No. 834,786. PATENTED OCT. 30, 1906.

W. A. WILLIAMSON.

FOLDING BED.

APPLICATION FILED OCT. 10, 1905.

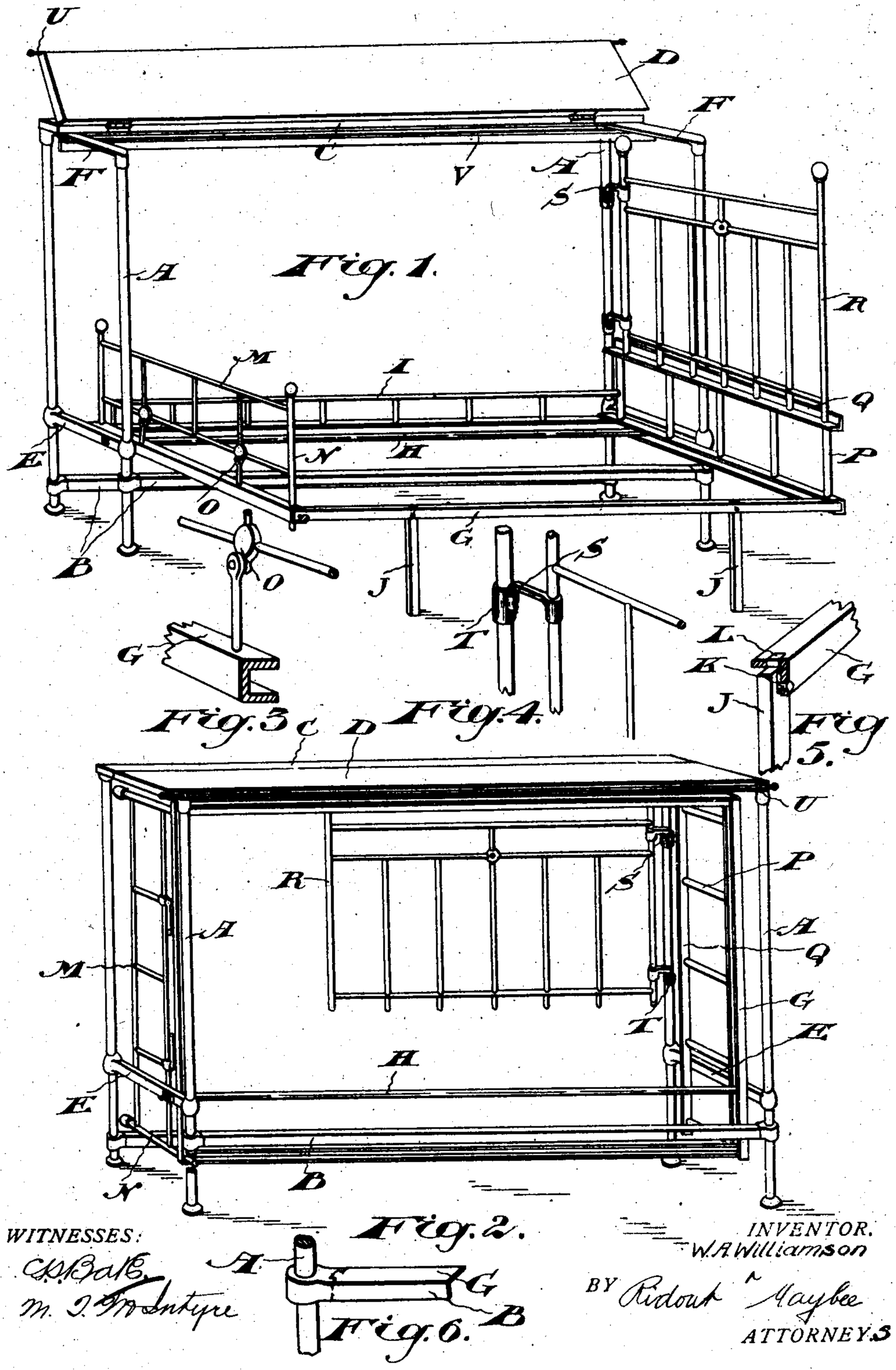

Fig. 1.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 2.

Fig. 6.

WITNESSES:

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FOLDING BED.

No. 834,786. Specification of Letters Patent. Patented Oct. 30, 1906.

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To all whom it may concern:

Be it known that I, WILLIAM ADAMS WILLIAMSON, merchant, of the town of Brampton, in the county of Peel, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Folding Beds, of which the following is a specification.

The object of my invention is to devise a folding bed of the mantel type, which will occupy a minimum of space when folded up and which when in use will be safe, comfortable, and similar in appearance to ordinary beds.

With this object in view my invention consists, essentially, of a bed-frame suitably hinged on stationary end frames and provided with a foot-section adjustable in height and a head-section hinged on the end frame and adapted to engage the bed-frame when the latter is horizontal, substantially as hereinafter more specifically described and then definitely claimed.

Figure 1 is a perspective view showing my bed as it appears when in use. Fig. 2 is a perspective view showing the bed folded. Fig. 3 is a perspective detail of one of the supporting-links of the foot-section. Fig. 4 is a perspective view of one of the hangers of the movable head-section. Fig. 5 is a sectional detail showing the connection between the bed-frame and one of its supporting-legs. Fig. 6 is a perspective detail of one of the connections of the cross-bars connecting the end frames.

