J. WESTHAVER.

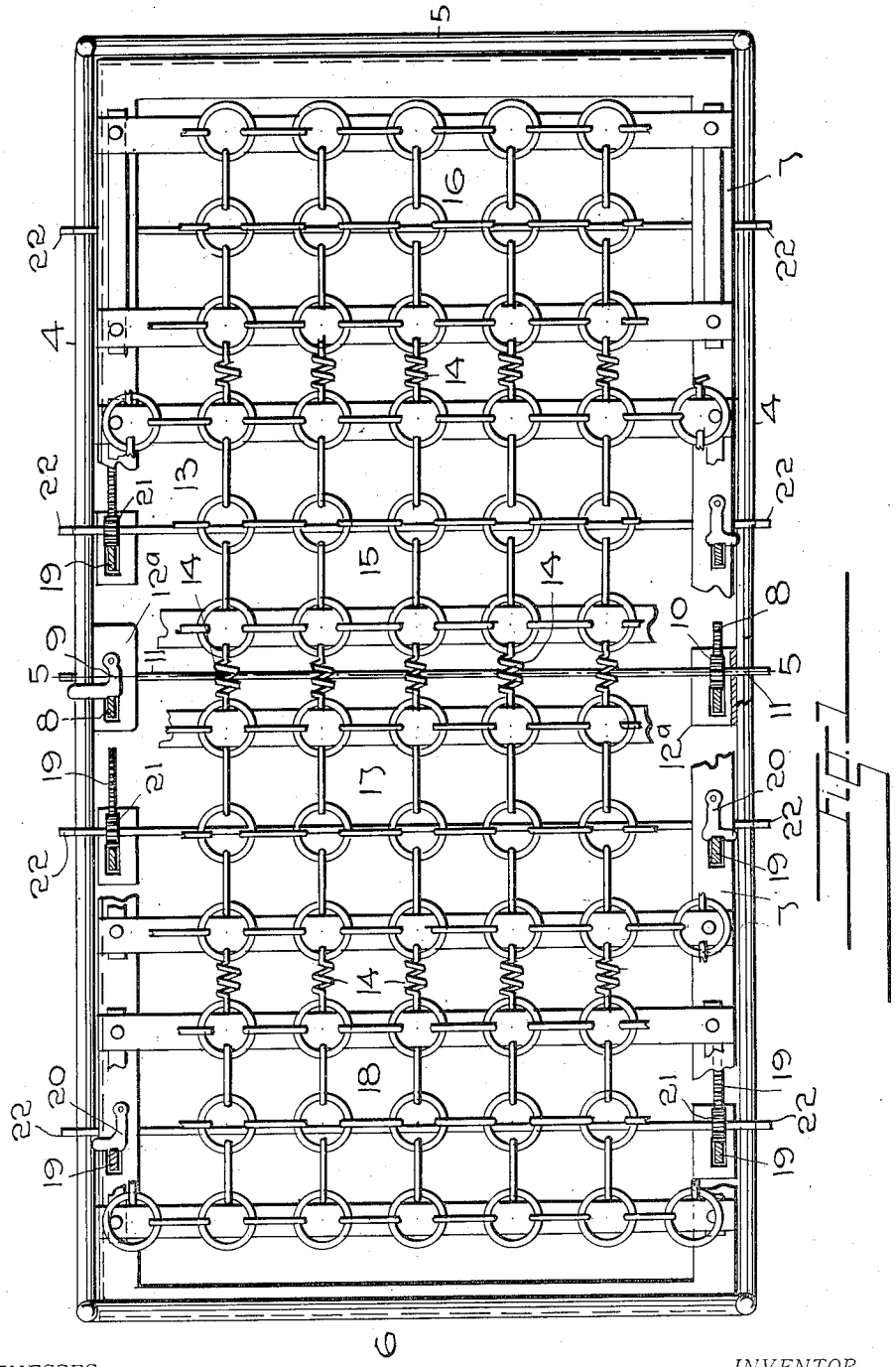
BEDSTEAD.

