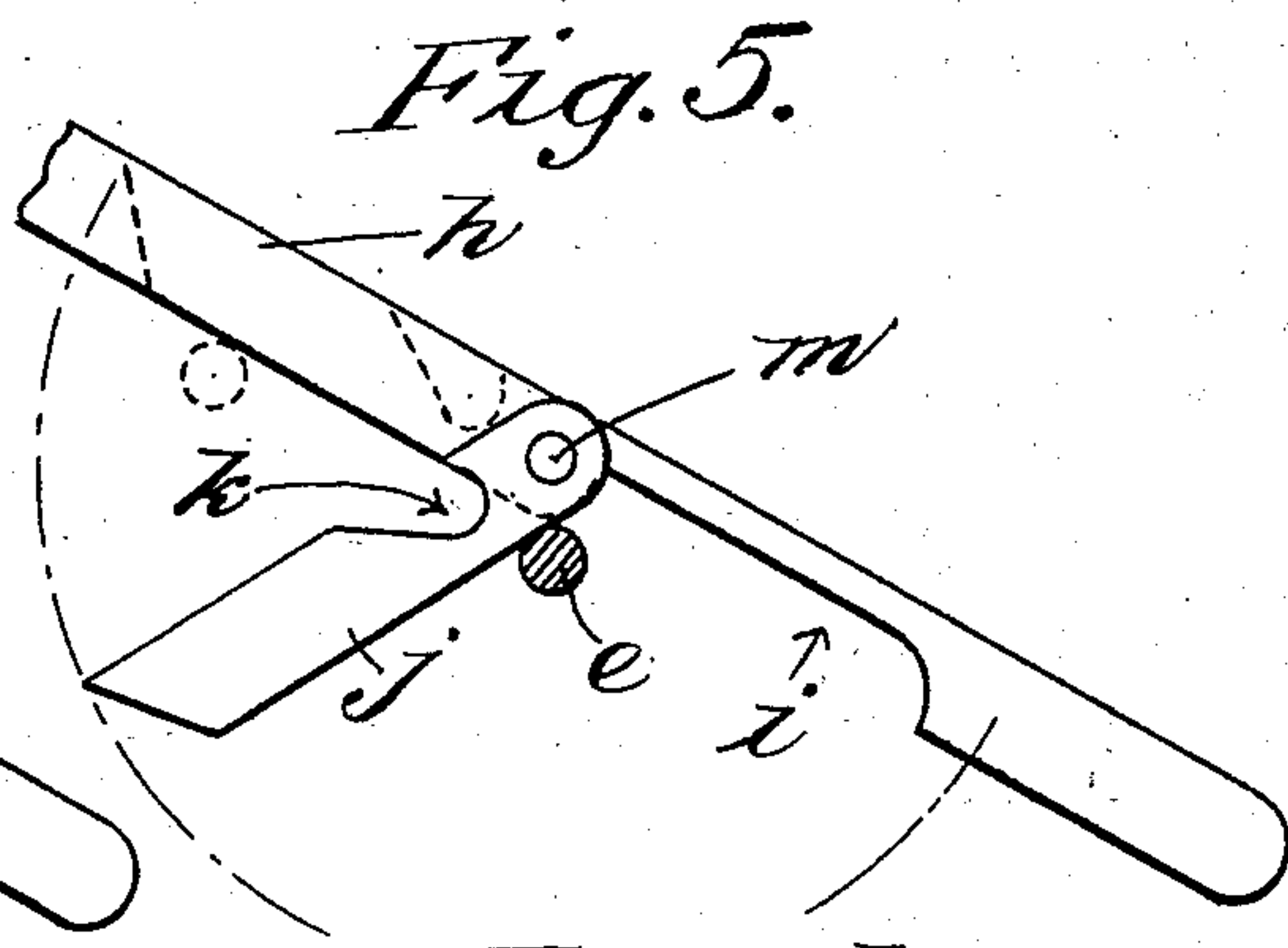
