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PATENTED APR. 9, 1907.

J. REILLEY.
SPRING BED BOTTOM.
APPLICATION FILED MAY 9, 1906.

2 SHEETS—SHEET 1.

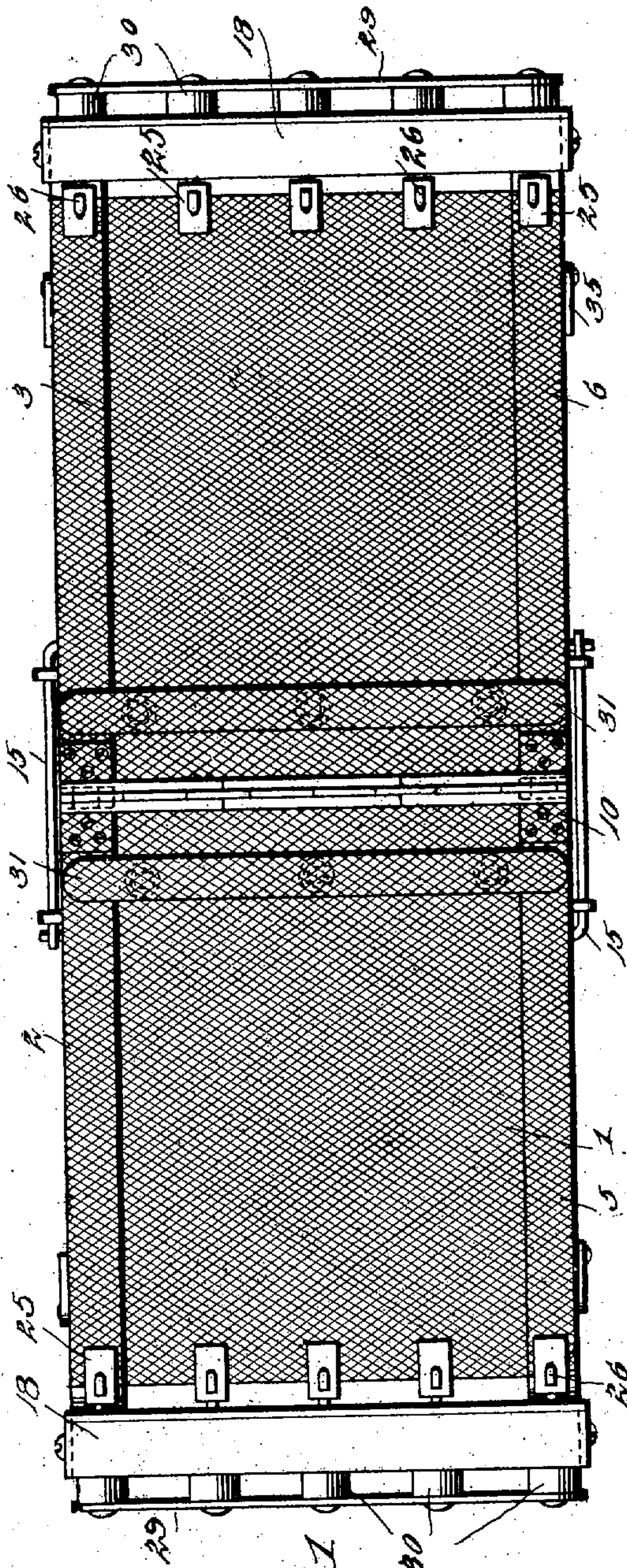


Fig. 1

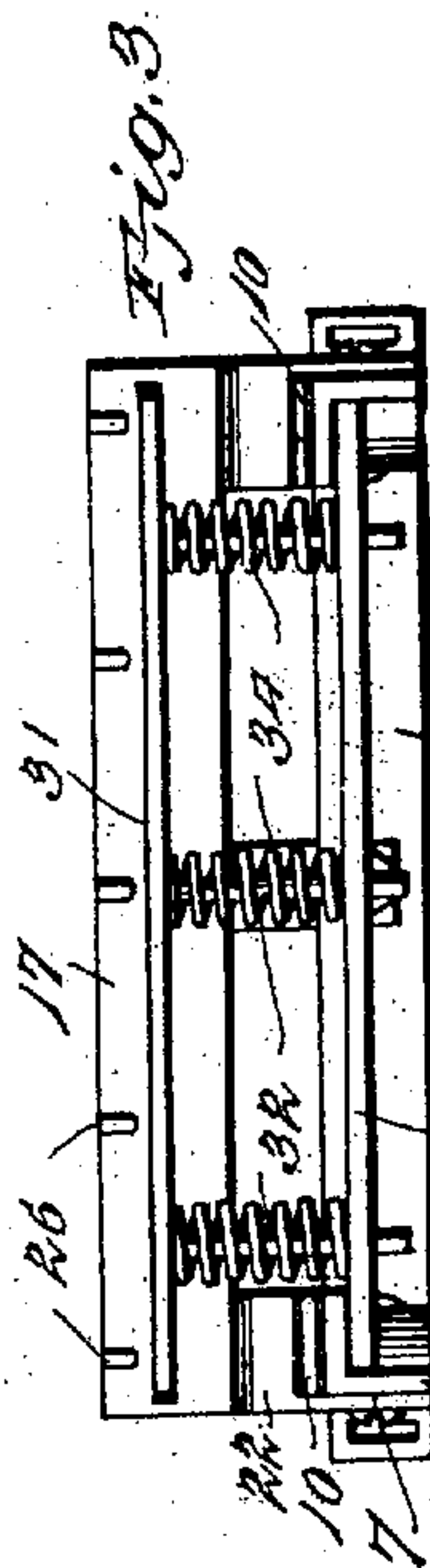


Fig. 3

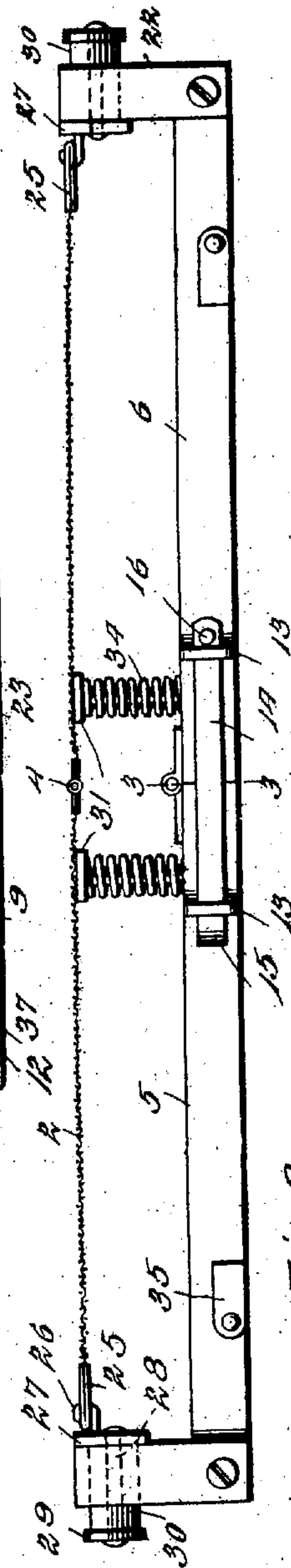


