

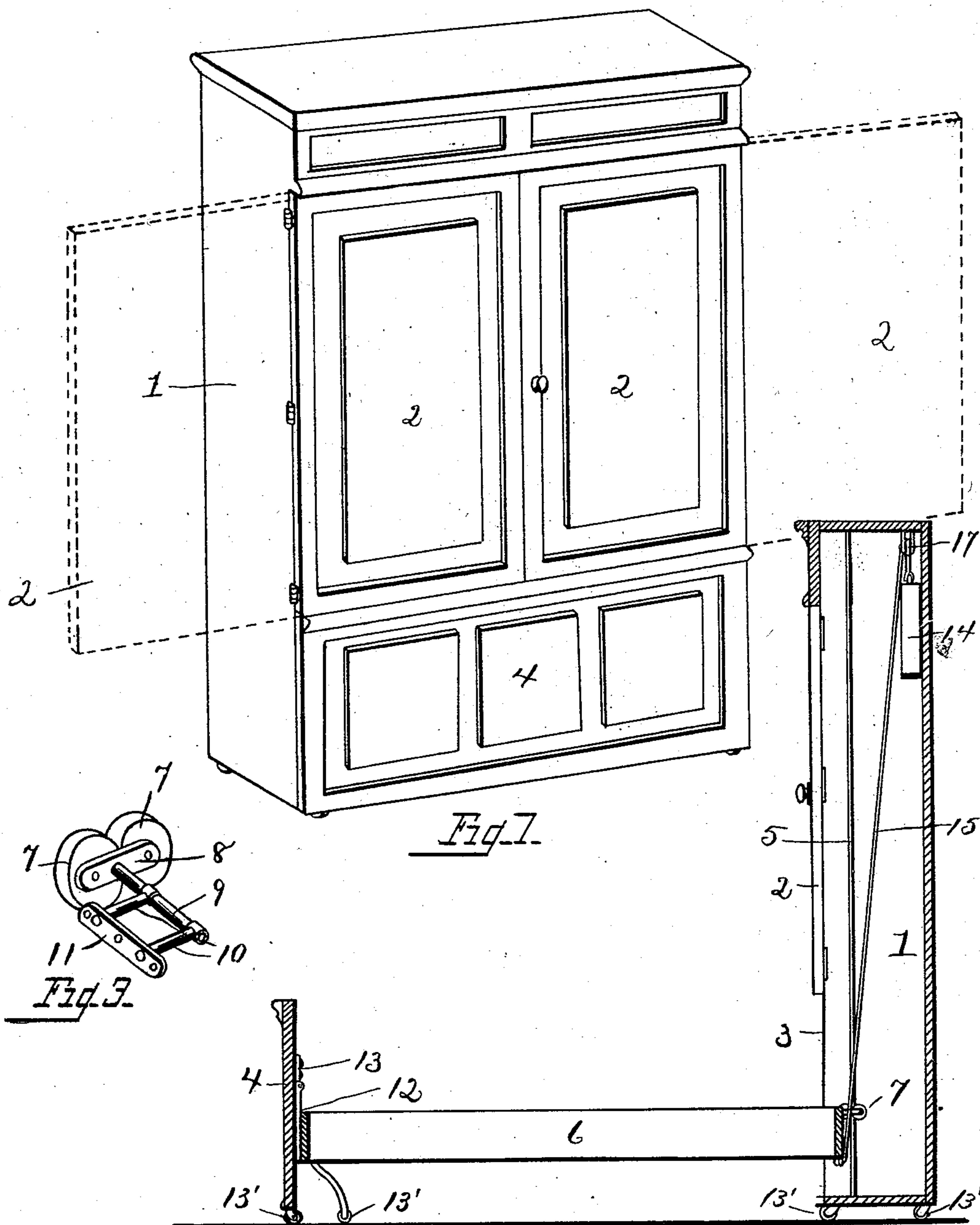
(No Model.)

2 Sheets—Sheet 1.

E. M. KNOBLAUGH.
FOLDING BED.

No. 528,328.

Patented Oct. 30, 1894.



