

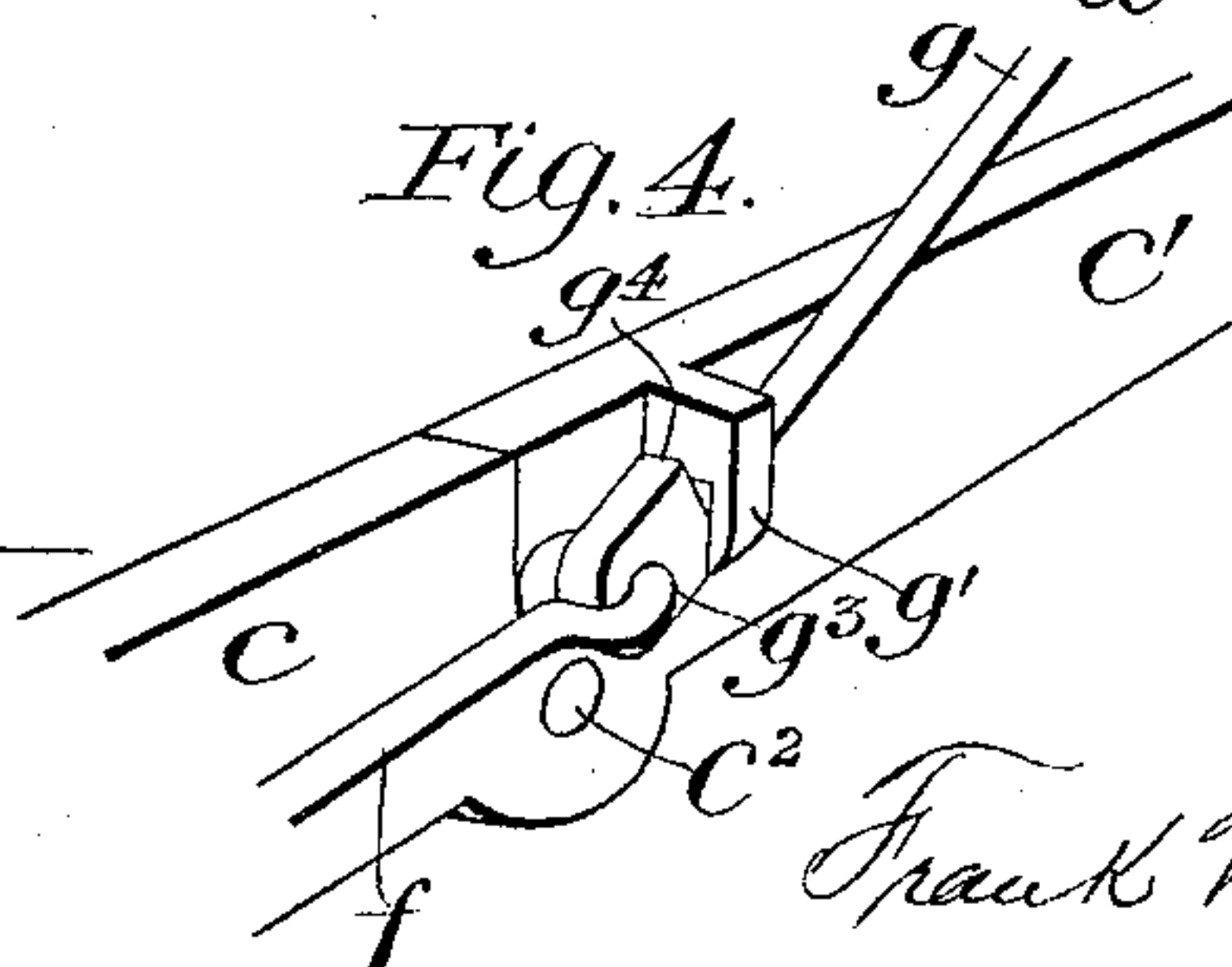