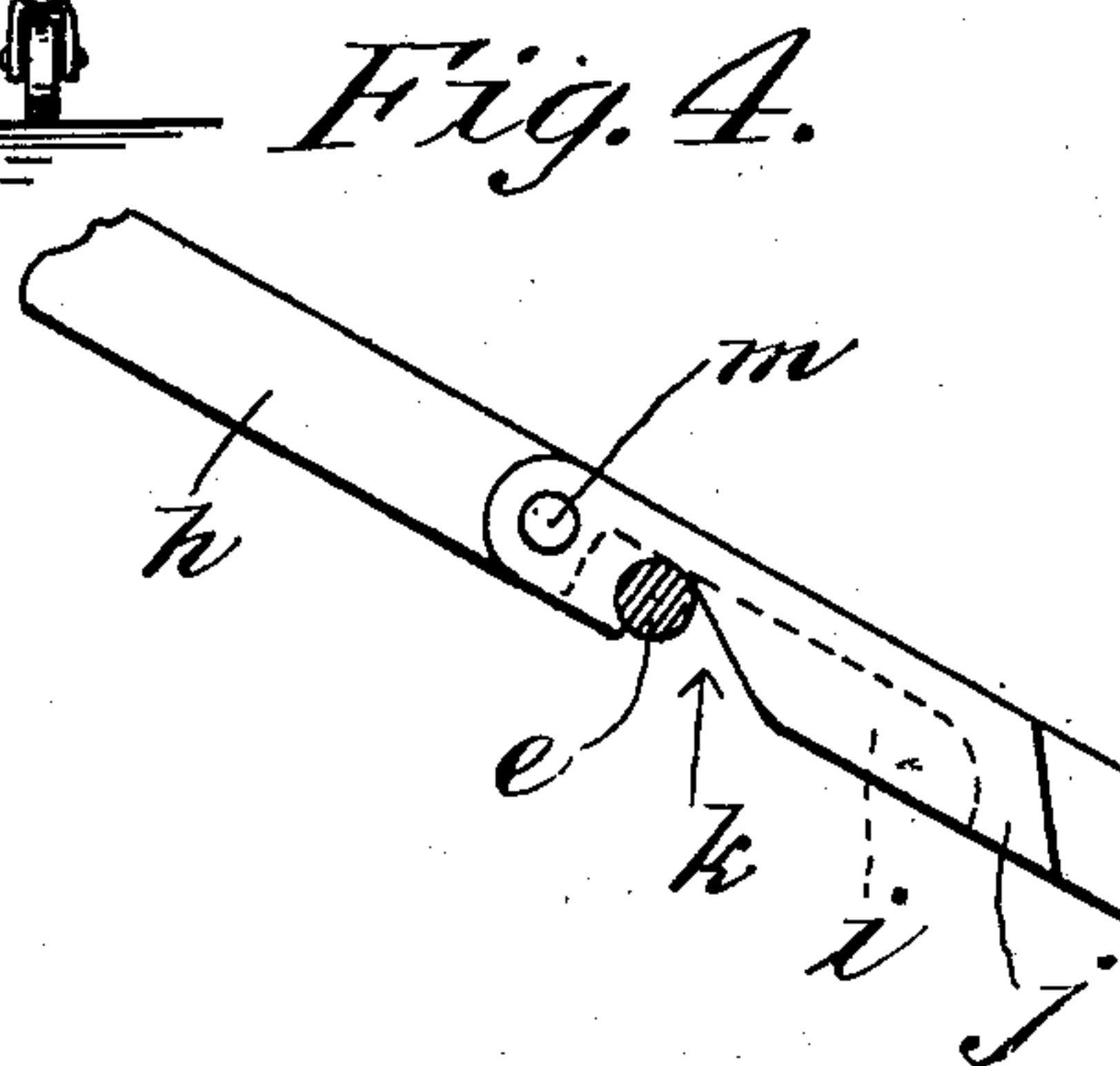
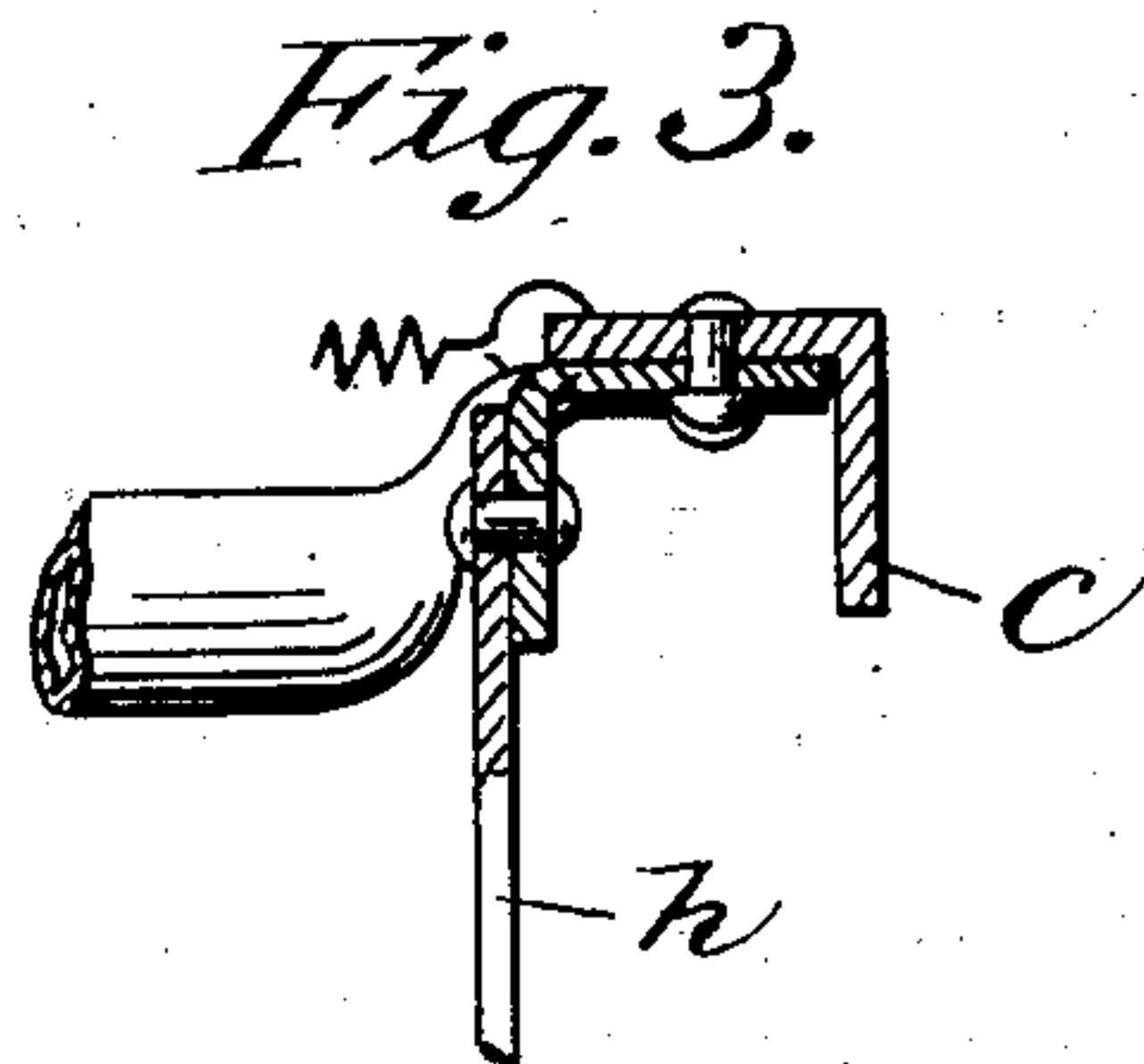
