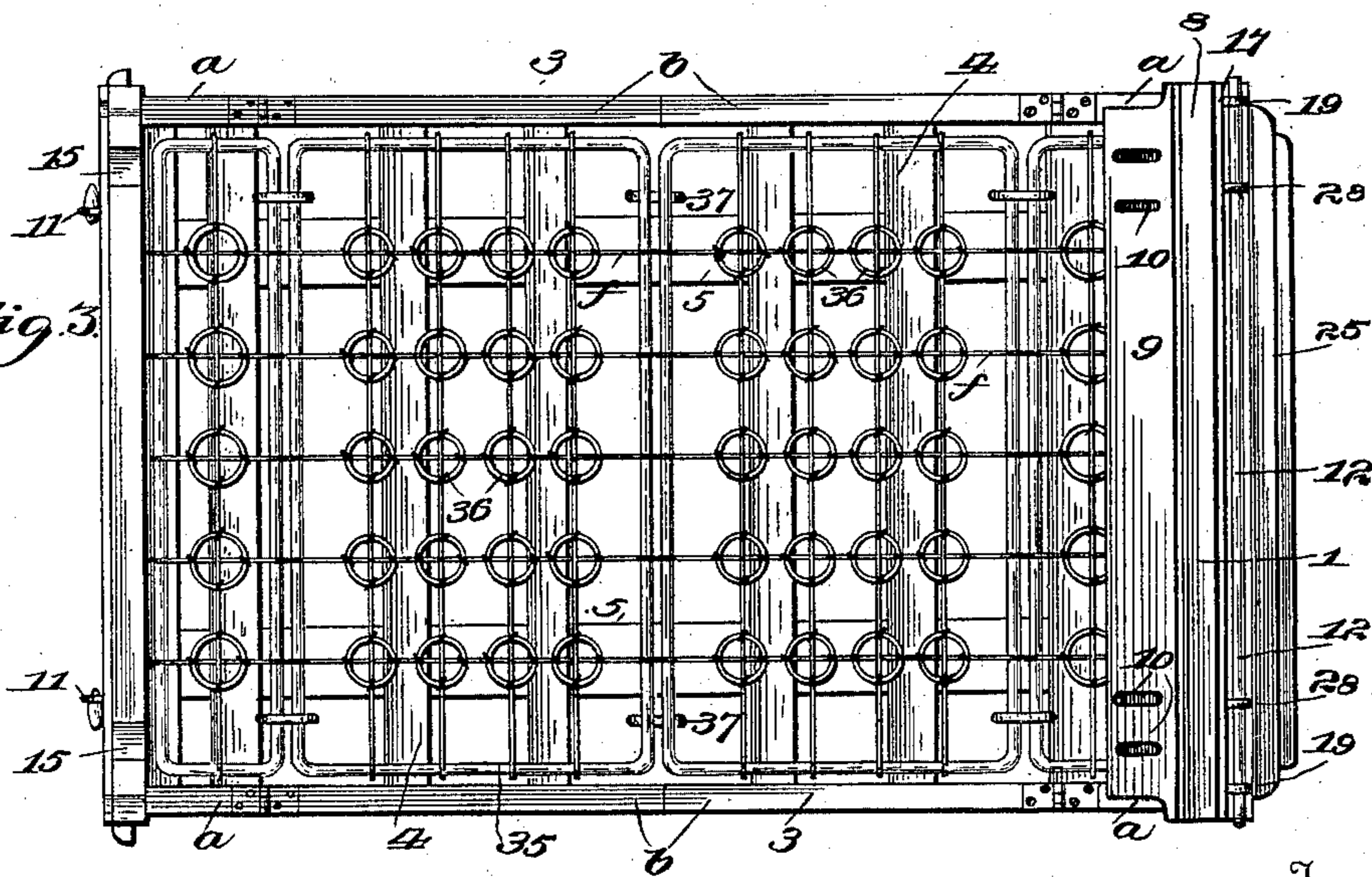


Fig. 3.