APPLICATION FILED MAR. 5, 1908.

942,426.

Patented Dec. 7, 1909.

3 SHEETS—SHEET 1.



WITNESSES:

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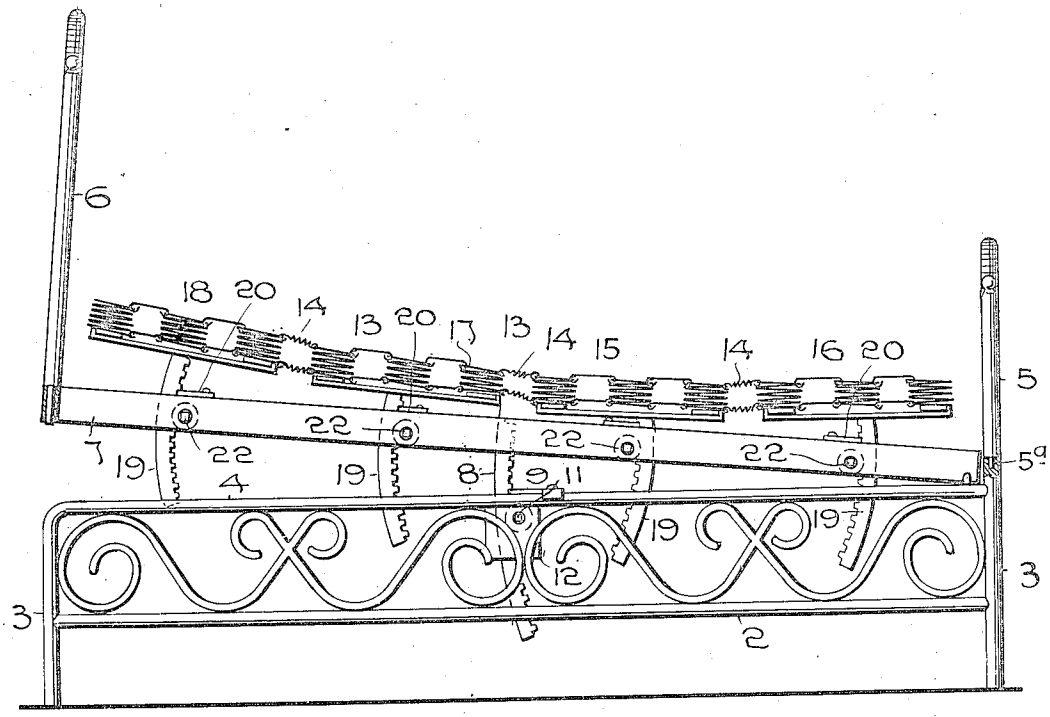