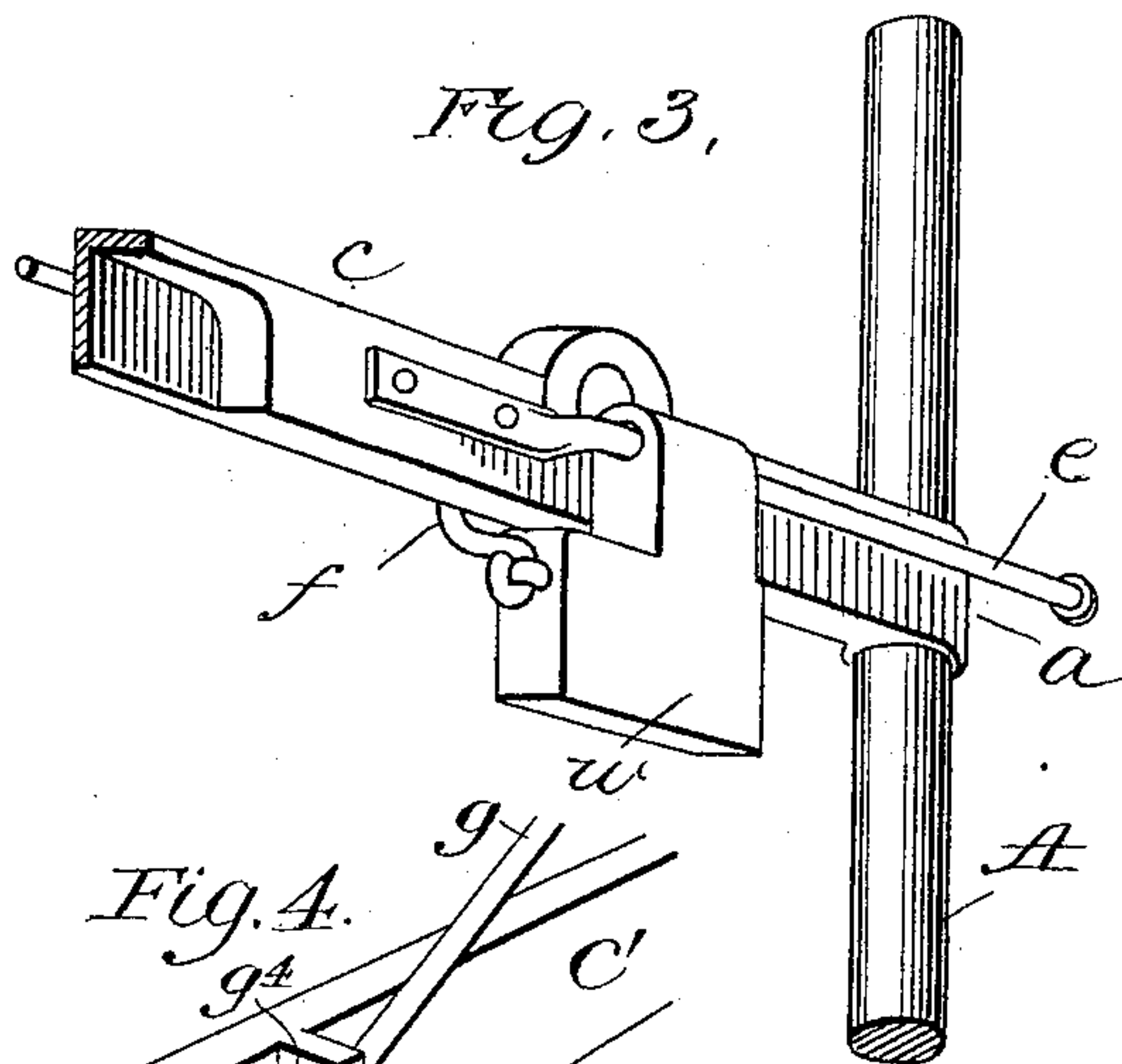
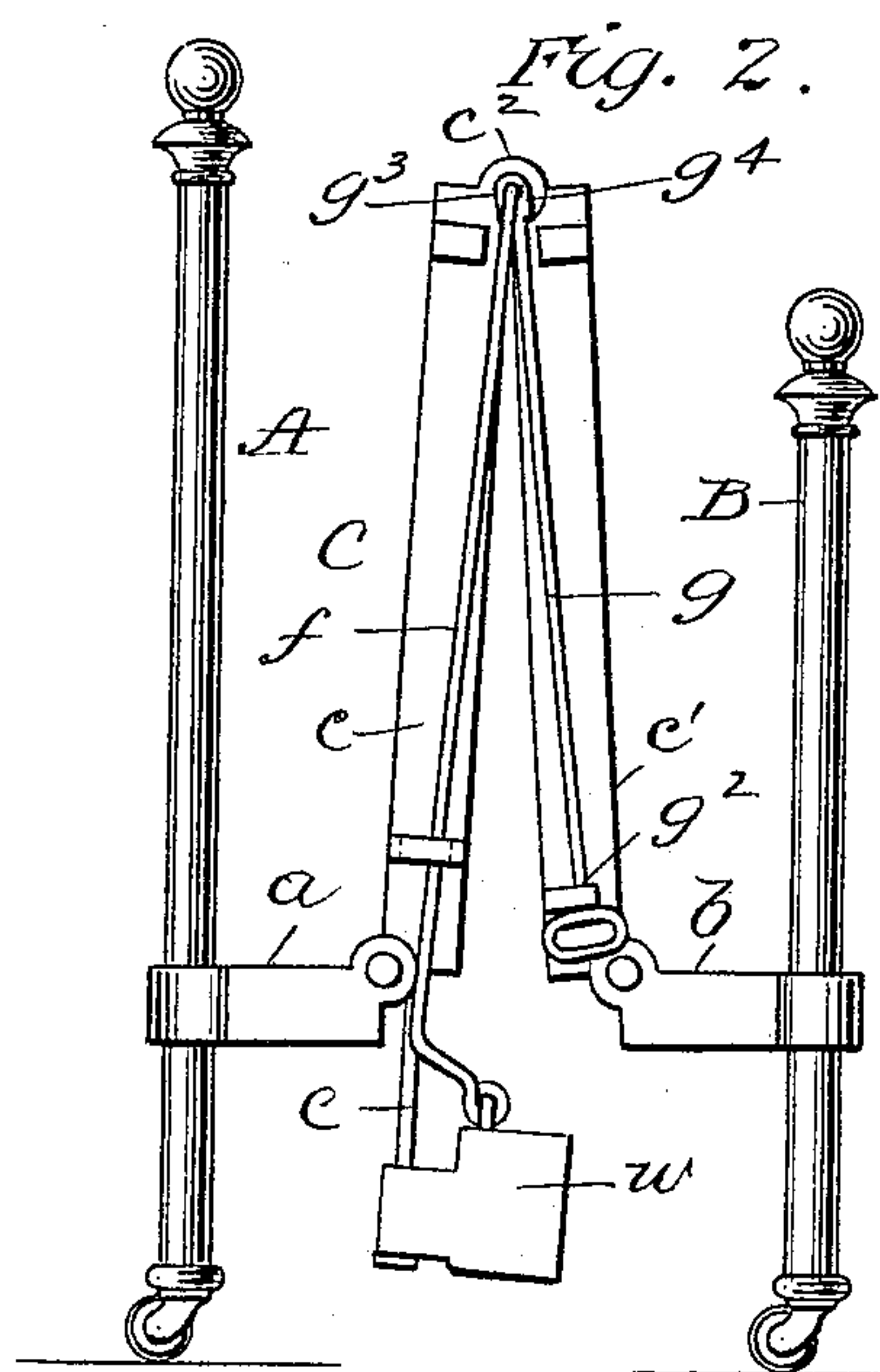
