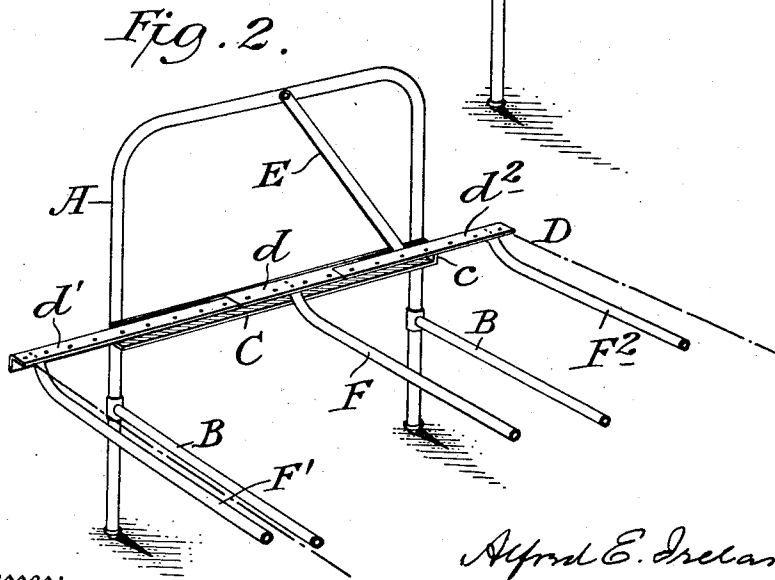
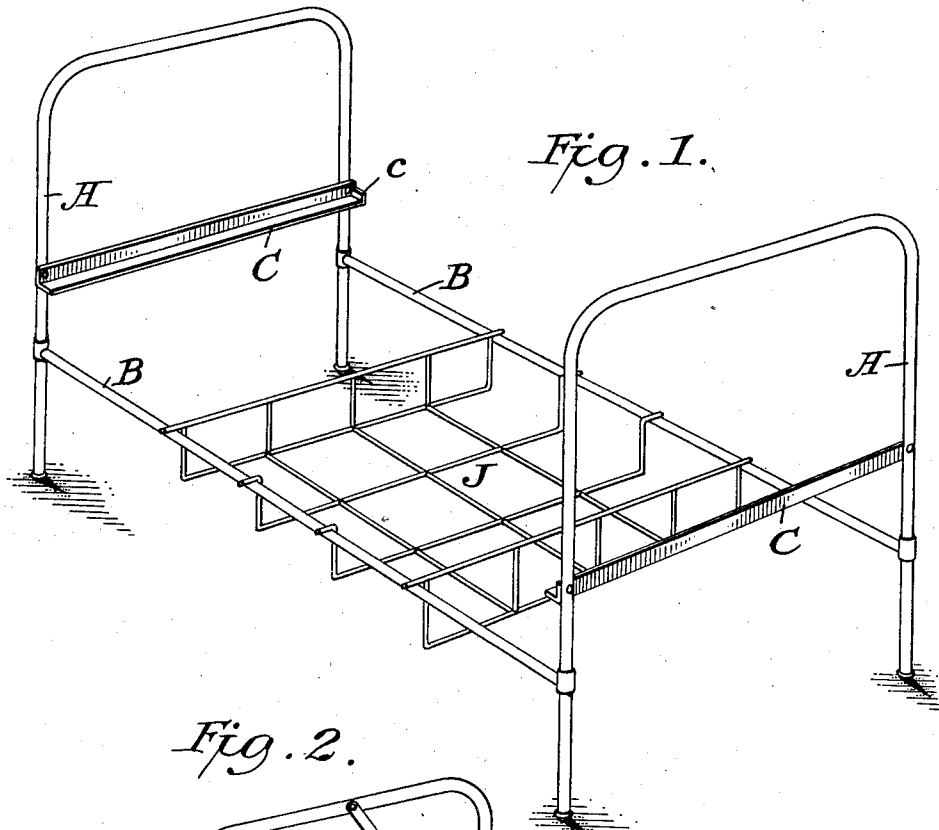


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 CONVERTIBLE BED.
 APPLICATION FILED AUG. 19, 1911.

1,043,772.