FIG. 2

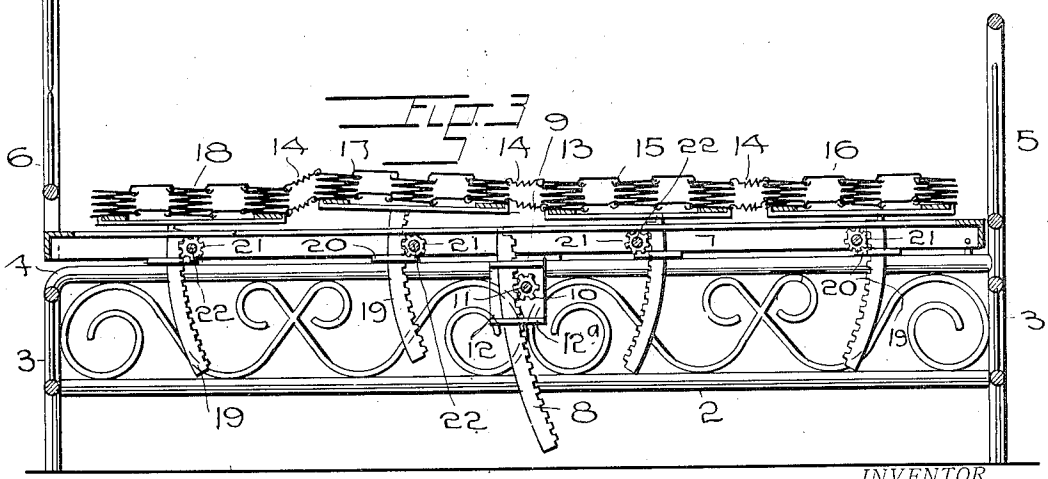

FIG. 3

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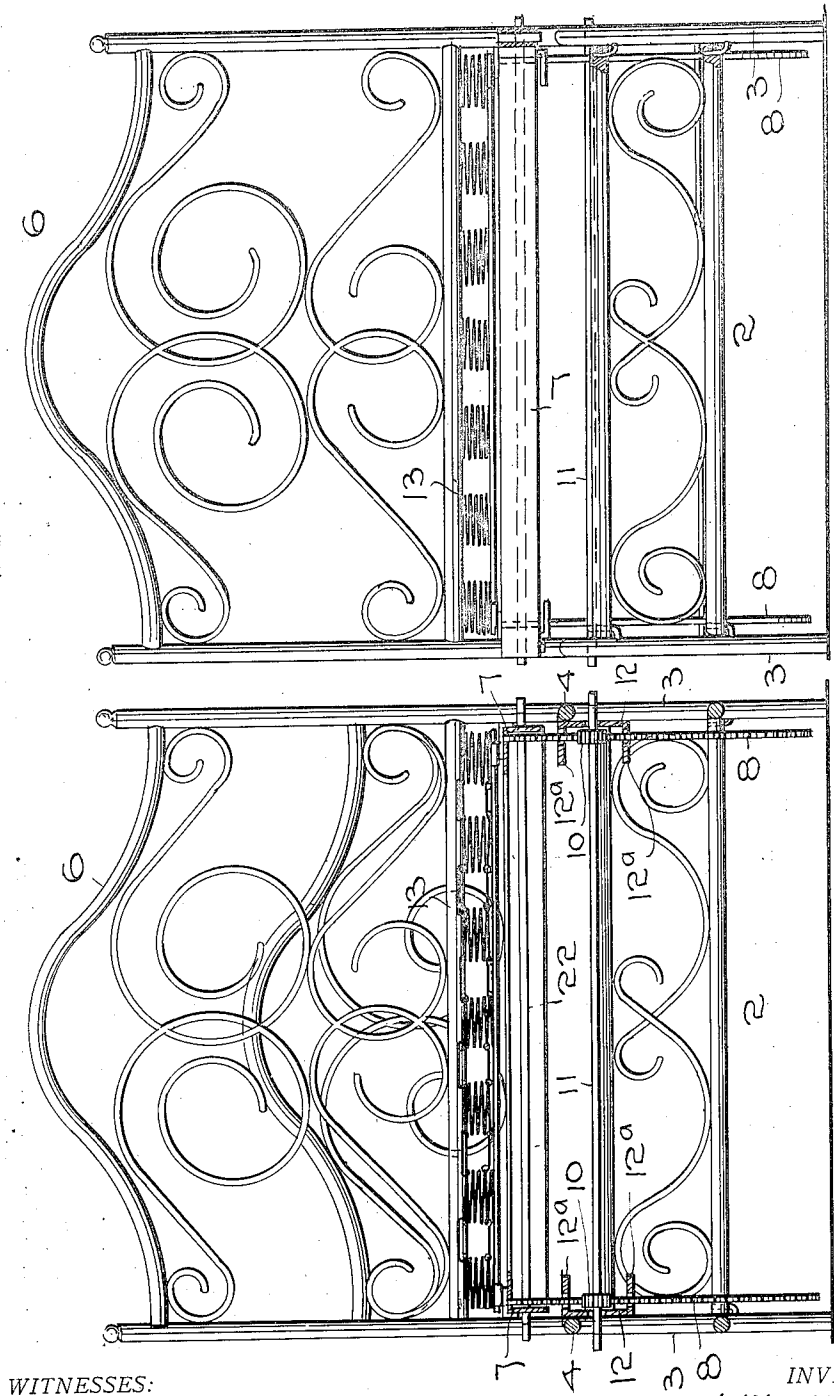

