**ATTORNEYS** 

## B. KRELLENSTEIN. FOLDING BED.

(Application filed Apr. 8, 1898.)

(No Model.) Fig. 1. Fig.4 Fig. 5. INVENTOR WITNESSES: Bernard Krellenstein

## United States Patent Office.

BERNARD KRELLENSTEIN, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO MOSES CRYSTAL, OF SAME PLACE.

## FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 611,128, dated September 20, 1898.

Application filed April 8, 1898. Serial No. 676,953. (No model.)

To all whom it may concern:

Be it known that I, BERNARD KRELLEN-STEIN, a citizen of the United States, residing at New York, in the county and State of New 5 York, have invented new and useful Improvements in Folding Beds, of which the following is a specification.

This invention relates to certain details of construction set forth in the following speci-10 fication and claims and illustrated in the an-

nexed drawings, in which—

Figure 1 is a sectional side elevation of the bed closed or folded. Fig. 2 is a view like Fig. 1, showing the bed open or unfolded. r5 Fig. 3 is a section along xx, Fig. 1. Fig. 4 is a section along y y, Fig. 2. Fig. 5 is a detail view of pivot connections.

The fixed or upright or, as it may be called, "case" portion of the bed is shown with the 20 sides 12. The description of one side will explain the other. This case side is shown provided with guides or grooves 3 and 4, one vertical and the other horizontal, or practi-

cally so.

The folding portion is shown with its head end at 5 and its foot or front end at 6. At 7 the folding portion at each side is jointed or pivoted to a slide 8 at the horizontal guide 4. When the bed opens, the slide 8 carries 30 its pivot connection 7 forward or outside or clear of the case 12. The folding part 56 on opening is thus moved forward or away from the case, so as to secure the proper length of bed or the proper distance between 35 the front or foot 6 and the back of the case 12.

The vertical guide 3, Fig. 5, is shown at the front lower portion or edge 2 of the case side 1 2. The horizontal guide is shown located above and clear of or out of contact 40 with the vertical guide. The folding portion has a pivot or joint connection 9 with the vertical guide 3. As the guides 3 and 4 are clear of one another, the pivot 9 cannot rise into the way of or interfere with the movement of 45 slide 8.

The horizontal guide 4 is extended out through the front of the case to allow the slide 8 to project or carry its pivot connection 7 forward beyond the case. The slide 8 is of 50 proper length to fill or correspond to the

zontal guide 4 is extended clear across the case 1 2. The slide or traveler 8 has thus firm guidance to aid in steadying the bed or folding portion 5 6.

When the bed is open, the foot portion 6 is supported by the legs or support 10, adapted to fold or close the portion 5.6 when the bed is folded.

When the bed is open, a person sitting or 60 resting on the front portion 5 is apt to cause the folding portion to accidentally tilt or close about pivot 7. A lock or latch made to engage slide 8 can be made to prevent accidental folding.

The slide S is shown provided with a pin or shoulder 11. The folding portion has a latch 12, readily formed by a bar-strip of rigid material suitably guided or slidably mounted in the folding part. A folding foot portion 13 70 14, Fig. 2, jointed to the bed portion 56 at 15 and connected to the latch 12 at 16, can be made to actuate the latter. This foot portion 13 14 may be regarded as a lever of the first class with fulcrum at 15, power-point at 13, 75 and resistance at 16. When the bed is open, the footboard 13 being swung to its exposed or open position, Fig. 2, will cause latch 12 to slide to or engage the pin 11 to lock the bed portion in open position. To fold the bed, the 80 footboard 13 is swung into the bed portion or out of the way, Fig. 1, thus unlocking the latch 12 and leaving the bed free to close.

The bed or folding portion 56 at 17, Fig. 2, has jointed thereto a head-frame 18, which 85 when the bed is open is extended back into the case. This head-frame and folding portion have slats 19, supporting the springs or coils 20, for holding the bottom 21 in proper position. This flexible bottom 21 is fixed or 90 secured at 22 to a suitable point or piece at the rear part of the case and at a suitable point, as 23, to the folding part.