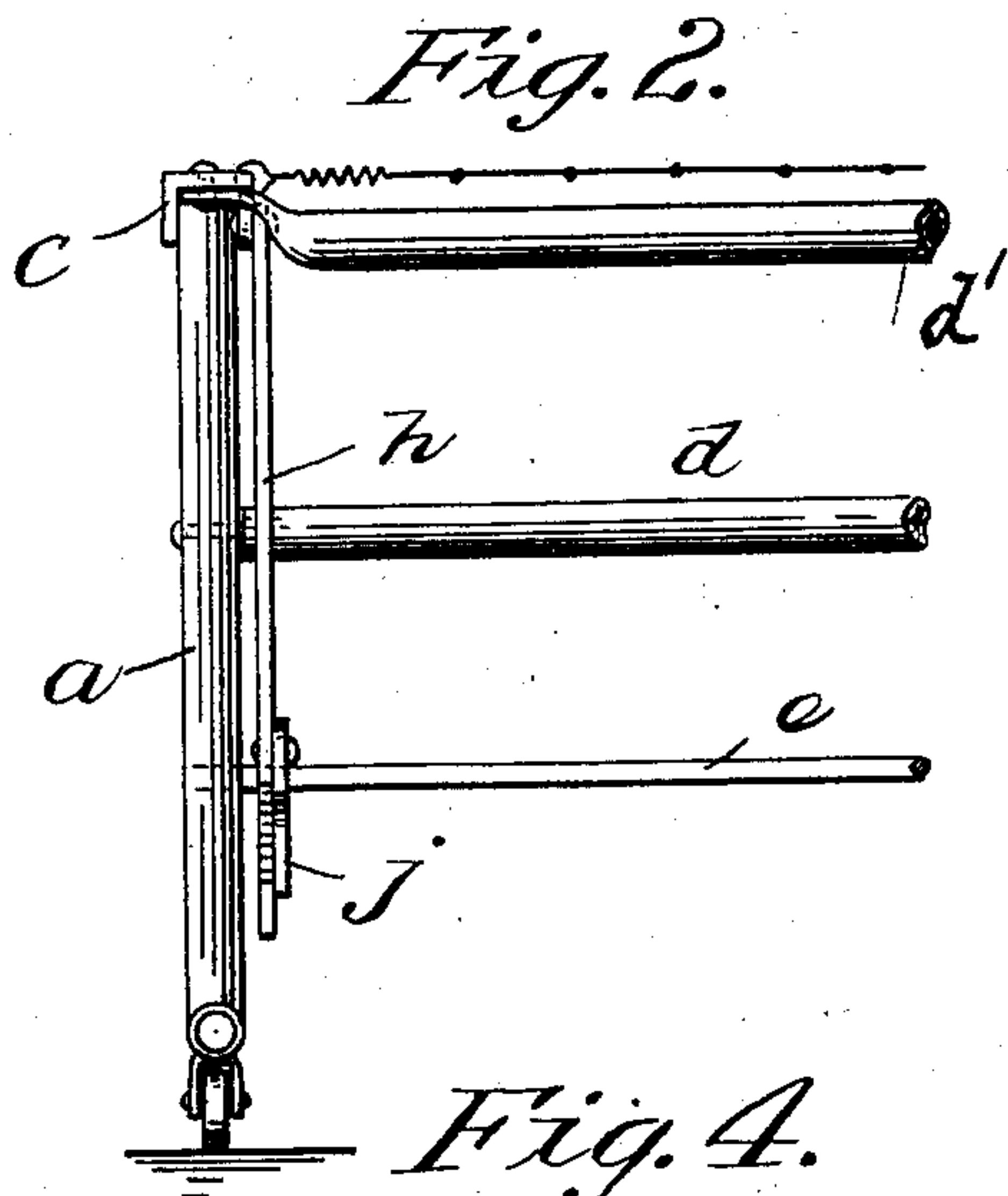