Fig. 2

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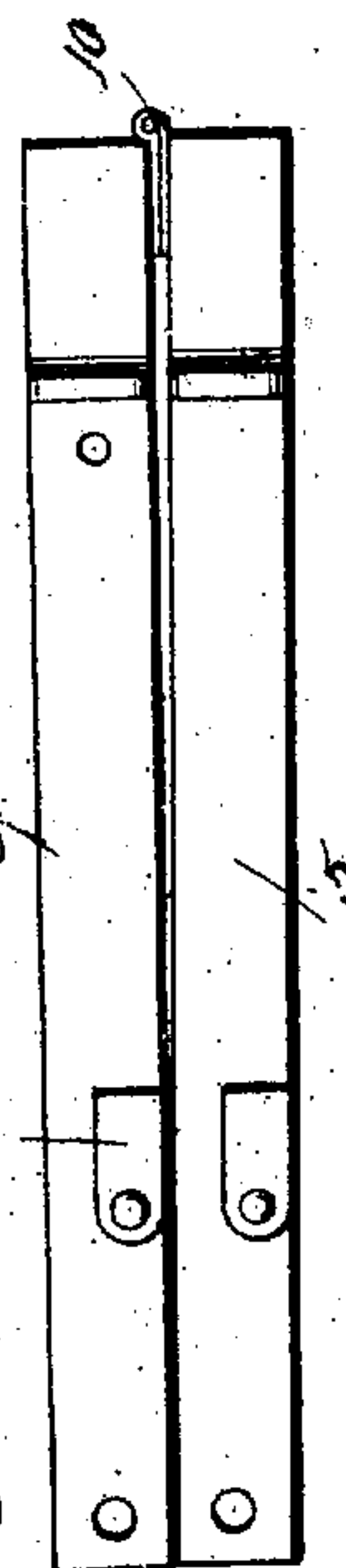
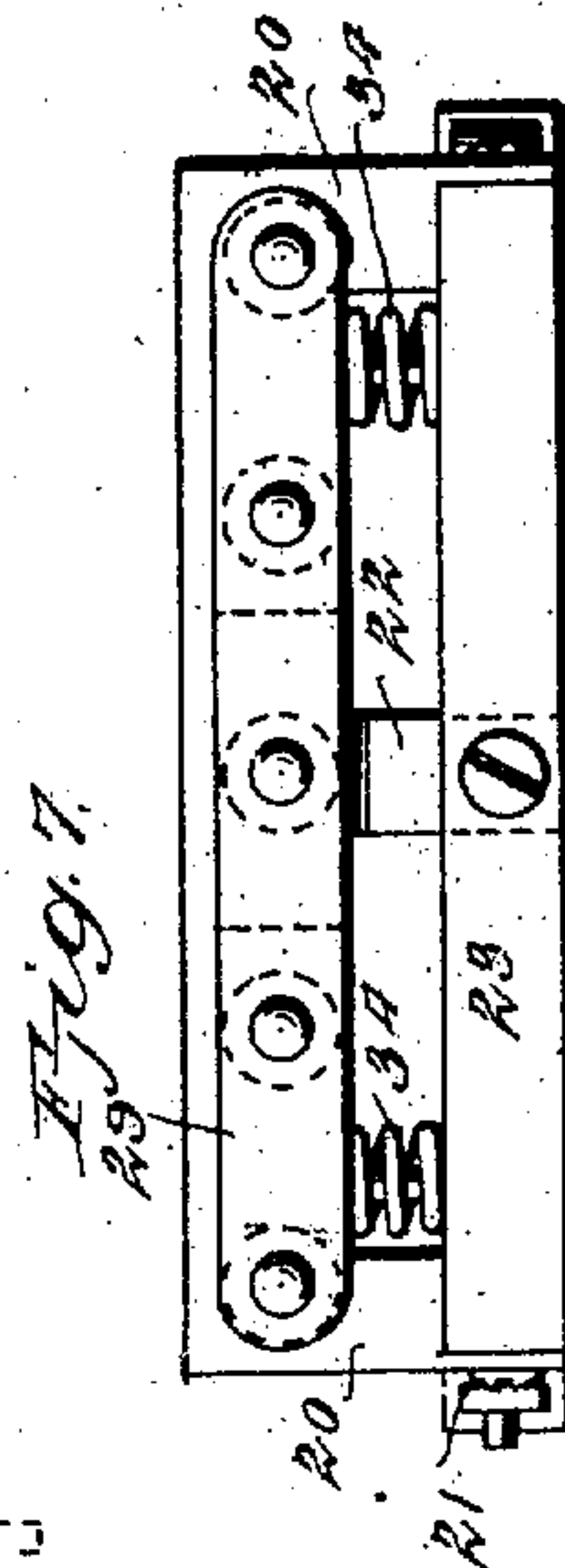