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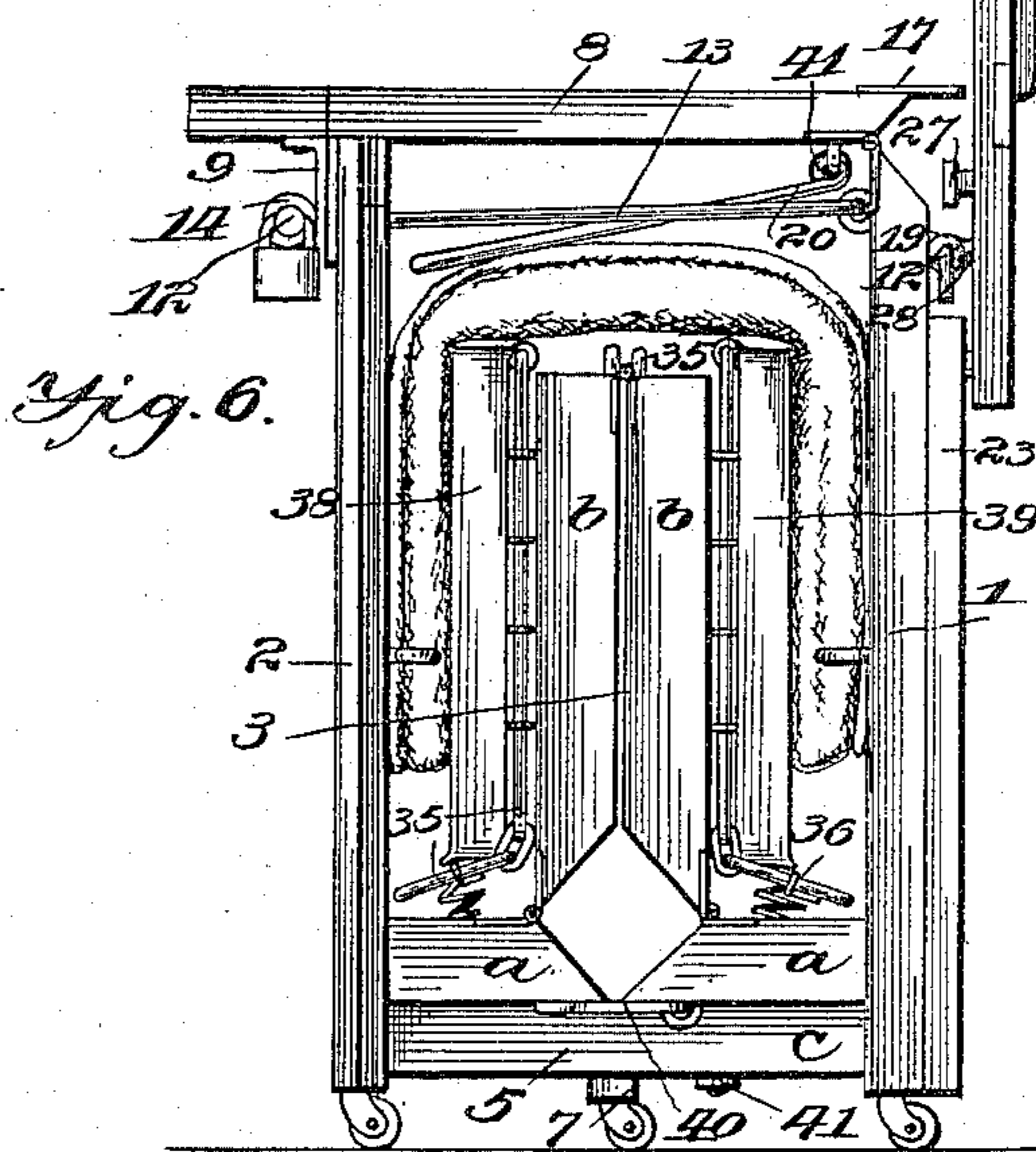
