(No Model.)

R. W. WOODMAN.

KNOCKDOWN BED BOTTOM.

No. 347,980. Patented Aug. 24, 1886.

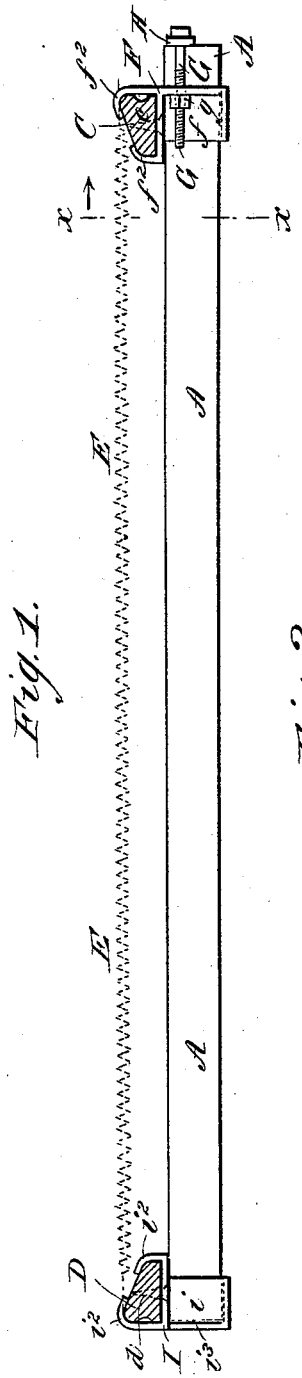

Fig. 1.

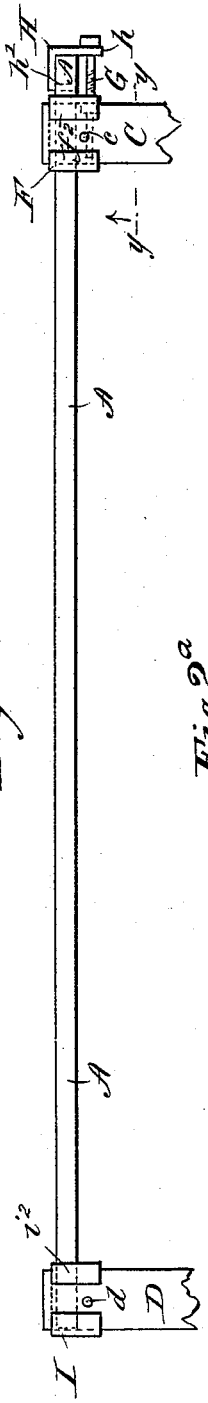

Fig. 2.

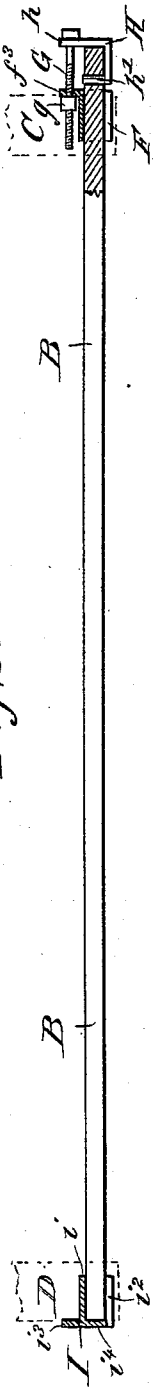

Fig. 2a.

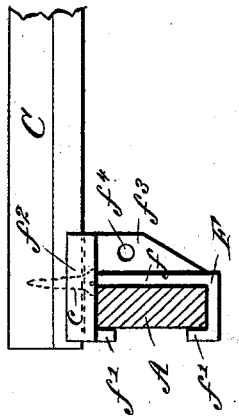

Fig. 3.

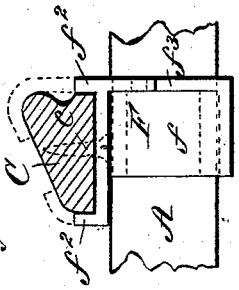

Fig. 4.

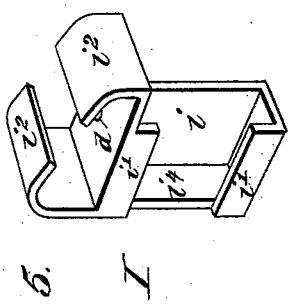

Fig. 5.

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REUEL W. WOODMAN, OF BAR MILLS, MAINE.

KNOCKDOWN BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 347,980, dated August 24, 1886

Application filed January 29, 1886 Serial No. 190,257. (No model.)

To all whom it may concern:

Be it known that I, REUEL W. WOODMAN, of Bar Mills, Buxton, county of York, State of Maine, have invented a new and Improved Knockdown Bed-Bottom, of which the following is a full, clear, and exact description.

