

No. 641,385.

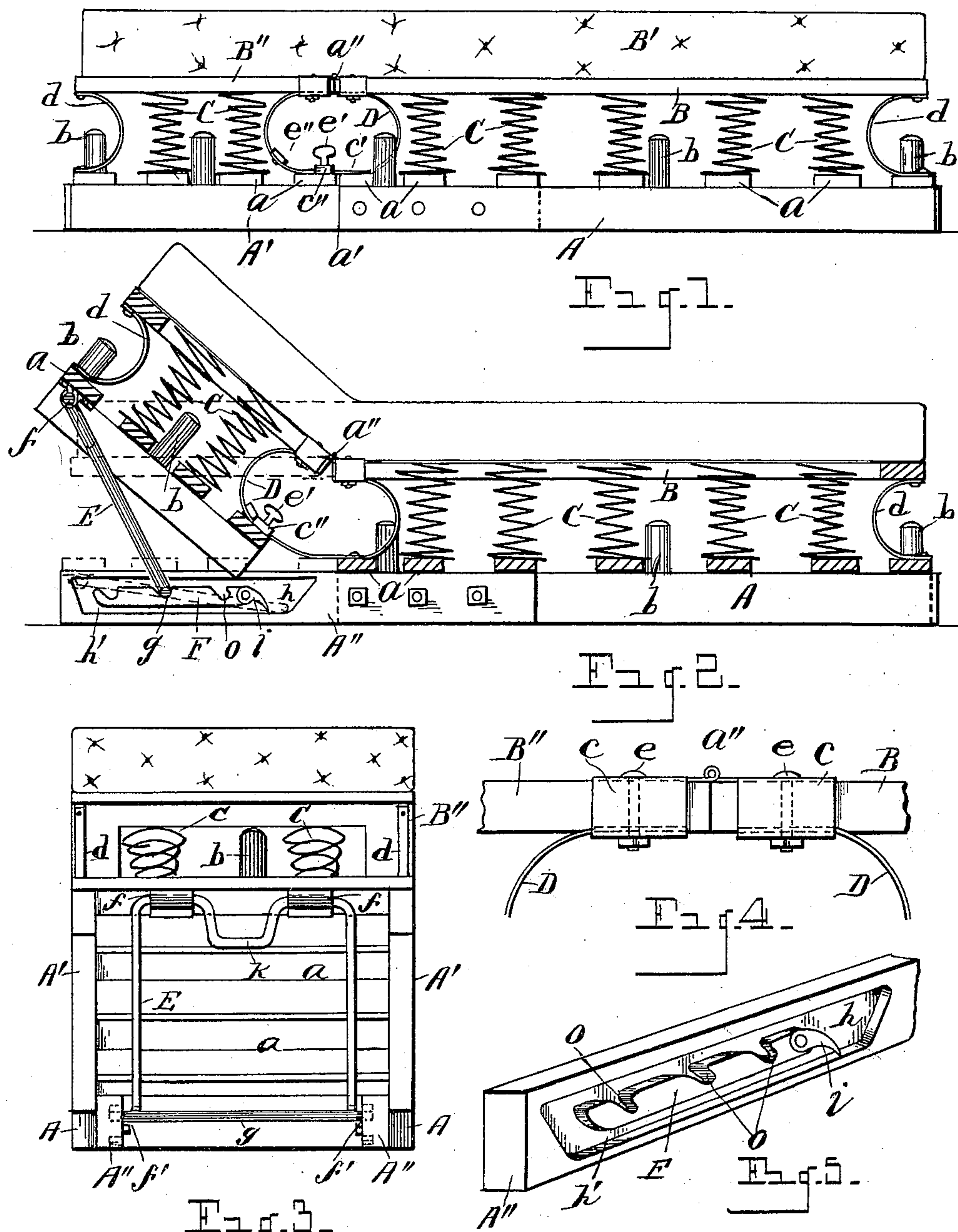
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ADJUSTABLE SPRING COT FRAME.

(Application filed Nov. 28, 1898.)

(No Model.)



WITNESSES.

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ADJUSTABLE SPRING COT-FRAME.

SPECIFICATION forming part of Letters Patent No. 641,385, dated January 16, 1900.

Application filed November 28, 1898. Serial No. 697,642. (No model.)

To all whom it may concern:

Be it known that I, PARKER D. HEATHER, a citizen of the United States, residing at Pontiac, in the county of Oakland, State of Michigan, have invented certain new and useful Improvements in Adjustable Spring Cot-Frames; 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to adjustable spring cot-frames; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out particularly in the claims.

The objects of the invention are to provide simple and efficient means for adjusting and supporting the head-section of a cot-frame in an inclined position, so as to raise the head and shoulders of the occupant of the cot to any desired elevation, the arrangement of the parts being such as to facilitate the raising and lowering of the hinged head-section and to provide for securely supporting the joint between the hinged and fixed sections of the frame in such manner as to permit of the free movement of the hinged section and at the same time maintain the meeting ends of said sections firmly in place. These objects are attained by the construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a spring cot-frame involving my invention. Fig. 2 is a central longitudinal section through Fig. 1, the hinged head-section of the frame being raised. Fig. 3 is an end elevation of Fig. 2. Fig. 4 is an enlarged detail view showing the hinge connecting the adjustable and fixed sections of the cot and the manner of securing the ends of the bowed spring uniting said sections. Fig. 5 is a perspective view of the inner face of one of the side rails of the fixed portion of the cot-frame, showing the recess therein and a notched bar in the center of said recess adapted to receive the ends of the hinged bail which supports the adjustable section of the cot.

