

No. 804,594.

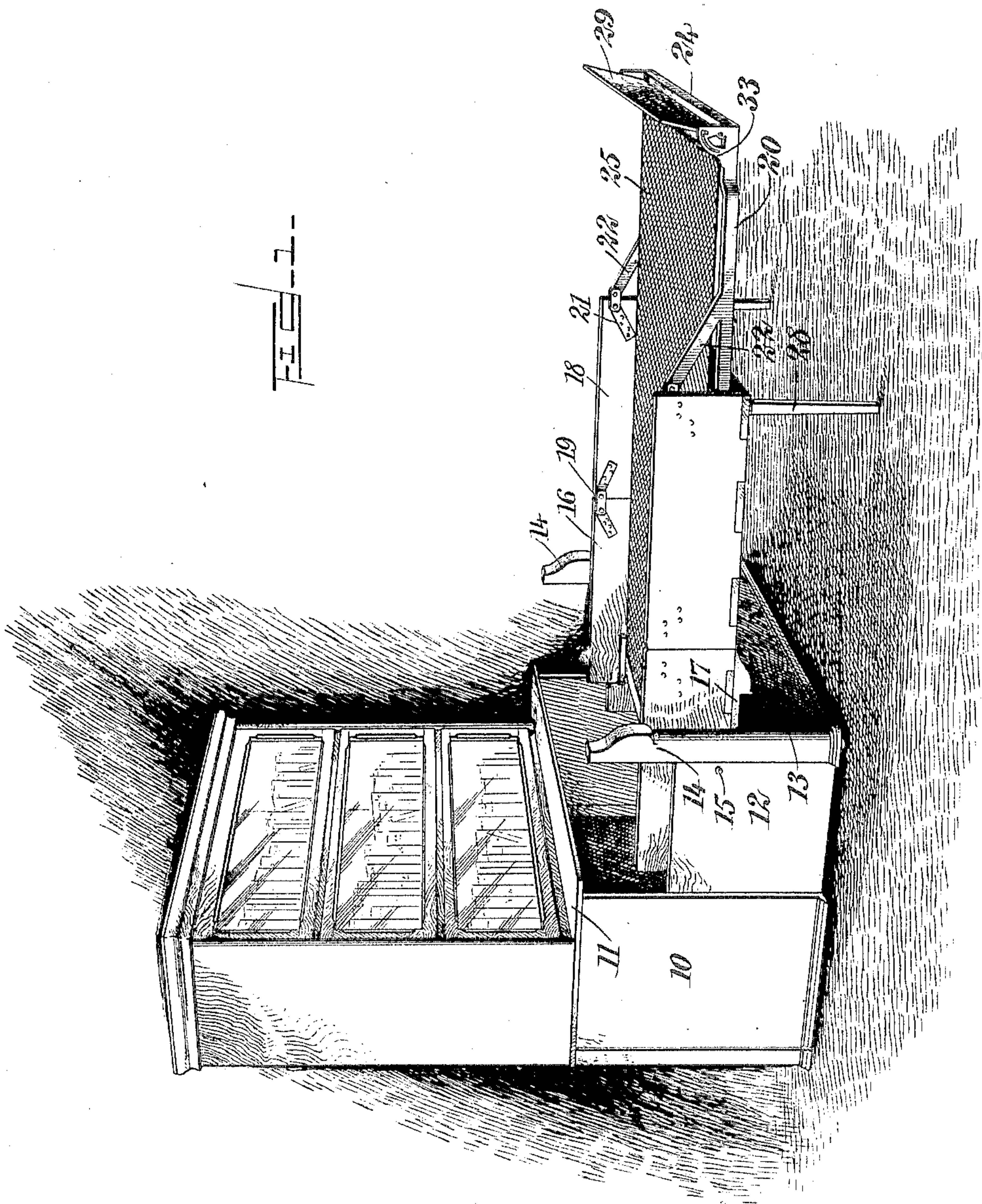
PATENTED NOV. 14, 1905.

J. D. FROMAN & T. M. LANHAM.

FOLDING BED.

APPLICATION FILED MAY 29, 1905.

2 SHEETS—SHEET 1.



WITNESSES:

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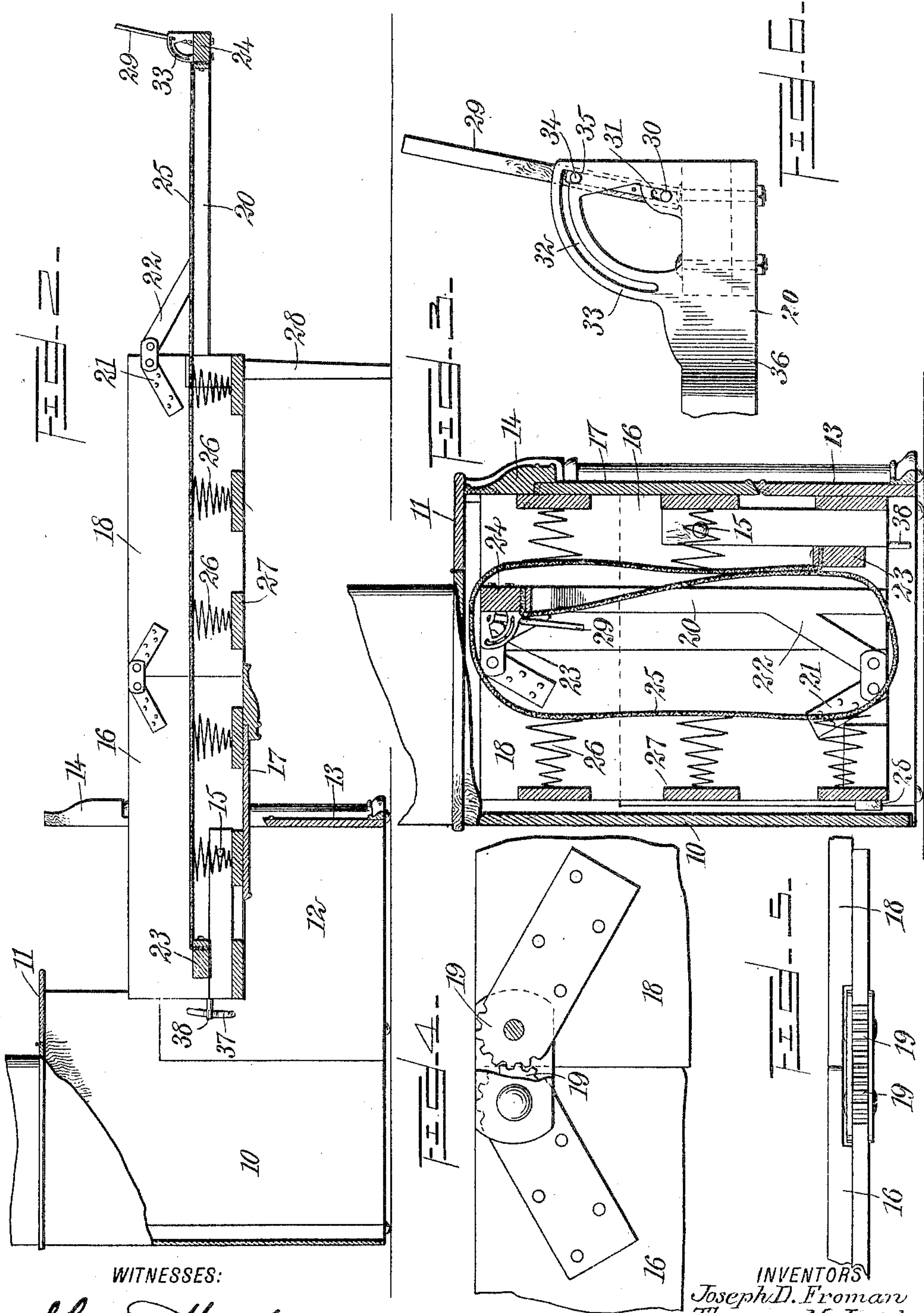
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UNITED STATES PATENT OFFICE.

JOSEPH D. FROMAN AND THOMAS M. LANHAM, OF VEVAY, INDIANA.

FOLDING BED.

No. 804,594.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed May 29, 1905. Serial No. 262,828.

To all whom it may concern:

Be it known that we, JOSEPH D. FROMAN and THOMAS M. LANHAM, citizens of the United States, and residents of Vevay, in the county of Switzerland and State of Indiana, have invented a new and Improved Folding Bed, of which the following is a full, clear, and exact description.

Our invention relates to a folding bed which can be combined with a bookcase, settee, wardrobe, dresser, and various other kinds of furniture.

The principal objects of the invention are to provide for folding a bed in such a manner that it will occupy much smaller space than has been the case heretofore, and especially to reduce the vertical space occupied by the bed in folded position.

Further objects of the invention are to provide efficient means for holding the bed both in folded and unfolded positions and for simplifying and generally improving the construction of articles of this character.

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

Figure 1 is a perspective view of a combined bookcase and bed, illustrating our invention, the bed appearing in unfolded position. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view of the device, showing the bed in folded position. Fig. 4 is a fragmentary view of a joint. Fig. 5 is a plan of the parts shown in Fig. 4, and Fig. 6 is a side elevation of the means for supporting and guiding the foot-board on an enlarged scale.

While we have shown our bed as being combined with a bookcase, it is understood that this is illustrated for convenience, and for the reason that on account of the shape and size which the bed assumes when folded it is especially adapted for this purpose. It will be readily perceived, however, that the bed can conveniently be combined with many other articles of furniture.