In the drawings like letters of reference indicate corresponding parts in the different figures.

The stationary part of the bed comprises end frames A A, detachably connected by cross-bars B in an ordinary well-known manner, (see Fig. 6,) and by a mantel-top comprising a fixed board C and a movable board D, hinged to the front of the fixed board. The end frames are formed of uprights connected together by suitable cross-bars E F, the upper cross-bars F forming also a support for the boards C and D of the mantel-top already described.

G is a rectangular bed-frame of suitable construction and pivoted near to its inner side on the cross-rod H, secured to the cross-bars E of the end frames near their outer ends.

The inner side of the bed-frame is preferably provided with a rail I, intended to retain the mattress and clothes on the bed when the latter is folded up. The outer side of the bed-frame is provided with one or more supporting-legs J, each pivoted on the side of the bed-frame with a pin-and-slot connection K. The upper end of each leg is reduced in dimensions to form a projection L, adapted to enter a hole in the bed-frame to hold the leg in its vertical position when in use. As the side of the bed-frame is shown as formed of an L-angle bar, the hole is shown in the horizontal part of the angle-bar. It is evident that by pulling down the leg the projection may be disengaged from the hole and the legs swung in parallel to the side of the bed-frame.

The foot-section M of the bed is provided with standards N, vertically movable in holes in the end of the bed-frame. The foot-section may thus be slipped up and down at will or entirely removed. When in use, it will be retained in a raised position by any suitable means, preferably by means of links O, hinged on the foot-section and adapted to engage the upper side of the end of the bed-frame. When these links are swung to one side, the foot-section may be lowered to reduce its height, so that when the bed is folded the foot-section will not project too far beyond the bed.

The head of the bed is preferably provided with a fixed head-section P, the upper side of which is preferably formed of an L-angle bar Q. At the inner side of the adjacent end frame A is hinged the movable head-section R, preferably by means of bearing-hooks S, secured to the head-section R and fitting in the sockets T, secured to the end frames. Thus the head-section may be readily lifted off when desired. When in use, it is swung outwardly and its lower side rests on the angle-bar Q, as shown, the vertical part of the angle-bar preventing the section swinging too far back. On the front of the board D, I show a curtain-rod U, upon which a curtain (not shown) may be hung to cover the bed when folded.

From the constructions described it will be seen that I have devised a bed which is simple in construction, compact when folded, and which occupies comparatively little height.

When the head and foot sections are in place, it resembles very closely an ordinary bed, and as these latter are easily removable

the same bed for show purposes may be exhibited with head and foot sections of any desired pattern or costliness to suit the taste of different customers.

The bed is also absolutely safe, as the swinging head-section prevents the bed folding up when in use, even when the whole weight of the occupant is thrown to the inner side within the line of the pivots. The bed as a whole is also readily knocked down and packed for shipment.

In order to make the bed entirely self-contained, I secure to the board C a stop V, preferably an angle-bar, with which the upper parts of movable section may engage when the said section is folded in. This retains the section in position to hold the clothes and mattress in place and makes the bed independent of a wall.

As a measure of safety I prefer to provide set-screws W, by means of which the standards N may be clamped in the bed end through which they slide.

What I claim as my invention is—

1. In a folding bed the combination with stationary end frames suitably supported of a bed-frame horizontally hinged at its ends between the end frames; means for supporting the bed in a horizontal position; a stationary head-frame secured to the bed; and a movable head-frame vertically hinged on the adjacent end frame, the stationary head-frame being adapted to engage the lower side of the movable head-section when the latter is swung out for use, substantially as described.

2. In a folding bed the combination with stationary end frames suitably supported, of a bed-frame horizontally hinged at its ends between the end frames, means for supporting the bed in a horizontal position; a foot-section vertically slidable on the bed; and links pivoted on foot-section and adapted to rest on the bed, substantially as described.

3. In a folding bed the combination with stationary end frames suitably supported of a bed-frame horizontally hinged at its ends between the end frames; means for supporting the bed in a horizontal position; a movable head-section vertically hinged at one side to one of the end frames, the bed being adapted to engage the lower side of the head-section when the latter is swung out for use; and a stop limiting the inward swing of the movable head-section, substantially as described.

4. In a folding bed the combination with the mantel-shelf supported by double tubular ends, the members of which are connected by cross-bars and the longitudinal bars detachably connecting the ends together, of a bed pivotally swung at the ends sidewise in relation to the mantel-frame; and means for supporting the outer side of the bed, substantially as described.

5. In a folding bed the combination with the mantel-shelf supported by double tubular ends, the members of which are connected by cross-bars and the longitudinal bars detachably connecting the ends together, of a bed pivotally swung at the ends sidewise in relation to the mantel-frame; means for supporting the outer side of the bed; a movable head-section adapted to engage the bed; and brackets on an end of the frame upon which the movable head-section is hinged so that it may be swung under the shelf when disengaged from the bed, substantially as described.

Toronto, Ontario, September 23, 1905.

WILLIAM ADAMS WILLIAMSON.

In presence of—

J. EDW. MAYBEE,

M. I. MCINTYRE.