

No. 641,274.

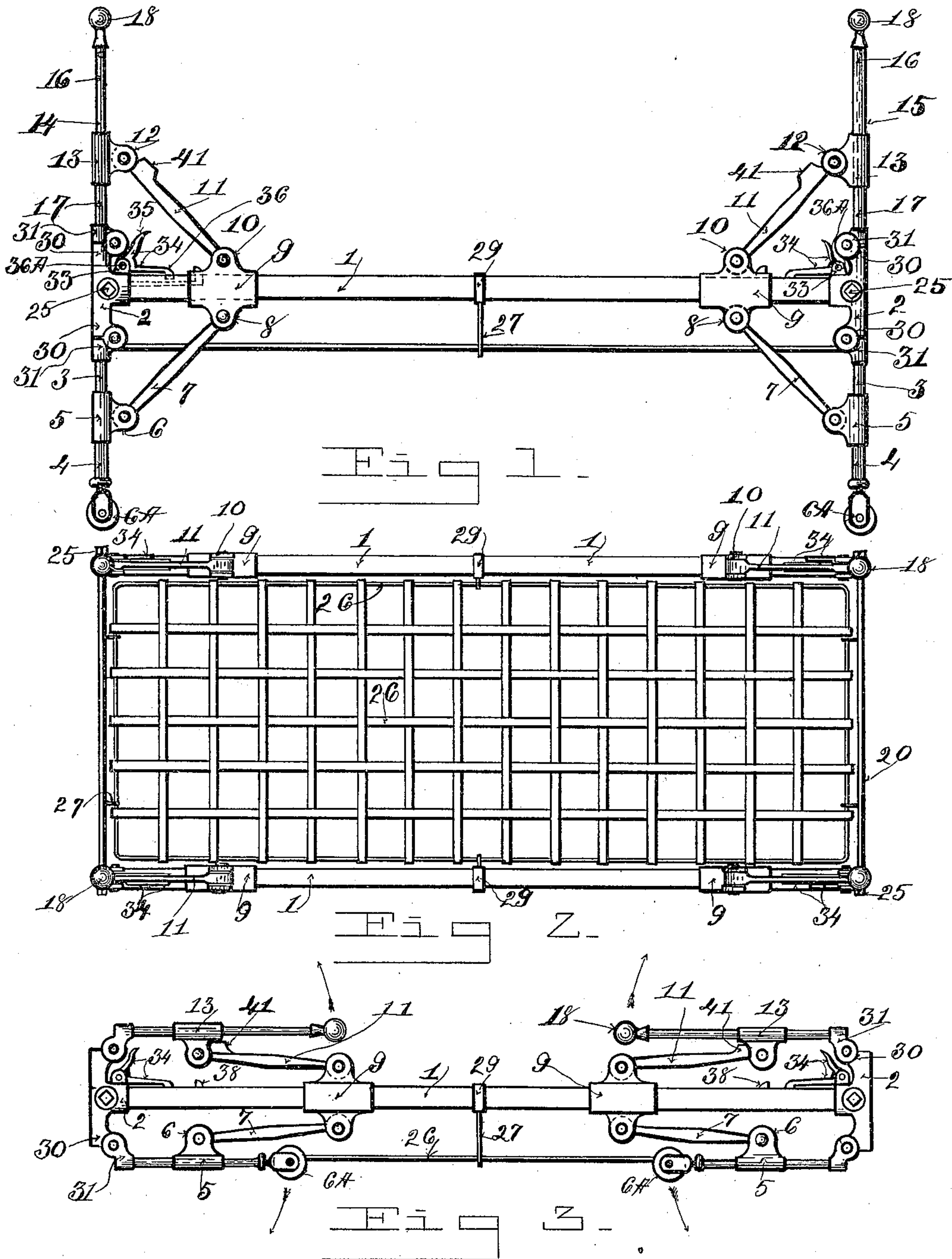
Patented Jan. 16, 1900.