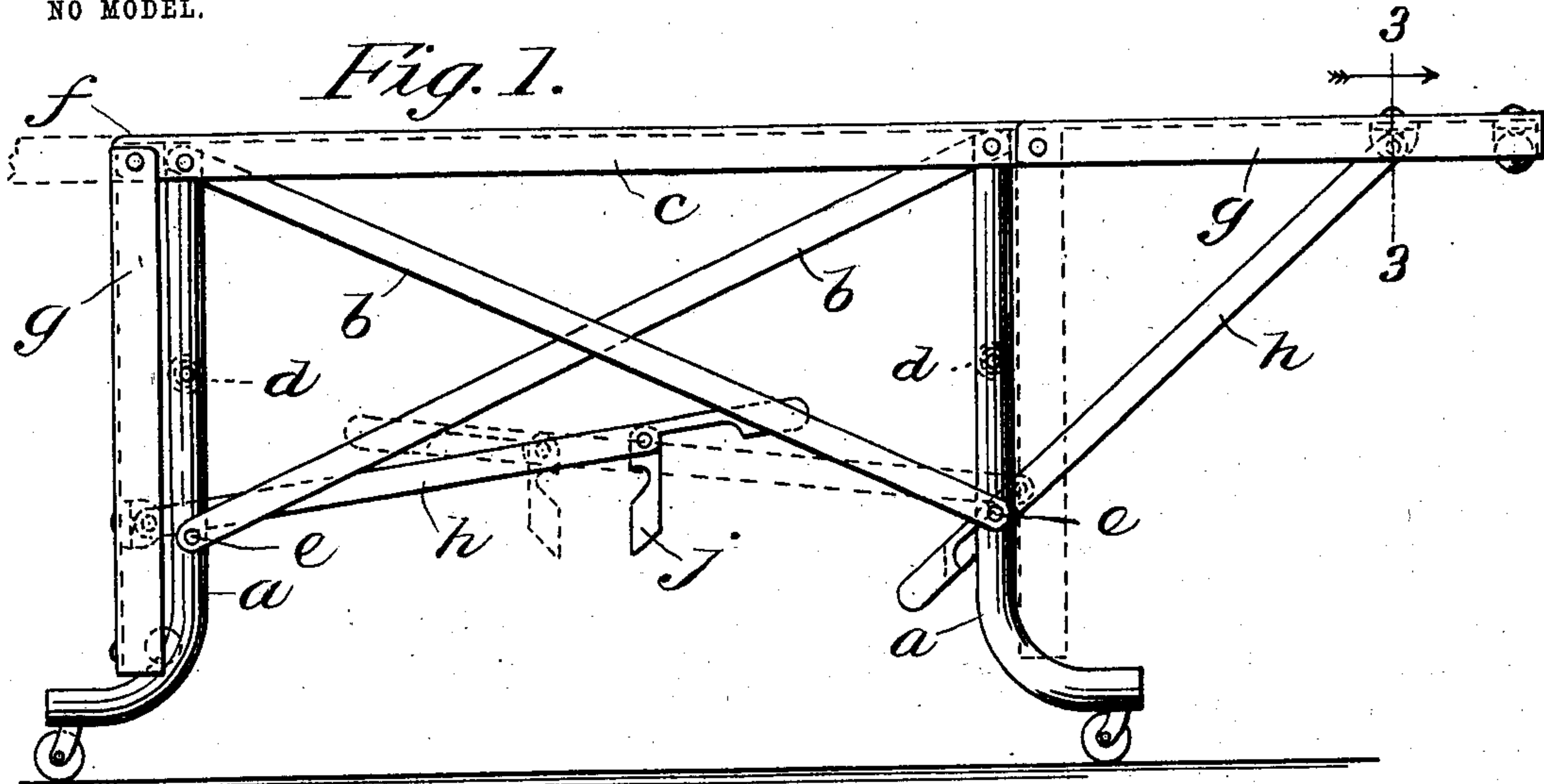


