No. 630,744. Patented Aug. 8, 1899.

J. RUSSELL.

FOLDING OR COLLAPSIBLE BEDSTEAD.

(Application filed Oct. 21, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

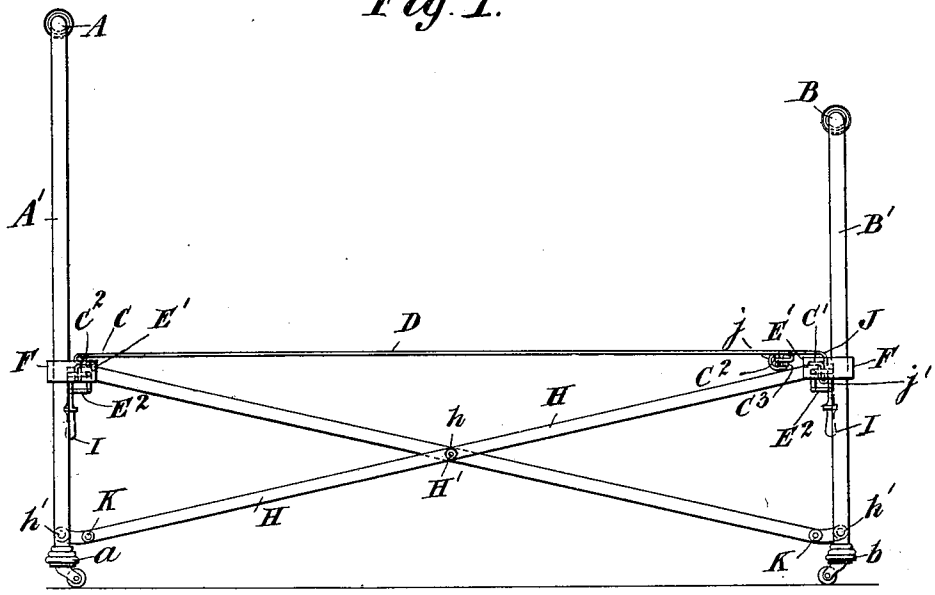
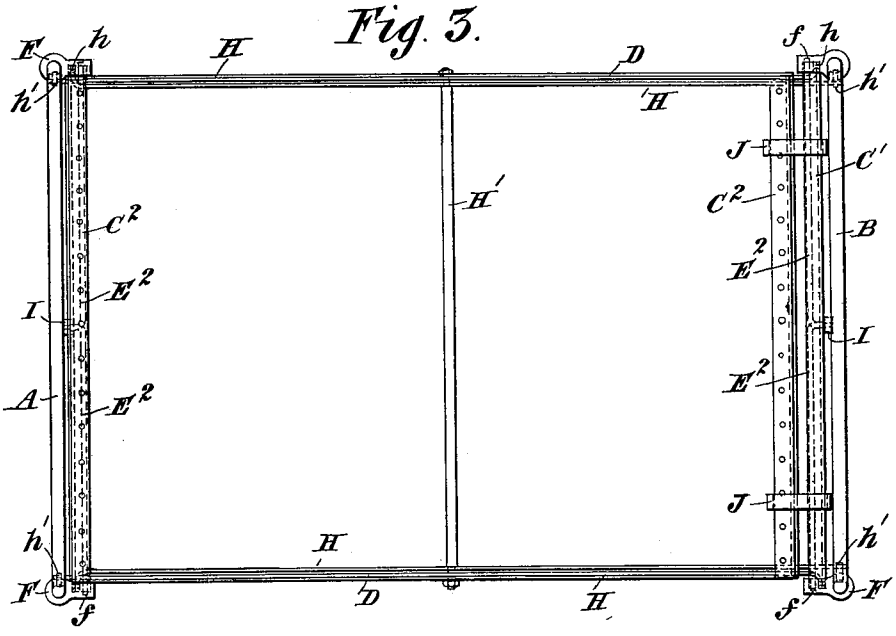


Fig. 3.



Witnesses:-
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Alan Balch.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 630,744. Patented Aug. 8, 1899.

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(Application filed Oct. 21, 1898.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 2.

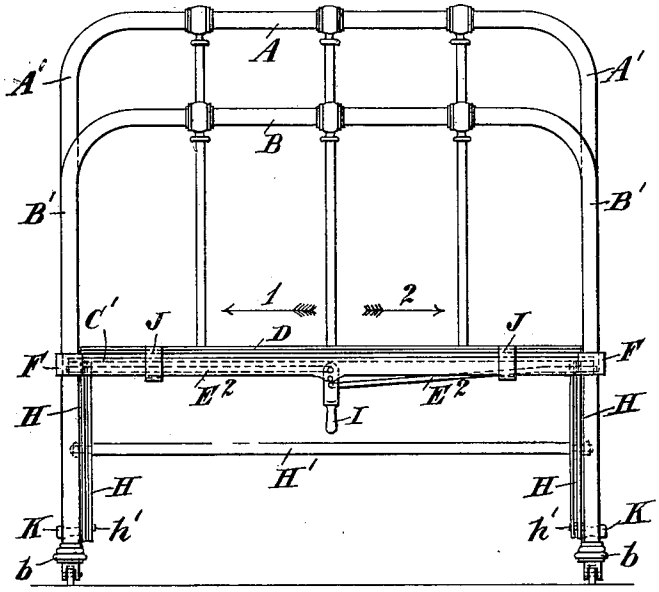


Fig. 4.

