

No. 624,434.

Patented May 2, 1899.

W. COUGHLIN.
BEDSTEAD.

(Application filed Jan. 21, 1899.)

(No Model.)

FIG. 1.

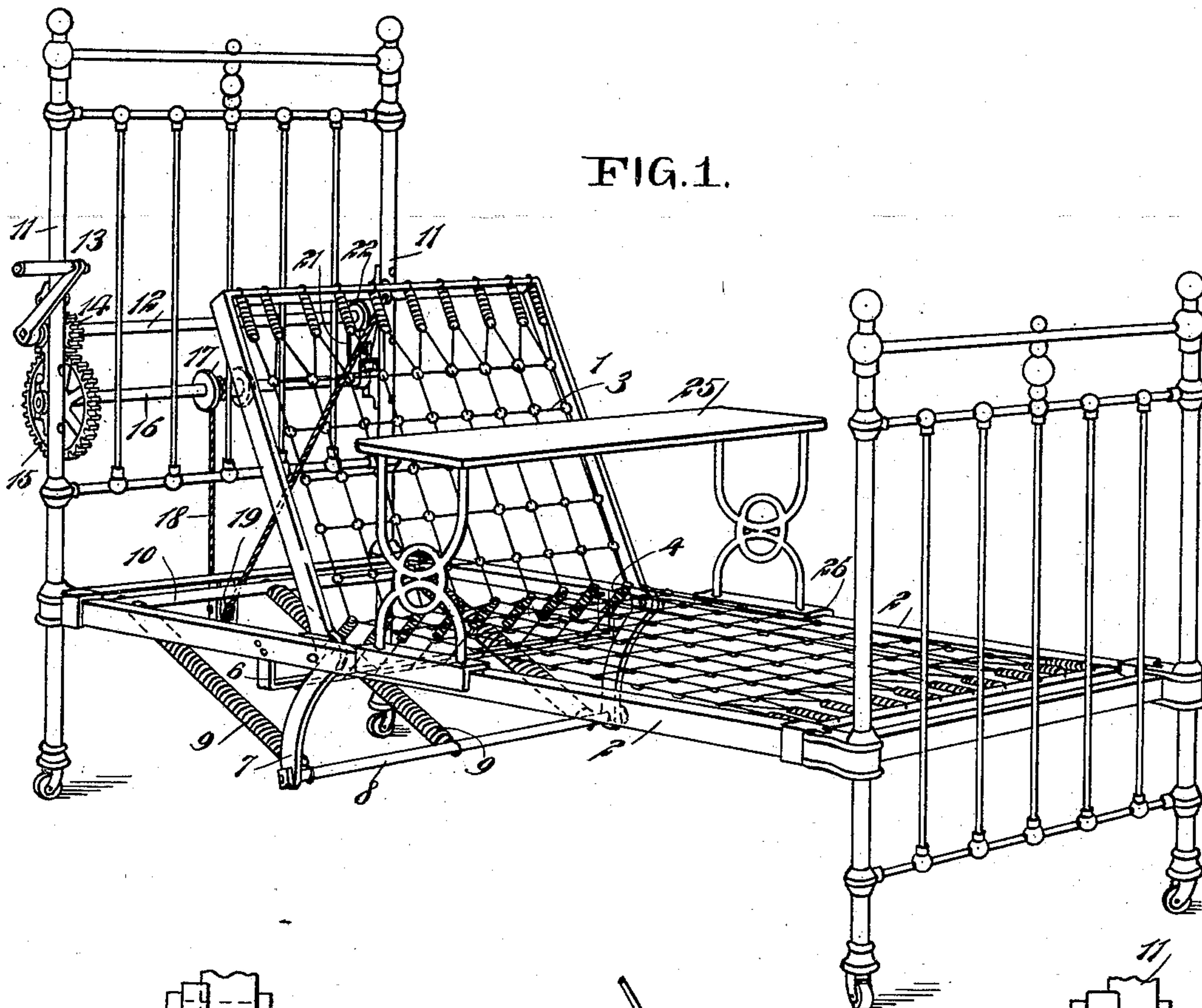
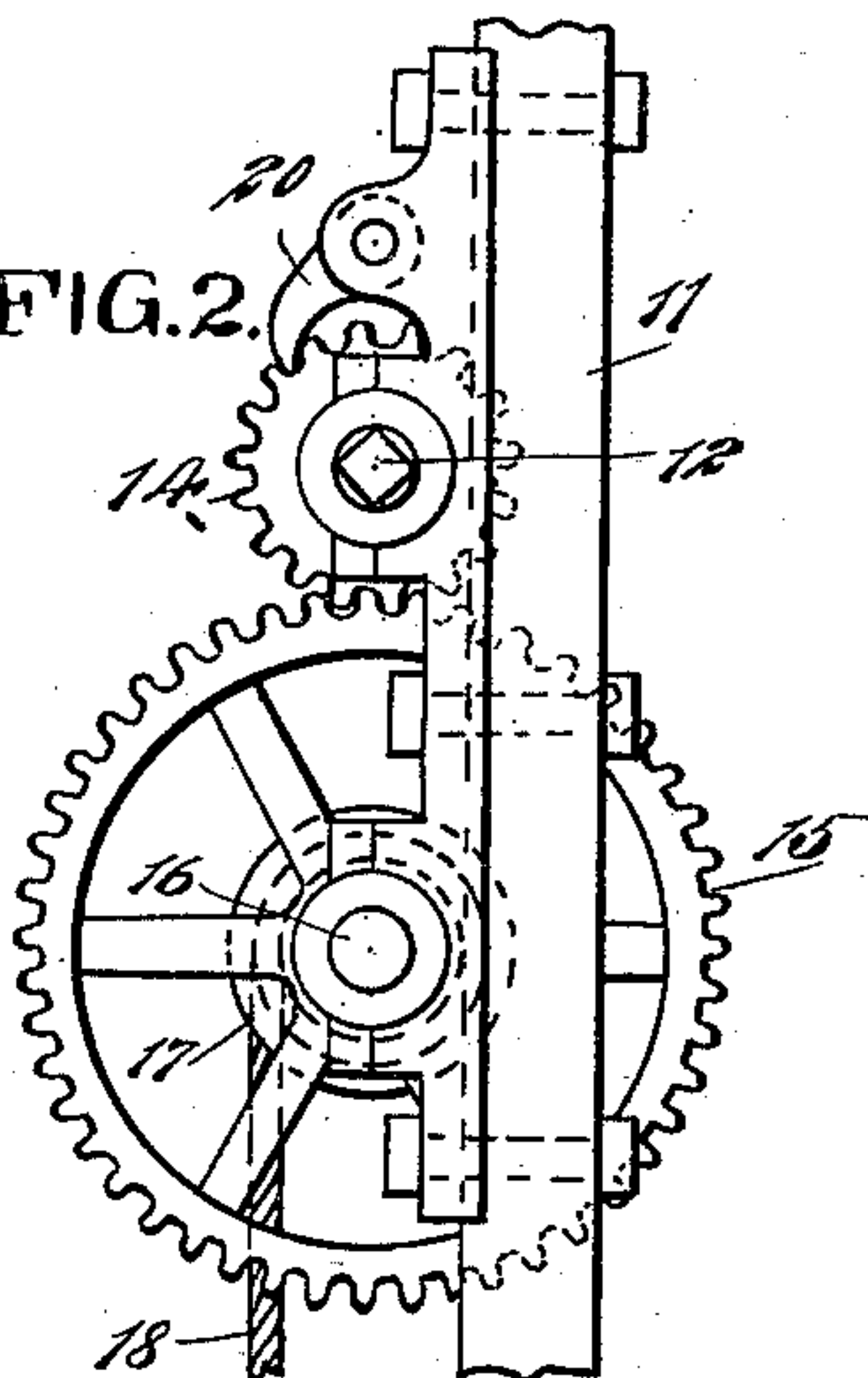