F. CRAMER.
FOLDING BEDSTEAD.

(Application filed Sept. 11, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses
Arthur N. Barnes
Eilpha P. Cramer

Inventor
Frederick Cramer
By his Attorney
H. S. Bailey

No. 641,274.

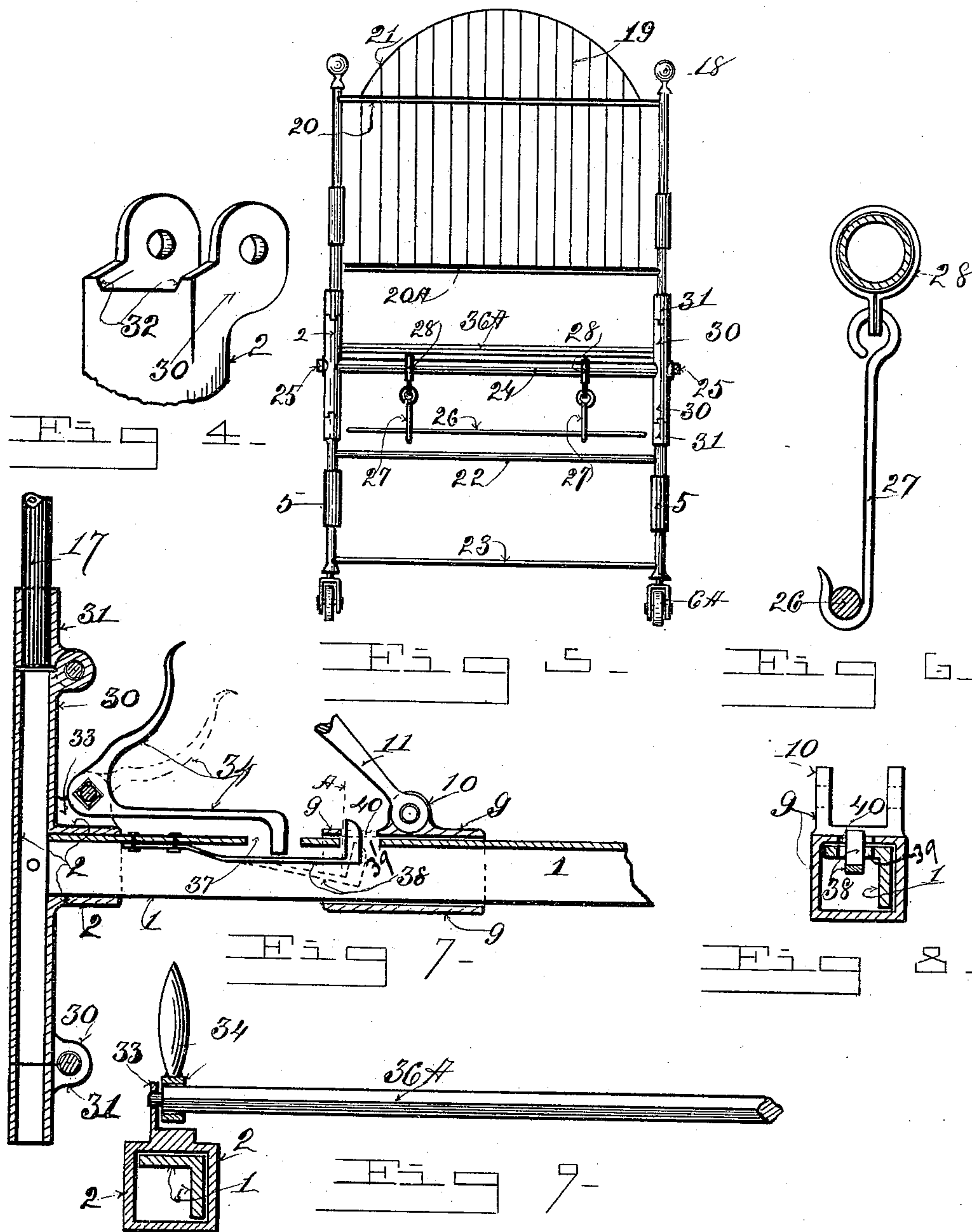
Patented Jan. 16, 1900.