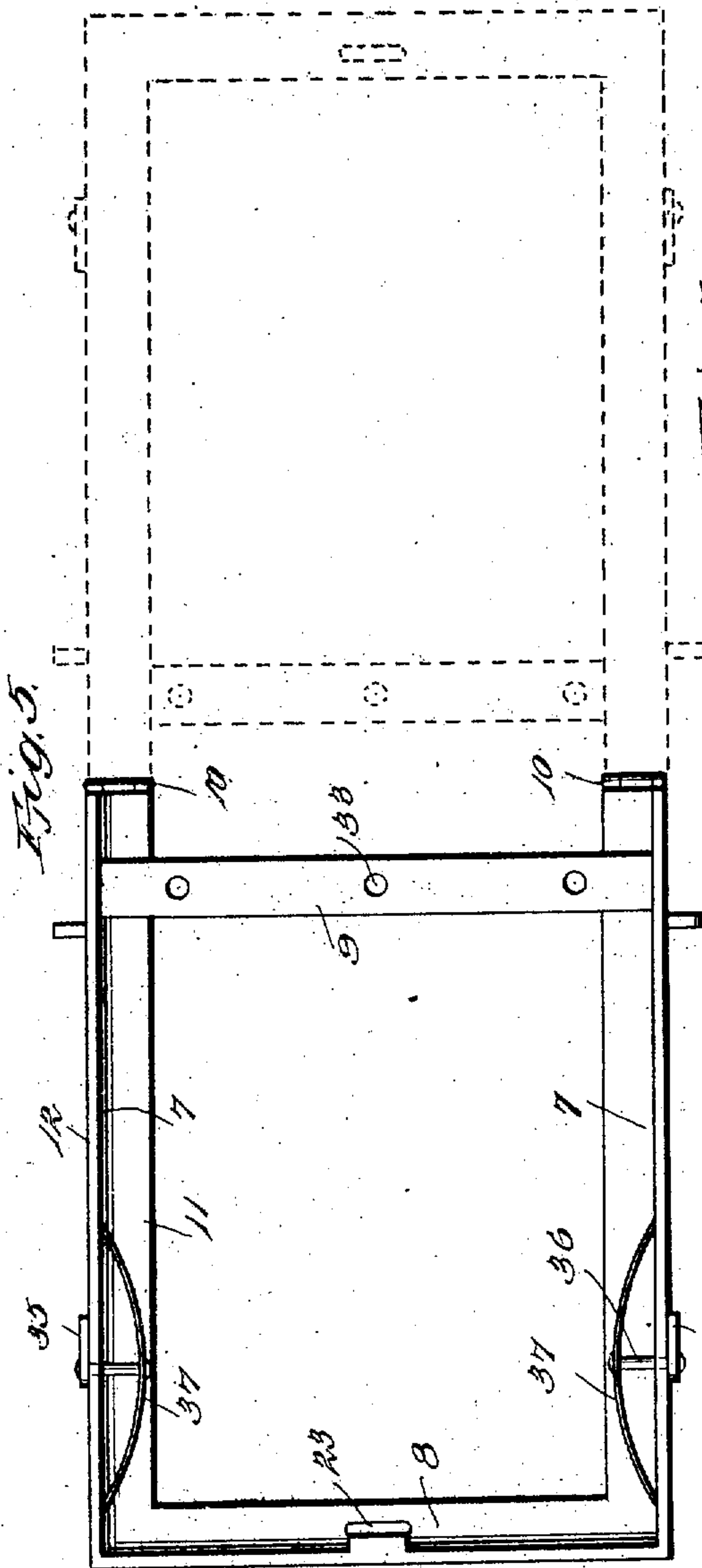
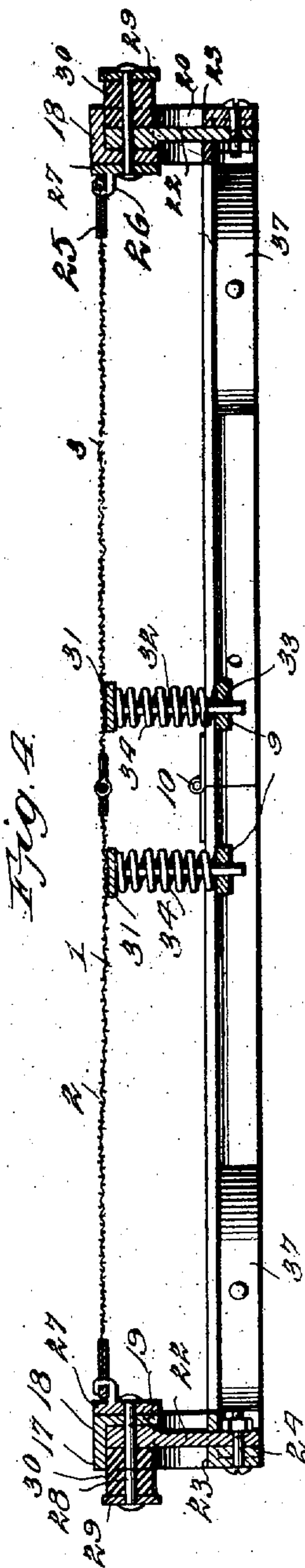
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UNITED STATES PATENT OFFICE.

