

No. 652,693.

Patented June 26, 1900.

M. SAMUELS.
FOLDING BED.

(Application filed July 3, 1899.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

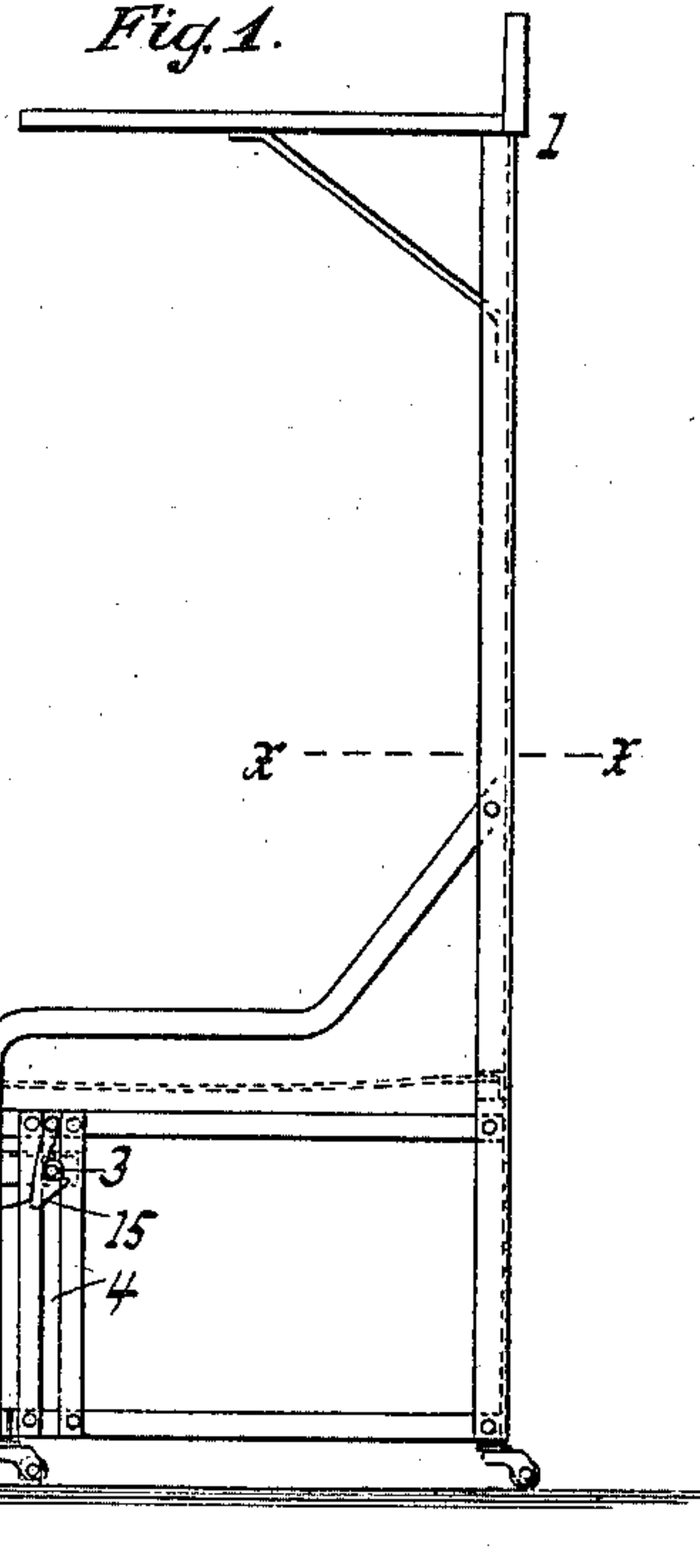


Fig. 3.