WITNESSES

Carroll J. Webster
Floyd R. Webster

Fig. 2

INVENTOR

Edward M. Knoblauch
By William Webster
Atty

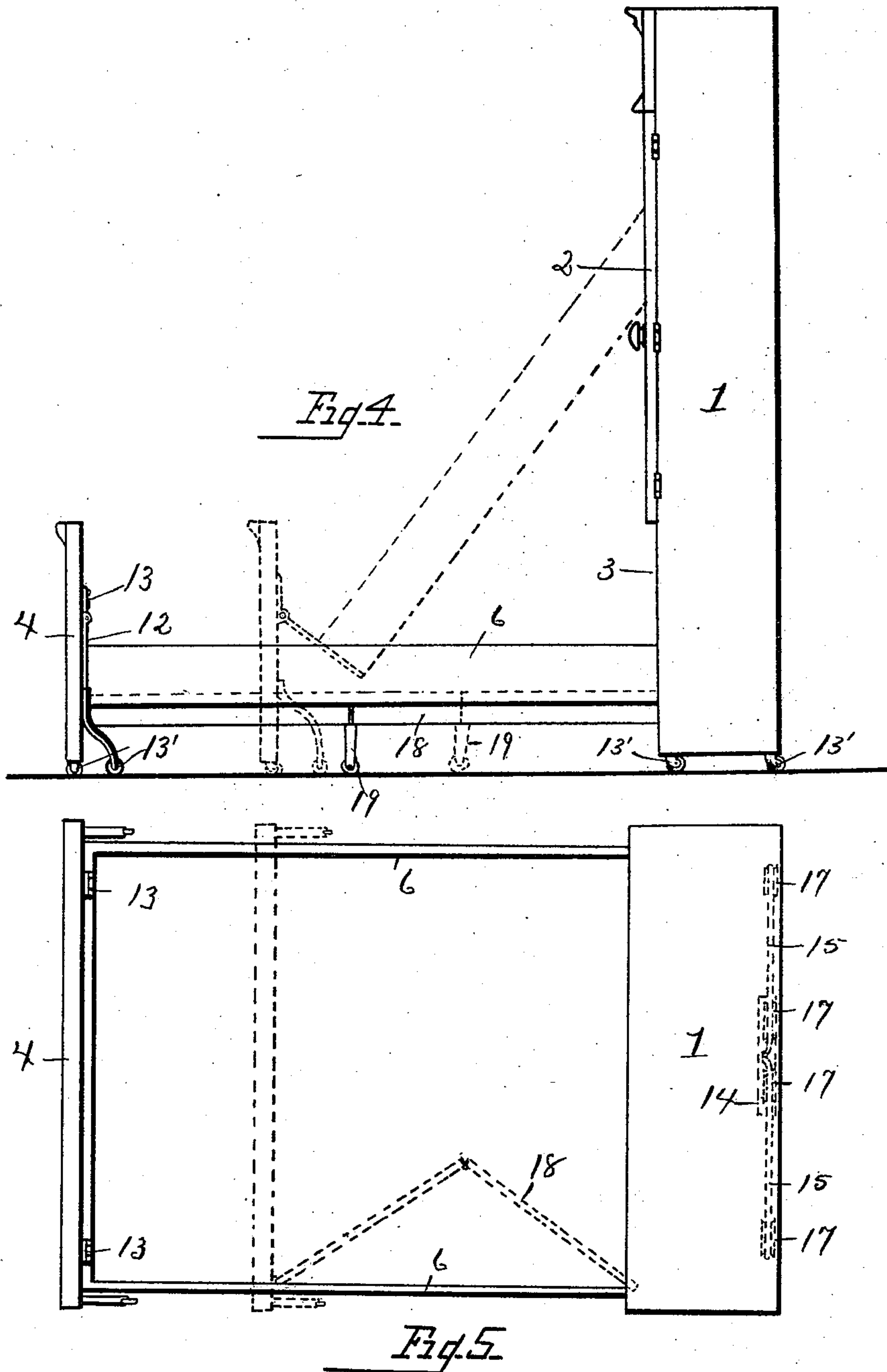
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UNITED STATES PATENT OFFICE.

EDWARD M. KNOBLAUGH, OF TOLEDO, OHIO.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 528,328, dated October 30, 1894.

Application filed August 16, 1893. Serial No. 483,261. (No model.)