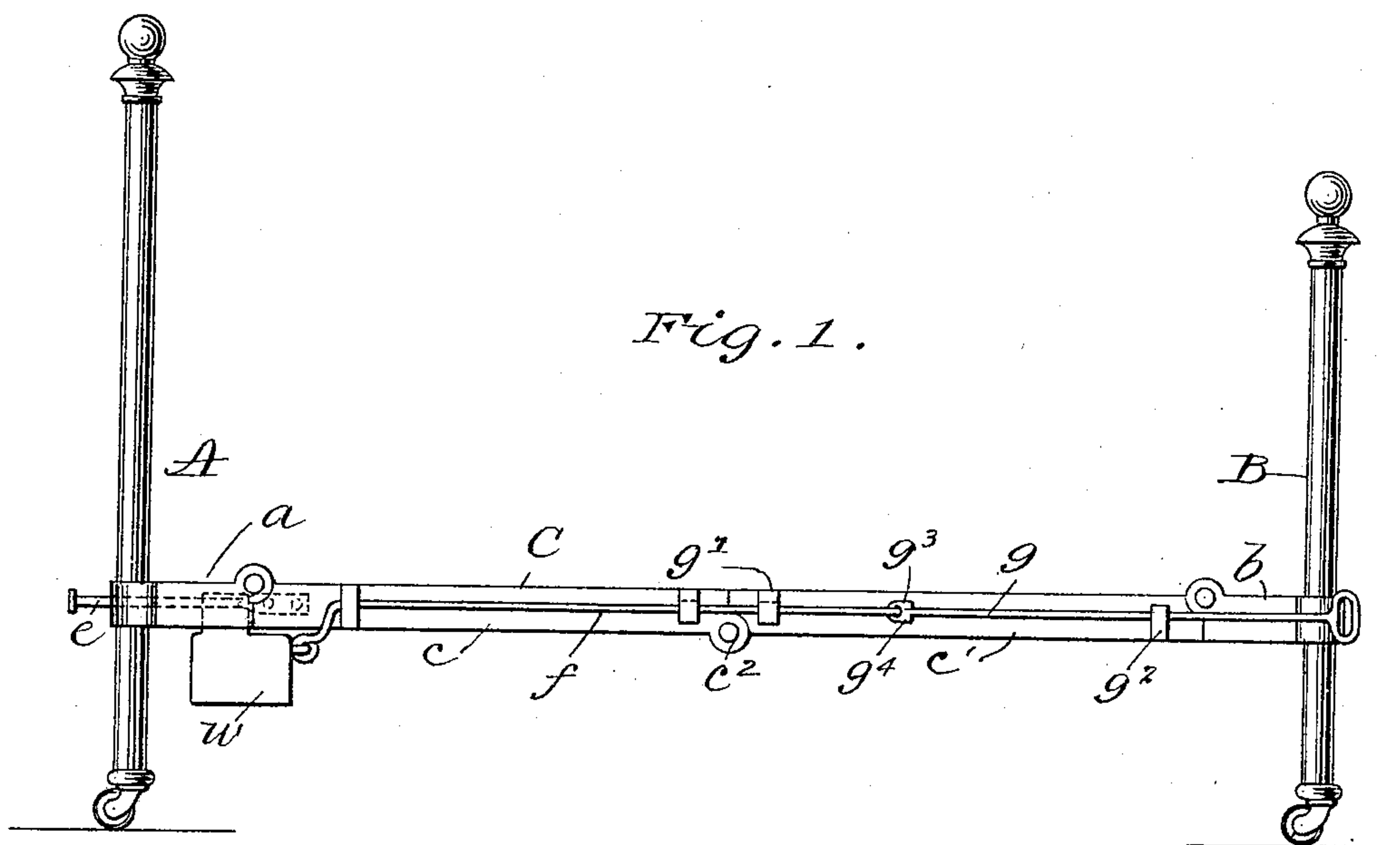
No. 616,048.