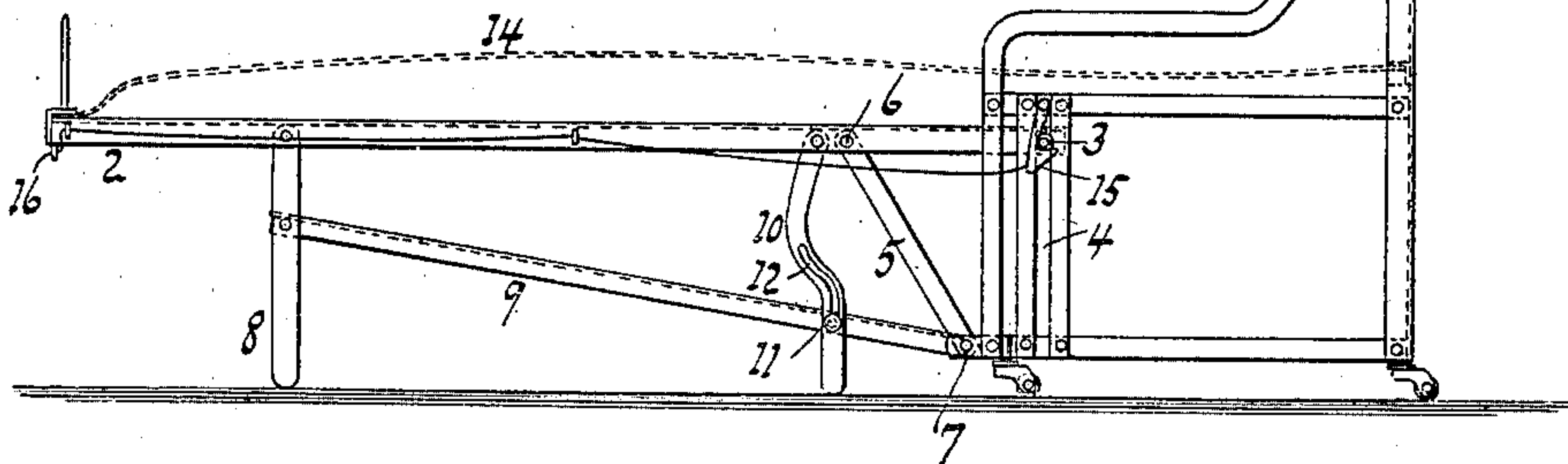
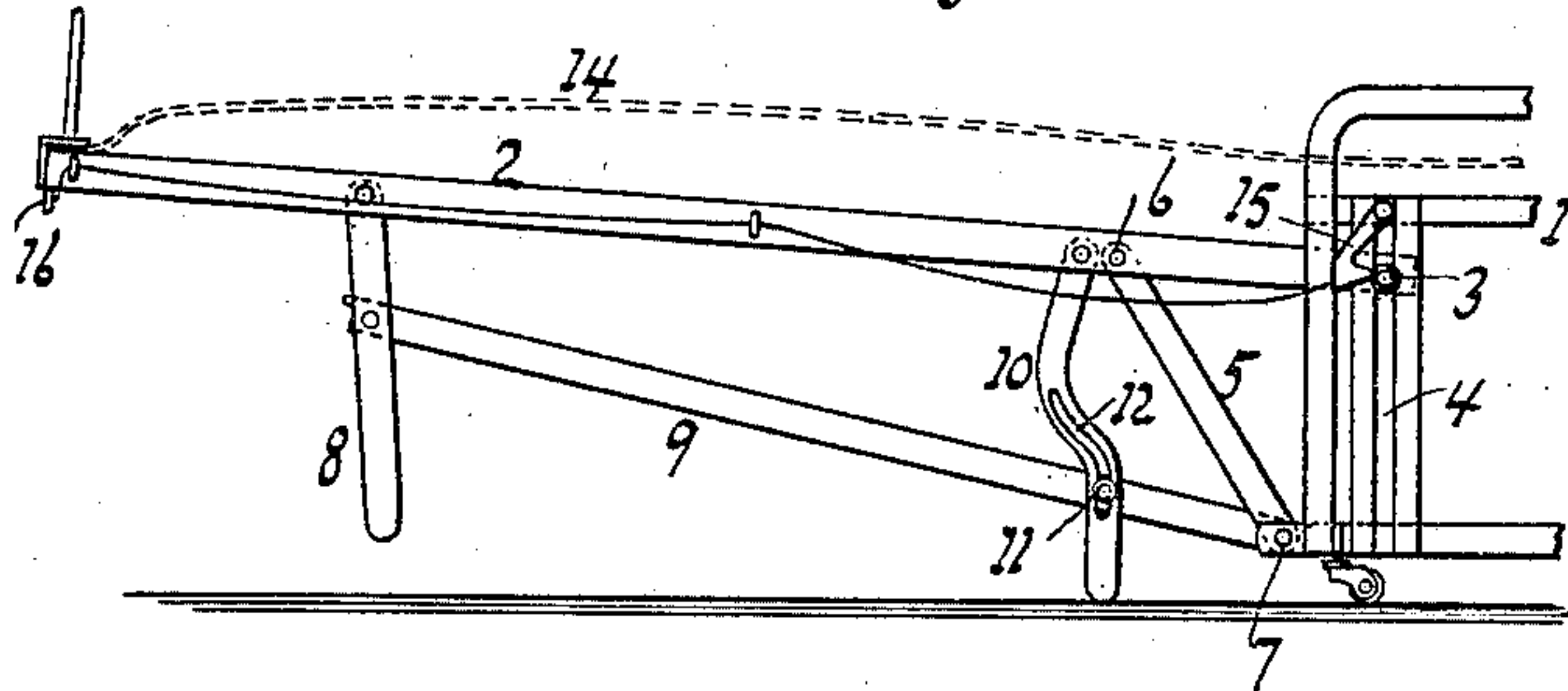