F. CRAMER.
FOLDING BEDSTEAD.

(Application filed Sept. 11, 1899.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses
Arthur H. Barnes
Zilpha P. Cramer

Inventor
Frederick Cramer
By his Attorney
H. S. Bailey

UNITED STATES PATENT OFFICE.

FREDERICK CRAMER, OF DENVER, COLORADO.

FOLDING BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 641,274, dated January 16, 1900.

Application filed September 11, 1899. Serial No. 730,166. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK CRAMER, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Folding Bedsteads; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 a part of this specification.

My invention relates to improvements in folding bedsteads; and the objects of my invention are, first, to provide a folding bedstead that can be securely locked in an open position without danger of accidentally closing if moved about; second, to provide a folding bedstead the headboards of which cannot fold close enough to injure an occupant; third, to provide a folding bedstead in which the legs also fold and that can be very quickly folded up and placed on edge or end at one side of a room or in a closet; fourth, to provide a simple, durable, and light-weight bedstead especially adapted for hospitals, army and navy use, hotels, and apartment and lodging houses. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved folding bedstead. Fig. 2 is a plan view of Fig. 1. Fig. 3 shows the bedstead folded up. Fig. 4 is a fragment of one of the folding joints. Fig. 5 is an end elevation of the bedstead. Fig. 6 is an elevation of the hook and clip that supports the springs and a section of one of the end braces. Fig. 7 is a fragmentary sectional view of one side rail and post, showing the locking device. Fig. 8 is a cross-section of Fig. 7 on line A; and Fig. 9 is an end view of the locking-bolt and the rod that connects the locking-bolts of the opposite sides of the bed together, so that each end of the bed may be unlocked from either side.

Similar numerals of reference refer to similar parts throughout the several views.

Referring to the drawings, the numeral 1 designates the side rails of the bed. These are preferably made of angular-shaped metal,

as shown in cross-section in Figs. 8 and 9, but any other form could be used, and, if desired, wooden rails could be used instead of metal. These rails are secured in any convenient manner, but preferably by being pinned or brazed to the post-sockets 2, which are T-shaped sockets, and support the head and foot boards and also the legs. The legs consist of pieces of pipe or rods 3 and 4, which are secured to a coupling 5, upon which projecting ears 6 are cast. Casters 6^A are placed in the ends of the legs. One end of an arm 7 is pivoted to these ears, and the other end is pivotally secured to ears 8, depending from a sleeve 9, which is slidably mounted on each end of each side rail. Each sleeve is provided with ears 10 on its upper side, to which one end of arms 11 are pivotally secured. The opposite ends of these arms are pivotally secured to ears 12, forming part of a coupling 13. This coupling forms a part of the head and foot board posts 14 and 15, the posts above and below these couplings comprising the rods or tubes 16 and 17. A ball 18 is shown at the top of each post. Transversely across from post to post a partition of any desired design of preferably open wirework is placed. Straight wires 19 are shown in Fig. 5 passing through the braces 20 and 20^A and terminating in an arch-wire 21 at the top. Two cross-braces 22 and 23 are shown connecting the legs, and at the central portion of the sockets 2 a strong brace comprising a pipe 24, which is fitted between the posts, and a bolt 25, which passes through the pipe and posts and clamps them together. The bed-springs 26 are supported by rods 27, preferably containing hooks at their ends, as shown in Fig. 6. These are secured by round clips 28 to the end braces 24 and by square clips 29 to the side rails. This arrangement allows the springs to be detached quickly from the bedstead when desired. It is never necessary to detach the springs in order to fold and move the bedstead. In fact, it is just as easy to move it about from one room to another with all the usual bedding as without, and is intended to be folded up and moved about in order for instant use upon unfolding and erecting it in normal position. The sockets 2 are provided at their opposite ends with one half of a piv-

otal hinge-joint 30, the opposite half 31 being secured to the adjacent portion of the posts. These joints are arranged so that the legs and head and foot board portions will
 5 swing and fold down over and up under the sides and springs, as shown in Fig. 3.

