No. 661,936. Patented Nov. 13, 1900.

J. M. MARTIN.

SPRING BED.

(Application filed Jan. 24, 1898.)

(No Model.) 2 Sheets—Sheet 1.

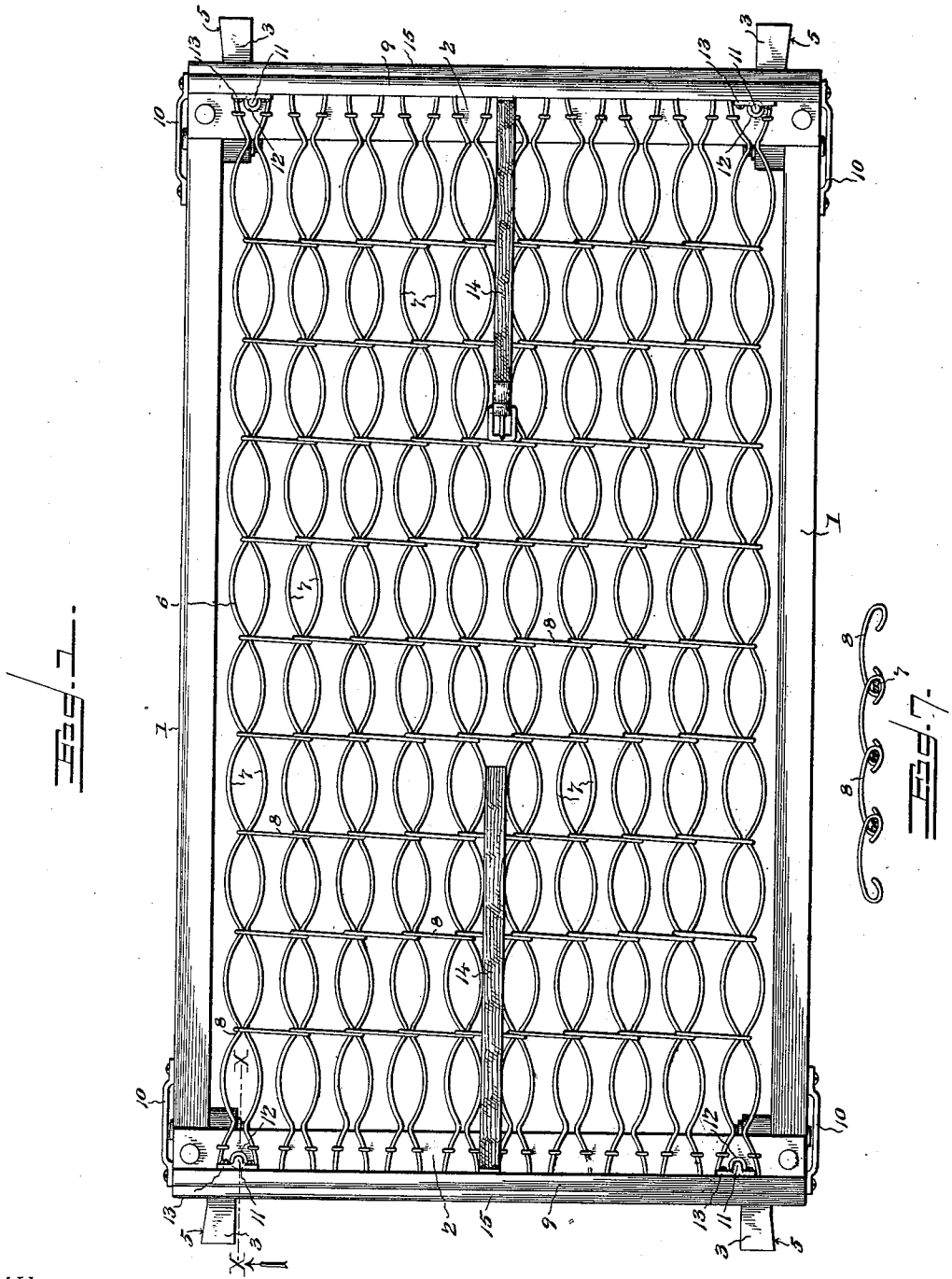


Fig. 1.

Fig. 2.

Witnesses
E. F. Stewart.
U. B. Hillyard.

James M. Martin Inventor
By Wm S Attorneys,
C. A. Snow & Co.