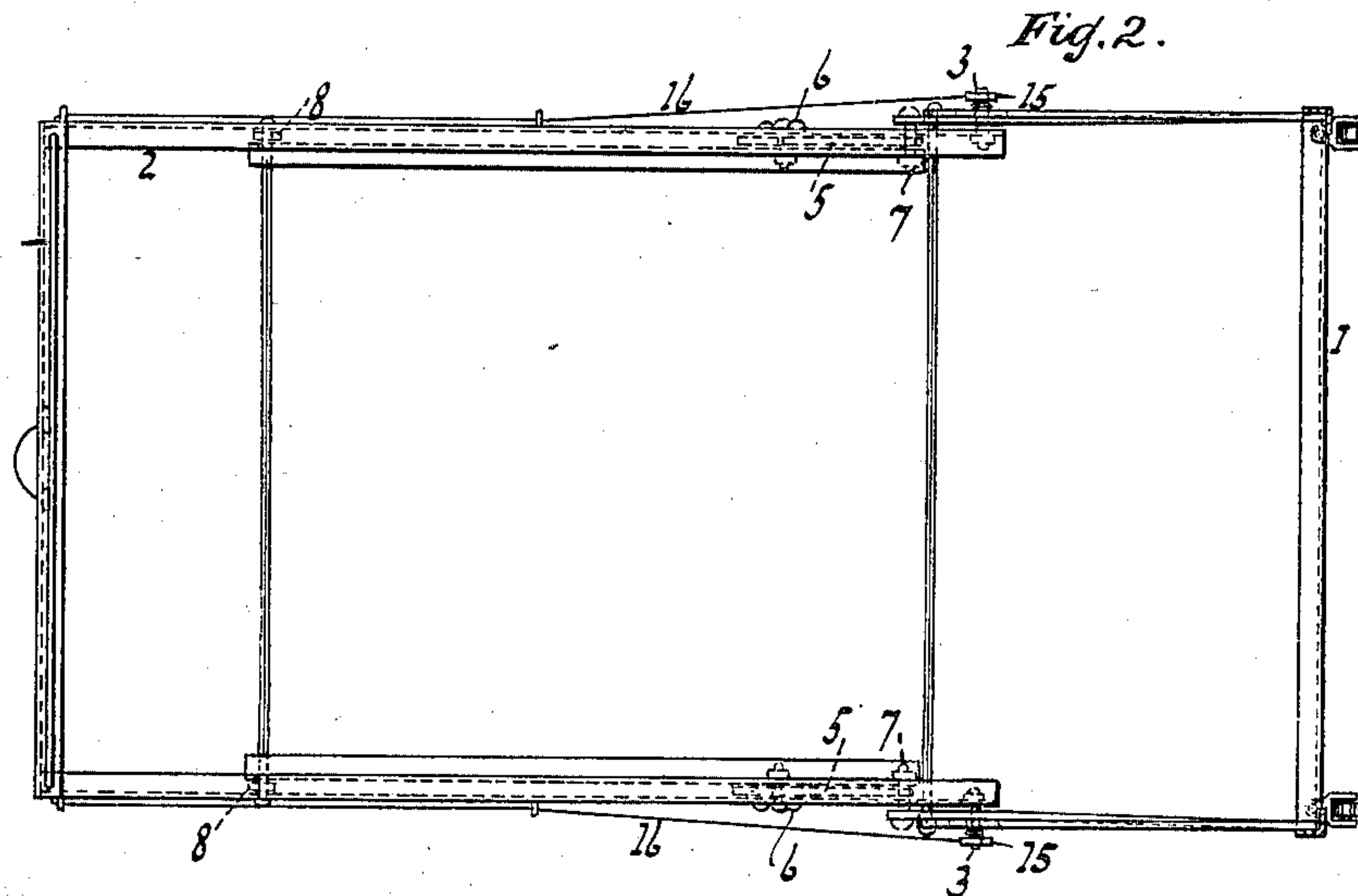