FIG. 4.

FIG. 5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN WESTHAVER, OF EDGEWATER, COLORADO, ASSIGNOR, BY MESNE ASSIGNMENTS, OF ONE-THIRD TO ELIZA WAKEFIELD AND TWO-THIRDS TO HAROLD WESTHAVER, BOTH OF EDGEWATER, COLORADO.

BEDSTEAD.

942,426. Specification of Letters Patent. Patented Dec. 7, 1909.

Application filed March 5, 1908. Serial No. 419,304.

To all whom it may concern:

Be it known that I, JOHN WESTHAVER, a citizen of the United States of America, residing at Edgewater, in the county of Jefferson and State of Colorado, have invented certain new and useful Improvements in Bedsteads, of which the following is a specification.

This invention relates to certain new and useful improvements in bedsteads and more particularly to that class of beds which by their peculiar construction are especially adapted for the use of invalids.

The principal object of my invention is to provide a bedstead in which the spring bed is composed of a plurality of sections which are independently adjustable to selected elevations and angles of inclination and which likewise have an adjustment as a series, to a selected angle in relation to the stationary supporting frame, the said adjustments being accomplished by simple means which may be operated from either side of the bedstead.

A further object of my invention is to provide a bedstead having the various adjustments above referred to, in which the maximum of simplicity is combined with practicability in use and ease of operation, and which in appearance, resembles a bedstead of ordinary construction while the adjusting mechanism is such that the raising and lowering of the movable parts may be accomplished without inconvenience to the most delicate patient. I attain these objects by the mechanism illustrated in the accompanying drawings in the various views of which like parts are similarly designated and in which—

Figure 1— represents a plan view of my improved device, certain parts being broken away to show subjacent mechanism, Fig. 2— a side elevation drawn to a reduced scale, Fig. 3— a vertical longitudinal section, Fig. 4— an end elevation, and Fig. 5— a vertical transverse section taken along a line 5—5, Fig. 1.

Referring to the drawings, the reference character 2, designates the lower frame of the device which is constructed after the manner of bedsteads generally and which includes the legs 3 and the connecting side rails 4. The foot portion 5 of the bedstead is detachably secured upon the stationary frame by tenons 5^a formed at the lower extremity of the said portion, which are inserted into corresponding apertures in the upper end of the frame. The head portion 6 is secured in like manner upon the upper end of a supplemental frame 7 which is pivotally connected at its opposite extremity to the side rails 4 of the frame 2 and in superposed relation thereto.

Secured to the side rails of the upper frame, which normally extends horizontally in parallel relation to the rails 4, are two dependent, segmental racks 8 which may be employed to secure the frame 7 at a selected angle in relation to the lower frame, in cooperation with detents 9 which being pivotally secured upon the rails 4 are arranged to engage with the teeth formed on the inner edge of the racks. Pinions 10 mounted upon a shaft 11 which is revolubly mounted in bearings 12 secured to the side rails 4 of the main frame, respectively mesh with the above named racks and the extremities of the said shaft, projecting beyond the stationary frame, are squared for the application of a key or lever by means of which the shaft may be rotated for the purpose of raising or lowering the racks and swinging the therewith connected frame about its pivotal axis. The key or lever is for obvious reasons not shown in the drawings.