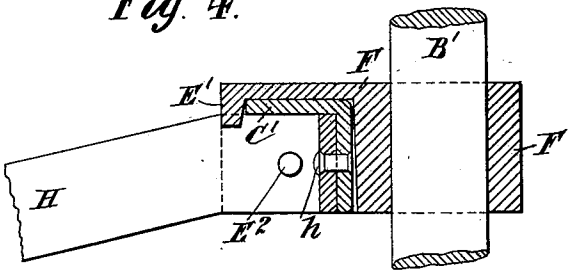


Fig. 5.

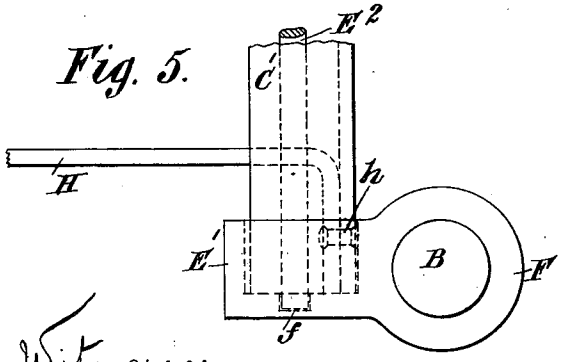


Fig. 6.

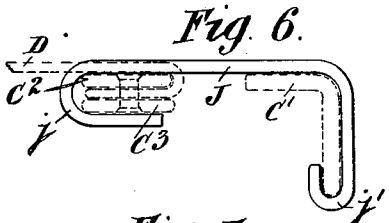


Fig. 7.

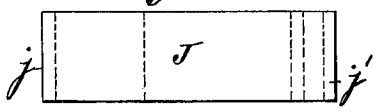


Fig. 8.

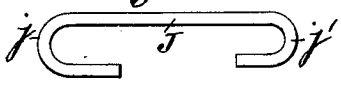
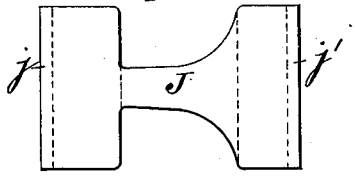


Fig. 9.



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UNITED STATES PATENT OFFICE.

JOHN RUSSELL, OF HEWORTH, ENGLAND.

FOLDING OR COLLAPSIBLE BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 630,744, dated August 8, 1899.

Application filed October 21, 1898. Serial No. 694,234. (No model.)

To all whom it may concern:

Be it known that I, JOHN RUSSELL, a subject of the Queen of Great Britain and Ireland, residing at Heworth, near York, in the county of York, England, have invented new and useful Improvements in or Relating to Folding or Collapsible Bedsteads, of which the following is a specification.

This invention relates to improvements in or relating to folding or collapsible bedsteads which are particularly applicable for hospital purposes. Its object is to avoid removing the bolts and clips that are usually employed for stretching a spring-mattress on, say, an iron bedstead and to save time by providing simple, ready, and effective means for enabling the bedstead to be easily folded when it is required to be removed from one room or ward to another and the spring-mattress readily secured in position.

In the drawings hereunto annexed, Figure 1 is a side elevation, Fig. 2 an end elevation, and Fig. 3 a plan, looking at the top of a bedstead constructed according to this invention. Figs. 4 and 5 are respectively an enlarged sectional elevation and a plan looking at the top of the corner-piece. Figs. 6 and 7 are respectively an enlarged elevation and plan of clip employed for retaining the spring-mattress in position. Figs. 8 and 9 are an enlarged elevation and a plan of clip.

Like parts in all the views are marked with similar letters of reference.

According to this invention the bedstead may be constructed of any suitable material—such as, say, for example, iron—arranged in a somewhat similar manner to the iron bedsteads with spring-mattresses.

A is the head piece or rail; B, the foot piece or rail; C C′, the end rails or angle-bars, respectively, arranged transversely in front of the head and foot pieces, and D the woven spring-mattress, all of which may be of the usual and ordinary construction; F, the corner-blocks, which are cast respectively on or otherwise secured to the pillars A′ B′ and side and end rails of the bedstead; but instead of making the male and female portions of the corner-pieces F in the ordinary dovetail form I arrange the corner-pieces F, which are fixed on or attached to the pillars A′ B′, to be shaped as shown at Fig. 4, and the downwardly-projecting piece E′, which forms a hook to take the place of the conical-shaped wall of the recess in the female portion of the ordinary dovetail corner-block. In this arrangement an angle-bar C or C′, extending nearly the full width of the bed, takes the place of the male portion of the dovetail, and its ends are made to pass under and be retained in position by the downwardly-projecting piece E′, against which the inner edge of the angle-bar abuts, as shown at Fig. 4. The upper ends of the side bars H, which are pivoted on rod H′, may be bent or turned at or about a right angle and riveted to the angle-bars C or C′, as shown at *h*, Fig. 5. In order to prevent the angle-bar C or C′ from working out of the horizontal position after its ends have been placed in engagement with the downwardly-projecting piece E′, pins E^2, which pass through the side bars H at each corner-piece F, (see Figs. 4 and 5,) are made to enter holes or recesses *f* in the corner-pieces F.