Fig. 2.



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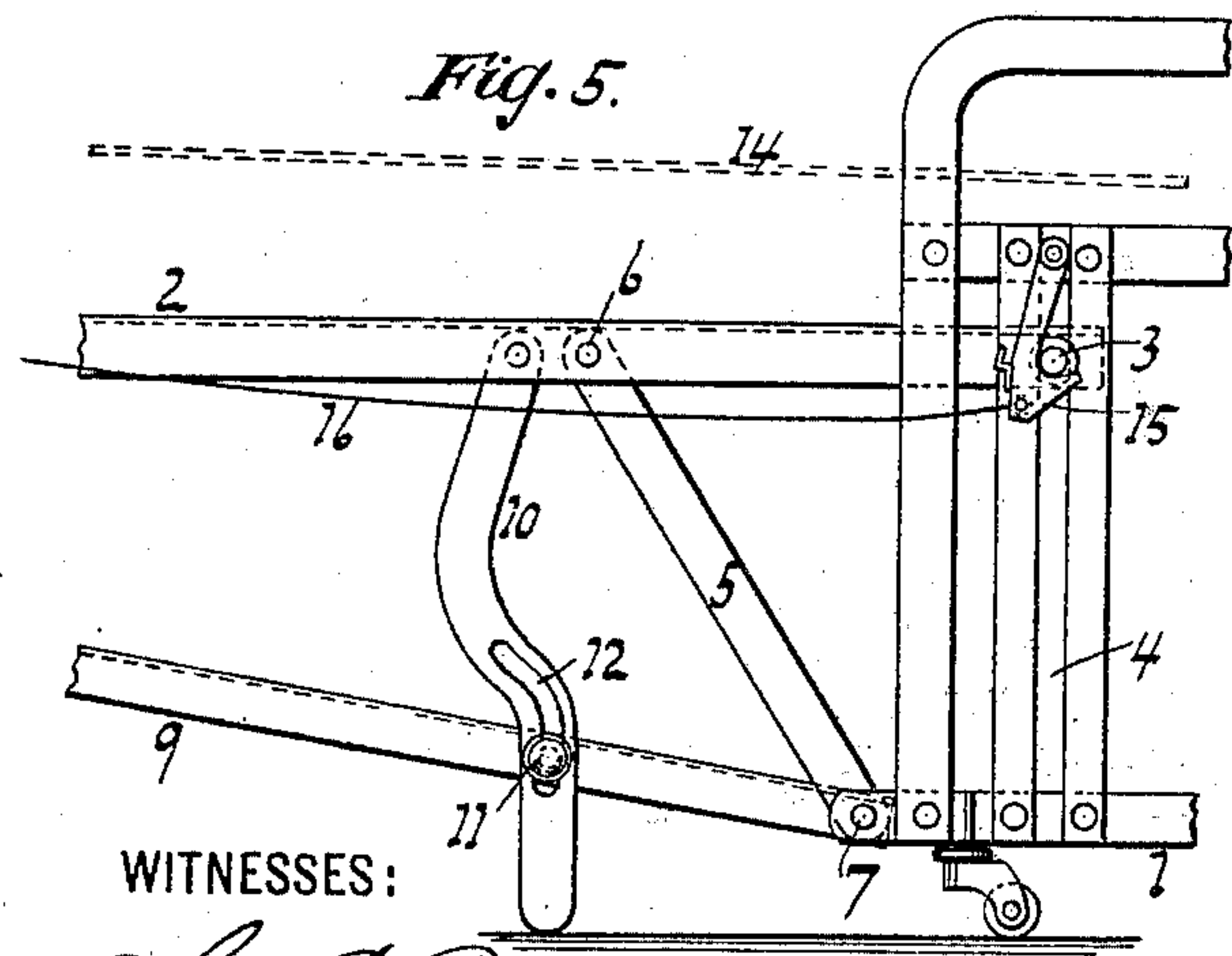
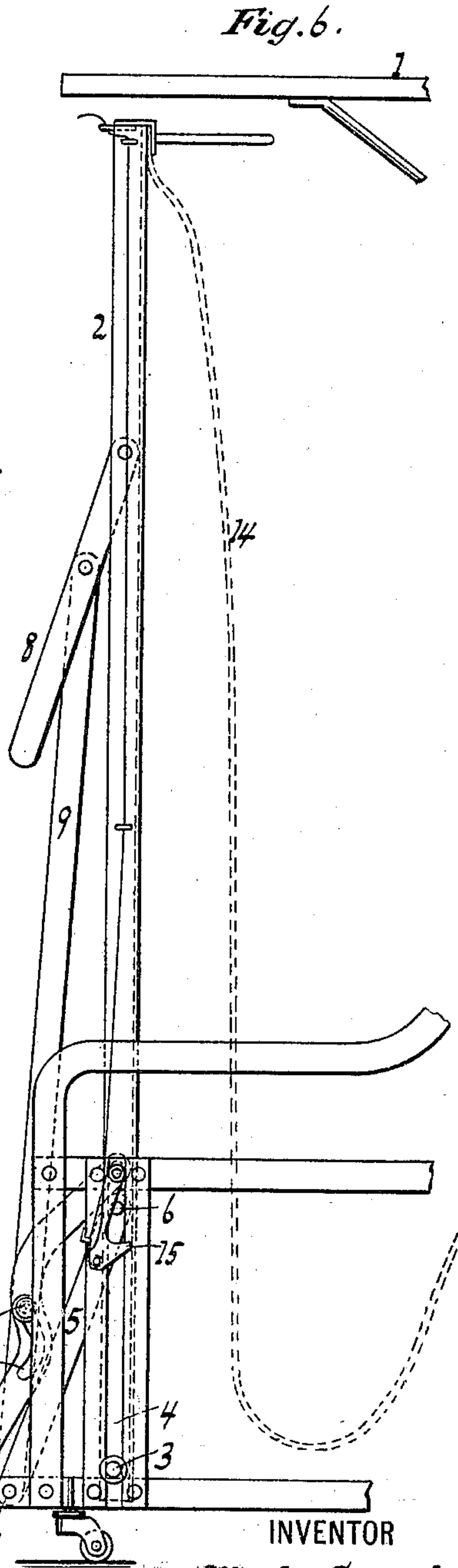