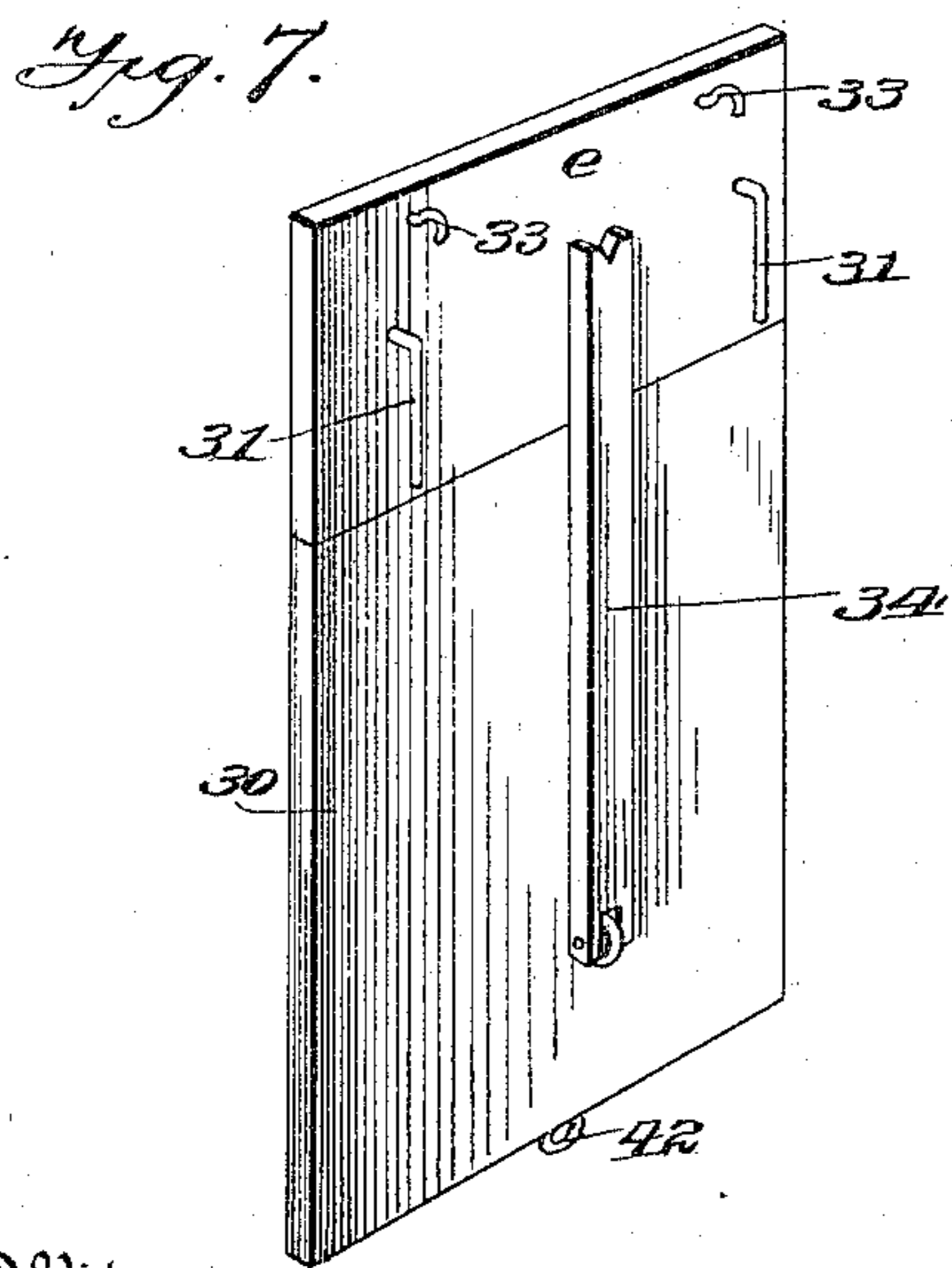
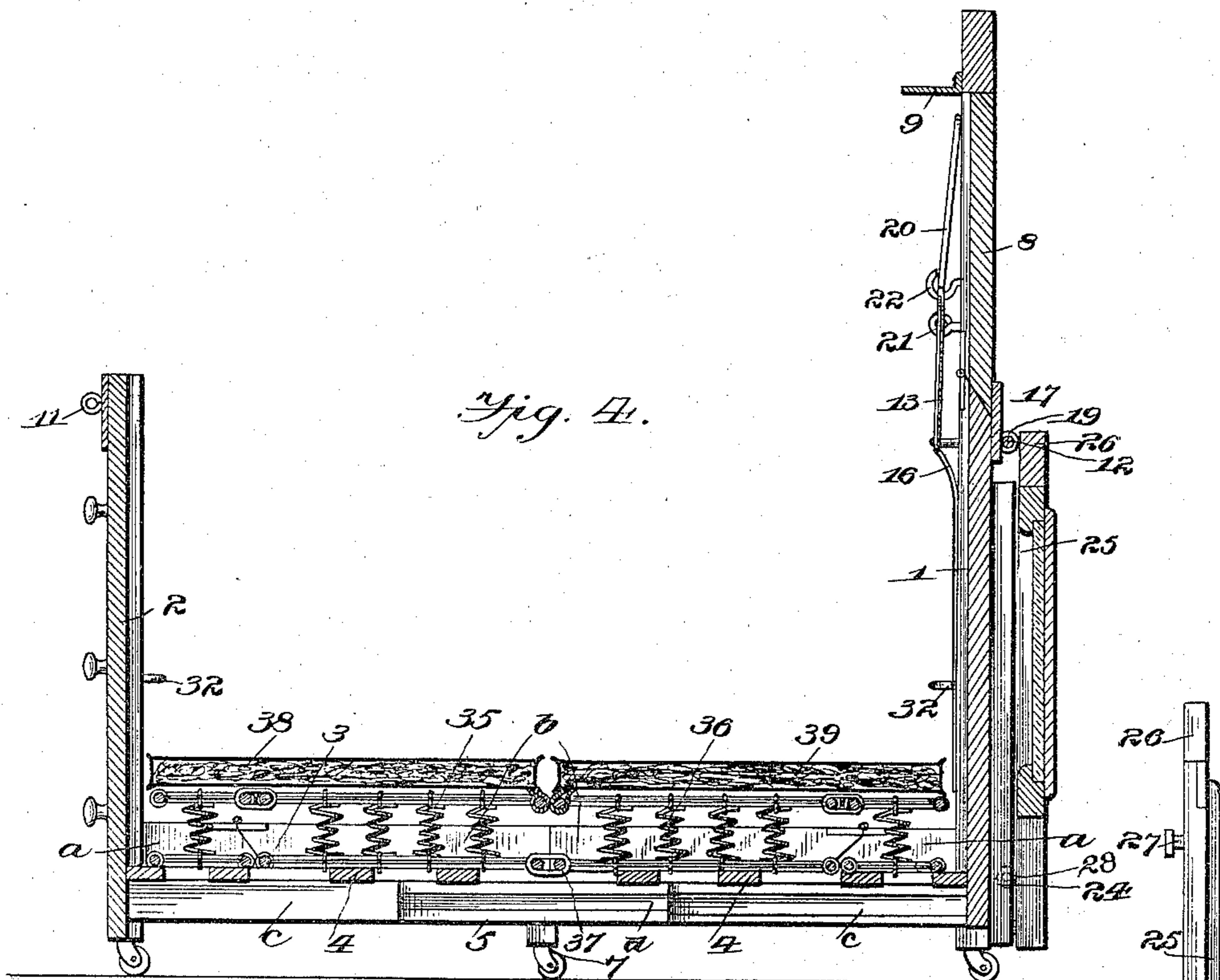
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3 Sheets—Sheet 3.



