

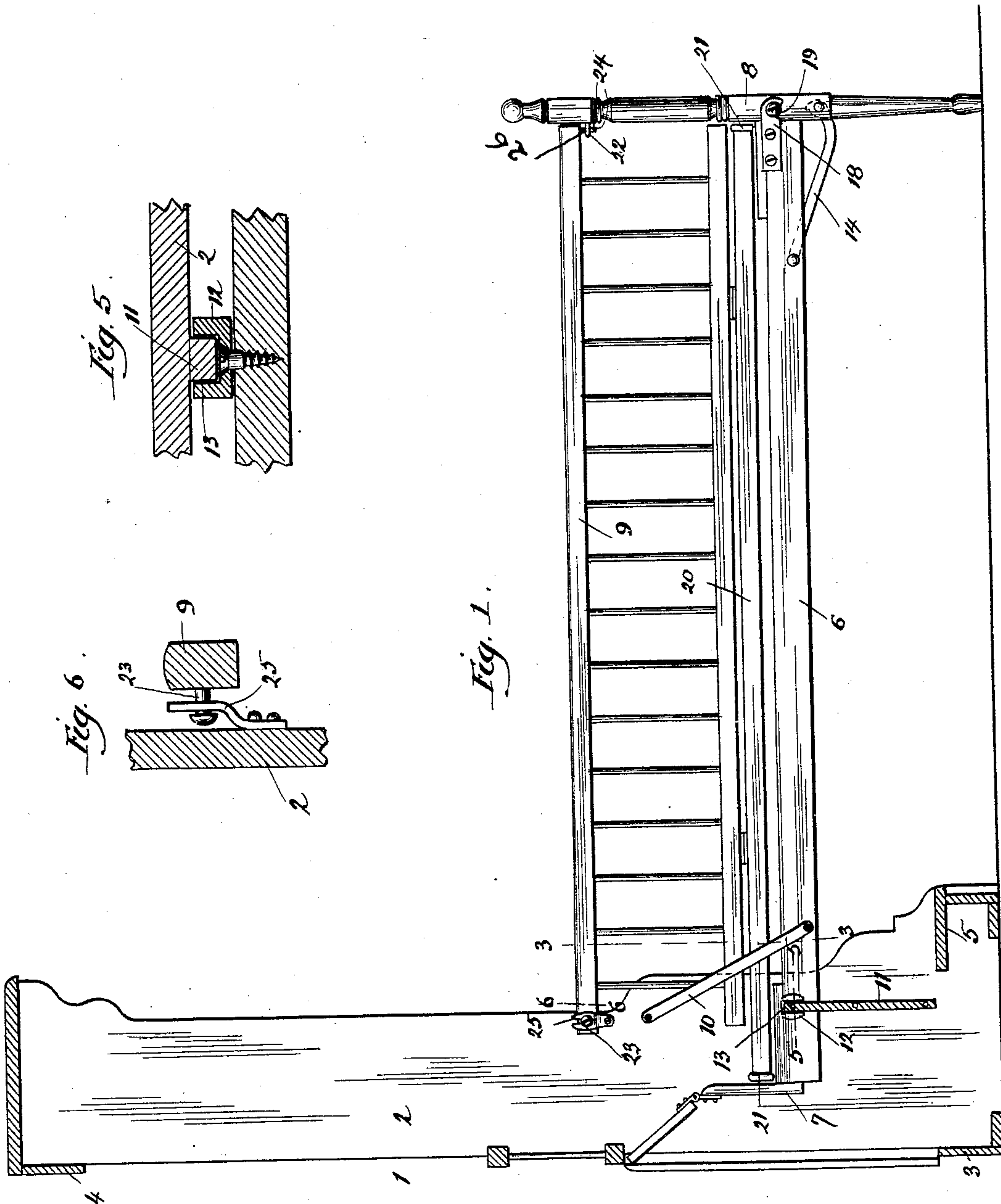
(No Model.)

2 Sheets—Sheet 1.

C. M. WAGNER.
FOLDING BED.

No. 480,795.

Patented Aug. 16, 1892.



Witnesses:

John L. Jackson.
Nellie McKibben

Inventor:
Caspar M. Wagner,
By Bondedum & Pickard.

Attorneys.

