

No. 833,903.

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R. J. WAGNER.
COUCH BED.

APPLICATION FILED NOV. 7, 1906.

Fig. 1.

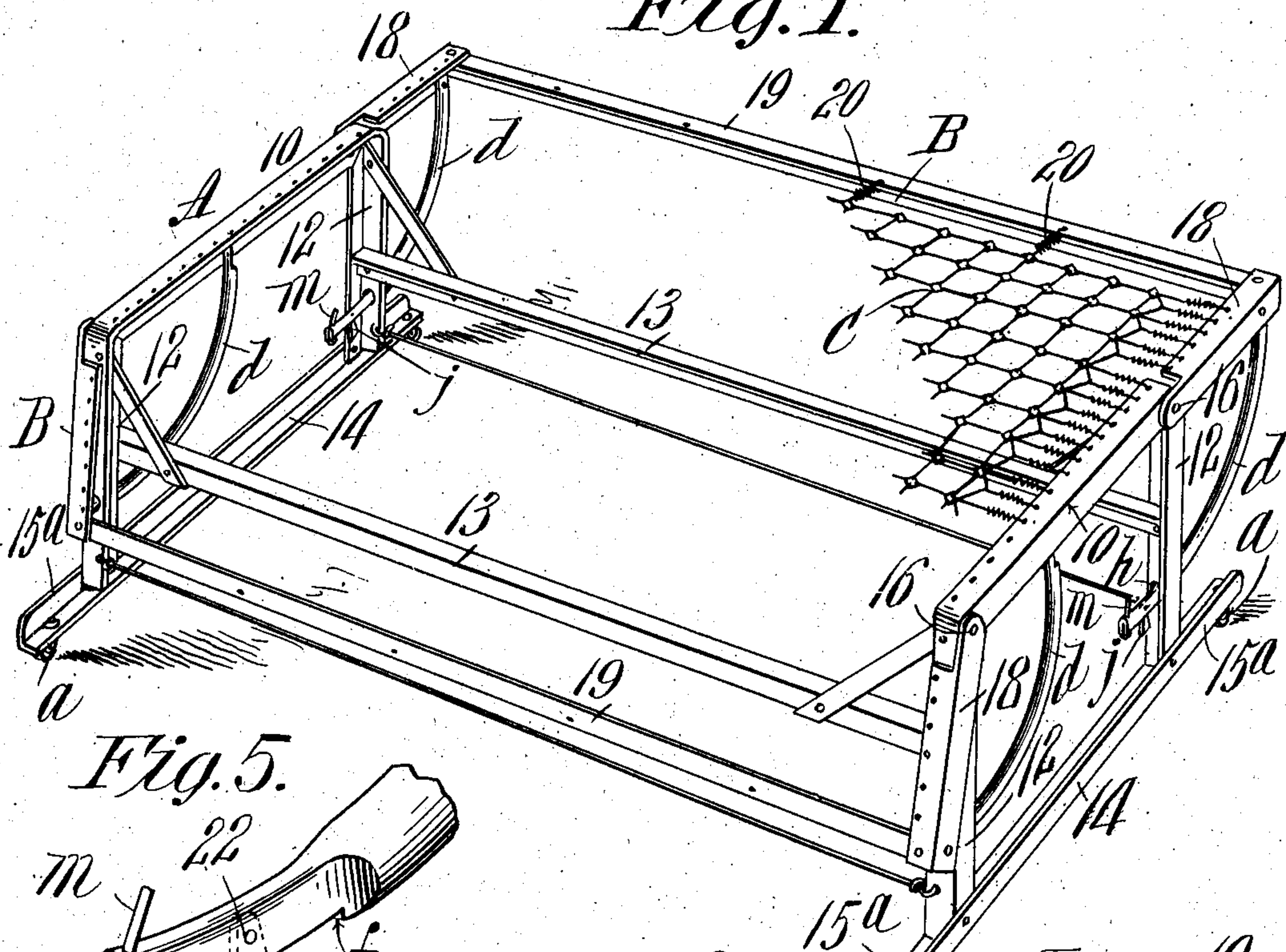


Fig. 5.