For easy working the pivots 7 and 9 might have antifriction sleeves or devices. As seen 95 but one motion is required for opening or closing the bed portion 56, and in opening the pivot 9, rising along guide 3, and the slide 8, projecting along guide 4, the bed portion will be raised to proper height and extended 100 to proper length. In closing, the drop of the guide 4 when the bed is closed, and said hori- | bed portion down guide 3 will bring the closed

bed to the low height or appearance commonly known as "chiffonnier," and the bed portion 5 6 being rigid or of one piece does not have to be folded or doubled.

The device can of course be made of any suitable material or materials, and its several parts shaped, ornamented, or designed, as seen fit.

The bottom 21 is free from or not attached to the spiral springs 20.

What I claim as new, and desire to secure

by Letters Patent, is—

1. The combination with a case having each side provided with a vertical grooved guide15 way and with a horizontal grooved guideway located above and clear of the vertical guideway and extended out through the front of the case, of a folding portion having a pivoted connection with the vertical guide, and a slide-bar having a slidable engagement in the horizontal guide-groove and having a pivotal connection with the folding portion at a point toward the outer end of said slide-bar so as to carry the said pivot connection forward outside the case on the opening of the folding part, substantially as described.

2. The combination with a case provided with a vertical guideway and with a horizontal guideway separate from and above the vertical guideway and extended to the front of the case, of a slide-bar movable in the horizontal guideway and adapted to extend beyond the same, and a folding part jointed to the said slide-bar toward its outer end and shaving a pivot movably engaged in the vertical statement of the said slide slide share toward its outer end and shaving a pivot movably engaged in the vertical statement of the said slide slide share toward its outer end and shaving a pivot movably engaged in the vertical statement of the said slide slide share toward its outer end and shaving a pivot movably engaged in the vertical statement of the said slide slide slide slide share to said slide s

3. A case side having its front lower portion provided with a vertical guide or groove and a horizontal guide located above and clear of the vertical guide and extended out through the front of the case, a folding portion pivoted to the vertical guide, and a slide at the horizontal guide having a pivot connection with the folding portion, said slide being made to project beyond the horizontal guide to carry its pivot connection clear of the case on the folding portion being opened substantially as described.

4. A case side having its front lower por-50 tion provided with a vertical guide or groove

and a horizontal guide located above and clear of the vertical guide and extended out through the front of the case, a folding portion pivoted to the vertical guide, and a slide at the horizontal guide having a pivot connection with the folding portion, said horizontal guide being extended across the case side, and said slide being of a length to fill or correspond to the horizontal guide and being made to project beyond the horizontal guide to 60 carry its pivot connection clear of the case on the folding portion being opened substantially as described.

5. A case side having a vertical guide and a horizontally-traveling slide, combined with 65 a folding portion jointed or pivoted to the guide and slide and having a lock made to engage the slide substantially as described.

6. A case side having a vertical guide and a horizontally-traveling slide, combined with 70 a folding portion jointed or pivoted to the guide and slide, said slide having a locking-pin and said folding portion having a latch made to engage the locking-pin substantially as described.

7. A case side having a vertical guide and a horizontally-traveling slide, combined with a folding portion jointed or pivoted to the guide and slide, a pin on the slide, a latch on the folding portion, and a folding foot portion 80 connected to the latch for actuating the latter substantially as described.

8. A case side provided with horizontal and vertical guides, a folding portion pivoted to the vertical guide, a slide at the horizontal 85 guide having a pivot connection to the folding portion, a flexible bottom fixed to the rear part of the case and to the foot portion of the folding part, and a head-frame jointed to the folding portion and extended back into 90 the case, said head-frame and folding portion having supporting-springs for the bottom substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 95 witnesses.

BERNARD KRELLENSTEIN.

Witnesses:

W. C. HAUFF, E. F. KASTENHUBER.