JOHN REILLEY, OF BROOKLYN, NEW YORK.

SPRING BED-BOTTOM.

No. 850,118.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed May 9, 1906. Serial No. 315,913.

To all whom it may concern:

Be it known that I, JOHN REILLEY, a citizen of the United States of America, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Spring Bed-Bottoms, of which the following is a specification.

This invention relates to improvements in spring bed-bottoms, the object of the invention being to provide a bed-bottom of this character which is susceptible of being folded in close compass for storage or transportation and which embodies novel and improved means for connecting the parts or sections thereof and securing an effective spring action and a proper tensional resistance to sagging.

In the accompanying drawings, Figure 1 is a top plan view of a spring bed-bottom constructed in accordance with my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a transverse section through the frame on line 3-3 of Fig. 2, omitting the coupling-bars and the bed-bottom. Fig. 4 is a vertical longitudinal section. Fig. 5 shows in full lines a bottom plan view of one of the frame-sections as it appears when folded over upon the companion section and in dotted lines a top plan view of the same when unfolded or turned back to operative position. Fig. 6 is a side view of the folded frame. Fig. 7 is an outer end elevation of one of the frame-sections.

Referring now more particularly to the drawings, the numeral 1 designates the bed-bottom proper, which is preferably made of woven wire, but may be formed of any other suitable material and which is transversely divided at its center to form sections 2 and 3, united at their inner or meeting edges by a hinge or pivot 4, so that one section may be folded over upon the other and in parallel relation therewith for convenience in storing or transporting the bottom.

The bottom 1 is carried by a supporting-frame consisting of two similar sections 5 and 6, each of said sections comprising side pieces 7, an outer end piece 8, and an inner end piece or cross-bar 9, the whole preferably consisting of a single casting, although each section of the frame may be constructed in any preferred way. The inner or meeting ends of the side pieces 7 of the sections are hingedly or pivotally connected at 10, so that one section may be folded over upon the other,

as shown in Fig. 6, thus enabling the complete bed-bottom to be packed in close compass. The side pieces 7 and end piece 8 of each frame-section are preferably made of angle material, the upper webs 11 thereof being horizontal and the lower webs 12 vertically disposed.

