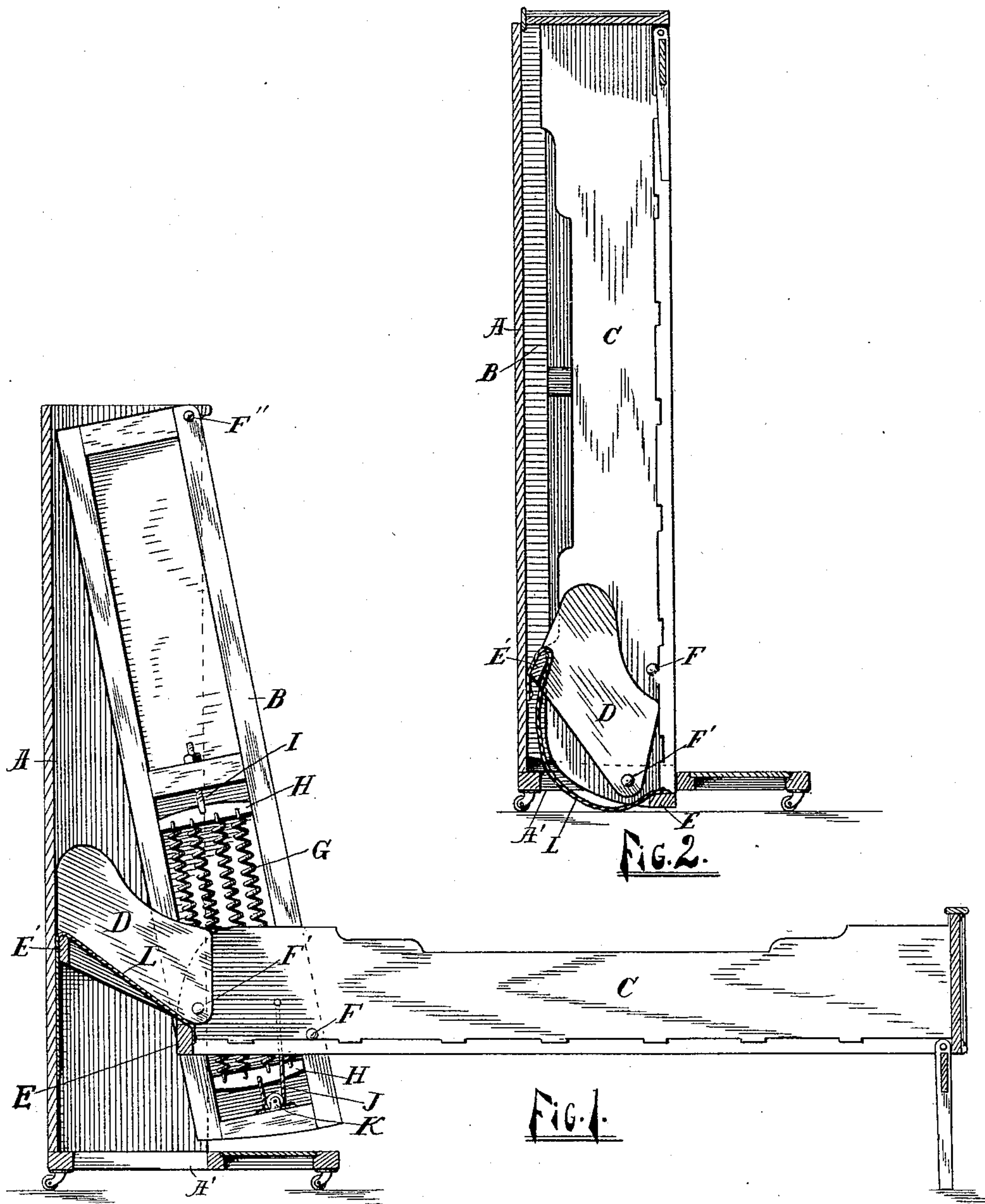


(No Model.)

I. C. SMITH & E. E. HERRINTON.
FOLDING BED.

No. 452,736.

Patented May 19, 1891.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ISRAEL C. SMITH AND EDWARD E. HERRINTON, OF GRAND RAPIDS, MICHIGAN; SAID HERRINTON ASSIGNOR TO THE GRAND RAPIDS FOLDING BED COMPANY, OF SAME PLACE.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 452,736, dated May 19, 1891.

Application filed September 4, 1890. Serial No. 363,911. (No model.)

