(No Model.)

J. J. ADGATE & F. HICKMAN.

FOLDING BEDSTEAD.

No. 262,882. Patented Aug. 15, 1882.

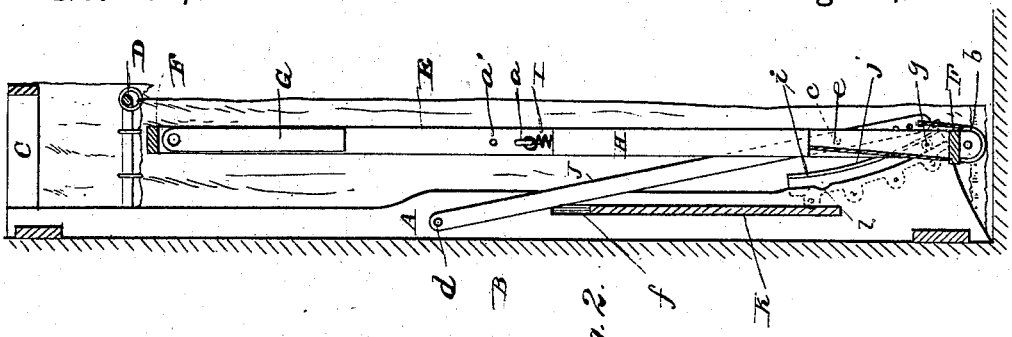

Fig. 2.

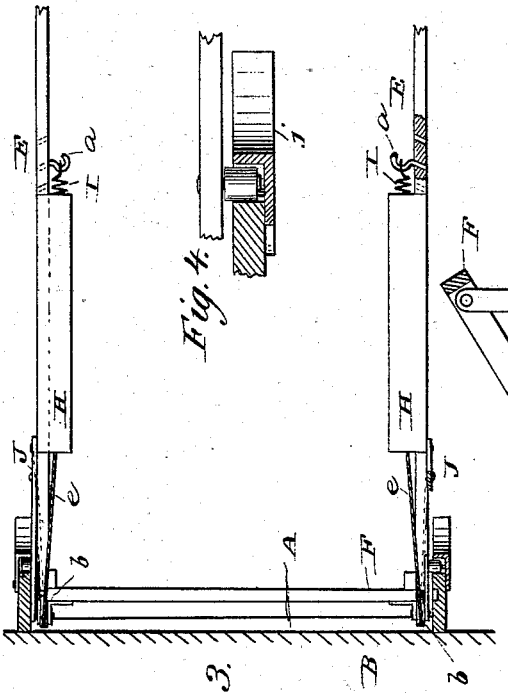

Fig. 4.

Fig. 3.

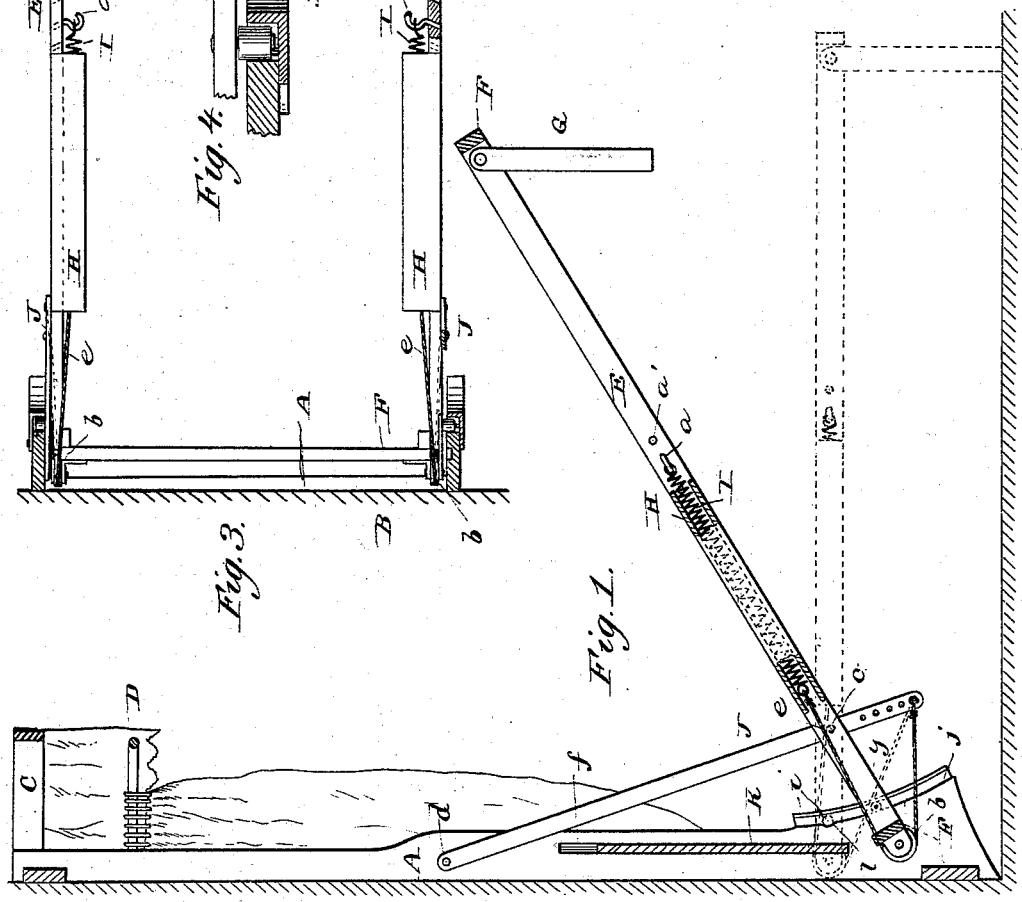

Fig. 1.