In order to hold the frame-sections 5 and 6 in extended position and longitudinal alinement, the side pieces of each section are provided adjacent their inner ends with keeper-loops 13 to receive a coupling bar or member 14, slidably adjustable therein, one end of said bar having an inwardly-bent portion 15 to engage the adjacent side piece of one of the frame-sections, while the other end thereof is apertured for the reception of a pin 16, carried by or adapted to be inserted within an opening in the adjacent side piece of the other frame-section to hold the bar in applied position. The part 15 on one end of the coupling-bar forms a stop to engage the adjacent guide-loop 13 to hold the bar from endwise movement in one direction, so that in order to disconnect the bar to permit the frame-sections to be folded the pin 16 must be removed and the apertured end of the bar successively slid out of engagement with the keepers by a longitudinal movement of the bar in the reverse direction, thus leaving two sections free to swing upon their hinged connections 10. The bars 14 when applied across the meeting ends of the side pieces of the sections thus firmly and securely hold the latter from movement.

Upon the outer ends of the frame-sections are mounted brackets 17, each comprising a head-piece 18, which is horizontally arranged and has at its inner end a depending vertical flange 19, the head-piece also being provided at its ends with depending legs or standards 20, fastened to the side pieces 7 of the frame-section by screws 21. An intermediate connecting-piece 22 abuts against the outer surface of the flange 19 and extends downward through an aperture 23 in the horizontal flange or web 11 of the end piece 8 and is fastened to the vertical flange of said end piece by a bolt or other suitable securing device 24.

The ends of the bed-bottom 10 are provided with coupling members 25, formed with apertures to engage hooks 26 on transverse supporting plates or members 27, normally arranged to bear against the inner faces of the flanges 19. Passing through each of the said plates 27, the flanges 19, and

the intermediate connecting-piece 22 at each end of the frame is a series of connecting bolts or rivets 28, which are freely slidable in the parts 19 and 22 and are connected at their outer ends with an outer cross piece or plate 29, which is thus movable with the cross-plate 27. Surrounding the pins or bolts 28 between the flange 19 and plate 29 and at an intermediate point between the connection 22 and plate 29 are sleeves 30, formed of rubber or other suitable elastic material and which serve by their expansive tendency to force the plate 29 outwardly, and thus draw upon the plate 27 to exert tension upon the bed-bottom 1, the two sets of tension devices thus constructed at the end portions of the frame serving to exert a pull in opposite directions upon the bed-bottom to hold the same stretched to the desired tension and to effectually prevent sagging thereof. To all intents and effects the elastic sleeves 30 thus serve the function of springs, and it will be understood that in lieu thereof coiled springs may be employed.

Arranged below the respective inner ends of the sections 2 and 3 of the bed-bottom 1 are transverse supporting-plates 31, from which depend guide-pins 32, which are fitted to slide vertically in openings 33 in the inner cross-bars 9. Surrounding these springs between the bars 9 and plates 31 are coiled cushioning-springs 34, which serve to hold the plates 31 normally pressed upward to yieldingly support the central portion of the bed-bottom and prevent sagging thereof at the point where it is subjected to the greatest pressure and strain. The pins 32 loosely fit within the openings 33, so that when the bed-bottom 1 is disconnected from the brackets 18, which may be done by removing the coupling-plates 25 from engagement with the hooks 26, the plates 31, pins, and springs may be detached from the bed-bottom frame.

It will thus be seen that the bed-bottom will be yieldingly supported and that provision is made at the ends of the frame for automatically maintaining the same under a desired stretch or tension.