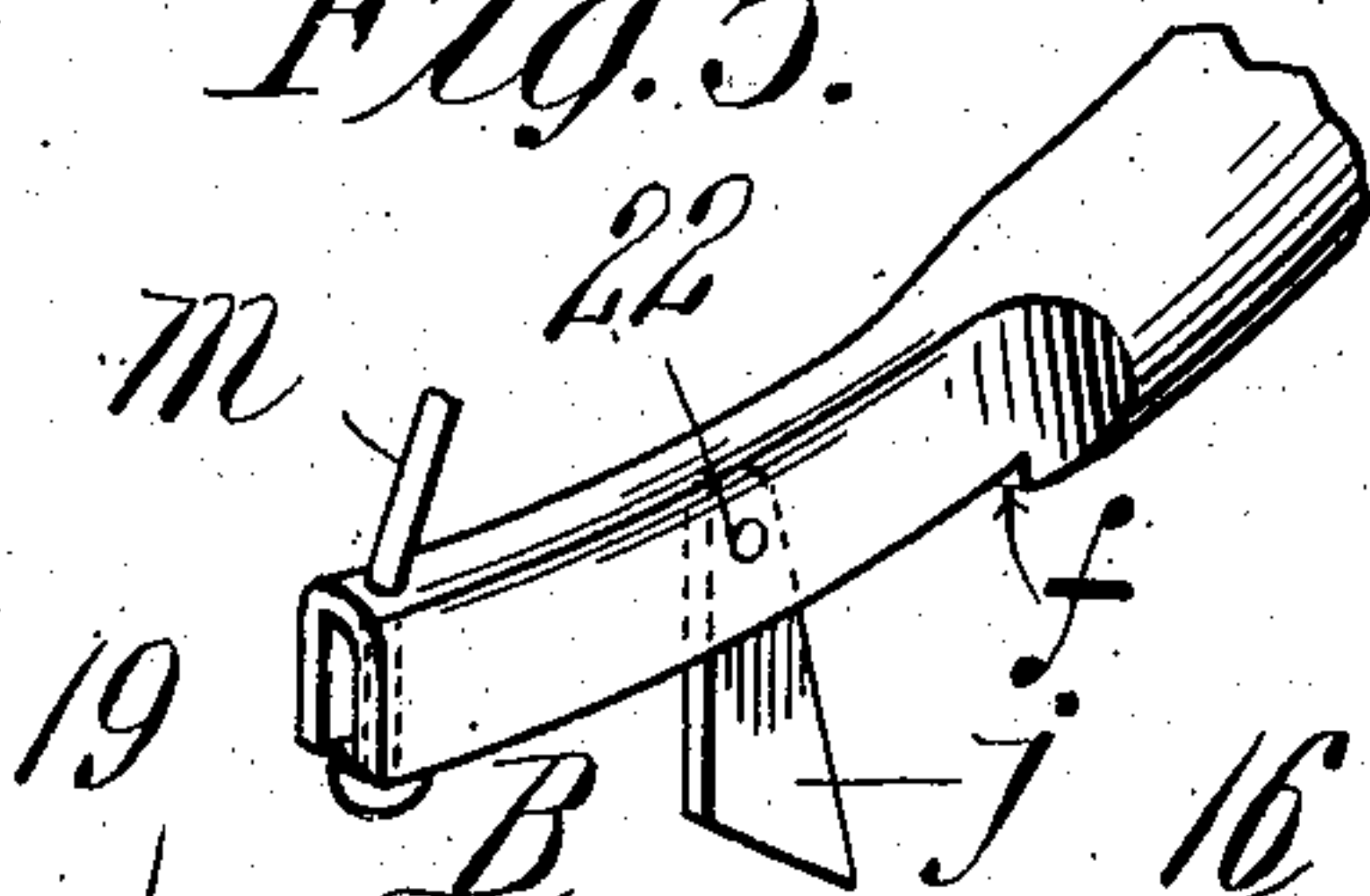


Fig. 2.