The bearings 12, which, in the construction shown, consist of apertured plates, are formed with inturned flanges 12^a provided with openings through which the racks 8 project and which thus serve to guide the latter in their reciprocating movement.

Placed upon the supplemental frame 7 is the so-called bed-bottom or spring bed 13 which, in practice, supports the mattress of the bed and which is transversely divided into four equal sections, connected by springs 14 or other flexible means.

The head and foot sections, respectively designated by the numerals 18 and 16, as well as the intermediate sections 15 and 17 are adapted to be moved to any selected elevation or angular inclination in relation to each other and the frame upon which they are mounted and they are to this end each provided with two segmental racks 19, identical in form to those associated with the

frame 7, and which depending from their sides, project through openings in the side rails of the upper frame. Detents 20 pivotally secured upon the said rails, serve to maintain the different racks and the therewith connected sections in their adjusted positions, by engagement with the former's teeth, while pinions 21 meshing with the said racks, are fixed upon shafts 22 which are revolubly mounted transversely of the frame 7 in openings in its side rails. The ends of the various shafts, projecting beyond the frame 7 are like those of the shaft 11 on the stationary frame, squared to operatively connect with a suitable handle or lever.

Normally, the frame 7 as well as the thereon supported spring bed extends horizontally in parallel relation to the lower frame, and the bedstead may be used as one of the many non-adjustable beds now in common use and which it closely resembles in appearance. To place the reclining patient in an inclined position, the frame 7 is tilted to the desired angle by rotation of the shaft 11, which may be accomplished by the use of the before named lever at either side of the bedstead. To raise the upper or lower portions of the patient's body, the head section 18 or the foot section 16 of the spring bed may be tilted in a similar manner or when it is desired to raise the middle portion of the patient's body one of the intermediate sections 15 and 17 is lifted by rotation of the respective subjacent shaft 22. In each instance, the movable part is maintained in its adjusted position by means of the detents 9 and 20 which are preferably formed with thumb-pieces to facilitate their manipulation.

The removable and interchangeable foot portion 5 and head portion 6 of the structure obviate moving the entire bedstead when it is desired to reverse the position of the invalid, the movable frame and the adjustable foot and head sections of the spring bed serve to place the patient in an inclined position or to raise his head or legs without the least danger of jarring or otherwise disturbing the most delicate invalid, while the rising intermediate sections 15 and 17 of the spring bed are of the greatest value in the many instances that it is required to place vessels or other articles beneath the reclining patient's body.

Having thus described my invention what I claim is:—

1. A bedstead, comprising in combination a fixed frame, a second frame superposed upon said fixed frame and having a pivotal connection therewith, means for tilting said second frame as a rigid unit, sectional springs carried by said second frame, and means for independently adjusting each sectional spring.

2. A bedstead comprising in combination, a fixed frame, a second frame unitarily pivoted to said fixed frame, sectional springs carried by said second frame, and being vertically adjustable thereon, and means for adjusting said second frame as a unit, whereby said springs may be variously disposed above said fixed frame.

3. A bedstead, comprising in combination, a fixed frame, a second frame unitarily pivoted to said fixed frame by one of its ends, a rack and pinion adjustment located away from said pivoted end for unitarily raising said frame, sectional springs carried by said second frame, and rack and pinion adjustments for each section whereby said sections may be variously disposed with relation to said fixed frame through the medium of said adjustment on said second frame and said sections.

4. A bedstead, comprising in combination, a fixed frame, a second frame unitarily pivoted to said fixed frame by one of its ends, a rack and pinion adjustment located away from said pivoted end for unitarily raising said frame, sectional springs carried by said second frame, and rack and pinion adjustments for each section, said rack and pinion adjustments comprising sets of arcual racks oppositely disposed on each side of the center of said second frame, whereby said sections may be given a substantially arcual adjustment with relation to said second frame.

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

JOHN WESTHAVER.

Witnesses:

G. J. ROLLANDET,

K. M. STUMP.