The bookcase or other article with which the bed is to be combined is provided with a box 10 at the lower part thereof, said box preferably having a lid 11 which can be lifted to allow the folding of the bed. In this box is located a frame 12, which is capable of sliding to the rear portion of the box and also capable of being drawn out to the position shown in Figs. 1 and 2. When in the first-

named position, the front 13 of the box 10 and the corner-pieces 14 located thereon constitute the corner-pieces of the box and are slid back to a position just under the cover. The frame is provided with pivots 15, upon which the first section 16 of the folding bed is mounted. This section is provided with a surface 17, which when the bed is folded up forms a continuation of the front plate 13 of the frame, and consequently completes the surface which will be exposed to view when the bed is in folded position. The first section is connected with the second section 18 by means of a pair of segments 19, which are fixedly mounted upon these two sections of the bed and which engage with each other. These segments are located near the upper adjacent corners of the sections 16 and 18, and consequently the second section can be rotated about this corner into engagement with the first section, the segments meshing with each other at all times.

We are aware that beds with two sections which fold together have been constructed; but these sections usually have to be made so long that when folded the bed occupies a space which prevents its combination with an ordinary bookcase and also prevents its use for the lower part of a settee, bench, or the like. To overcome this objection, we have divided the bed into three parts, the third section 20 being connected with the second section by means of a bracket 21 on the second section and a bracket 22 on the third. These brackets are provided with segments similar to the segments 19 and operate in the same way. The first and third sections are provided with cross-bars 23 and 24, with which the ends of a wire fabric 25 are connected. This fabric is stretched into a taut position when the third section is down, and as the pivots by which the several sections are connected with each other are located above this fabric the fabric itself serves to hold the bed in its unfolded position, acting to draw the parts backward from the joints.

We prefer to support the fabric at several points by means of springs 26, resting on cross-bars 27, mounted on the sections 16 and 18. These furnish a yielding but firm support for the bed when placed where the greatest part of the weight is applied. The section 18 is provided with movable legs 28 for supporting the foot of the bed when in unfolded position and so hinged that when folded they lie crosswise of the bed and lengthwise of the

bed-slat. We also provide a footboard 29, having pivots 30 mounted in slots 31 upon the section 20. A circular slot 32 is also provided in an extension 33 on this section 20 for guiding a pin 34 in the side of the footboard. This slot is concentric with the upper portion of the slot 31, and it is provided with an extension 35, in which the pin 34 may drop when the footboard reaches its extreme position, this permitting the pin 30 to drop to the bottom of the slot 31 and holding the board in the desired place. The outer parts of the section 20 are provided with offset portions 36 to permit the end of the section to pass the connection by means of which the part 18 is joined to the part 16.

In order to hold the section 16 in horizontal position when turned down before the sections 18 and 20 are folded or unfolded, we employ a spring-catch 37 for engaging a projection 38 on the section 16.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A folding bed, comprising a foot-section having a curved slot provided with an offset and an elongated slot in line with said offset, and a footboard having projections entering said slots, whereby the footboard is pivotally mounted in the elongated slot and guided by the curved slot.

2. A folding bed, comprising a foot-section having a curved slot provided with an offset, an elongated slot in line with said offset and passing through the center of said curved slot, and a footboard having projections entering said slots.

3. A folding bed, comprising a series of sections adapted to fold upon each other, one of said sections being a foot-section, said foot-section being provided with a projection having a curved slot provided with a downwardly-extending offset; said foot-section also being provided with an elongated slot in line with said offset, the upper portion of said elongated

slot constituting the center of said curved slot, and a footboard having projections entering said slots, whereby the footboard is pivotally mounted in the elongated slot.

4. The combination with a bookcase, of a frame slidably mounted therein and having a front portion constituting when closed a continuation of the front surface of said bookcase, and a bed-section pivotally mounted on said frame and having a lower surface constituting a continuation of the front surface of said frame.

5. The combination with a bookcase, of a frame slidably mounted therein and having a front portion constituting when closed a continuation of the front surface of said bookcase, and a bed-section pivotally mounted on said frame and having a lower surface constituting a continuation of the front surface of said frame; said bed-section being provided with a projection, and said frame being provided with a spring-catch adapted to engage the projection to assist in holding the bed-section in horizontal position.

6. The combination with a bookcase having a receptacle in the lower portion thereof, of a frame slidably mounted in said receptacle and having a front portion constituting when closed a continuation of the front surface of said bookcase, a bed-section pivotally mounted on said frame and having a lower surface constituting a continuation of the front surface of said frame, and a plurality of sections connected with said first-mentioned section and adapted to be folded within said receptacle.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOSEPH D. FROMAN.
THOMAS M. LANHAM.

Witnesses:

CLARENCE R. DRAKE,
EDWARD TILLY.