Patented Nov. 5, 1912.

2 SHEETS—SHEET 1.



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CONVERTIBLE BED.

1,043,772.

Specification of Letters Patent.

Patented Nov. 5, 1912.

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To all whom it may concern:

Be it known that I, ALFRED E. IRELAN, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Convertible Beds, the following being a full, clear, and exact disclosure of the one form of my invention which I at present deem preferable.

For a detailed description of the present form of my invention, reference may be had to the following specification and to the accompanying drawings, which illustrate my invention.

Figure 1 shows the frame of my convertible bed without the mattress; Fig. 2 is a perspective view showing one end of the bed bottom frame in its open position. Fig. 3 is a view similar to Fig. 2, the frame being partly folded. Fig. 4 shows one end of the fabric frame. Fig. 5 shows on a larger scale the joint in the end bar of the bed-frame.

My invention relates to a bed structure capable of being employed as a bed or couch on the one hand and as a seat or davenport on the other hand. The means by which the bed is converted from one form to the other reside wholly in the mattress frame without any change in the bed-frame itself. In brief, the mattress frame is formed in sections, preferably in three sections, the central section being narrow and formed with its own individual strands of mattress fabric and the other two sections being jointed to the central one on either side and likewise provided with their individual braces and tension strands of fabric. The end bar of the mattress frame considered as a whole is divided in three sections, the central one having the two side sections pivoted thereto as wings, while the mattress fabric is so constructed as to be foldable longitudinally along lines corresponding to the joints of the end sections. The width of one wing section plus that of the central section is substantially equal to the width of the bed-frame, while the third section is only of such width that, when folded to the proper position, it will form the back of the davenport. The last named section is provided with a link at each end connecting it to the upper cross bar of each of the re-

spective end pieces of the bed-frame, while the mattress frame is also provided with a notched engagement with the bed-frame so as to be locked to the bed-frame in either its extended or its folded position. The mattress frame as a whole is slidable transversely on the bed-frame by means of transverse guides upon which the mattress frame is mounted and which are capable of allowing the mattress frame to move transversely with respect to the bed-frame.

Turning to Fig. 1 of the drawing, A A represent the end pieces of the bed-frame and B B the longitudinal side bars thereof, while J represents a metallic basket suspended below the frame bars for the reception of the bed clothes. C C represent guides or supports for the mattress frame upon which the mattress is movable transversely with respect to the bed-frame. These guides or supports are usually in the form of angle bars, one branch of the angle being vertical and riveted to the inside of the upright posts of the end piece and the other branch being horizontal and projecting inwardly from the lower edge of the upright branch. At one end the extremity of the horizontal branch is turned upward, as at *c*, to form a locking flange which will be hereinafter referred to in detail.

Referring to the drawings which show the mattress frame, the sectional end bar is shown as composed of three parts, to-wit, the central part *d* and the two end parts *d*¹ *d*² on either side of the central one. These are jointed together so that, while the central section remains horizontal, either of the wing sections on the respective sides can be turned or folded upwardly to an approximately upright position. In Fig. 2 the three sections are shown in their horizontal position, their combined length being greater than the width of the end piece A. In Fig. 3 the wing section *d*² (which is jointed by link E to the top cross bar of the end frame) is shown in its folded or upright position, the corresponding wing section of the mattress frame thereby serving as the back of the davenport, while the sections *d* and *d*¹ have a combined length approximately equal to the width of the end piece A. In either position of the mattress the horizontal mattress frame section corresponding to the end bar section *d*¹ may be

lifted up to give access to the basket or receptacle J. The jointed end bar is formed of angle iron, one branch of the angle being vertical, with its lower edge seated upon the inwardly projecting branch of the angle C which forms its guide or support, and the other branch being horizontal and projecting inwardly from the upper edge of the vertical branch. The section d of the angular end bar has its upright branch extended so as to overlap the section d^2 and is provided with a latch K adapted to hook over the aforesaid locking flange c , while the section d^2 is also provided with a latching notch K¹ which similarly engages the flange c when the mattress frame is in its horizontal position. This is shown in Figs. 4 and 5.

