

(No Model.)

H. A. GORE.
FOLDING BEDSTEAD.

No. 437,150.

Patented Sept. 23, 1890.

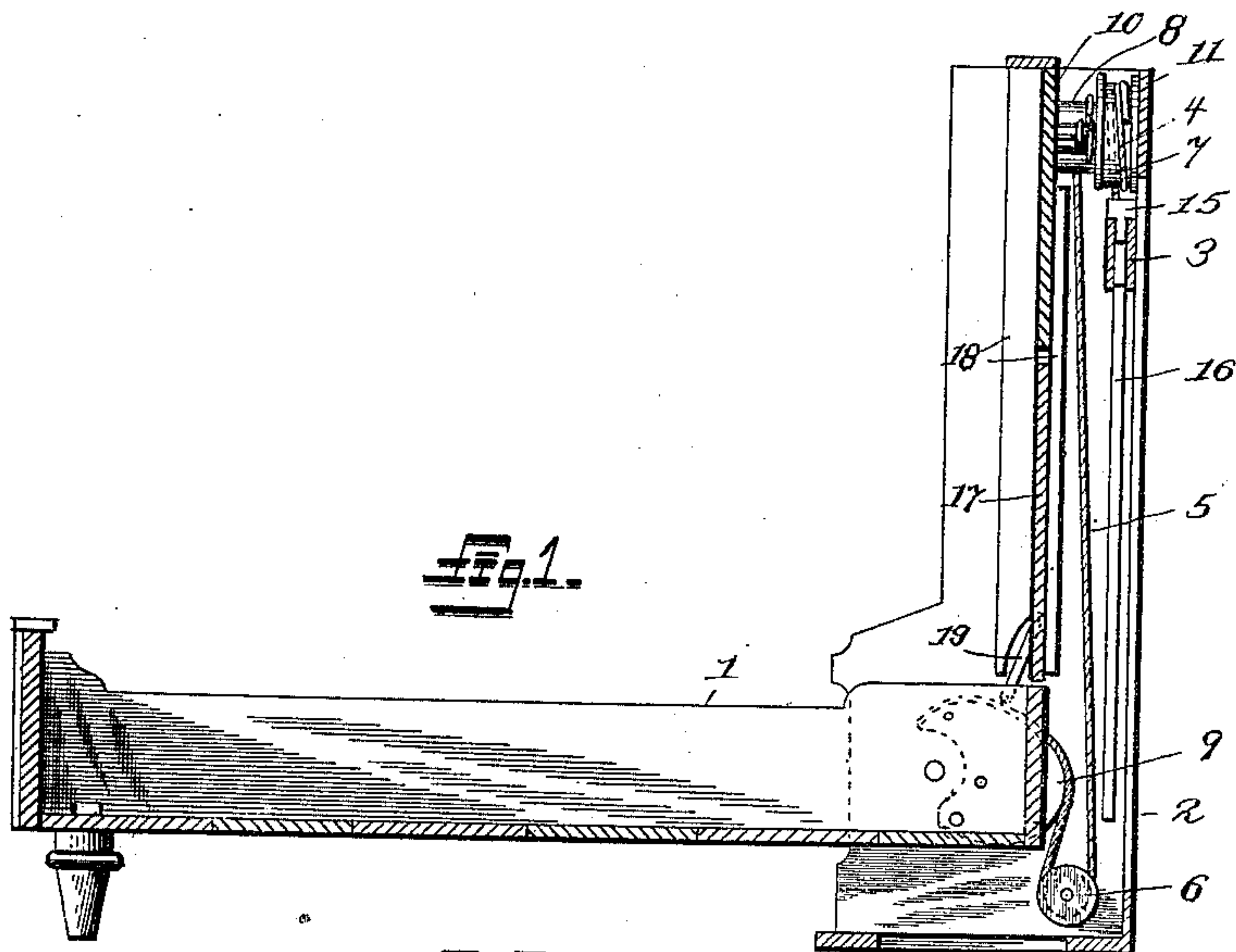


Fig. 2