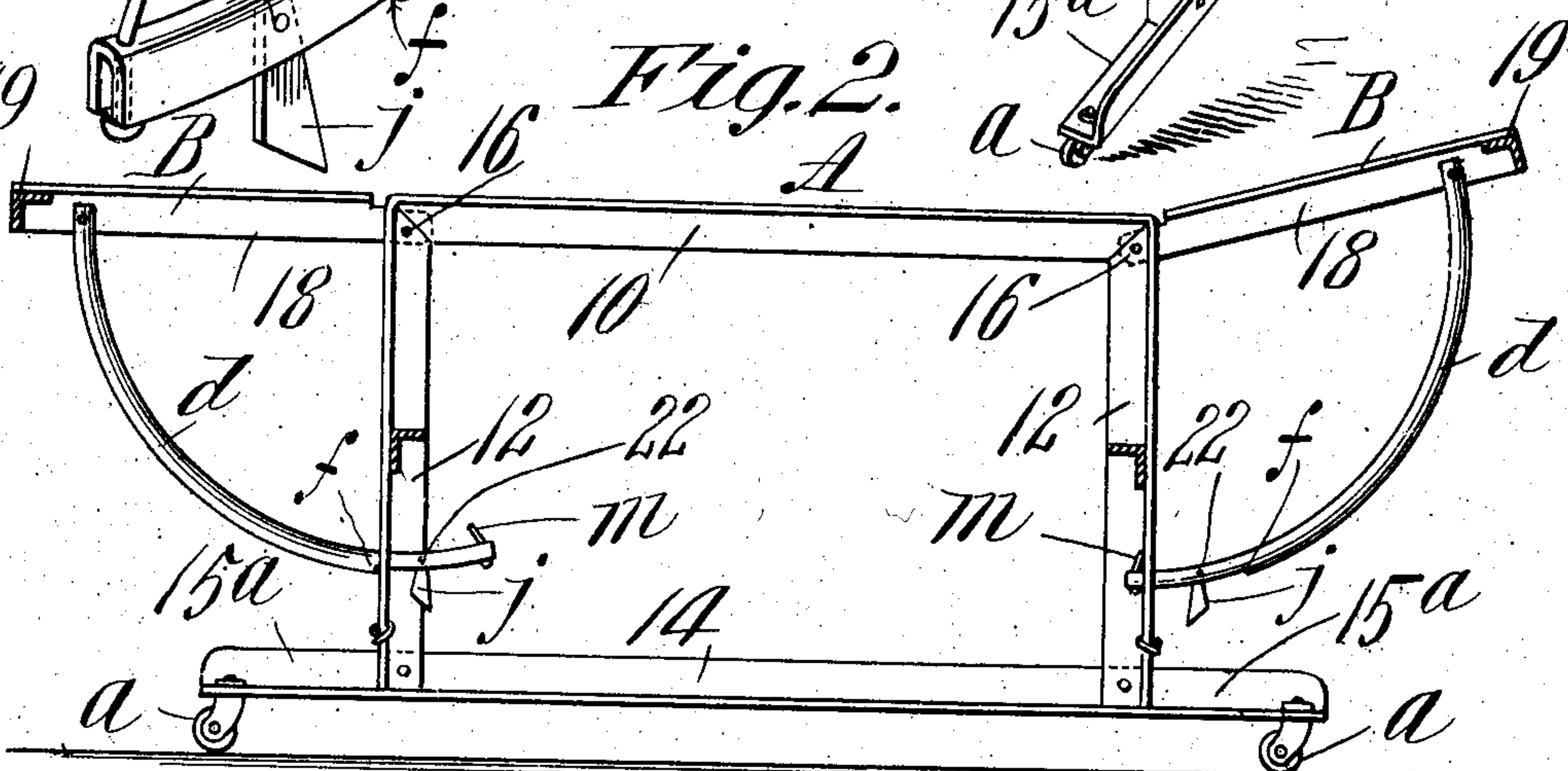


Fig. 3.