FIG. 2.



WITNESSES:

Donn Twitchell
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FIG. 3.

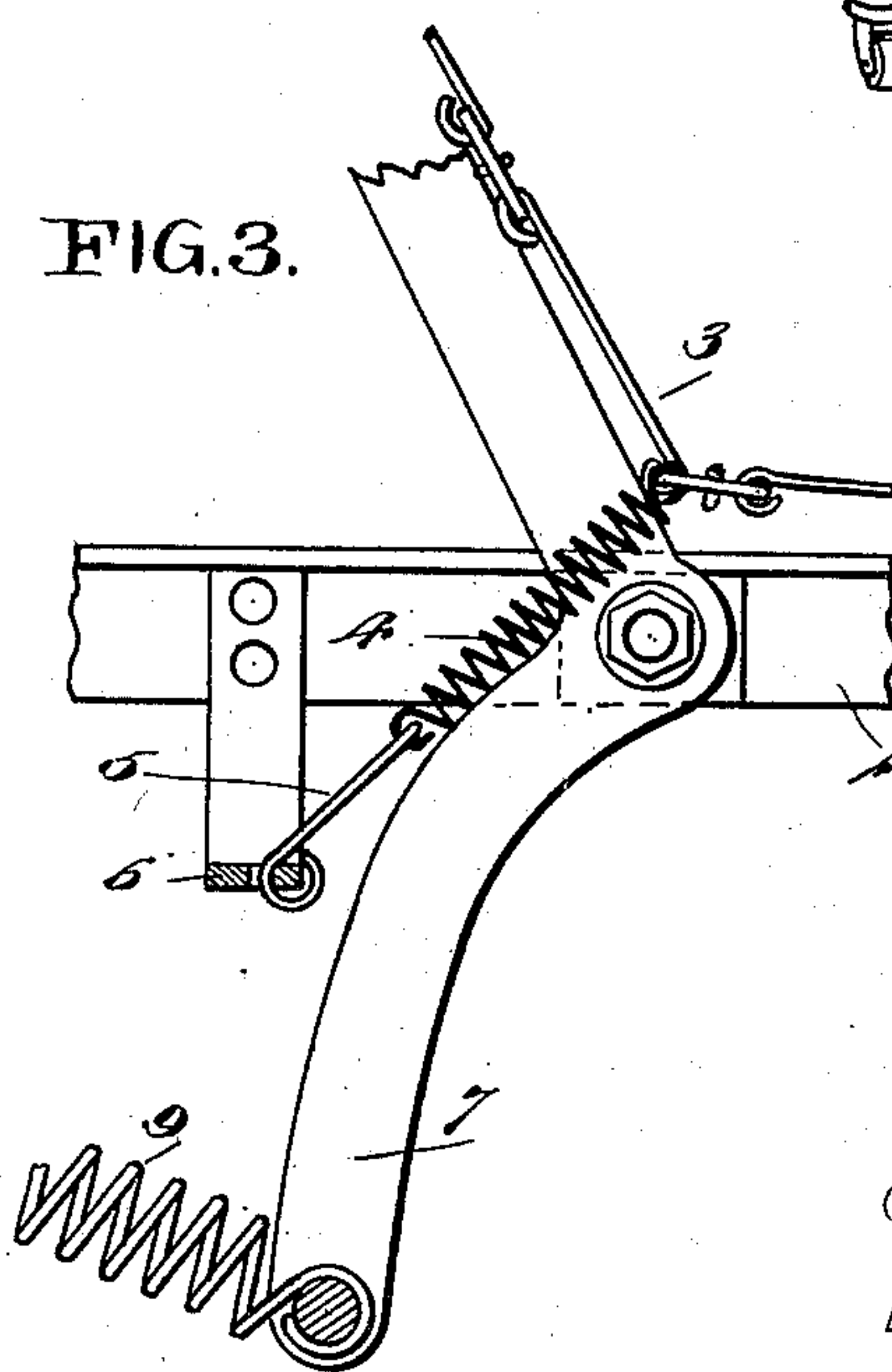
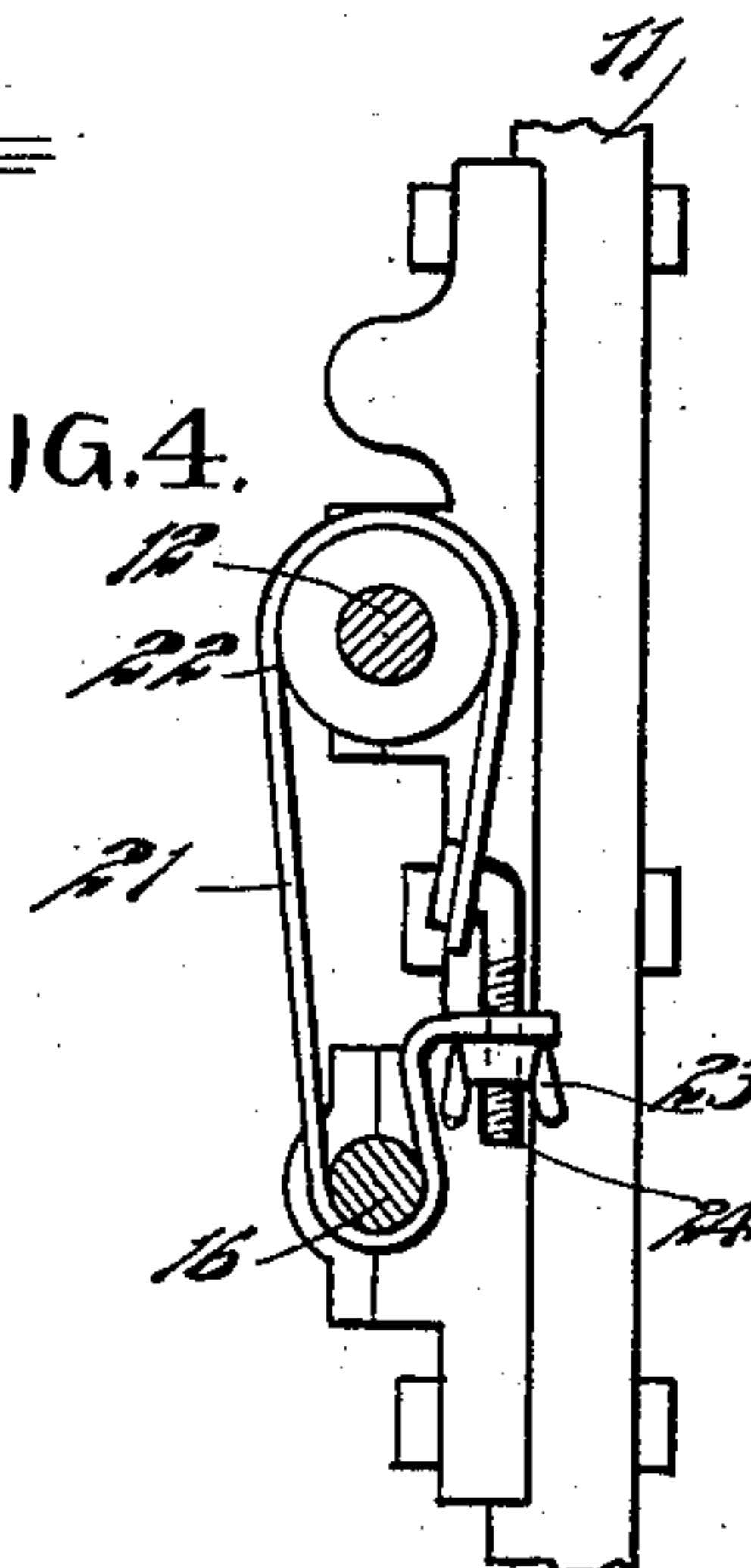