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UNITED STATES PATENT OFFICE.

JOSEPH J. ADGATE AND FRANCIS HICKMAN, OF NEW YORK, N. Y., ASSIGNORS TO MATTHEW G. STEPHEN, OF SAME PLACE.

FOLDING BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 262,882, dated August 15, 1882.

Application filed June 21, 1882. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH J. ADGATE and FRANCIS HICKMAN, of the city of New York, in the county of New York, and in the State of New York, have invented certain new and useful Improvements in Folding Beds; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to folding bedsteads which may be permanently secured to the wall of a room, or they may be applied to cases or cabinets which are portable; and the nature of our invention consists in a bedstead-frame, or the supporting part which is designed to receive a mattress or bed-bottom, in combination with pivotal sustaining bars or stirrups, which are pivoted at their upper ends to a casing and near their lower ends to the rails of the bedstead-frame, the extremities of the said stirrups being connected to tension-springs, as will be hereinafter explained.

Other features of our invention, together with the above-named features, will be fully understood from the following description, when taken in connection with the annexed drawings, in which—

Figure 1 is a vertical longitudinal section through a folding bedstead and its casing having our improvements applied to the same. Fig. 2 is a similar view of the same parts, showing the bedstead proper folded. Fig. 3 is a horizontal section, a part of the bedstead-frame being broken away. Fig. 4 is an enlarged cross-section of one of the cheeks of the casing, a part of the bedstead-rail, and the angle-iron segment, showing an anti-friction roller which is applied to said rail.

Similar letters of reference indicate corresponding parts in the several figures.

For the purpose of illustrating our invention when the casing or supporting-frame A is permanently secured to a wall, B, we have represented these parts in Figs. 1, 2, and 3 of the drawings.

C designates a head-frame of the said casing, and D is a rail which receives rings, from which curtains may be hung, as we have represented.

E E designate the bedstead-rails, which are secured together by head and foot end pieces, F F, so that a rectangular bedstead-frame is formed adapted to receive a bed-bottom of any suitable kind. This frame is provided at the foot with pivoted legs G, and it is also provided with tubes H, inclosing helical springs I. One end of each one of the helical springs is connected to a bedstead-rail by a hooked pin, *a*, which is adjustable into one or more holes, *a'*, made through the rail for the purpose of increasing tension or for compensating for the give of the spring. The opposite end of each spring I has suitably attached to it a cord, *e*, which is passed around a grooved pulley, *b*, pivoted to the head of the bedstead-rail, which cord is attached to the shortest arm of a stirrup-lever, J. This lever J is pivoted at *c* to the bedstead-rail, and its long arm is pivoted to a cheek of the casing at *d*, as shown in Figs. 1 and 2.

It will thus be seen that the bedstead-frame is suspended by stirrups from a casing, which may be portable or stationary, by means of the rods, levers, or stirrups J. The cord *e*, after passing over pulley *b*, is carried forward and, as above described, attached to the spring of each rail E. These cords serve, in combination with the springs applied to the bedstead-rails, an important purpose, in that they connect the tension of the said springs to the swinging stirrups, and by adjusting the attachment of the cords to the lower arms of the stirrups higher or lower the tension of the springs can be compensated for. Holes are made through the lower arms of the stirrups to provide for said adjustment.

K designates a head-board, which is vertically adjustable in grooves *f*, made in the cheeks of the casing or cabinet-frame, and which is moved upward when the bedstead-frame is adjusted in the horizontal position indicated in dotted lines, Fig. 1.

The letters *g g* indicate anti-friction rollers, which are applied to the outer sides of the bedstead-rails, between the pulleys *b* and the fulcra *c* of the stirrups J, and which are free to

move up and down in grooves of segmental form, (indicated in Figs. 1 and 2 by the letter *i*.) These grooves have two bearings for the said anti-friction rollers *g*, one bearing (on each side of the casing) being formed by a curved edge of the casing and the other bearing or guide being formed by an angle-plate, *j*, suitably secured to the casing-cheek.

When the bedstead-frame is depressed, as indicated in dotted lines, Fig. 1, the retraction of the springs I will cause the anti-friction rollers *g g* to enter notches *l*, and thus hold or assist in holding the bedstead-frame in said depressed position; but when the weight of the mattress and the usual bed appurtenances is on the bedstead-frame it will be positively held down in the position above indicated.

It will be seen from what we have above described that our bedstead-frame is suspended by stirrups; that it is acted on by tension-springs applied directly to the bedstead-rails, and that it is practically locked in a horizontal position against the main upright frame or casing by said springs and the anti-friction rollers engaging into the notches *l*.

It will also be seen that when the said bedstead-frame is in an upright position, as indicated in full lines, Fig. 2, it will be thus held by the springs I, aided by the abutments, which are afforded below by the anti-friction rollers bearing against the curved edges of the cheek-pieces of the casing.

Having described our invention, we claim—

1. In a folding bedstead, a bedstead-frame which is connected to or suspended by stirrups from a casing or wall, the extensions of the stirrups below the bedstead-frame, cords and pulleys, and tension-springs, applied substantially in the manner and for the purposes described.

2. The combination of a swinging bedstead-frame, a fixed or movable support therefor, suspension rods or stirrups, cords and pulleys actuated by tension-springs, and a movable head-board, substantially as and for the purposes described.

In testimony whereof we affix our signatures, in presence of two witnesses, this 19th day of June, 1882.

JOSEPH J. ADGATE.
FRANCIS HICKMAN.

Witnesses:
SAM. TRO. SMITH,
C. W. SMITH.