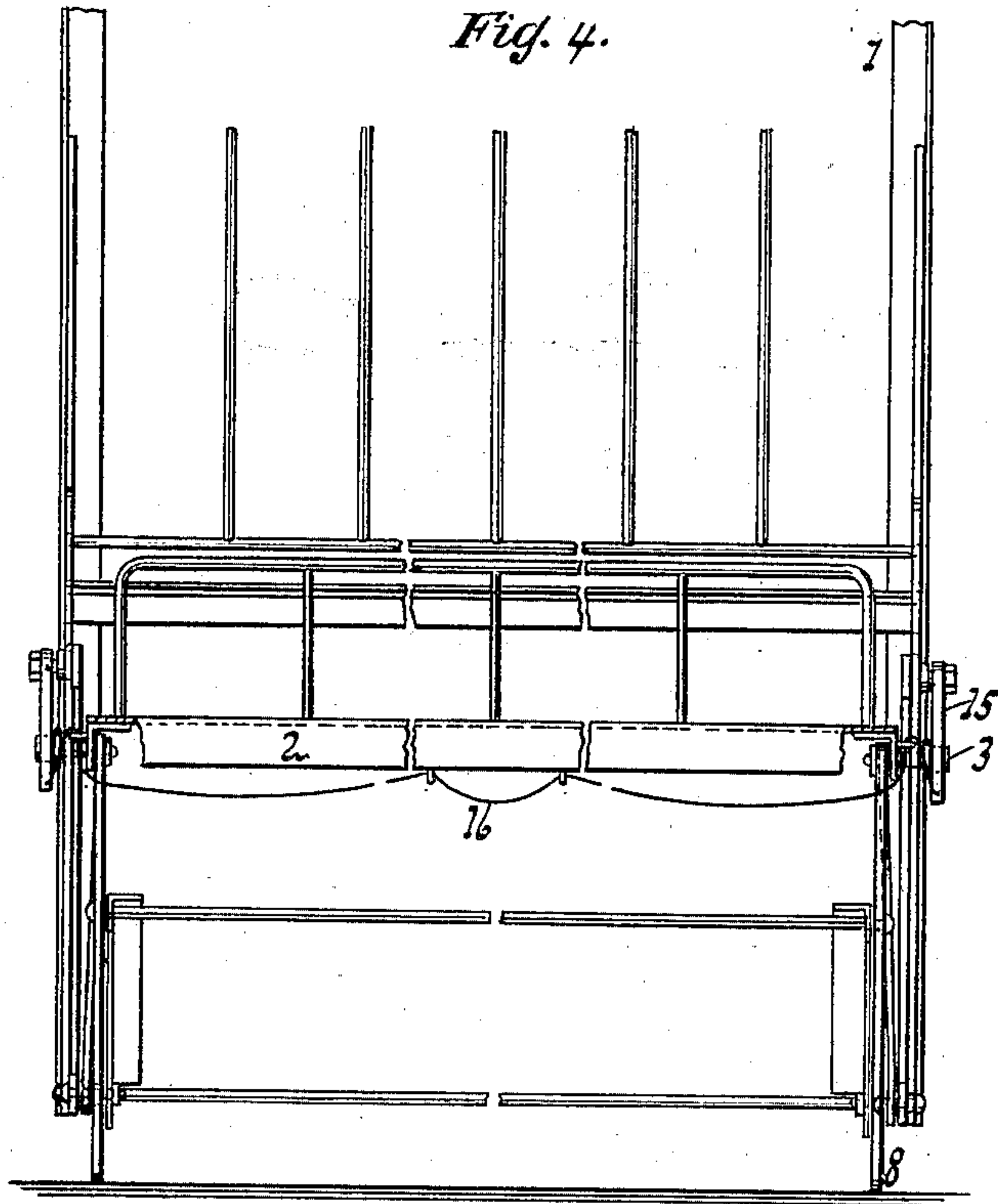
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2 Sheets—Sheet 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