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

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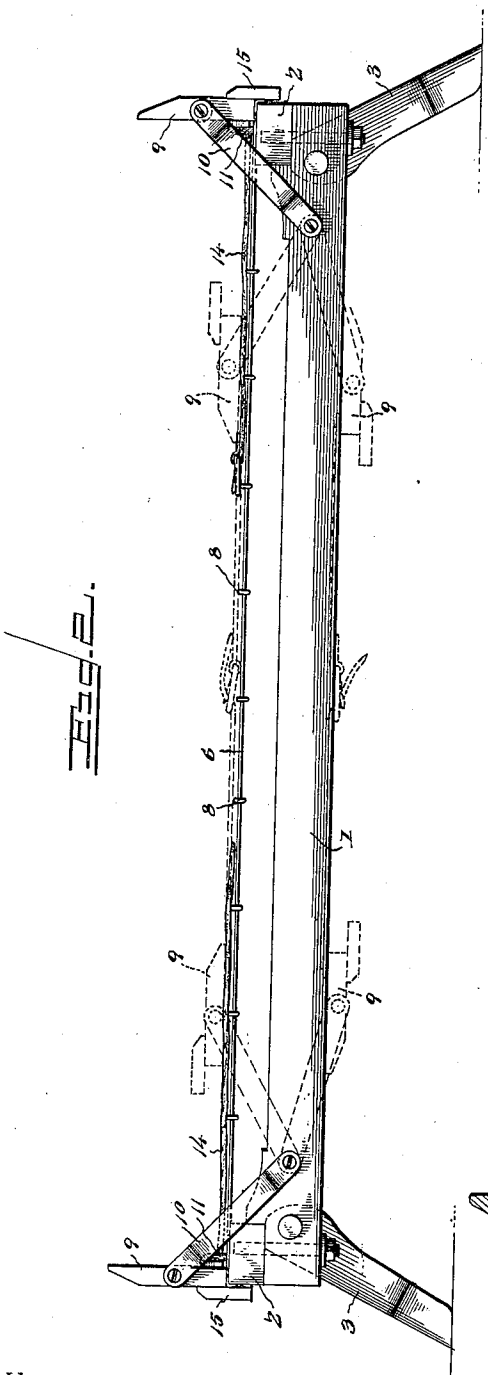


Fig. 2.

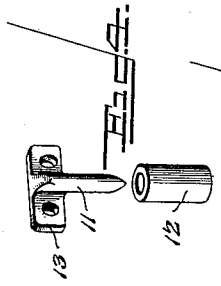


Fig. 4.

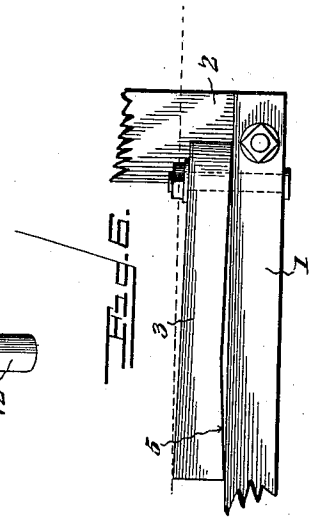


Fig. 5.

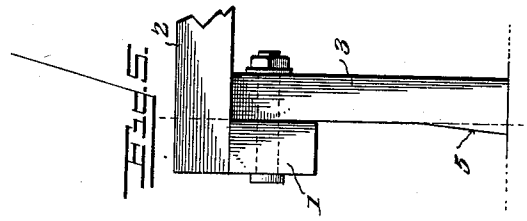


Fig. 6.

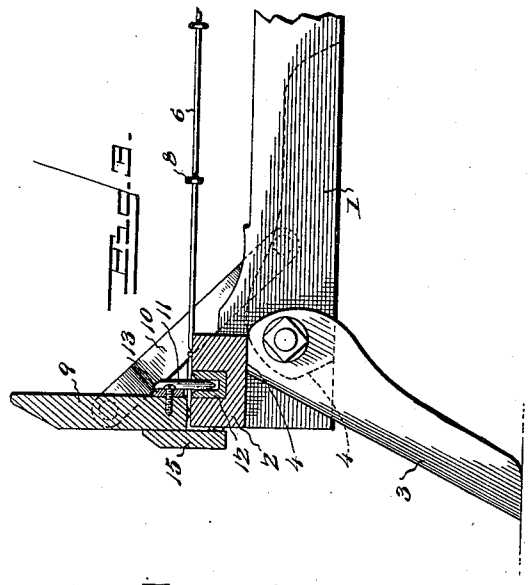


Fig. 3.