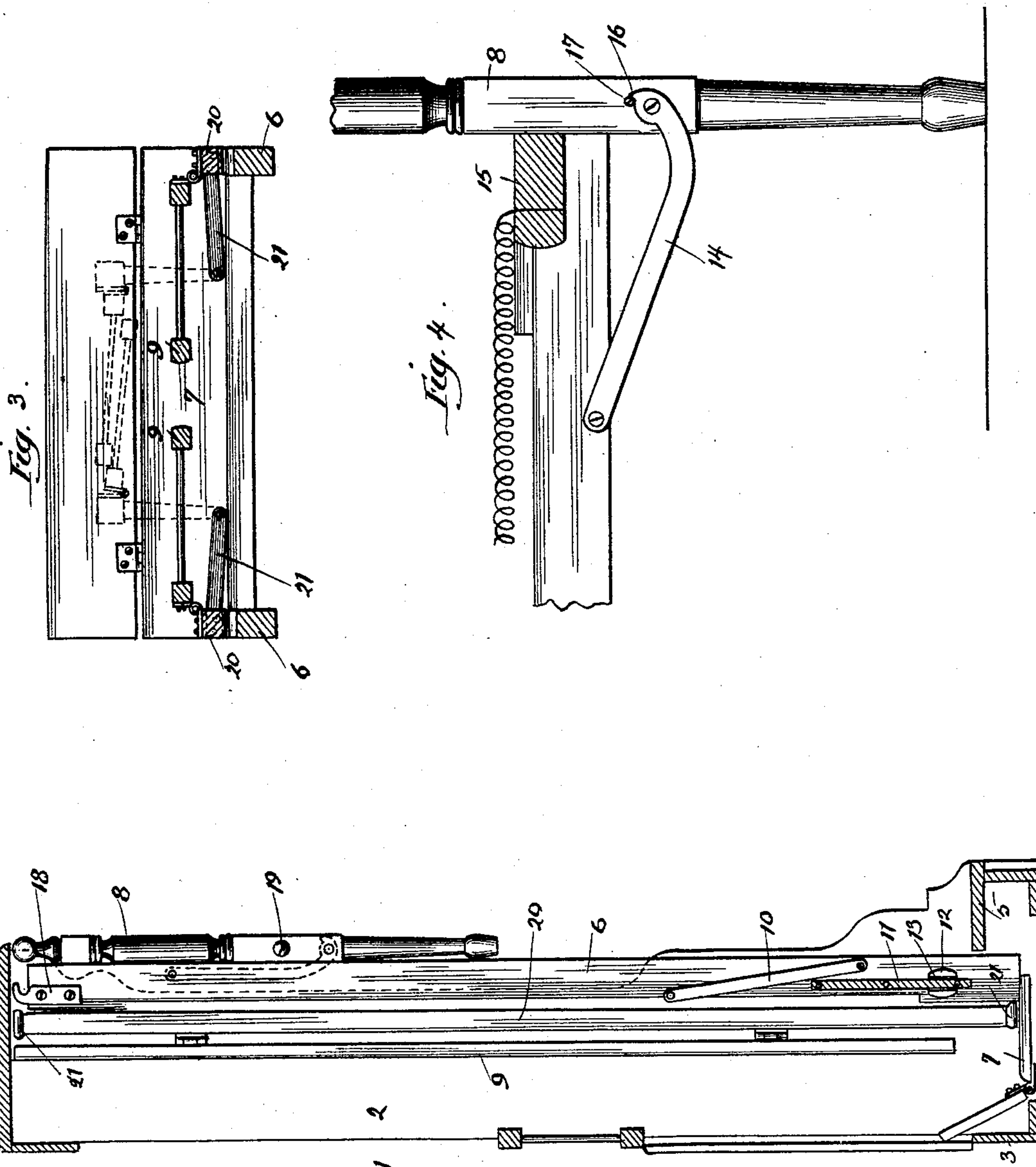
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Fig. 2. Inventor: Caspar M. Wagner.
By Bond, Widener & Richards.
Attorneys.

UNITED STATES PATENT OFFICE.

CASPAR M. WAGNER, OF CHICAGO, ILLINOIS.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 480,795, dated August 16, 1892.

Application filed March 8, 1892. Serial No. 424,236. (No model.)