To all whom it may concern:

Be it known that we, ISRAEL C. SMITH and EDWARD E. HERRINTON, citizens of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Folding Beds; and we do hereby 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.

Our invention relates to folding beds. Our object is to produce an article of this description having new features which will appear upon inspection; and it consists in the construction, combination, and arrangement of the various parts hereinafter described, and particularly pointed out in the claims, reference being had to the accompanying drawings, wherein—

Figure 1 represents a central vertical section of a device embodying our invention open, and Fig. 2 the same closed.

A represents the stationary casing, having the base-frame A' projecting forward of the front to form a foot and prevent the section from tipping.

B is a rectangular frame pendulously pivoted to the side of the stationary casing and swinging freely forward and back. It is divided horizontally by a cross-bar into an upper and lower panel. Within the lower panel is arranged a spring G, consisting of a series of coiled springs connected by yokes H and provided with a tension-bolt I, having an adjusting-nut.

C represents the side of the folding section, and is pivoted to the pendulous frame B to fold vertically and open outwardly.

D is a pillow or bolster section, and its outer lower corner is pivoted to the folding section, while the inner end is free to move vertically upon the back of the stationary casing.

It will be understood that the parts B, C, and D are in duplicate, C and D forming, respectively, the side portions of the structures named, and that frames B are arranged upon each sides of the folding section between the

folding section and the respective sides of the stationary casing. The two sides of the folding section are connected by an end cross-bar E, and the two side boards of the pillow-section are connected by an end cross-bar E'. The pillow-section is provided with an apron L of stout canvas or other suitable material, one edge being attached to the inner end of the folding section to its cross-bar E, and the other edge attached to the back of the stationary casing and passing over the bar E', but not attached to it, and thereby forming the bottom of the pillow-section, and when the bed is closed, as in Fig. 2, forming a sack for containing bedding. The folding section C is connected to spring G by a cord or cable J, having one end attached to the side back of the pivot and the other to the lower yoke of the spring and passing around the pulley K, secured to frame B.

F F' F'' are the respective pivot-bolts upon which the various parts turn, as described.

When the bed is closed, as in Fig. 2, it will be noted that the bottom of the folding section forms the front of the structure, the pillow-section D folds within the folding section C, and the frames B and the sides of section C are in line with the sides of section A. When opened, as in Fig. 1, frame B is swung forward at an angle upon its pivot F'', which is preferably placed at the front upper corner, as shown. The folding section C is horizontal, and may be provided with any suitable folding supporting-leg, such as is shown, but not lettered in the drawings, and swings upon its pivot F, which is preferably placed in the lower edge of the side and in the front portion of frame B, as shown. As the folding section swings outward from its vertical position, the pillow-section D rises vertically, carrying the bar E', which engages the apron L and takes up the slack, and the parts are so adjusted that when the folding section C has reached its horizontal position the apron L arrests the vertical movement of the pillow-section and is at that part of the operation at its greatest tension, thereby forming a stretched canvas bottom for the pillow-section, which rests at an angle to the bottom of

the bed and forms a convenient support for the head of persons occupying the same. In this construction the side pieces of the stationary casing and also of the folding section
5 may be made shorter than is possible in beds not provided with the pillow-section.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent of the United States, is—

10 1. The combination, with the stationary casing, the pendulous frames pivoted thereto upon opposite sides, as set forth, the folding section pivoted between and to the pendulous frames, and the springs G, arranged in
15 the pendulous frames and connected to the folding section back of the pivot, substantially as set forth.

20 2. The combination, with the stationary casing, the pendulous frames pivoted thereto upon opposite sides, the folding sections pivoted between and to the pendulous frames, the springs G, arranged in the pendulous frames and connected to the folding section back of the pivot, and the pillow-section D, pivoted

to the folding section, substantially as set forth. 25

3. The combination, with the stationary casing, the pendulous frames pivoted thereto upon opposite sides, the folding section pivoted between and to the pendulous frames, 30 the springs G, arranged in the pendulous frames and connected to the folding section back of the pivot, the pillow-apron L, connected to the folding section and the back of the stationary casing, the pillow-section 35 frame having side pieces pivoted to the folding section, and a connecting - bar E', over which the apron is stretched when the folding section is horizontal, substantially as set forth. 40

In testimony whereof we affix our signatures in presence of two witnesses.

ISRAEL C. SMITH.

EDWARD E. HERRINTON.

Witnesses:

DENNIS L. ROGERS,

LUTHER V. MOULTON.