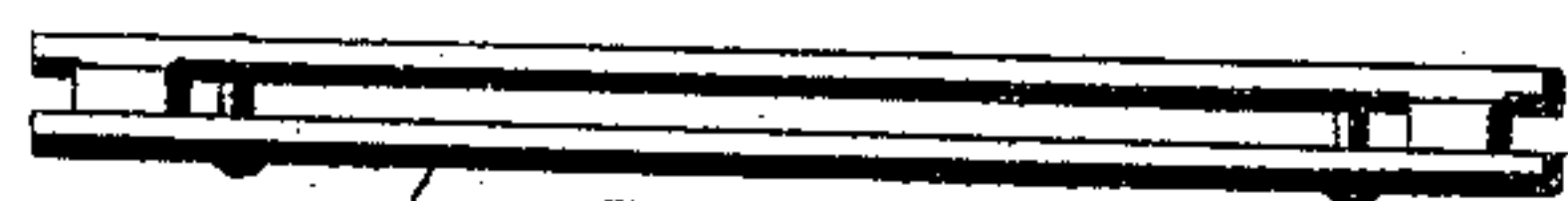
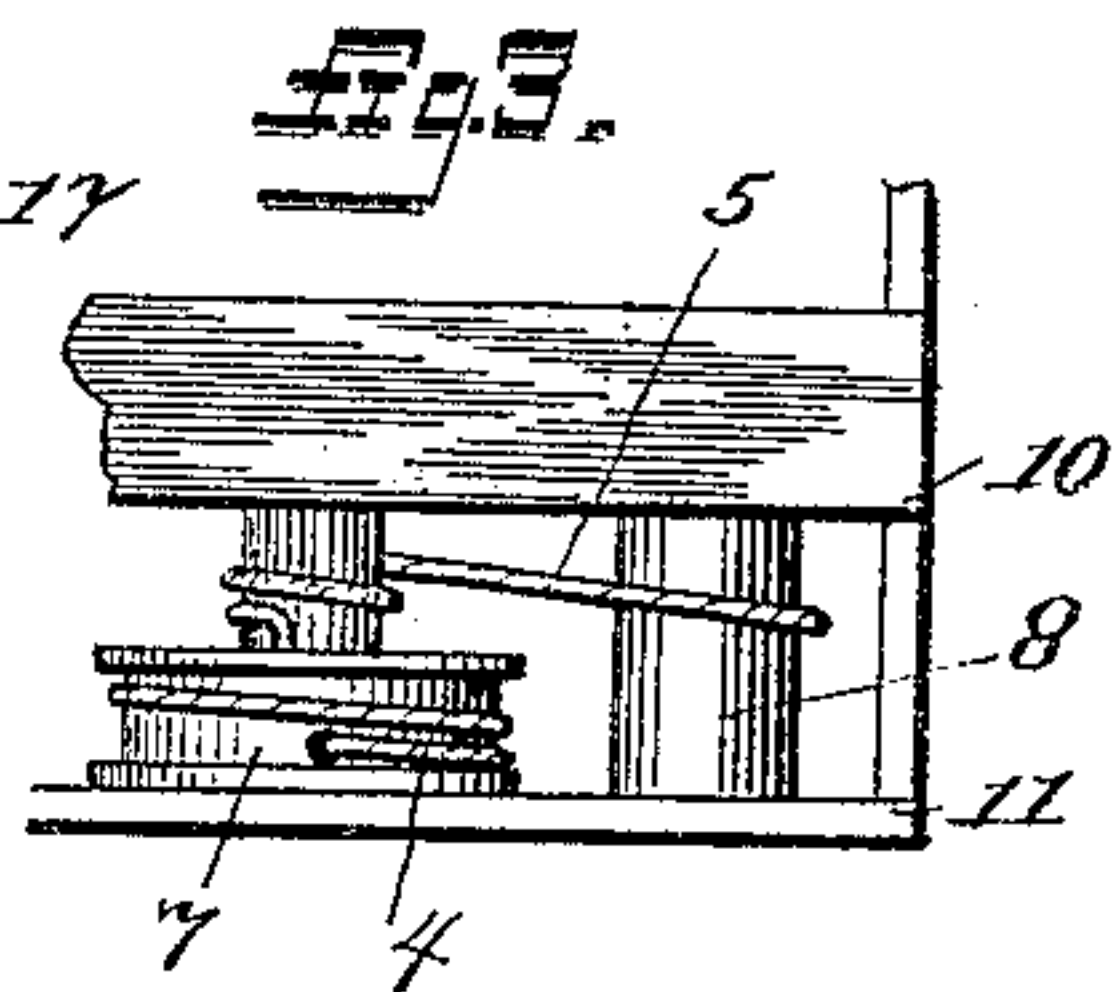