The pins E^2, respectively at the head and foot rails, are operated by the hand-lever I, pivoted to the rail C or C′, the inner ends of the pins E^2 being prolonged and jointed to the said lever at points respectively above and below its fulcrum, as shown at Fig. 2. By this means whenever the hand portion of lever I is moved in the direction of arrow 1 the pins E^2 will be withdrawn from the recesses *f* to permit of the bedstead being folded up, but when the handle portion of lever I is moved in the direction of arrow 2 the pins E^2 will be moved so as to project into the recesses *f*, thus providing a quick and ready means for securely fixing it in position and as quickly and readily unfastening it for folding up.

The wire mattress or webbing D, which is of the usual and ordinary construction, may be riveted to the rail C at the head A between the top of the rail and a clamping-piece C^2, or, if desired, the clamping-piece may be dispensed with; but at the foot B of the bedstead I prefer to use the following arrangement, namely: The end of the wire webbing or mesh D, which forms the spring-mattress, is riveted or otherwise secured between the clamping-pieces C^2 C^3, (see Fig. 6,) after which the pieces C^2 C^3, with the webbing between them, are turned under the webbing D. The webbing is then ready for being stretched in

position and secured in position to the foot-rail C′ by either of the clips J, (shown at Figs. 6 to 9,) the clip shown at Figs. 6 and 7 being for use with an angle-bar and the clip shown at Figs. 8 and 9 being for use with a flat bar. One end *j* of clip fits onto the plates C^2 C^3, which are used to inclose the wire mesh D, the other end *j′* being made to hook onto the lower portion of an angle-bar or onto a flat bar which serves as the end rail. To fix it in position, the wire mesh D is opened out a little during the riveting of the plates C^2 C^3 together, just wide enough to allow the clip J to be forced between the mesh. The act of stretching the wire mesh tends to close the gap thus made, and when the clip J is hollowed out at the sides, as shown at Fig. 8, it aids in preventing the wriggling out of position when not in use. By this means a ready and simple method is provided for tightening the wire mesh or webbing D whenever it becomes slack. This is accomplished by simply folding the mesh D around the plates C^2 C^3, thereby taking up its length and reattaching to the end rail C′ by the clip J, as described, thus dispensing with the usual winding and other bolts, together with their winding-keys and washers, and at the same time enabling the frame to be held in position and the wire webbing or mesh to be stretched simply by hooking on the clips J and then pressing down the corners of the framework until the dovetails or their equivalents are engaged in position.

In order to prevent the head A and foot B from falling farther back than is necessary during the hooking of the wire mesh D to the foot-rail C′, I provide the studs K, which may be fixed to or be placed in position on the outside of the side rails H of the folding frames at or about, say, an inch from the pillars A′ B′ when the latter are in an upright position. By this means the head and foot can fall back to, say, an angle of about seventy degrees, thus leaving the hands free to hook on the wire mesh D.

Having now described the nature of my said invention, what I claim, and desire to secure by Letters Patent, is—

1. In a folding bedstead as set forth, the combination of the head and foot pieces, corner-blocks fixed to the head and foot pieces and provided with downwardly-projecting flanges, folding side rails interposed between the head and foot pieces, said side rails being pivotally connected together at their centers, jointed at their lower ends to the head and foot pieces, and fixed at their upper ends to transverse rails, transverse rails adapted to engage with the downwardly-projecting flanges of the corner-blocks, and to be secured in position by the sliding pins and the sliding pins attached as described to the said transverse rails and supported by said side rails, substantially as set forth.

2. In a folding bedstead as set forth, the combination of the head and foot pieces, corner-blocks fixed to the head and foot pieces and provided with downwardly-projecting flanges, folding side rails interposed between the head and foot pieces, said side rails being pivotally connected together at their centers, jointed at their lower ends to the head and foot pieces, and fixed at their upper ends to transverse rails, transverse rails adapted to engage with the downwardly-projecting flanges of the corner-blocks, and to be secured in position by the sliding pins, sliding pins attached as described to the said transverse rails and supported by said side rails, a handle for actuating said sliding pins, a spring-mattress composed of woven-wire webbing fixed at the head to the transverse rail, and at the foot secured to a clamp, a clamp consisting of two rails capable of being secured to the transverse rail, and a clip for attaching the clamp to the transverse rail, substantially as and for the purposes set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JOHN RUSSELL.

Witnesses:

CARL KRESSER,

THOMAS YORKE.