(No Model.)

H. A. J. RIECKERT.

Spring for Folding Bedstead.

No. 235,293. Patented Dec. 7, 1880.

Fig. 1

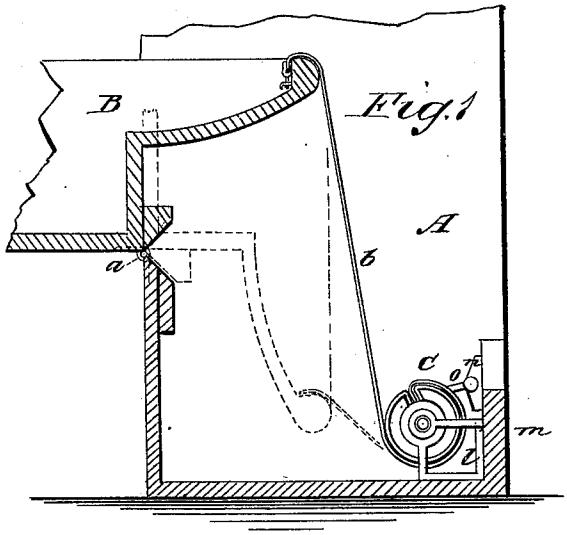


Fig. 4

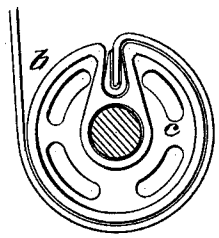


Fig. 2

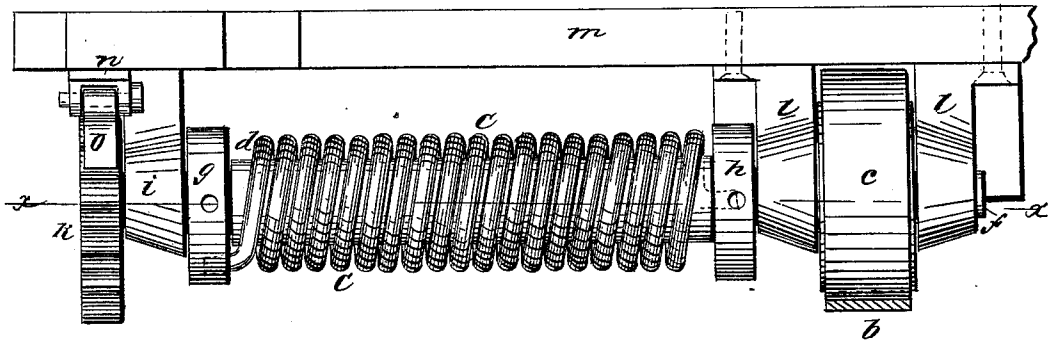
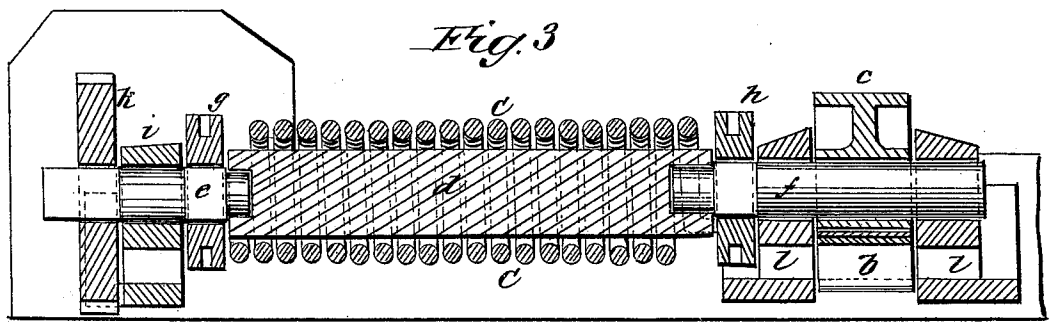


Fig. 3



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UNITED STATES PATENT OFFICE.

HERMAN A. J. RIECKERT, OF NEW YORK, N. Y.

SPRING FOR FOLDING BEDSTEADS.

SPECIFICATION forming part of Letters Patent No. 235,293, dated December 7, 1880.

Application filed June 16, 1880. (No model.)

To all whom it may concern:

Be it known that I, HERMAN A. J. RIECKERT, of the city, county, and State of New York, have invented a new and useful Improvement in Springs for Folding Bedsteads, of which the following is a specification.

My improvement relates to springs used in connection with folding or cabinet bedsteads to balance or sustain the bed while being raised and lowered.

The object of my invention is to furnish a durable spring having sufficient power, and which can be adjusted in its tension. The construction and operation will be described in detail, with reference to the accompanying drawings, wherein—

Figure 1 is a vertical section, showing a portion of a folding bed having my spring applied thereto. Fig. 2 is a plan view, in larger size, of the spring and its supports. Fig. 3 is a longitudinal section of the same; and Fig. 4 is a cross-section showing the winding-drum.

Similar letters of reference indicate corresponding parts.

A is the base or stand of a cabinet-bedstead, and B is the bed, hinged at *a*, so that it may be raised to a vertical position or lowered to a horizontal position, as shown, for use.

Within the stand A, at C, is secured the balance-spring, from the winding-drum *c* of which a belt, *b*, passes to and is connected to the end of bed B, so that as the bed is turned down the belt is drawn upon. There will preferably be two springs connected to the bed by separate belts.

As shown most clearly in Figs. 2 and 3, the spring C is upon a core or shaft, *d*, that sets, by mortises at its ends, upon the shafts *e f*, which carry the heads *g h*, to which the opposite ends of spring C are connected, the heads being fast upon the shafts. The core *d* is loose and serves to keep the spring in shape when under tension.

The shaft *e* is sustained in a bracket, *i*, and carries a ratchet-wheel, *k*, upon its squared end.

The shaft *f* is sustained in brackets *l l*, between which is keyed on the shaft the pulley or drum *c*.

The brackets *i l* are preferably formed for being secured to the back and bottom of the stand A in the angle.

m represents the back of stand A, and on this is secured a plate, *n*, having lugs, in which is hung a pawl, *o*, that engages with ratchet-wheel *k*.

The drum *c* is formed with a radial slot, as shown in Fig. 4, in which the belt *b* is secured by wedging its end, or it may be attached in any desired manner.

The head *g* is formed with holes in its periphery, for insertion of a rod to turn shaft *e*, and thereby give the required normal tension to the spring after it is secured in place. The pawl *o* prevents the shaft *e* from turning backward.

The spring will be set and belt *b* attached while the bed is in a raised position. When the bed is lowered to a horizontal position the belt is thereby drawn upon and the spring wound as a spring. The bed is thus wholly or partially sustained or balanced, so that the operation of raising and lowering it may be readily performed.

It will be seen that in raising the bed the strap is most fully taken up before the bed reaches the vertical position, and to finish the movement the spring is slightly drawn upon, so as to relieve any shock in closing the bed.

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

The spiral spring C, sustained at one end, shaft *f*, connected to the opposite end, drum *c* on shaft *f*, and belt *b*, combined with the hinged bed B, substantially as and for the purposes set forth.

HERMAN A. J. RIECKERT.

Witnesses:

GEO. D. WALKER,

C. SEDGWICK.