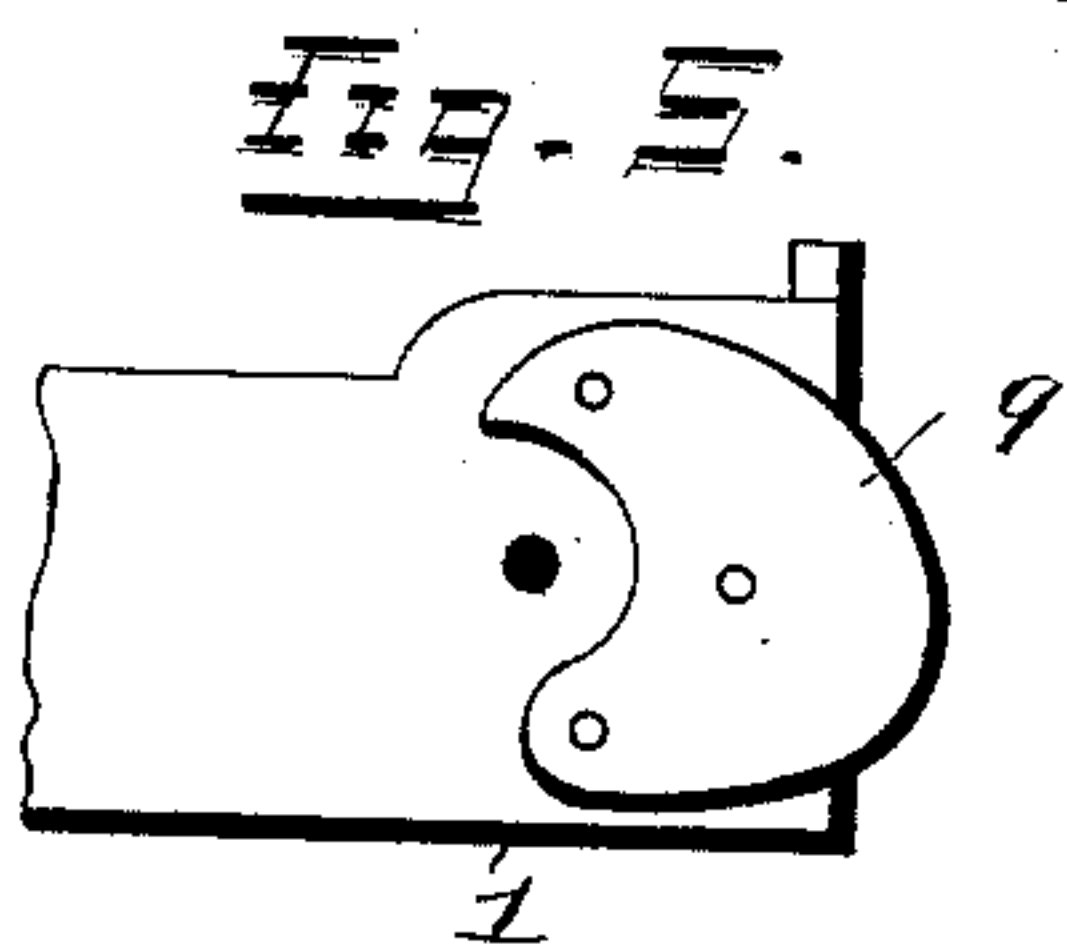
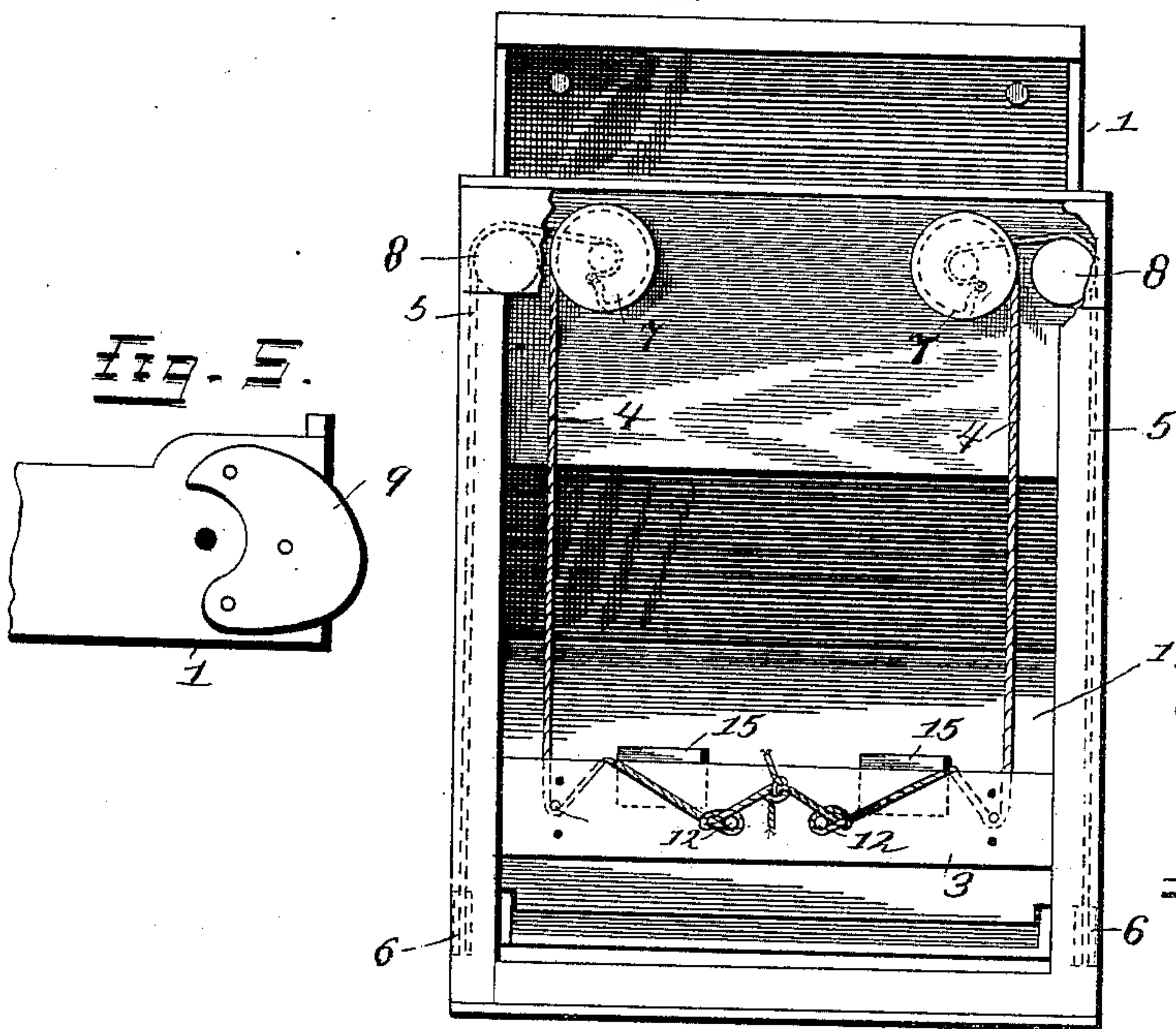