Patented Dec. 13, 1898.

F. M. ARCHER.
FOLDING BED.

(Application filed Feb. 7, 1898.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK M. ARCHER, OF NEW YORK, N. Y., ASSIGNOR TO SIEGFRIED SILBERBERG, OF SAME PLACE.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 616,048, dated December 13, 1898.

Application filed February 7, 1898. Serial No. 669,333. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. ARCHER, a citizen of the United States, residing at New York city, in the county of Kings and State of New York, have invented certain new and useful Improvements in Folding Beds, of which the following is a full, clear, and exact description.

This invention relates to folding beds, the object being to provide a simple and cheap construction especially adapted for metallic bedsteads and which may be easily manipulated in the operation of folding and unfolding.

In my improved bedstead the side bars are jointed in the middle and to the head and foot boards, so that the middle joint will rise in the operation of folding, allowing the two parts of the side pieces to fold together and bring the head and foot boards into close parallel relation, the mattress, spring, and bedclothing being confined between them. Certain appliances are provided for facilitating the operation, all of which will be fully described with reference to the drawings, wherein—

Figure 1 is a side elevation of the improved bedstead as it appears when open. Fig. 2 shows the bedstead closed or folded. Fig. 3 is a detail of a counterweight and its mounting, and Fig. 4 is a detail of the side-rail joints.