No. 753,760.

PATENTED MAR. 1, 1904.

F. M. TINKHAM.
COUCH BED CONSTRUCTION.
APPLICATION FILED MAY 4, 1903.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRANCIS M. TINKHAM, OF SPRINGFIELD, MASSACHUSETTS.

COUCH-BED CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 753,760, dated March 1, 1904.

Application filed May 4, 1903. Serial No. 155,628. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS M. TINKHAM, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Couch-Bed Constructions, of which the following is a specification.

This invention relates to couch-bed constructions; and it has special reference to beds of that class in which the widening of the structure to form the bed is effected by swinging a side section of the couch whose normal position is parallel with the side of the couch upward to horizontal position to bring the mattress or bed-bottom on the side section into the same plane as that of the couch, the object of the invention being to provide improved means to support the side sections of the above-described structure in a horizontal position in such manner as to effect the easy release of the support by slightly lifting the side section above the horizontal.

In the drawings forming part of this application, Figure 1 is an end elevation of a couch-bed of the class described having this invention applied thereto and showing one side section thereof in horizontal position and one in a down-hanging position. Fig. 2 is an edge view of a portion of the frame of the couch-bed with the side section in the same position as in Fig. 1. Fig. 3 is a sectional view on line 3 3, Fig. 1, showing the manner of securing the support to the side section, the parts being somewhat enlarged. Fig. 4 is an enlarged side elevation of the support in operative position. Fig. 5 is a similar view of the parts after their release from supporting position, but before they reach a position of rest.