Witnesses
E. F. Stewart.
V. B. Hillyard.

James M. Martin Inventor
By Wm. S. Attorneys,
C. A. Snow & Co.

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

UNITED STATES PATENT OFFICE.

JAMES MONROE MARTIN, OF KNOXVILLE, TENNESSEE.

SPRING-BED.

SPECIFICATION forming part of Letters Patent No. 661,936, dated November 13, 1900.

Application filed January 24, 1898. Serial No. 667,780. (No model.)

To all whom it may concern:

Be it known that I, JAMES MONROE MARTIN, a citizen of the United States, residing at Knoxville, in the county of Knox and State of Tennessee, have invented a new and useful Spring-Bed, of which the following is a specification.

The subject-matter of this invention is a folding bed or cot and spring-bottom, and has for its objects to provide a spring-bottom of novel form which will be elastic, strong, durable, and easily kept clean; also to combine with the frame head and foot pieces which can be folded upon or beneath the spring-bottom and which when in position will be firmly stayed and braced, and also to provide folding legs which will close by a wedging action and prevent their accidental displacement when the bed is placed aside or not required for immediate use.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a top plan view of a bed embodying the characteristic features of this invention. Fig. 2 is a side elevation, the dotted lines showing the position of the head and foot pieces when folded upon and beneath the frame. Fig. 3 is a detail section, about on the line *x x* of Fig. 1, on a larger scale. Fig. 4 is a detail perspective view of the socket and pin by means of which the head and foot pieces are held in place. Fig. 5 is a detail view in elevation of a folding leg, showing its relation to the frame. Fig. 6 is a detail view of the parts illustrated in Fig. 5, showing the leg folded. Fig. 7 is a detail section of the spring or fabric bottom.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The frame, which may be of any size, according to the style of the bed, comprises side rails 1 and end rails 2, the several rails being bolted or otherwise firmly and rigidly attached at their meeting ends. The folding legs 3 are pivotally connected with the end portions of the side rails 1, and when the bed is set up they incline outwardly and downwardly, being braced at their upper ends against the lower sides of the end rails 2. These legs 3 may be attached to the side rails in any manner found most convenient and which will admit of them folding, so as to reduce the size of the bed to enable it to be stored in the smallest space possible. The pivotal ends of the legs have flattened ends 4, which engage with the lower side of the end rails 2 and limit the movement of the legs when unfolded and maintain them in proper position when the bed is erected for use. The legs are thickened at their free ends on the side adjacent to the rails to which they are pivoted, the thickening being gradual, so that when folding the legs they will close by a wedging action, which will prevent their accidental displacement and insure them being retained in a folded condition. The principal feature is the lateral extension 5, which may be provided in a number of ways, either by thickening the lower or free ends of the legs, as described, or by bending them to one side.

The spring-bottom is composed of longitudinal strands or wires 6, provided in pairs and similarly waved or corrugated, the complementary wires or strands being placed so that the waved portions come directly opposite each other, thereby providing alternately swelled and contracted portions, the latter touching and being secured together. The waved portions 7 of each pair of strands or wires curve outwardly in opposite directions in the plane of the bottom and enable the spring to yield longitudinally by elongating and at the same time provide an extended surface for the bedclothing, so as to obviate injury thereto. These longitudinal strands or wires 6 are secured at their ends to the rails 2 by staples or other suitable fastenings. Links 8 have their end portions formed into eyes which embrace the contracted portions of contiguous pairs of longitudinal strands or wires 6 and are the means for securing together the wires of each pair and connecting

all the pairs of wires in series, as illustrated. These links 8 extend transversely of the bed and are curved upwardly between their ends, so as to admit of the bed-bottom yielding laterally.