To all whom it may concern:

Be it known that I, CASPAR M. WAGNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Folding Beds, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation showing the folding frame in a horizontal position, one side of the stationary frame being removed. Fig. 2 is a similar view showing the folding frame in its vertical position. Fig. 3 is a vertical cross-section on line 3 3 of Fig. 1, showing the side rails folded. Fig. 4 is an enlarged detail, being a partial longitudinal vertical section through the folding frame, showing the arrangement of one of the straps to which are attached the posts which support the outer end of the folding frame. Fig. 5 is an enlarged detail, being a horizontal cross-section on line 5 5 of Fig. 1; and Fig. 6 is a vertical cross-section on line 6 6 of Fig. 1.

My invention relates to folding beds; and the objects of my invention are to provide a new and improved folding bed, which will be provided with suitable side rails, so that it may be used as an ordinary cot; to provide new and improved means for folding the posts which support the outer end of the folding frame when the bed is closed or in its vertical position; to provide new and improved means for mounting the side rails, so that they may be folded over the bedding, and to otherwise improve the construction of folding beds. I accomplish these objects as hereinafter specified and as illustrated in the drawings.

That which I regard as new will be pointed out in the claims.

In the drawings, 1 indicates the stationary frame of a folding bed, which may be made after the usual pattern, being provided with side boards 2, united by cross-boards 3, 4, and 5. I do not wish to limit myself to the particular arrangement of the cross-boards shown, as they may be otherwise arranged.

6 indicates the side pieces of the folding frame, which side pieces are united at their inner ends by means of a head-board 7, as best shown in Fig. 3, and at their outer ends by a cross-piece 15, as best shown in Fig. 4.

8 indicates posts, which are united by a foot-board. (Not shown.) The lower ends of the posts 8 serve as legs to support the outer end of the folding frame, and their upper ends extend a greater or less distance above the side pieces 6 and serve to support the outer ends of side rails 9, as best shown in Fig. 1. The posts 8 are connected to the side pieces 6 of the folding frame by means of curved straps 14, which at one end are pivoted to the side pieces 6 and at the other end to the sides of the posts 8, as best shown in Fig. 4. The length of the straps 14 is such that they serve to bind the posts 8 firmly against the ends of the side pieces 6 when the posts are turned at right angles to said side pieces.

16 indicates a shoulder, one of which is formed on the outer end of each strap 14, as best shown in Fig. 4. Each shoulder 16 is adapted to engage a pin or screw 17, secured in the post 8, as shown. The shoulder 16 and pin 17 of each strap and post are so placed with relation to each other that when the posts are at right angles to the side pieces 6 of the bed the shoulders will bear against the pins 17 in such manner as to prevent the upper ends of the posts from being moved outward. By this construction if the posts 8 are folded under the folding frame, as shown in Fig. 2, and it is desired to turn the posts at right angles to the frame, (as is the case when the bed is in use,) the posts may be turned outward until the pins 17 engage the shoulders 16 of the straps 14, when further outward motion of the upper ends of the posts 8 will be prevented and the posts will be held in proper position to fit against the ends of the side pieces 6. This not only renders the operation of setting up the posts easier, but it also aids in preventing them from tipping over away from the folding frame. To further prevent tipping away of the posts 8, each side piece 6 is provided with a hook 18, which is adapted to engage a screw or pin 19, carried by each post when the posts are at right angles to the side pieces, as shown in Fig. 1. When the folding-frame is turned to a vertical position, the posts 8 are moved downward and horizontally under the folding portion, as shown in Fig. 2.

The inner ends of the side pieces 6 are connected by means of pivoted straps 10 to the

side pieces 2 of the stationary frame, as best shown in Fig. 2, by which construction the folding frame may be turned upward to a vertical position or moved downward to a horizontal position. The straps 10 are preferably placed on the inside of the side pieces 2 and on the outside of the side pieces 6, as shown in Figs. 1 and 2.

11 indicates guide-strips, one of which is secured to each side piece 2, preferably in a vertical position.

12 indicates guide-blocks, one of which is swiveled upon each side piece 6 near its inner end, each of which guide-blocks is provided with a groove 13, adapted to receive the guide-strips 11, substantially as described in my application of even date herewith. The guide-blocks 12 and guide-strips 11 act together with the straps 10 to render the action of the folding frame smooth and serve to balance it, so that it may be easily operated. By inclining the guide-strips 11 they may be made to throw the folding frame in or out as the frame is moved.