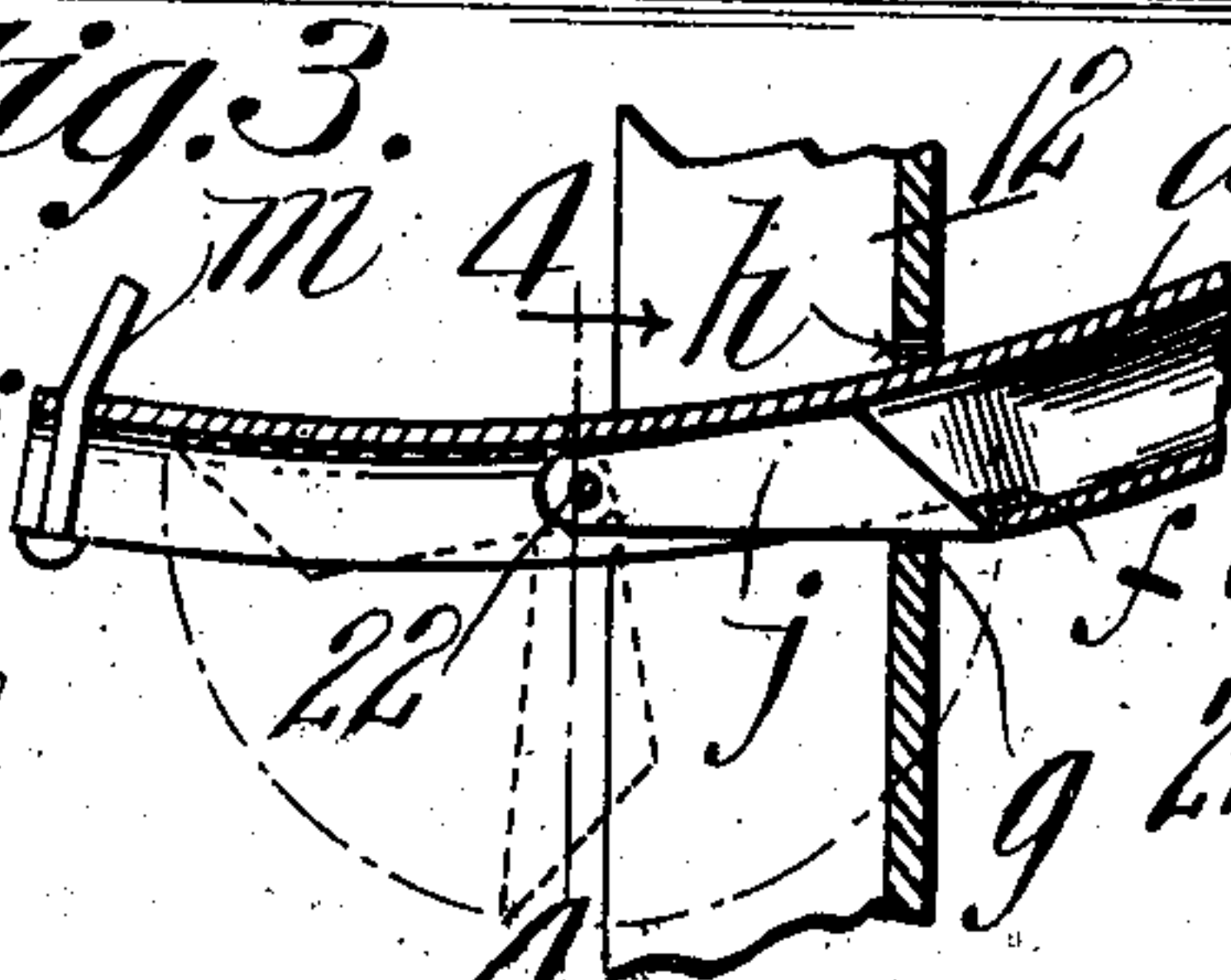


Fig. 4.



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UNITED STATES PATENT OFFICE.

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COUCH-BED.

No. 833,903.

Specification of Letters Patent.

Patented Oct. 23, 1906.

Application filed November 7, 1905. Serial No. 286,177.

To all whom it may concern:

Be it known that I, RICHARD J. WAGNER, a citizen of the United States of America, and a resident of Holyoke, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Couch-Beds, of which the following is a full, clear, and exact description.

