

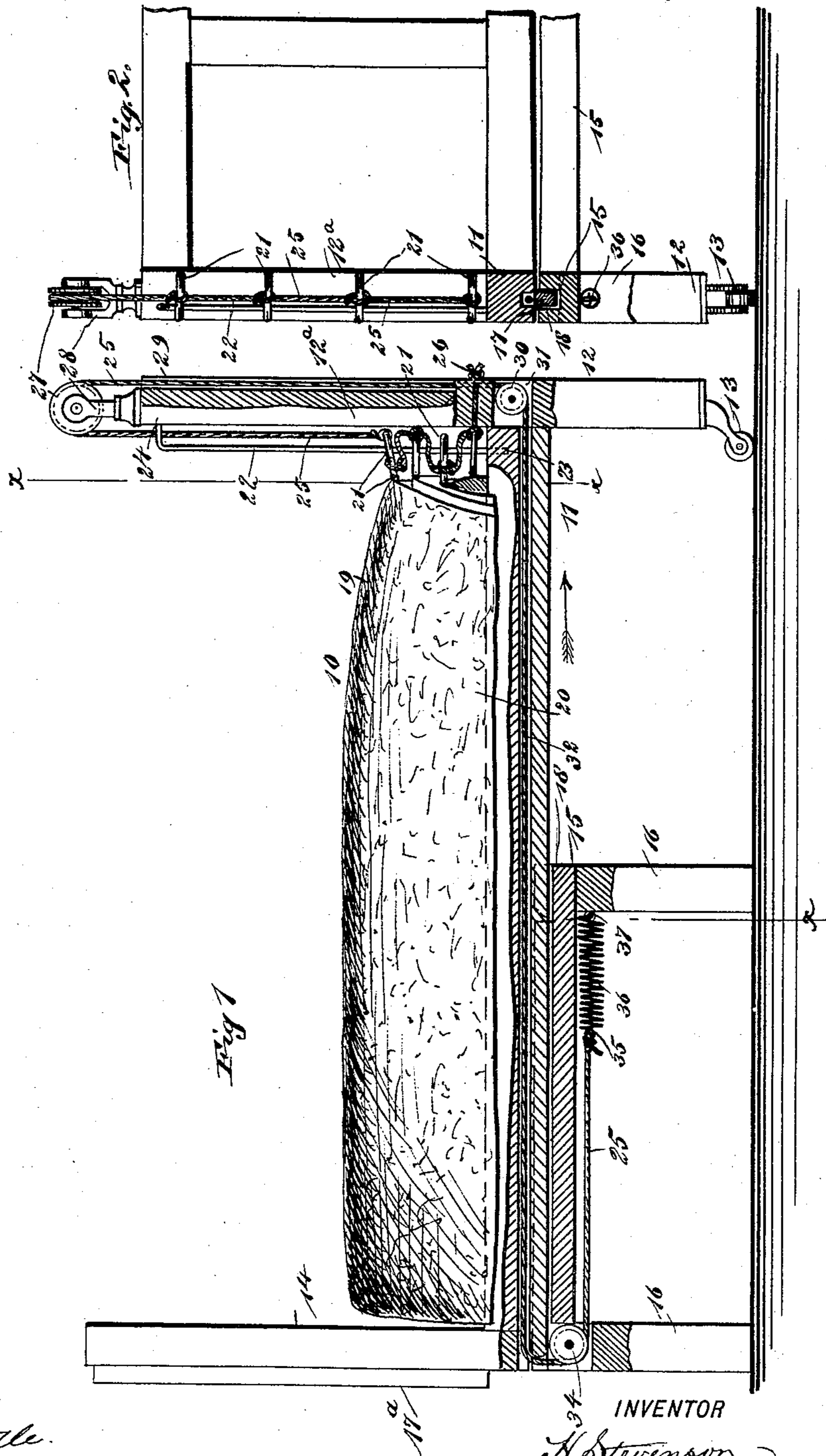
(No Model.)

2 Sheets—Sheet 1.

H. STEVENSON.  
FOLDING BED.

No. 477,967.

Patented June 28, 1892.



WITNESSES:

*J. M. Andle*  
*G. Sedgwick*

INVENTOR

*H. Stevenson*

BY

*Mumy*  
ATTORNEYS.