Each side rail 9 is hinged to a strip 20, one of which extends longitudinally of the bed over each side piece 6, as best shown in Fig. 3, the side rails being so hinged that they may be folded over the bed, as shown. Each strip 20 is connected to the head-board 7 and cross-piece 15 by means of two hinged straps 21—one at each end. By this construction when it is desired to fold the rails 9 over the bedding the side strips 20 and side rails may be lifted up the necessary height and folded over, as indicated by dotted lines in Fig. 3, the hinged straps 21 permitting of such folding. By mounting the side rails 9 upon strips extending longitudinally of the folding frame the operation of moving the side rails upward to fold them over the bedding is rendered much easier, as the strips are rigid, and even when the side rails are lifted from one end their motion is uniform. This construction also strengthens the different parts. The upper ends of the side rails 9 are supported by suitable hooks 23 and 24, mounted on the posts 8 and side pieces 2, respectively, which hooks are engaged by pins 25 and 26, carried by the side rails 9, as shown in Fig. 1.

When it is desired to fold or close the bed, the side rails 9 are turned down over the bed, as shown in full lines in Fig. 3, or indicated by dotted lines in Fig. 3, depending on whether the bed does not or does carry bedding, and the folding frame is then turned upward and the end posts 8 are turned to lie parallel with the side pieces 6, as shown in Fig. 2. By this construction a folding bed is secured which may be used for all the ordinary purposes for which a cot is adapted.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a stationary frame, a folding frame having side pieces 6, and straps 10, pivoted to the side pieces and

to the stationary frame, of guide-blocks 12, swiveled to the said side pieces and each having a groove 13, and guide-strips 11, rigidly secured to the stationary frame and extending through the grooves in the guide-blocks, substantially as and for the purposes described.

2. The combination, with a stationary frame, of a folding frame having side pieces 6, the straps 10, pivoted to the side pieces and to the stationary frame, the swinging side rails 9, having pivotal connections with the folding frame, the guide-blocks 12, swiveled to the side pieces of the folding frame and each having a groove 13, and the guide-strips 11, rigidly secured to the stationary frame and extending through the grooves in the guide-blocks, substantially as and for the purposes described.

3. The combination, with a stationary frame, of a folding frame having side pieces 6, the straps 10, pivoted to the side pieces and to the stationary frame, the longitudinal strips 20, having end straps 21 pivoted to the folding frame so that the strips can rise and fall, the side rails 9, hinged to the longitudinal strips, and the posts 8, pivotally connected with the side pieces of the folding frame, substantially as and for the purposes described.

4. The combination, with a stationary frame, of a folding frame having side pieces 6, the straps 10, pivoted to the side pieces and to the stationary frame, the guide-blocks 12, swiveled to the side pieces and each having a groove 13, the guide-strips 11, rigidly secured to the stationary frame and extending through the grooves in the guide-blocks, the longitudinal strips 20, having straps 21, pivoted to the folding frame so that the strips can rise and fall, the side rails 9, hinged to the longitudinal strips, and the posts 8, pivotally connected with the side pieces of the folding frame, substantially as and for the purposes described.

5. The combination, with a stationary frame, of a folding frame having side pieces 6, the straps 10, pivoted to the side pieces and to the stationary frame, the guide-blocks 12, swiveled to the side pieces and each having a groove 13, the guide-strips 11, rigidly secured to the stationary frame and extending through the grooves in the guide-blocks, the longitudinal strips 20, having straps 21 pivoted to the folding frame so that the strips can rise and fall, the side rails 9, hinged to the longitudinal strips, the posts 8, pivotally connected with the side pieces of the folding frame and having hooks 22 to engage the side rails, the hooks 25, secured to the stationary frame, and the pins 23, secured to the inner ends of the side rails and detachably engaging the hooks on the stationary frame, substantially as and for the purposes described.

6. The combination, with the side pieces 6, of the end posts 8, provided with laterally-

projecting pins 17, and the straps 14, pivoted
at one end to the side pieces and at the oppo-
site end pivoted to the posts directly below
said laterally-projecting pins and extending
5 past the pivoted points to form the project-
ing shoulders 16, which strike the pins on
the posts when the latter are adjusted to a

position at right angles to the side pieces, sub-
stantially as and for the purposes described.

CASPAR M. WAGNER.

Witnesses:

ALBERT H. ADAMS,
JOHN L. JACKSON.