The head and foot pieces 9 are similarly formed and are connected with the end portions of the side rails 1 by means of links 10, the latter admitting of the said pieces either folding on top of or beneath the frame, as indicated by the dotted lines in Fig. 2. When in position, the pieces 9 rest upon the end rails 2 and are held in place by pins 11, secured to and pendent from the parts 9 and entering sockets 12, provided in the end rails. The pins 11 are formed with plates 13 at their upper ends, said plates being pierced by the passage of fastenings by means of which they are secured to the head and foot pieces. The sockets 12 are of metal and are let into openings in the end rails. In order that the pins may readily enter the sockets, their ends are made tapering. Tapes or straps 14 are secured at one end to the head and foot pieces and are adapted to be buckled or otherwise secured at their free ends, so as to hold the head and foot pieces when folded. A strip or molding 15 is secured to the lower edge portion of each of the pieces 9 and overlaps the joint formed between the said pieces and the end rails, thereby concealing the terminals of the wires 6 and giving a neat and finished appearance to the bed when in condition for use. These strips or molding 15 overlap the outer edges of the end rails 2 and serve to brace the parts 9, thereby supplementing the action of the pins 11, particularly when outward pressure is exerted upon the upper edge portions of the said parts 9. The bed is reduced to a compact form by folding the legs 3 and the foot and head pieces, the latter being secured by the tapes or straps 14 and the legs held fast by a wedging or binding action, as fully set forth herein. The legs are, however, held against displacement by means other than the wedging action just referred to. As will be seen, the spring-bottom extending, as it does, across the frame prevents the legs from falling outwardly on one side, and by folding the end pieces upon the under side of the bed, as shown in Fig. 2, and then securing these end pieces in folded position by means of the straps the legs are effectually held between the bed-bottom on one side and the folded end pieces on the other.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. A spring bed-bottom comprising pairs of wires similarly waved or crimped and disposed with the waved portions opposite, whereby swelled and contracted portions are formed, in combination with a series of separate links, each link comprising an outwardly-curved body portion having eyes at its ends, the eye at one end of a link receiving a pair of wires at their contracted portion and the eye at the other end of the link receiving a subjacent pair of wires at their contracted portion; substantially as described.

2. In a spring bed-bottom, pairs of wires similarly waved or crimped and disposed in parallel relation with the waved portions opposite and alining, whereby swelled and contracted portions are formed, in combination with links arranged at right angles to the length of the waved wires and spanning the space formed between the contracted portions of adjacent pairs of wires and connecting them and having their end portions encircling and securing together the said contracted portions of each pair of wires, substantially as set forth.

3. In a spring bed-bottom, pairs of wires similarly waved or crimped and disposed with the waved portions opposite, whereby swelled and contracted portions are formed, in combination with links consecutively arranged across the bed-bottom and having their contiguous end portions overlapping and formed into eyes to receive the contracted portions of pairs of wires, each link connecting the contracted portions of adjacent pairs of wires in addition to securing together the wires of each pair, substantially as specified.

4. In a bed, the combination with the frame, and a folding end piece, of links for connecting the end piece with the frame and having independent pivotal connection at their ends with each to admit of the end piece folding close against either the top or the bottom side of the frame, and an interlocking connection between the frame and end piece acting jointly with the links to fix the position of the end piece when in operative relation, substantially as set forth.

5. In a bed, the combination with the frame and a folding end piece, of links pivotally connecting the end piece with the frame, a pin-and-socket connection for properly positioning the end piece, and a strip secured to the lower edge portion of the end piece and adapted to overlap the end portion of the frame, substantially as set forth.

6. In a bed or the like, the combination of the frame, and a leg pivoted to fold against a side thereof in a plane parallel therewith, the outer end portion of the leg having the side facing the frame member to which the leg is pivoted thickened or formed with an integral offstanding inclined portion to come between the leg and frame and secure the leg by a wedging action and to provide an extended bearing-surface at the outer extremity of the leg, substantially as set forth.

7. In combination with the frame of a bed, an end piece, links loosely connecting said end piece with the frame and admitting of its folding against either the top or the bottom side of the frame, and means for securing the end piece when folded in either position, substantially as specified.

8. In combination with the frame of a bed, end pieces, links loosely connecting said end

pieces with the frame and admitting of their folding against either the top or bottom side of the frame, and fastening means for securing the end pieces when folded either upon or beneath the bed, said fastening means comprising complementary parts attached directly to the folding end pieces, substantially as set forth.

9. In a bed, the combination with the frame and folding end pieces, of links connecting the end pieces with the frame, pin-and-socket connections between the frame and the said end pieces, strips secured to the end pieces and adapted to overlap the end portions of the frame, and tapes or straps attached to the aforedescribed end pieces to hold them when folded either above or below the frame, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES MONROE MARTIN.

Witnesses:
W. H. SANDERS,
W. A. CHENABERY.