Fig. 4 illustrates the preferred form of joint, the wedge-shaped step 32, which is formed in the socket portion permitting the opposite
 10 part to be braced laterally by the sides of the seat independent of the pivotal joint. On the top of that portion of the socket that supports the side rail ears 33 are formed, to which are pivoted an angled lever 34. (Shown
 15 clearly in Fig. 7.) This lever comprises a handle portion 35 and a tongue portion 36, the end of which is provided with a depending tip that passes through a slot 37, formed in the top of the sides, and normally rests against
 20 the top of a spring 38, that is secured to the under side of the top arm of the angled side pieces. These levers are pivoted to the ears 33 by the opposite ends of a rod, preferably a square rod 36^A, that extends across the bed-
 25 stead and through each lever to which it is secured, preferably, by a square portion, so that when one lever is moved the rod will move the opposite lever and enable both sides of each end of the bedstead to be unlocked
 30 from either side. The extreme ends of the rods are round and fit loosely in the ears 33, as shown in Fig. 9. The springs are provided with an upwardly-projecting end that forms a keeper which normally projects through
 35 slot 39 in the top of side pieces and through a slot 40, formed in the top of the sleeves, and normally holds and locks the bedstead in position for use, as shown in Figs. 1 and 7.

To fold the bedstead up, the nearest handle is grasped (as both ends and both sides have handles) and moved to push the keeper of the spring down out of the slot in the sleeves at first one end and then the opposite end of the bedstead, and as soon as the
 45 keeper leaves the slot of the sleeves they will slide along the side rails as the legs and top portion are folded over, as shown in Fig. 3. The ends have to be folded one at a time.

To set up the bedstead, it is only necessary
 50 to raise the head and foot boards up vertically, when the keeper will spring into the slot of the sleeve and lock them and the legs in a vertical position.

41 designates stops arranged in the top arms to prevent the head and foot boards from fold- 55
 ing down too close to the springs.

My improved folding bedstead is simple in construction, very light in weight, and cheap, and is very useful where a portable bed is desired or where a bed is desired that can be
 60 folded up and placed against the side of a room or removed from it and placed in a closet during the daytime, as in wards in hospitals, lodging-houses, and hotels.

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

1. In a folding bedstead, the combination of the side rails and the end posts, with the sleeve, two arms pivoted at one end to said
 70 sleeve on opposite sides and diverging from said sleeve to the upper and lower portions of said posts and pivotally attached at their opposite ends to said end posts, two pivotal hinge-joints at substantially equal distances 75
 apart above and below the center of said side rails in said post portions, a two-armed lever pivotally attached to the central portion of said posts, a spring secured to said side rails, a slot in said side rail, a keeper on said spring, 80
 a slot in said sleeve into which said keeper normally projects, and a depending end on said lever in engagement with said spring, substantially as described.

2. In a folding bedstead, the combination 85
 with the corner-posts, of side rails of any suitable form of cross-section, a T-shaped socket secured at one end to said side rails and having a pivotal hinge-joint at each end, head and foot board posts secured to the
 90 upper joints and legs secured to said lower joints, a coupling in said head and foot board posts and said legs, an arm pivoted at one end to each coupling, a sleeve slidably mounted on said side rails and pivotally secured to 95
 the opposite ends of said arms and means including a hand operating-lever for locking said hinged and folding portions in a vertical operative position and against accidental folding, substantially as described. 100

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK CRAMER.

Witnesses:

ARTHUR W. BARNES,
 ZILPHA P. CRAMER.