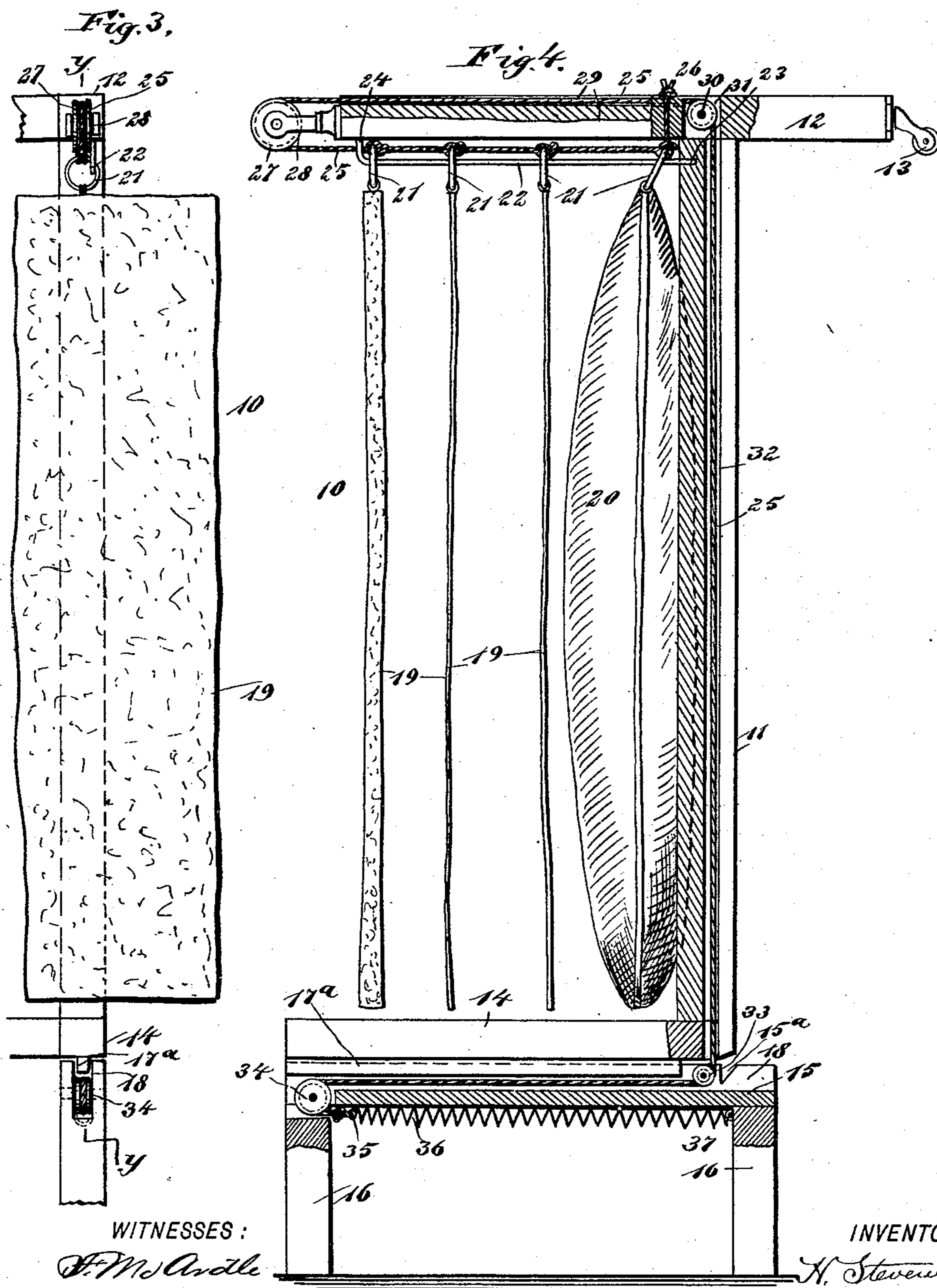
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# UNITED STATES PATENT OFFICE.

HUGH STEVENSON, OF NEW YORK, N. Y.

## FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 477,967, dated June 28, 1892.

Application filed March 11, 1892. Serial No. 424,541. (No model.)

*To all whom it may concern:*

Be it known that I, HUGH STEVENSON, of New York city, in the county and State of New York, have invented a new and Improved Folding Bed, of which the following is a full, clear, and exact description.

My invention relates to improvements in folding beds.

An objection to most folding beds is that when folded the bed-covers are held tightly within the casing of the bed, and as a result they are imperfectly aired.

The object of my invention is to improve the construction of various types of folding beds and provide attachments for the bed whereby the covers and the bed itself will be freely suspended when the bed-case or bedstead is folded, thus permitting the air to circulate freely between and around the bed-cover.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

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

Figure 1 is a broken side elevation, partly in section, of a bed embodying my invention. Fig. 2 is a broken vertical section on the line  $x x$  in Fig. 1. Fig. 3 is a broken front elevation of the bed when in a raised or folded position, and Fig. 4 is a vertical section of the same on the line  $y y$  in Fig. 3.