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UNITED STATES PATENT OFFICE.

FREDERIK JENSEN, OF SEATTLE, WASHINGTON.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 610,057, dated August 30, 1898.

Application filed June 9, 1897. Serial No. 640,015. (No model.)

To all whom it may concern:

Be it known that I, FREDERIK JENSEN, of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Folding Beds; 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.

10 The object of this invention is to provide a folding bed in which the parts are constructed and arranged with a view of forming a bed of proper dimensions when extended and when closed will have the appearance of a bureau with a raised portion or frame carrying a looking-glass.

The invention contemplates a construction by which the side rails of the bed when lowered in position to form the bed will be thoroughly braced and support a sectional spring-mattress, upon which the bedding is placed, the frame carrying the looking-glass being slid to a position behind the head of the bed and the top of the bureau elevated to present the upper part of the head, while the front of the bureau forms the foot of the bed. In connection with these general features or parts, including devices for locking them in both a closed and an extended position, there are certain attachments which assist in the operation of folding the bed and detachable boards which form the side pieces of the bureau to inclose the inner parts.

The invention consists in the particular construction and combination of the parts which go to make up a bed that is adapted to be folded to give the appearance of a bureau, including the sliding looking-glass frame and detachable side boards.

40 In the following specification I have entered into a detail description of the several parts which constitute my invention, reference being had to the accompanying drawings and to letters or numerals thereon, and what I consider to be the novel features of the invention are specifically recited in the claims.

50 In the drawings which form a part of this specification, Figure 1 is a perspective view showing the parts folded and arranged to form a bureau. Fig. 2 is a side elevation with the parts extended and disposed to provide a bed. Fig. 3 is a plan view of the bed,

the bedding, including the hair mattress, being removed. Fig. 4 is a longitudinal sectional view through the bed. Fig. 5 is a transverse sectional view through the lower part of the head of the bed. Fig. 6 is a side elevation with the parts folded and the side boards removed. Fig. 7 is a reverse view of one of the side boards.

Referring to the drawings by letters and numerals, 1 designates the lower part of the head-section of the bed, 2 the footboard, and 3 3 the side rails. The side rails are each made up of a number of sections, preferably four, which are hinged to each other, the end sections *a*, which are rigidly secured to the head and foot boards, respectively, being hinged at the upper ends of the intermediate sections *b b*, and said intermediate sections are hinged or hooked to each other at their lower ends, this manner of connecting the sections of the side rails permitting the intermediate sections to be folded upward upon each other. The several sections of one of the side rails 3 3 are connected to the corresponding sections of the other side rail by slats 4. The head and foot boards are further connected to each other by means of extensible bars 5 5, consisting of end sections *c c*, rigidly secured to the head and foot boards, respectively, and an intermediate section *d* in sliding engagement with the end sections through the intervention of dovetail projections and corresponding recesses. The intermediate section of each extensible bar or rail is provided centrally with a caster 7, which assists in supporting the said bars in a horizontal position to form a support for the bed-bottom, the slats of which bear upon the extensible bars. By this arrangement or manner of forming a bed, the rear, head, and foot sections with the side rails in sections hinged to each other and the extensible supporting-rails, the head and foot sections can be brought close to each other by folding the intermediate sections of the rails upward and sliding the sections of the extensible rails upon each other, and in connection with this construction I provide the head of the bed with an extension 8, hinged to the head-board 1 and adapted to fall over upon the upper end of the footboard 2, said extension forming the top of the bureau.

In order to secure the extension or top in proper engagement with the footboard, the said top has a projecting flange-strip 9, having openings 10, which are engaged by eyes 11 at the upper part of the footboard, a rod 12 being passed horizontally through the eyes to lock said engagement, this rod having one end bent and an eye at its other end, to which a padlock may be applied to prevent the withdrawal of said rod, and thereby lock the bed in a closed position. In connection with this manner of locking the parts closed each side of the main head-section is provided with a rod 13, pivoted thereto, and its free end formed into an eye 14, which engages an open-ended slot 15 in the upper part of the foot-section, the eyes at the ends of said rods being then positioned on a horizontal line with the eyes 11 on the foot-section, and by this arrangement the rod 12 is also passed through the aforesaid eyes in locking the parts. These rods may be and preferably are provided with curtains 16, which are adapted to close the space at each side between the head and foot sections, though in some instances these spaces are closed by detachable parts hereinafter described.

The hinged extension or top piece 8 of the head-section is provided at its inner end with a plate, forming a flange 17 for slots 18, which engage eyes 19, projecting rearwardly from the upper end of the main head-section, said eyes being positioned on a horizontal line to receive the locking-bar 12 when the top or extension 18 is positioned on a line with the main section in forming the bed, it being understood that in this connection the said locking-bar is not required to engage the eyes on the foot-section. The extension 8 is provided with a bail 20, pivoted to the eyes 21, attached thereto, the said bail being used as a pillow-sham holder, and the extension has also a hook 22, centrally located to engage the eyes 14 of the rod 13 and support the same.