This invention relates to improvements in couch-beds of the common kind which comprise a main central or couch section and opposite side "drop-sections," which when the article is to be used as a couch are swung to vertical positions at the sides of the couch and which when the article is to be used as a bed are disposed and supported in horizontally-distended positions and in the plane of the "bottom" or mattress-support of the couch.

The object of the present invention is to provide, in conjunction with the supporting-braces for the drop-side sections, which have detachable engagements with the couch-sustaining legs or uprights, appliances for enabling easily and simultaneously the engagement and disengagement of the supporting-braces with and from such legs by movements imparted to the side sections and without the necessity of having to stoop or reach down to the low positions at which the engagements or disengagements are accomplished at the opposite ends of the couch for the purpose of effecting or detaching the connections individually.

The invention consists in a couch-bed, in the combination with the main or couch section constructed with opposite end legs provided with abutments, of a drop side section having supporting-braces pivoted thereto which are provided with abutment-engagement shoulders and each brace having a riding shoe pivoted thereto between the brace-shoulder and the lower non-pivoted end of the brace and operable in the lowering of the couch-section to guide the brace-shoulder over and without obstruction past the abutment; and the invention otherwise and furthermore consists in constructions of parts and in the combinations of parts and all as hereinafter fully described, and set forth in the claims.

In the drawings, Figure 1 is a perspective view showing the couch-bed with one side

section lowered and showing only a portion of the mattress-supporting open-work fabric, the greater portion of such fabric being omitted to enable a clearer illustration of the novel devices. Fig. 2 is an end view of the couch-bed. Fig. 3 is a vertical sectional view through a portion of one of the supporting legs or uprights and the engaging portion of one of the supporting-braces having the pivotally-connected riding shoe. Fig. 4 is an elevation as seen at right angles to Fig. 3, with parts in section, as taken on the line 4 4, Fig. 3. Fig. 5 is a perspective view of the free end portion of one of the braces provided with the riding shoe and stop.

Similar characters of reference indicate corresponding parts in all of the views.

In the drawings, A represents the main portion or section, which makes the couch proper and which includes the end bars 10 10 and uprights 12 12, braced by the longitudinal bars 13 13 and by the transverse bars 14 14, which extend between and are rigidly connected to the end pairs of uprights or legs and which are laterally projected, as shown at 15^a 15^a, at opposite sides beyond the vertical lines of the legs and have the depending casters *a a* comparatively widely arranged outside of the couch portion of the piece of furniture.

B B represent the drop side or extension sections for converting the couch into a bed, the same being pivotally connected at 16 to the main section and comprise the opposite end bars 18 18 and the uniting longitudinal bars 19.

C represents an open-work bottom or mattress-supporting fabric connected at its ends to the end bars 10 and 18 18 of the main and side sections and has laterally-disposed springs 20, by which this fabric is connected to the longitudinal side bars of the drop side frames, so that the bottom fabric, while always taut, may yield as required to accord with the changed positions of the drop side sections.

d d are the braces for supporting the drop side sections in their horizontal position, the same being at their upper end portions pivotally connected to the outer extremities of the side-section end bars 18 and have detachable supporting engagements by the shoulders *f* thereof with abutments *g* therefor,

which are made as lower portions of the legs or uprights. The most practical and satisfactory manner of forming these abutments is by making apertures or recesses *h* through the legs, the sides of the apertures serving as guides for the play therethrough of the braces, while the lower boundaries or edges of the apertures constitute the brace-engagement abutments.

Each brace has at its end portion and between its engagement-shoulder and its end a riding shoe *j*, of wedge or triangular form and pivotally connected to the brace at 22. The extremity of the brace *d* between its shoulder *f* and its free or non-pivoted end is narrowed, as shown, and each brace has an end stop *m* for preventing when the drop side section may be swung upwardly beyond the horizontal plane, as shown at the right of Fig. 2, the extremity of the brace from being drawn out through the aperture *h* and disengaged with the leg-upright. The braces *d*, which are preferably curved, are made of sheet or other metal of an inverted-U shape in cross-section, and the riding shoe *j* is pivoted between the separated side portions of the U-shaped brace and so as to assume various positions, as represented in the full and dotted lines in Figs. 2, 3, and 5.