The bed-frame and its support may be of any approved construction, as will be hereinafter described; but, as shown in the drawings, the bed 10 is provided with side rails 11, which at the foot are joined to the foot-posts 12, these having the usual casters 13 at their lower ends and having their upper portions connected by the usual foot-board 12<sup>a</sup>. The opposite ends of the rails 11 are secured to a common form of head-board 14, and the head portion of the bed is supported upon a frame 15, having suitable feet 16 to support it.

The rails 11 are adapted to slide longitudinally upon the base or frame 15, and to this end the rails are provided on the under side with tongues 17, which fit in grooves 18 in the base 15, and as the bed when folded has the

rails 11 tipped into a vertical position the head-board 14 is also provided with tongues 17<sup>a</sup>, which when the bed is raised fit in the grooves 18, as shown in Fig. 4.

To raise the bed-frame, it is pulled out longitudinally from off the base 15 until the head of the bed is near the front edge of the base, and the bed is then tilted upward. To facilitate the easy tilting of the bed, the base 15 is notched on opposite sides and near the front edge, as shown at 15<sup>a</sup>, so that the rear ends of the rails 11 may enter the notches.

The several bed-covers 19 and the mattress 20 are provided at the foot with rings 21, to which they are firmly secured; but, if desired, the covers and mattress may be provided with eyeleted perforations instead, and the rings are held loosely on the vertical slide-rods 22, which are arranged parallel with the foot-posts 12, the lower ends of the rods being secured, as at 23, to the rails 11 and the upper ends being bent inward and fastened to the foot-posts, as shown at 24. The rings 21 are severally secured to cables 25, there being a cable on each side of the bed; but more cables and rings may be provided, if necessary. Each cable 25 has one end fixed to the foot-post, as shown at 26 in Figs. 1 and 4, and from the rings 21 the cable extends upward over a pulley 27, which is journaled in a hanger 28 on the top of the foot post or board, and from thence the cable extends downward through a groove 29 in the back of the foot-post around a guide-pulley 30, which is pivoted in a recess 31, opposite the rear end of the side rail 11, thence through a longitudinal bore 32 in the rail, thence around guide-pulleys 33 and 34, which are journaled in the base 15 beneath the head of the bed, and thence beneath the base, the cable being secured, as shown at 35, to a spiral spring 36, which has one end fixed to the front end of the base or frame 15.

The object of the spiral springs is to take up the slack of the cord when the bed is prepared for use; but other means may be provided or the apparatus may be used without any means for taking up the slack, as the main feature of the invention is the means for freely suspending the covers.

When the bed is to be used, it is tipped down into the position shown in Fig. 1 and then pushed back until the head-board 14 comes

above the back legs 16 of the base-frame 15. This will slacken the cables 25 and permit the covers 19 to drop to place upon the mattress 20, the slack of the cables or cords being taken  
5 up by the springs 36. When the bed is to be folded, the reverse operation is performed—that is to say, the bed is drawn out until the head-board 14 is above the front portion of the base-frame 15—and this will move the ca-  
10 bles and lift the rings 21 and the covers into the position shown in Fig. 2. The bed is then tilted upward, and the tongues 17<sup>a</sup> on the head-board will drop into the grooves 18 of the  
15 base 15, thus forming a sort of brace for the bed, and the covers and mattress will hang loosely from the rods 22, as shown in Fig. 4.

I have shown a bedstead and base simply to illustrate that the mechanism described is operative; but it will be readily understood  
20 that this construction may be greatly modified without departing from the principle of my invention, and it will also be understood that the entire mechanism of the bed may be in-  
closed in any desired form of case.

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

1. The combination, with a folding bed and the bedding thereof, of a cable mechanism for  
30 separating and lowering the bedding by the rise and fall of the bed, substantially as described.

2. The combination, with a folding-bed, of the bedding held at one end to move on slide-rods and a cable mechanism for separating 35 and lowering the bedding by the rise and fall of the bed, substantially as described.

3. The combination, with the folding bed and its stationary base, of the bedding and a cable connection between the bedding and 40 the base, whereby the bedding will be separated and suspended by the rising of the bed, substantially as described.

4. The combination, with the tilting bedstead mounted on a suitable base, of a cable 45 extending vertically at one end of the bedstead and connected with the base, means for tightening and loosening the cable by the movement of the bedstead, and the several pieces of bedding connected at one end to the 50 cable, substantially as described.

5. The combination, with the bedstead and its supporting-base, of slide-rods secured vertically to one end of the bedstead, the bedding 55 having its pieces held to slide on the rods, and a cable connected with the bedstead and the base and also with the bedding, the cable extending over suitable guide-pulleys so as to be tightened and loosened by the rise and fall of the bedstead, substantially as described.

HUGH STEVENSON.

Witnesses:

WARREN B. HUTCHINSON,  
C. SEDGWICK.