It will be understood, of course, that the flanges 9 and 17, formed on the upper section or extension of the headboard, may be of metal nicked or suitably ornamented, and the parts of the head and foot section with which said flanges engage may also be of metal to receive any wear that may come thereupon.

Upon the back of the main sections of the headboard, at the sides thereof, are secured vertical strips 23 and 24, forming channels or grooves that guide the frame 25 carrying the looking-glass to form a part of the bureau. This frame is of any improved construction and is provided at its upper end with an ornamental top piece 26, the sides of the frame having projecting lugs 27, that are headed to engage the guides or channels formed by the vertical strips 23 and 24 of the main head-section. It will be noted that when the looking-glass frame is raised the upper lug thereon is moved out of engagement with the guides, and the two lower lugs on each side

form the means for supporting the frame. This forms a construction by which the frame carrying the looking-glass is moved downward to be located behind the main head-section when the parts are extended to form a bed. The frame which carries the looking-glass is also provided at its lower end with eyes 28, that are brought on a line with eyes 19, extending from the head-section, so that when the looking-glass frame is elevated it may be held by a rod passed horizontally through the eyes.

When it is desired to securely close the spaces at the sides of the bureau between the sections forming the head and foot boards of the bed, I provide boards 30 for this purpose, each consisting of two sections hinged to each other, the upper section *e* having hooks 31 to engage eyes 32 on said head and foot boards and another set of hooks 33, which engage the cross bars or rods 13. In order that these boards may be used for other purposes when the parts are extended to form a bed, the said boards have bars 34, pivoted or hinged thereto, which permit of their being used to form an article of furniture—for instance, a flower-stand or anything else requiring a support.

In connection with the folding bottom of the bed comprising the sectional side rails and extensible supporting-bars I provide a spring-mattress 35, which is also composed of sections comprising wire rectangular frames having cross-wires *f* and separated by elastic coil-springs 36. The sectional spring-mattress comprises two large sections, the lower frames of which are connected to each other by links 37 and rest directly upon the slats of the intermediate sections of the bed-bottom, and the smaller end sections, which rest upon the rigid end sections of the bed-bottom and are hinged to the other or larger sections of the mattress. In connection with this sectional spring-mattress I form the hair mattress in two parts 38 and 39, which separate at the center to permit the bed-bottom and the spring-mattress to fold when the parts of the apparatus are contracted in forming a bureau. This manner of attaching the hair mattress also provides a construction by which the sections can be turned end for end when the central portion of the bed has been compressed from use. The feather bed or upper mattress is placed upon the hair mattress and possesses sufficient flexibility to permit the bed-bottom to be folded between the head and foot boards of the bed. The other part of the bedding is placed upon the upper mattress in order that when the bed is folded or the parts extended the bedding will not become disarranged.

In addition to the device which securely connects the upper ends of the head and foot boards hooks 40 are pivoted to the under side of a slat of one of the stationary sections of the bed-bottom and engage eyes attached to the slat of the other stationary section, and

in order to hold the lower part of the detachable side boards in place hooks 41 are connected to the stationary boards of the extensible supporting-rails and engage eyes 42 at the lower ends of said boards.

In connection with a folding bed constructed as herein shown and described I employ an attachment consisting of cords 43, which are connected to eyes 44 on the head-section and are connected at their free ends to the footboard, said cords having depending pieces or flexible extensions 45, attached at their lower ends to the eyes or hooks carried by the side rails of the bed. These cords may be used for supporting a mosquito netting or bar and are especially adapted for use in assisting in the operation of folding the bed. In this application of the attachment the operator stands at the rear end or foot of the bed and presses his knees upon the footboard and pulls upon the cords, which draws the headboard toward him. It will be understood, of course, that the head and foot boards or sections of the bed are provided at their ends with the ordinary casters, and in order to have the device more nearly assume the appearance of a bureau when folded the outer surface of the foot-section is provided with horizontal beads and interposed panels carrying handles or knobs. In this connection the hinged extension or upper part of the headboard is provided at its outer side with a plane surface to form the top of the bureau, and the free end is provided with an ornamental strip, which adds to the appearance of the headboard when the device is arranged in the form of a bureau.