The frame of the bed-bottom is made to suit bedsteads of a prescribed size and to rest in the usual manner upon the ends of the slats above the retaining-rails or directly upon said rails; but in some cases the width of the bedstead may be greater than that of the bed-bottom frame. In order to overcome the difficulty of applying the bed-bottom under such conditions, I provide adjustable fastening means for connecting the bed-bottom frame with the bedstead-frame. These fastenings are mounted upon the vertical webs 12 of the side pieces 7 of each frame-section, and each consists of a pivoted hook or button-plate 35, arranged upon the outer side of the web 12 and pivotally mount-

ed upon a fastening pin or rivet 36, passing through said web and the intermediate portion of a bowed spring 37, having its ends bearing against the inner face of the web. The hooks 35 are adapted to engage the upper edges of the side rails of the bedstead and through the medium of the spring 37 and the fastening-pin 36, which is slidably and pivotally mounted in the opening in the web through which it extends, the hook may be drawn out from the side piece 7 a greater or less distance, according to the width of the frame of the bedstead, to engage the adjacent side rail thereof, so that the hooks upon the frame when in engagement with the two side rails of the bedstead will hold the frame in applied position, the tension of the springs 37 serving to hold the parts in firm engagement.

Figs. 1, 2, and 3 show the bed-bottom set up for use. When it is desired to collapse the same for storage and transportation, the bottom proper, 1, is disconnected from the hooks 26 and one of the sections of the same folded over the upon other, after which the supporting-plates 31 and cooperating parts are detached from the frame and the brackets 18 then disconnected from the frame by removing the bolts 24 and fastening-screws 21, one of the sections of the frame then being folded over upon the other, as shown in Fig. 6. The retaining-plates and springs 32 and the brackets 18 and applied parts may then be inserted in the space between the bars of the folded frame-sections, the folded bottom 1 laid upon the folded frame, and the complete device packed within a suitable casing or the parts tied or untied in any preferred manner. The bed-bottom when thus collapsed will occupy but a small space and may be conveniently stored or shipped.

Having thus described the invention, what is claimed as new is—

1. A spring bed-bottom comprising a folding frame, said frame embodying hinged sections, each composed of side pieces and outer and inner end pieces, yielding tension devices upon the outer end pieces, said tension devices being provided with hooks, a folding bed-bottom proper composed of hinged sections and provided at its ends with coupling members to engage said hooks, cross-plates applied to the sections of the bottom on opposite sides of its joint, guide-pins carried by said plates and slidable vertically in the inner end pieces of the folding frame, and springs encircling said pins between said plates and end pieces.

2. A bed-bottom comprising a frame, brackets rising from the outer ends of the frame, transverse plates disposed upon the inner and outer sides of said brackets, pins slidably engaging the brackets and connecting said plates, a bed-bottom proper connected with the inner transverse plates, and

elastic means between the bracket and outer transverse plate to maintain a desired tension on the bed-bottom.

3. A bed-bottom comprising a frame, 5 brackets rising from and detachably secured to the ends thereof, each bracket having a top plate provided with a depending vertical flange, guide-pins slidably engaging said flange, inner and outer transverse plates connected by said pins, means between the 10 brackets and outer transverse plates to normally force the inner transverse plates outwardly, and a spring bed-bottom detachably connected with said inner transverse plates.

15 4. In a spring bed-bottom, the combination of a frame, brackets applied to the ends of the frame, transverse plates disposed upon the inner and outer sides of said brackets, a bed-bottom proper connected with the inner

transverse plates, pins slidably engaging the 20 brackets and connecting the inner and outer transverse plates, and devices inclosing said pins between the brackets and outer transverse plates to hold the bed-bottom proper stretched and prevent undue sagging thereof. 25

5. A bed-bottom having a frame provided with fastenings to engage a bed-frame, each fastening comprising a slidably and pivotally 30 mounted engaging device, slidably movable transverse of and toward and from the frame, and a spring for resisting the outward movement of said fastening.

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

JOHN REILLEY.

Witnesses:

ROBERT A. SHUFELT,
THOMAS SPEERIN.