FIG. 4.



INVENTOR

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM COUGHLIN, OF NEW YORK, N. Y.

BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 624,434, dated May 2, 1899.

Application filed January 21, 1899. Serial No. 702,954. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM COUGHLIN, of the city of New York, borough of Manhattan, in the county of New York and State of New York, have invented a new and Improved Bedstead, of which the following is a full, clear, and exact description.

This invention relates to improvements in bedsteads particularly adapted for the use of invalids; and the object is to provide a bedstead of this character of simple and comparatively inexpensive construction and having a head portion arranged to be raised and held yieldingly in an inclined position by a suitable spring or springs, and, further, to provide a simple device to prevent sudden or too quick movement of the head portion under the influence of the spring or springs.

I will describe a bedstead embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a bedstead embodying my invention. Fig. 2 is a detail showing a winding mechanism employed. Fig. 3 is a detail showing the means for resting the head portion and holding the bed-bottom adjacent to the pivotal point of the head portion, and Fig. 4 shows a brake or retarding device employed.

Referring to the drawings, 1 designates the movable frame, having its side portions pivotally connected to the rails 2 of the bedstead. This frame 1 forms a portion of the bed-bottom, or rather a portion of the support for the spring-bottom 3. This spring-bottom 3 is held in suitable position at the line of the pivotal points of the frame 1 by means of springs 4, which are connected at the upper end to the bed-bottom 3, and by link connections 5 with a cross-bar 6, secured to the side rails 2. This cross-bar 6 is somewhat below the plane of the side rails, so that a sufficient space is provided for the springs 4 when the bed-bottom is in its horizontal position.

Arms 7 extend downward from the side portions of the frame 3 and are connected at the lower ends by a cross-rod 8, to which the lower ends of springs 9 are secured, the upper ends

of said springs being attached to a cross-rod 10, secured to the side rails 2.

Having bearings in boxes secured to the head-posts 11 of the bedstead is a driving-shaft 12, with which a crank 13 is designed to be engaged, and on this shaft 12 is a pinion 14, meshing with a gear-wheel 15 on a shaft 16, also having bearings in boxes on the head-posts 11. On this shaft 16 is a drum 17, from which a rope or cable 18 extends downward around a pulley 19, mounted in a bracket secured to the head-rail of the bedstead, and from this pulley 19 the rope or cable extends to a connection with the head-rail of the frame 1. The pinion 14 is controlled by a dog 20, as shown in Fig. 2.

In operation by releasing the dog 20 from the pinion 14 the springs 9, by bearing upon the arms 10, will cause the frame 1 to move upward, these springs of course being sufficiently strong to raise the weight of the patient lying upon the bed. When the frame 1 shall have been moved to the desired position, the dog 20 is to be again engaged with the pinion 14. To prevent a too sudden movement of the frame 1 under the influence of the springs 9, I employ a retarding device, here shown as a metal band 21, which passes around a drum 22 on the shaft 12 and also around the shaft 16. The frictional bearing of the strap may be regulated by a thumb-screw 23, engaging with a bolt 24, which at one end is connected to one end of the strap 21 and has its other end extended through a hole formed in the other end of said strap.

A table 25 may be placed upon the bedstead, as plainly indicated in Fig. 1—that is, the lower portions of its legs are connected with angle-plates 26, which engage upon the top and against the outer sides of the side rails 2, so that the table may be pushed lengthwise of the bed, as desired, but will be prevented from lateral movement. Obviously to lower the frame 1 it is only necessary to release the dog 20 and then rotate the shafts, which by drawing upon the rope or cable 18 will draw said frame downward against the resistance of the springs 9.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A bedstead, having a vertically-movable

frame portion, springs for moving said frame portion upward, a power-shaft, a drum-shaft, gear connections between said two shafts, a rope or cable extending from the drum on the drum-shaft to the movable frame, and a retarding device having connection with the two shafts, substantially as specified.

2. A bedstead, having a swinging frame portion, arms extended downward from said frame, a cross-rod having connection with said arms, springs extended from said rod to a fixed bar, a power-shaft, a drum-shaft, gearing connection between said two shafts, a brake for the shafts, and a flexible connection extended from the drum-shaft to the swinging frame, substantially as specified.

3. A bedstead, having a swinging frame portion pivoted to the side rails of the bedstead, a wire spring-bottom for the bed, a cross-bar connected to the side rails of the bedstead, spring connections between said

cross-bar and the bed-bottom, the said connections being substantially in line with the pivot-points of the frame, springs for swinging the frame upward and means for drawing said frame downward, substantially as specified.

4. A bedstead, having a swinging frame portion, springs for swinging said frame portion upward, a power-shaft, a drum-shaft driven thereby, a flexible connection between the drum-shaft and the swinging frame, and a retarding device comprising a metal strap engaging upon the two shafts and having means for regulating its frictional engagement with the shaft, substantially as specified.

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Witnesses:

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