Fig. 4

Witnesses

W. H. H. H.
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By

Attorney

Inventor
Henry A. Gore
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UNITED STATES PATENT OFFICE.

HENRY A. GORE, OF GOSHEN, INDIANA, ASSIGNOR OF TWO-THIRDS TO HIRAM W. RU TON AND EDWARD W. WALKER, BOTH OF SAME PLACE.

FOLDING BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 437,150, dated September 23, 1890.

Application filed February 13, 1890. Serial No. 340,310. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. GORE, a citizen of the United States, residing at Goshen, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Folding Bedsteads; and I do 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.

My invention relates to wardrobe folding beds in which the weight of the bed is counterbalanced by means of springs or weights attached to the ends of cords which are connected with the bed and passed over pulleys within the frame or casing; and it consists in certain improvements in the construction and combination of parts of the same, as will be hereinafter more particularly set forth.

In the accompanying drawings, Figure 1 is a longitudinal vertical sectional view of a bed embodying my invention. Fig. 2 is a rear view partly broken away. Fig. 3 is a detail view. Fig. 4 is a top view of the box to hold the weights; and Fig. 5 is a view of the end of one of the rails, showing the cam thereon.

Referring to the said drawings, in which the same reference-numerals indicate corresponding parts in each of the figures, 1 indicates the bedstead, which is pivotally secured at one end within the lower portion of the casing 2. Both the bedstead and the casing may be made of any suitable style and material and be finished with any degree of ornamentation.

The counterpoise for the weight of the bed may consist of a spring or of a beam or weight-box 3, which is connected with the bed by means of the ropes or cables 4 and 5, which pass over the pulleys and drums 6, 7, and 8. The end of each of the side rails of the bed which is pivoted to the casing is formed or provided with a cam 9, which may be grooved or channeled upon its edge, and over which the end of one of the cables 5 is passed, and by means of which the leverage is so changed by the movement of the outer end of the bed that the weight is more evenly counterbalanced in opening and closing the bed. To accomplish this, the apex of the cam or por-

tion farthest from the pivot of the bedstead with the casing is at the end of the rail, and by securing the cable to the cam at a point nearest the pivot and then passing it over the apex of the cam and around the pulley 6, which is journaled below the apex, the power of the counter-balance is increased as the bed assumes a horizontal position and decreased as it assumes a vertical position. The power of the counter-balance is also increased by winding its cables 4 upon the larger periphery of the drum 7 at the top of the frame or casing and the cables from the bed upon the smaller periphery. This drum and also the drum or roller 8, over which the cables from the bed are passed to be wound upon the drum 7, are preferably journaled between the cross-pieces 10 and 11 of the frame. The ends of the cables are secured to the weight-box or counterpoise 3, which is slotted nearly its entire length, by screws or other retaining devices 12 12. A loop or fold can then be formed in the cable and retained within the slot of the weight-box by means of a pin 13 or any suitable device.

Removable weights 15 are retained upon the weight-box by means of the slot and a projection on the weight. In this manner the weight can be increased or diminished to compensate for the varying weight of the bed, accordingly as it is provided with more or less clothes or covering or removed entirely for shipping.

The weight-box is guided in its movement within the frame by means of the vertical ribs or ways 16.

To give the bed a neater appearance when the bed is open, a head-board 17 is movably secured within the frame 2 between the vertical guides 18 18. The head-board is of sufficient width to fill the space between the end of the bed and the top rail of the frame, and could be made stationary, if desired; but I prefer to make it movable and connect it with the ends of the bed by means of the links 19 19, so that as the inner end of the bed is lowered when the other end is elevated to close the bed the head-board is drawn down and leaves an open space in the casing, which thus permits of the free access of the air to the

bed when it is closed and avoids the objections urged against confining the bedclothing in a closed receptacle during all the time the bed is closed.

5 Having described my invention, what I claim is—

The combination, in a folding bed, of a frame, a bedstead pivotally secured thereto, the side rails of which are each formed or provided with a cam, the apex or point farthest
10 from the pivot being at the end of the rail, a pulley journaled in the side of the casing be-

low the apex of the cam, pulleys journaled in the upper portion of the casing, a cable secured to the cam and passed over the apex 15 of the cam and over the pulleys, and a counterpoise at the end of the cables, substantially as described.

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

HENRY A. GORE.

Witnesses:

CHAS. J. CREGIER,
EDWARD U. BROWN.