Assuming that the mattress frame is in its horizontal position, shown in Fig. 2, it is only necessary to lift the outer edge of the wing section d^2 of the mattress frame, which is thereby freed by disengagement of notch K¹ from the flange c , and is immediately turned or folded into its upright position as shown in Fig. 3, its movement being determined by the links E. When the up folded wing-section reaches its upright position, it is allowed to settle down slightly when the latch K will engage the flange c and the parts be thereby locked in their relative positions. The structure may then be used as a davenport or seat with a back formed by the folded-up wing, and the horizontal part formed by the central section and opposite wing section of the mattress. To restore it to its horizontal position, the mattress frame is slightly lifted by raising the back portion until the latch K is released from the flange c when it will drop by gravity and assume the horizontal position shown in Fig. 2, the horizontal sections sliding forward on their guiding supports and the third section swinging downward, under control of the links E, to the horizontal position. The fabric for the sections of the mattress frame is designated generally by the reference character D, and includes the usual strands R that have tension connections to the said sections.

The structure above described is an extremely simple one, involving no joints or sections in the bed-frame itself which always remains in the same condition, while the mattress frame itself, which is the only sectional jointed member of the organization, assumes its different positions and is locked therein in a simple, cheap and readily operated manner.

What I claim as new and desire to secure by Letters Patent is:

1. In combination with a bed frame provided with transversely extending end guides, a folding sectional metallic mattress frame carried by the guides, said frame having a central section provided with a brace

rod and two wings each provided with individual bracing joined on a longitudinal axis to the respective sides of said central section, said mattress frame being provided with means for engaging the guides for fixing the horizontal and upright positions of the same relative to the bed frame.

2. In combination with a bed frame provided with mattress frame guides, a mattress frame carried by the guides and formed of sections foldable on a longitudinal axis, and a latch carried by the mattress frame for engaging one of the guides.

3. The combination with a bed-frame having transverse mattress frame guides, of a sectional mattress frame on said guides, and a link connecting one section of said mattress frame to the bed-frame.

4. The combination with a bed-frame having upright corner posts and a terminal connecting crosspiece, of transverse mattress guides carried by the corner posts, a sectional mattress frame on said guides, and a link pivoted at one end to said crosspiece and at its other end to a section of said mattress frame.

5. The combination with a bed-frame, of a transversely movable mattress frame formed of inner and outer sections, each section having its individual end-bars, brace rod and tension strands, and the outer section movable into an upright position, a link connecting the above-mentioned outer mattress section to the bed-frame, and a stop for fixing the horizontal and upright relation of the inner and outer section.

6. The combination with a bed-frame having transverse guides, of a sectional mattress frame movable transversely on the bed-frame, two stops for giving two fixed positions of the mattress frame on the bed-frame, and a link connecting one of the mattress frame sections to the bed-frame.

7. The combination with a bed-frame of a transversely movable mattress frame formed in sections, a link for guiding one mattress frame section from a horizontal to an upright position and a lock between the mattress frame sections and bed-frame released by lifting the mattress frame with respect to the bed frame.

8. The combination with a bed-frame of a jointed sectional mattress frame movable transversely on the said frame and having its transverse end bars provided with a notch engagement with the bed-frame at two points, and a link for guiding one mattress frame section from a horizontal to an upright position.

9. A bed-frame having its end pieces connected by longitudinal bars, a transverse guide on each end-piece on a higher level than said bars, a longitudinally sectioned mattress frame movable transversely on the said guides, a link for guiding one mattress

frame section from a horizontal to an upright position and stops for holding the mattress frame horizontally in two different positions with respect to the bed-frame.

- 5 10. The combination with a bed frame, of transverse guides carried by the ends thereof, said guides having stops at one end, a mattress frame formed of central and side sections having pivotally connected end bars, the end bars of one side section being provided with notches for engaging the stops to retain the sections in longitudinal posi-
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tion, a link connecting the notched bar to the end frame, and latches carried by the end bars of the central section for engaging the stop to hold the linked side section in an upright position. 15

In witness whereof I have hereunto set my hand, before two subscribing witnesses, this 14th day of August, 1911.

ALFRED E. IRELAN.

Witnesses:

J. J. KEENAN,
GUSTA ROESLER, Jr.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."