Referring to the drawings, *a* indicates the legs of one of the end frames of a couch, both ends thereof being alike. These legs are united and braced by two diagonal straps *b b*, and to the upper ends of the legs a transversely-disposed bar of L-iron *c* is secured, which completes the end frame. The two end frames are united by the longitudinal braces *d* extending between the legs of the two end frames on each side, and these frames are further

united by a rod *e* on each side of the couch extending from one end frame to the other below the braces *d* and substantially parallel therewith. Side bars *d*, of tubing, are secured to the ends of the transverse end bars *c* to constitute the seat-frame of the couch. Each end of the bar *c* is carried somewhat beyond the side of the legs *a*, as indicated at *f*, Fig. 1, and to the projecting ends of these bars the side sections *g* are pivotally secured. These sections normally hang down in position parallel with the legs *a*, as shown in Fig. 1 at the left, and are adapted to be swung to a horizontal position, as shown on the right hand of said figure, being held in that position by the diagonal braces or supports *h*, one of which is preferably located at each end of the side section, being pivotally secured to the end portion of said section, as shown in Figs. 1, 2, and 3. These braces *h* when the side sections are swung upward will engage the rods *e* in the manner shown in Fig. 4 when the sections attain the horizontal position.

This invention does not run to the couch construction described herein, but to the construction of the supports for the extension-sections of couch-beds of the type herein shown and described.

Referring now to Figs. 4 and 5 more particularly, it is seen that the supports *h* are cut away along the lower edge thereof, as shown at *i*, the forward end of this cut-away portion being preferably curved. Just back of the rear end of the cut-away portion *i* a latch *j* is pivoted to the support *h*, and in this latch is a notch *k* of such shape as to readily hook over the rod *e* and when so engaged on said rod is by the weight of the side section swung into a position of parallelism with the brace, the upper side of the rod *e* bearing against the under side of the brace in the cut-away portion *i* thereof. By cutting away the under side of the brace *h*, as shown, the parts are permitted to assume the position shown in Fig. 4—that is to say, the thrust on the latch *j* is transversely through the axis of the pin *m*, on which it is pivoted to the brace, and also through the axis of the pin which supports the brace on the side section, thus con-

stituting an absolutely rigid brace for the latter. The latch *j* is loosely pivoted on the brace *h*, and hence if one of these side sections be raised sufficiently to permit the free
5 end of the latch to pass over the rod *e* the latch will drop to a vertical position, and if the section is then lowered the brace resting on the top of the bar *e* will slide thereon, the rod following the contour of the cut-away portion
10 *i* of the brace until it reaches that part to which the latch is secured, which will then be hanging down at an angle to said brace; but the contact of the rod with the latch will throw the latter backward into a position of
15 substantial alinement with the brace, as shown in dotted lines in Fig. 5, thus presenting the rounded end of the latch to the rod *e*, which will permit the brace to ride over the top of the rod *e*, and as the section assumes a vertical
20 position, as shown in Fig. 1, the brace *h*, resting on the rod *e*, will take the position shown in said figure beneath the couch-frame.

From the foregoing description it is seen that the support *h* will automatically engage
25 the rod *e* to hold the side sections in a horizontal position and that the mere raising of said side section a little beyond the horizontal

will automatically disengage the braces from the point of their support on the frame.

I am aware that it is not broadly new to construct a brace adapted to automatically engage with a point of support during its transverse movement across the latter, nor to be disengaged therefrom by endwise movements imparted to the brace, and I make no claim,
35 broadly, to such construction.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The combination with a diagonally-disposed
40 brace to support the side section of a couch-bed, said brace having a portion of one edge thereof cut away, of a latch pivoted on the brace to swing over said cut-away portion thereof, a notch cut in the latch, and adapted
45 to engage the frame of the bed to hold the brace in operative position, the latch and brace constituting a toggle connection to support said side section.

FRANCIS M. TINKHAM.

Witnesses:

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