MARKS SAMUELS, OF NEW YORK, N. Y., ASSIGNOR TO MINDEL SAMUELS, OF
SAME PLACE.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 652,693, dated June 26, 1900.

Application filed July 3, 1899. Serial No. 722,730. (No model.)

To all whom it may concern:

Be it known that I, MARKS SAMUELS, a citizen of the United States, residing at New York, borough of Manhattan, in the county and State of New York, have invented new and useful Improvements in Folding Beds, of which the following is a specification.

This invention relates to a folding bed simple in construction and reliable in its action; and the invention resides in the features of construction set forth in the following specification and claims and illustrated in the annexed drawings, in which—

Figure 1 is a side elevation of the bed open. Fig. 2 is a plan view of Fig. 1 sectioned at $x x$. Fig. 3 shows the bed partly opened. Fig. 4 is an end elevation of the bed open. Fig. 5 is a side elevation of part of Fig. 3 enlarged. Fig. 6 is a side elevation of the bed closed.

An upright back-frame is shown at 1 and a bed-section 2 is made to swing and travel on the back, the two being connected by a movable joint or a pin-and-slot connection 3 and 4. The back-frame having the vertical guide or way 4, the swinging section 2 when closed or swung shut, Fig. 6, will sink or carry the guide-bolt 3 to the lower part of slot 4. The bed is thus practically shortened or lowered. On opening, the section 2 carries the traveling bolt 3 to the top or upper part of vertical slot 4, as seen in Fig. 1. The rod or link 5 is fixedly pivoted or jointed to the back-frame and to the bed-section, the pivot 6 not being allowed to slide or travel on the bed-section and the pivot 7 being stationary on the back-frame 1. This rigid bar 5 on opening the bed carries or sustains the inner part of the bed-section or the part at guide or pin 3 in raised position, as seen in Fig. 1. The bed-section 2 on opening is thus suitably raised or brought to proper height and is at the same time extended or moved out of back-frame 1, so as to secure the proper length or distance between the foot end of part 2 and the back-frame 1.