To all whom it may concern:

Be it known that I, EDWARD M. KNOBLAUGH, of Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Folding Beds; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form part of this specification.

My invention relates to a folding bed, and has for its object to provide a bed adapted to be folded into compact form, to occupy the least possible space, and that shall present an ornamental appearance when folded.

A further object is to reduce the cost to a minimum and provide for convenience in extending and folding the bed.

The invention consists in the parts and combination of parts hereinafter described and pointed out in the claims.

In the drawings: Figure 1 is a perspective view of the bed folded, the dotted lines showing the door of the head or cabinet opened. Fig. 2 is a longitudinal, vertical, sectional elevation showing the bed extended. Fig. 3 is a detail view of the anti friction roller guides. Fig. 4 is a side elevation showing the bed extended in full lines, and partly folded in dotted lines. Fig. 5 is a top plan view showing in full lines the bed extended, and in dotted lines the bed partly folded.

1 designates the head or cabinet, comprising a rectangular receptacle solidly inclosed upon three sides, and upon the front side by swinging doors 2 which extend from the top of the cabinet to near the bottom, leaving a space 3 which is closed by the foot board 4 when the bed is folded. Upon the inner front side of the cabinet are two metal wires or rods 5 extending from top to bottom, one upon each side, and which serve as guides for the bed when in the act of folding. The bed portion comprising the side rails 6 and foot board 4 is mounted in front upon wires 5 and travels up the same when in the act of folding or being extended.

A preferred means of mounting the bed upon wires 5 is shown in Fig. 3 comprising

two grooved rollers 7 preferably rubber faced, which embrace wire 5 and have an adjustability to suit the different inclinations of the bed by reason of their being journaled upon bar 8 secured upon a shaft 9 journaled in bracket arms 10 which are secured in a plate 11 permanently secured to the bed rail, whereby the shaft 9 may turn in the hangers and allow the rollers to adjust to any inclination of the bed.

The foot board 4 is hinged to the foot of the bed by means of a strap 12 pivotally connected with a hinge section 13 secured upon the foot board, whereby the side rails may fold in parallel relation with the foot board, the strap 12 being of a length to draw the foot board firmly against the sides of the cabinet beneath the doors when the bed is folded.

For convenience in moving the bed the head or cabinet, and also the foot board are provided with casters 13', the foot board preferably having two upon each side as shown.

The bed is counterbalanced to assist in raising the same by means of a weight 14 suspended in the cabinet by means of ropes 15 connected with the forward end of the bed, passed over pulleys 17, journaled near the center of the cabinet and connected with the weight. In order to maintain the foot board in vertical position when the side rails assume an inclined or vertical position in raising or lowering the bed, there is secured to the head and to the foot board by proper hinges, a centrally hinged bar 18 which may fold upon itself when the foot board is folded (see dotted lines Fig. 5) or may extend with the bed, and always holds the foot board in vertical position. Bar 18 is preferably sustained centrally by means of a caster 19.

The operation will be apparent. The doors being opened in folding the bed, a slight lift upon the forward end will cause the same to rise in the cabinet, the foot board being drawn snugly against the sides, when the doors are closed, and the bed presents the appearance of any desired article of furniture. The bed is extended by simply opening the doors and bearing down upon the rails until its inner ends contact with support 20.

While I have shown and described a specific form of roller guide for embracing the guide rod or wire, I may vary this construction

greatly without departing from the spirit of my invention, as, for instance, I may employ a swiveled eye bolt through which the wire or rod is passed.

5 What I claim is—

1. In a folding bed, a head or cabinet, vertical rods arranged therein, a bed having swiveled guides to embrace the rods, whereby when the head is raised the guide will swing
10 to the different inclinations of the bed, and a foot board hinged to the foot rail of the bed and means for holding the same in vertical position at all times.

2. In a folding bed, a head or cabinet, rods

arranged vertically therein, bed rails arranged 15 with their inner ends within the head, guides upon the rails for embracing the rods, comprising a journaled shaft, and a plate upon the shaft having grooved rollers journaled thereon. 20

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

EDWARD M. KNOBLAUGH.

Witnesses:

WILLIAM WEBSTER,
CARROLL J. WEBSTER.