My invention relates particularly to spring bed-bottoms, and has for its object to provide simple, inexpensive, efficient irons or fixtures, adapted to join the side rails and end bars of the bottom frame in such manner that the entire frame may be "knocked down" for storage in small space or for shipment, and may readily be set up for use when required, and whereby the springs or other flexible mattress-support of the bottom may be stretched or strained up tightly at any time.

The invention consists in certain novel features of construction and combinations of parts of the bed-bottom, all as hereinafter fully set forth.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an inside face view of one of the side rails of the bed-bottom, with the head and foot bars in section and with the bed-springs indicated in dotted lines. Fig. 2 is a plan view of one of the side rails with the head and foot bars broken away. Fig. 2ª is a similar view of the other side rail, partly in section, and with its fixtures shown in section and the head and foot bars partly shown in dotted lines. Fig. 3 is an enlarged detail view in section on the line *x x*, Fig. 1. Fig. 4 is an enlarged detail view in section on the line *y y*, Fig. 2; and Fig. 5 is a perspective view of the joint-iron at the other end of the bed.

The opposite side rails, A B, and the opposite end bars, C D, constitute the wood frame of the bed-bottom, the elastic or spring wires E of which are connected to the bars C D, as indicated in dotted lines in Fig. 1. To one end of each side rail there is fitted a joint-iron, F, the lower part of which is formed with one whole side, as at *f*, which bears against one face of the rail, and has inbent flanges *f' f'*, lapping on the opposite face of the rail, whereby the iron F is adapted to be slipped upon and adjusted along the rail. At its upper part the joint-irons F are provided with upturned flanges f^2 f^2 at opposite edges, and ranging at right angles to the lower side-rail-receiving opening, and between which upturned flanges the adjacent end bar, C, of the frame is held. These flanges f^2 f^2 may be short, as indicated in full lines in Figs. 3 and 4, or may be longer and be bent, so as to overlap upon the top of the end bar, as indicated in dotted lines in Fig. 4 and in full lines in Figs. 1 and 2. Next the side *f* of the joint-iron F its top is extended laterally, to broaden the bearing for the end bar, C, while allowing the use of a thin side rail, A, and in the angle between the top and side *f* is fitted a bracket, f^3, which not only strengthens the iron, but affords a bearing at f^4 for the threaded end of a screw-bolt, G, which is passed loosely or freely through the lug *h* of a clamp-iron, H, held to the end of rail A. The bolt G passes freely through the bracket f^3, and inside of it receives a threaded nut, *g*, whereby when the bolt is turned one way the joint-iron will be drawn outward on the rail A to tighten the wire E of the bed-bottom. The clamp-iron H is held to the rail by the insertion of its pin or lug *h'* into a hole in the rail, and will be held securely to place by the passage of the bolt G through it and the joint-iron F, as clearly shown in Fig. 2. The irons F H are made in pairs for application to the ends of the opposite side rails, A B. The joint-irons I, at the ends of the side rails, A B, opposite to those at which the irons F are placed, are provided with a face, *i*, opposite flanges *i' i'*, and a top having flanges i^2 i^2, to hold the rails and the adjacent end bar, D, of the frame, and the irons I also have brackets i^3 to strengthen them, and in these respects the irons I are like the ones F, above described; but instead of being free to slip or slide along the side rails, the irons I have plates i^4, closing the outer ends of the rail-sockets, to prevent slip of the irons on the rails. The overhanging tops of both the irons F and I are perforated for the passage of screws, as at *c d*, into the end bars, C D, respectively, to hold these bars against endwise movement laterally of the bed-bottom frame.

With the bed-bottom frame constructed as above described it is obvious that all its parts may be kept separate or be packed in "knocked down" condition and in small space for storage or transportation.

To assemble the parts in a complete spring bed bottom or frame, the irons I will be slipped onto the one ends of the side rails, A B, and the irons F will be slipped onto their opposite ends, and the clamp-irons H and bolts G will be adjusted next the irons F, and the screws or bolts *c d* will be passed through the irons F I into the head and foot or end bars, C D, whereupon the screws G may be turned to draw the bar C away from the bar D, which is held fast by the irons I, and whereby the springs E will be stretched tightly across the frame, which is then ready for use. Should the springs E sag or be overstretched and slacken by use, they may be tightened up at any time by any one by simply turning up the screw-bolts G, as will readily be understood.

Although specially adapted to spring bed-bottoms, the irons F I H and screw-bolts G are applicable for use with side and end bars of wood or other material for giving support to and stretching canvas or other fabric or covering for various purposes.

The joint-fixtures F I H may be made of cast malleable metal—such as iron or steel—or may be made of wrought metal in any approved way.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with the side and end rails of a bed-bottom, of the sliding joint-irons, each of which joint-irons has a lower open-ended socket and an apertured plate or web arranged parallel with and edgewise to the longitudinal axis of the said socket, each joint-iron also having an upper socket ranging at a right angle to the lower socket, and having an aperture in its bottom, and the separate right-angled clamp-irons secured to the side rails and having one arm parallel with the said apertured plate or web, which arm receives a screw working in the apertured web or plate, substantially as and for the purpose set forth.

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Witnesses:
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