Referring to the drawings by letter, A represents the headboard, B the footboard, and C the side bars. The side bars are in two sections c and c' , jointed together at c^2 by "rule-joints" of such construction that when in a horizontal position the joint cannot be lowered, but can be raised. The section c is hinged by a similar joint, but reversed to a bracket a on the headboard, while the section c' is hinged by means of the same kind of joint to a bracket b on the footboard. Thus it will appear that by lifting the middle portions of the side bars and simultaneously forcing the footboard toward the headboard the bedstead may be folded into a position approximating that shown in Fig. 2. To accomplish this operation easily, I provide counterweights w , one attached to each side bar and hung upon a rod e , attached to the

section c and extending toward and possibly beyond the headboard. The weight is provided with a loop or eye through which this rod passes loosely and is adjustable along the length of the rod. When the weight is at the outer extremity of the rod, it tends to lift the section c , but when at the inner extremity of the rod this tendency is not present and may even aid in holding the section in its horizontal position. A weight mounted in this manner is applied to each side bar. Attached to the weight is a bent rod f , running along the outside of the side bar through suitable guide-eyes thereon and connecting at a point beyond the joint c^2 with a lifting lever or handle g by means of a joint g^3 . At or near this joint is a shoulder g^4 , the function of which will be hereinafter described. Adjacent to the joint c^2 and on the section c' is an overhanging hook or eye g' , through which the rod moves. The lifting-handle g rests normally in a bracket or hook g^2 . This arrangement of the rods is applied to both side bars. The normal position of the bedstead is shown in Fig. 1.

To fold the bed, a person stands immediately back of the footboard and reaching over the same grasps the handle-levers g in each hand. The levers are then thrust forward toward the headboard. This forces the counterweights w to the outer end of rods c^3 , where they will tend to lift the sections c . When the weights have reached this extreme outer position, the flexible joint g^3 between the lifting-lever and the rod f has passed just beyond the overhanging hook or eye g' . Then by pulling on both levers g' the shoulder g^4 at the joint engages with the overhanging hook g' and the sections c' are lifted. At the same time the operator presses against the footboard and with the help of the counterweights easily forces the bed into the position shown in Fig. 2. Since the joint g^4 in the operating-rods is located closely adjacent to the joints c^2 when the lifting is done, the rod will fold simultaneously with the side bars and when fully folded will occupy the position shown in Fig. 2. When the bed is in its folded condition, the counterweights, being still at the outer extremities of the rods supporting them, will tend to hold the bed in its folded position. In unfolding the bed the footboard

is simply drawn away from the headboard until the side bars have nearly assumed a horizontal position, when the levers *g* may be grasped and drawn on to move the weights
5 inward, after which the side bars may be forced solidly to their horizontal positions.

Either a bending mattress or one in two pieces may be used with this bed, and a spring of either of these characters may also be used.

10 Any canopy arrangement attached to the top of the headboard may be used to cover the bed when folded, the structure then presenting a neat appearance.

Having thus described my invention, I
15 claim—

1. In a folding bed the combination of hinged side bars, counterweights adjustable to opposite sides of the hinges of said side bars and lifting-levers whereby the counter-
20 weights may be adjusted and the side bars simultaneously lifted, substantially as described.

2. In a folding bed the combination of side bars jointed in the middle, counterweights
25 therefor located near one end of the side bars, and rods for adjusting the position of said

weights extending from the weights to the opposite ends of said bars and there provided with lifting-handles, said rods being jointed, for the purpose set forth. 30

3. In a folding bed the combination of side bars, each jointed in the middle, head and foot boards to which the two sections of the side bars are respectively hinged, a counterweight attached to the two sections which are
35 hinged to the headboard, said counterweight being adjustable to opposite sides of the hinge on the headboard, a rod connected with each counterweight and extending along the side bars beyond the middle joints thereof, hand-
40 levers flexibly jointed to said rods and a detent carried by the side bars adjacent to their middle joint wherewith the flexible joint in the rods may engage to lift the side bars, substantially as described. 45

In witness whereof I subscribe my signature in presence of two witnesses.

FRANK M. ARCHER.

Witnesses:

HARRY BAILEY,
FRANK S. OBER.