The vertically-swinging bed-section 2 is provided near its outer end portion with a pivoted leg-frame 8, and brace-rods 9 are pivoted at one end to said leg-frame and at the opposite end are pivoted, as at 7, to the forward

portion of the back-frame, so that as the bed-section is swung to a horizontal position the leg-frame 8 is unfolded and brought to an approximately-perpendicular position to support the bed-section.

The legs 10 are shown intermediate the foot and head portions of bed part 2. A cam connection causes the intermediate leg 10 to open and close in accordance with the bed part. This cam connection is formed by a stud 11 on brace 9 and a suitably-shaped slot 12 in leg 10. The brace 9 is thus common to the leg-frame 8 and intermediate legs 10, and when the bed is open the leg-frame 8 and intermediate legs 10 are opened or swung to supporting position. Closing the bed causes the legs to close or swing to back 1 to be out of the way.

The intermediate legs 10 are serviceable, as they prevent the back-frame from tipping or falling forward during opening. Say the bed part has been nearly opened, as seen in Fig. 3. The completion of the opening requires some force, as it is accompanied by a stretching or tightening of the flexible bed-bottom 14, usually supported on coil-springs. The latter are not shown here, as forming no part of this invention. When the bed part 2 has reached the position shown in Fig. 3, the leg 10 comes to rest on the floor, and downward pressure on the foot or free end of part 2 will be now brought to bear on leg 10, so that the back-frame 1 is not thrown or tilted forward, and the bottom 14 can be stretched or the bed completely opened without accident. When the bed is open, it is locked, so that if a person or body comes to rest or sit at the inner or head part—say at or above guide 3—the bed will not collapse or snap shut. An effective automatic lock is formed by the latch-dogs 15. When the bed is open, the guide 3 is carried up to pass by the latch-dogs 15, and the latter then dropping or swinging back to catch under guide 3, Fig. 3, the latter is held up in way 4 and the bed is locked in open position. To close the bed, the latch-dogs 15 are moved to releasing position. A suitable handle or release is formed by a connection, as a wire 16, connected to latch-dogs 15 and extended to near the foot end of bed part 2. A person at the foot can,

by release 16, unlock the latch-dogs 15 and then raise the foot end of the bed to close the latter.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a back-frame 1, having vertical, rectilinear guideways 4, of the vertically-swinging bed-section 2 having guide-bolts 3, at its inner end engaging said guideways, the leg-frame 8, pivoted to the bed-section, the braces 9 pivoted at one end to the leg-frame and at the other end to the base of the back-frame, the links 5 having non-slidable pivot connections with the bed-section and the base of the back-frame, the intermediate legs 10 pivoted at one end to the bed-section and having cam-slots 12, and studs 11 on said braces, working in said cam-slots, substantially as described.

2. The combination with a back-frame having vertical, rectilinear guideways 4, of a vertically-swinging bed-section 2 having guide-bolts 3 at its inner end engaging said guideways, a leg-frame 8 pivoted to the bed-section, the braces 9 pivoted to the leg-frame and to the base of the back-frame, the links 5 having non-slidable pivot connections with the bed-section and the base of the back-frame, the latch-dogs 15 pivoted at the upper ends of the guideways and having their free lower ends normally lying beside said guideways in the path of said guide-bolts to automatically engage the latter when they rise to the upper ends of said guideways, and means for disen-

gaging the latch-dogs from the guide-bolts, substantially as described.

3. The combination with a back-frame 1, having vertical, rectilinear guideways 4, of the vertically-swinging bed-section 2 having guide-bolts 3 at its inner end engaging said guideways, the leg-frame 8 pivoted to the bed-section, the braces 9 pivoted to the leg-frame and to the base of the back-frame, the links 5 having non-slidable pivot connections with the bed-section and the base of the back-frame, the intermediate legs 10 pivoted at one end to the bed-section and having cam-slots 12, the studs 11 on said braces, working in said cam-slots, the latch-dogs 15 pivoted at the upper ends of said guideways to automatically engage said guide-bolts when they rise to the upper ends of said guideways, and means for disengaging the latch-dogs from the guide-bolts, substantially as described.

4. A support or back, a pivoted swinging bed-section having intermediate legs, and a brace, said legs and brace having a cam connection for causing the legs to open and close in accordance with the bed substantially as described.

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

MARKS SAMUELS.

Witnesses:

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