Referring to the letters of reference, A designates the bottom rails of the cot-frame, which are connected by cross-slats *a*. Said rails A are divided near their forward ends, as at *a'*, forming an adjustable forward section A'.

B designates the side rails of the upper frame, which supports the mattress B', and which is in turn supported upon the springs C, which rest upon the cross-slats *a* of the lower frame. The side rails B of the upper frame are divided near their forward ends and are united by hinges *a''*, forming a movable section B'' of the head portion of the upper frame. The springs C support the mattress-frame, imparting the desired resiliency thereto, while the posts *b*, mounted on the lower frame, prevent the mattress-frame from being depressed sufficiently to collapse the springs.

To obviate an excessive lateral movement of the mattress-frame, said frame is tied to the lower frame by means of flat curved springs *d*, which maintain the two frames in proper alinement, but in no sense interfere with the resiliency of the mattress-frame.

The hinges *a''*, which unite the movable section of the cot-frame to the remaining portion thereof, are provided with rectangular sleeves *c*, which receive the opposed ends of the rails B B'.

D designates a bow-spring, the opposed ends of which enter the sleeves *c* of the hinges *a''* and are secured therein by the bolts *e*, which pass through the sleeves, rails, and springs. The bow of the spring D is adapted to rest upon the slats of the frame and is rigidly secured at *c'* to one of the slats of the fixed portion of said frame. Mounted upon one of the slats of the movable portion of the frame is a keeper *c''*, through which the arc of said spring is adapted to freely pass and in which is a set-screw *e'*, which may be screwed downward upon said spring to lock the spring within said keeper. Fixed upon the bowed spring D is a stop-block *e''*, which is adapted when the hinged section is raised to engage the keeper *c''* and limit the distance which said keeper shall travel outward on said spring. This sliding of the keeper upon the spring when the hinged section is raised relieves said spring from undue strain and permits the hinged section to move freely upon

its hinges a'' . When the hinged section is depressed to its normal position, the set-screws e' may be screwed downward upon the springs D, so as to lock the springs tightly in said keepers, thereby assisting to maintain a firm connection between the hinged and the fixed sections of the cot-frame.

To provide for supporting the hinged section of the frame in an inclined position, a rectangular bail E is employed, which is hinged or journaled at f to the under face of one of the cross-rails of the hinged section, extending transversely thereof and being provided at its free end with a cross-rod g , whose ends project beyond the sides of said bail. Secured to the inner faces of the rigid portions of the lower side rails A are the rail-sections A'' , having in their inner opposite faces an oblong recess h , in the center of each of which is located a notched bar F. These bars are so situated in the center of said recess as to form a way h' around them, in which the projecting ends f' of the rod g are adapted to travel. Pivoted to the rear ends of the notched bars F are the gravity-dogs i , whose points are adapted to lie upon the bottom of the recess h . In the normal position of parts, with the hinged section extending horizontally in line with the immovable portion of the cot-frame, the ends of the rod g lie within the opposed recesses h of the rails A'' in the rear of the dogs i . Upon the raising of the outer end of the hinged section of the cot the rod g of the bail is drawn forward, causing the projecting ends thereof to ride over the dogs i and onto the upper faces of the notched bars F. As the said hinged section of the frame is raised the lower rod of the supporting-bail is drawn forward over the notches of the bars F, into which the ends of said rod are adapted to drop to support the hinged section of the cot-frame at any desired inclination, as clearly shown in Fig. 2. When it is desired to lower the hinged section of the cot-frame, the lower end of the bail is swung forward, so that the ends of the rod thereof travel past the forward ends of the notched bars F, when said rod will drop to the lower portion of the way below said notched bar and will slide rearwardly therein past the gravity-dogs i , which rise as the ends of the bar g of the bail pass thereunder, in which position of parts the operation of raising the pivoted section of the cot-frame will again cause the projecting ends of the lower bar of the bail to ride over the dogs and enter the notches of the bars F. The center of the hinged bail E at its upper portion is provided

with a depending loop k , which may be grasped by the operator and serves as a means of manipulating the bail in the operation of raising and lowering the hinged section of the cot-frame.

It will be understood that while this invention has been described as an adjustable cot-frame it may be used as a spring-bed frame in which an invalid may be supported in a sitting posture. The invention is also adaptable to ambulance and hospital cot-frames as well.

Having thus fully set forth this invention, what is claimed is—

1. In an adjustable cot-frame, the combination of the mattress-supporting frame having a hinged section, the base-frame having a jointed section, the springs interposed between said frames, the bow-springs interposed between the mattress-frame and the base-frame at the joint between the hinged and the stationary portions thereof and so as to flexibly unite said frames, and means for supporting the hinged section at various degrees of inclination.

2. In a cot, the combination of the rigid portion of the frame, the hinged portion attached thereto, the bail hinged to said hinged portion and extending transversely thereof, said bail consisting of a quadrangular frame provided at its upper hinged portion with a depending loop and its free end having lateral projections f' , the rails of the cot-frame having oblong recesses in the opposed inner faces thereof, the bars having notches in their upper edges located centrally within said recesses forming a continuous way around said bars between their marginal edges and the wall of said recesses, the lateral projections on the free end of said bail lying in said ways and traveling therein as the bail is swung, said projections being adapted to engage the notches in said bars, and a dog pivoted to one end of each of said bars to swing downward across said ways.

3. In a cot-frame, the combination of the fixed and hinged portions of said frame, the bowed springs interposed between said frames at the point of hinging, the keepers upon the hinged portion of the frame adapted to freely receive said springs, and the stops upon said springs adapted to be engaged by said keepers.

In testimony whereof I sign this specification in the presence of two witnesses.

PARKER D. HEATHER.

Witnesses:

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