The shape, dimension, and location of the pivotal point of the riding shoe are such that it may have reversed positions longitudinally alined with the brace, as shown in Fig. 3, in which cases its opposite edges are in proximity to or contact against the back portion of the brace.

The drop side of the couch-bed being lowered, as represented at the front portion of Fig. 1, and the braces *d d* extending inwardly and upwardly, as there shown, to raise and sustain such section in the horizontal position it is only necessary to grasp the front rail or bar of the side section and swing it upwardly, the braces moving through the apertures *h* until the shoulders *f* of the braces assume the brace-retaining engagements with the abutments *g* at the lower boundaries of the apertures.

When desiring to let down the side section B of the bed-couch, it clearly is not necessary to reach under to the individual points of brace engagement at the opposite ends on the bed to disconnect the braces from their engagement by their shoulders *f* with the leg-upright, as would be very inconvenient not to say difficult of performance by one person; but it is only necessary to raise the side section B to a slightly more elevated position, as represented at the right of Fig. 2, to carry the riding shoe *j* outside of the leg-upright for its depending position thereat, as represented at the right-hand portion of Fig. 2. The brace in its movement to the rightward limit of its movement, as regulated by the stop *m*, causes the riding shoe to be swung

upwardly and endwise outwardly to the position represented by the dotted lines in Fig. 3 for its passage through the aperture *h*, which shoe after passing outwardly clear of the leg drops by gravity to the hanging position. (Seen in Fig. 2.)

The riding shoes of both end braces for a drop side section having the position represented at the right of Fig. 2, it now becomes possible to swing the side section to its downward position, it being apparent that the riding shoes *j* by contacting against the outer faces of the legs are swung to the positions represented by the full lines in Fig. 3, so that the point of the shoe is coincident with or very close to the lower corner of the brace-shoulder *f*, the lower incline edge of the shoe by its running engagement on the abutment *g* causing the brace to ride freely over the abutment, which now cannot operate as an impediment to the lowering of the drop side section.

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

1. In a couch-bed, the combination with a main couch frame or section having abutments below its top, of a drop side section pivotally connected to the main couch-section, having supporting-braces pivoted thereto which are provided with abutment-engagement shoulders at a distance from their free ends, and each brace provided with a riding shoe having one end thereof pivoted thereto at a distance from said brace-shoulder, and toward the free, non-pivoted, end of the brace, and endwise reversible on the brace, and means for limiting the swinging movements of each shoe relatively to the brace, and said shoe being operable in the lowering of the couch-section, to guide the brace-shoulder over, and without obstruction past, the abutment.

2. In a couch-bed, the combination with the main, or couch, section constructed with opposite end legs provided with abutments, of a drop side section pivotally connected at the side of the main couch-section, having supporting-braces pivoted thereto which are provided with abutment-shoulders at a distance from their free ends, and with end stops, and each brace provided with a riding shoe having one end thereof pivoted thereto between the brace-shoulder and the free non-pivoted end of the brace, and endwise reversible on the brace, and means for limiting the swinging movements of each riding shoe relatively to the brace, and said shoe being operable in the lowering of the couch-section, to guide the brace-shoulder over, and without obstruction past, the abutment.

3. In a couch-bed, the combination with the main, or couch, section constructed with opposite end legs provided with apertures, the lower edges of which constitute abut-

ments, of a drop side section having support-
ing-braces pivoted thereto which are of an
inverted-U shape in cross-section, and each
brace being provided with an abutment en-
5 gaging shoulder at a distance from its free
ends, each brace being movable through one
of said recesses, and each brace having a rid-
ing shoe pivoted thereto between the brace-
shoulder and the free, non-pivoted end of the
10 brace, adapted for reversal, endwise on the
brace, and adapted to have a limiting edge-
wise contact against the internal back por-

tion of the brace, and operable in the lower-
ing of the couch-section to guide the brace-
shoulder over, and without obstruction past, 15
the abutment edge of the leg-recess.

Signed by me at Springfield, Massachu-
setts, in presence of two subscribing wit-
nesses.

RICHARD J. WAGNER.

Witnesses:

PATRICK F. DONOGHUE,
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