From the foregoing description, in connection with the accompanying drawings, the construction and operation of my improved folding bed will be readily understood, for when the device is arranged into a bureau, as shown in Fig. 1, the extension 8 forms the top of the bureau, the head and foot boards the back and front, respectively, the detachable boards forming the side pieces, and the frame carrying the looking-glass is positioned above the top. This arrangement of the device conceals its real character and to all outward appearances would be taken for a bureau, and at the same time the bedding is so composed within the said bureau that when the top and sides are unlocked and the head and foot sections separated the bed-bottom will be brought to a horizontal position and the bedding properly spread out thereon. When the device has assumed the form of a bed, the parts are thoroughly braced and a comfortable bed is provided. By the particular construction and arrangement the bed can be kept clean, as the different parts are readily removed, the hair-mattress sections being preferably connected to the spring-mattress sections by pins, which engage the hair mattress and flexible strips attached to the spring-mattress.

Having thus described my invention, I do

not wish to be limited to the particular construction of the parts as herein shown and described, but desire to reserve the right to modify or change such constructions within the spirit and scope of my claims.

I claim—

1. In a folding bed, the combination with head and foot boards, of side rails connected thereto and comprising several sections hinged to each other, the headboard having a hinged extension which forms the top of the bureau when the parts are folded, together with eyes attached to the head and foot boards, and detachable boards which form the sides of the bureau, provided with hooks to engage the eyes substantially as shown and for the purpose set forth.

2. In a folding bed, the combination with head and foot boards, of the side rails each consisting of several sections hinged to each other so that the intermediate sections will fold upward upon each other, an extension hinged to the upper part of the head-section and having a flange at its outer end provided with openings, eyes projecting outwardly from the foot-section, and a locking-bar adapted to engage the eyes, substantially as shown and for the purpose set forth.

3. In a folding bed, the combination with head and foot boards, of the side rails each consisting of several sections hinged to each other so that the intermediate sections will fold upward, an extension hinged to the upper end of the headboard and provided at its inner and outer ends with flanges having openings therein, eyes projecting from the upper end of the head-section and from the upper end of the foot-section, and a locking-bar adapted to engage the eyes for holding the extensible section in its adjusted positions, substantially as shown and for the purpose set forth.

4. In a folding bed, the combination with the head and foot sections, of the side rails each consisting of several sections hinged to each other so that the intermediate sections will fold upward, an extension hinged to the upper end of the headboard and having a flange at its outer end and openings therein, eyes projecting outward from the upper end of the footboard, rods or bars pivoted to the head-section and having eyes which are brought on a horizontal line with the eyes of the foot-section, and a locking-bar adapted to be passed through the eyes, said rods having curtains attached thereto, substantially as shown and for the purpose set forth.

5. In a folding bed, the combination with the head and foot boards and sectional side rails connecting the same, of an extension hinged to the upper end of the headboard having a projecting flange at its outer end provided with openings, a footboard having eyes with which the flange engages, rods or bars connected to the head-section and having eyes at their ends which are brought on a line with the eyes of the footboards, and a lock-

ing-bar engaging the eyes; together with side
boards having hooks which engage the cross-
bars and other hooks which engage eyes ex-
tending from the head and foot sections, said
5 boards forming the sides of the bureau, sub-
stantially as shown and for the purpose set
forth.

6. In a folding bed, the combination with
the head and foot sections connected to each
10 other by a sectional bed - bottom, and a sec-
tional spring-mattress mounted upon the bed-
bottom and comprising upper and lower
frames separated by elastic coil-springs, the

intermediate sections of the spring-mattress
being hinged to each other, said spring-mat- 15
tress comprising short foot and head sections,
substantially as shown and for the purpose
set forth.

In testimony whereof I have signed this
specification in the presence of two subscrib- 20
ing witnesses.

FREDERIK JENSEN.

Witnesses:

L. T. TURNER,
WALTER G. KIENSTRA.