

No. 749,789.

PATENTED JAN. 19, 1904.

J. HARVEY.
SOFA BED.

APPLICATION FILED APR. 27, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

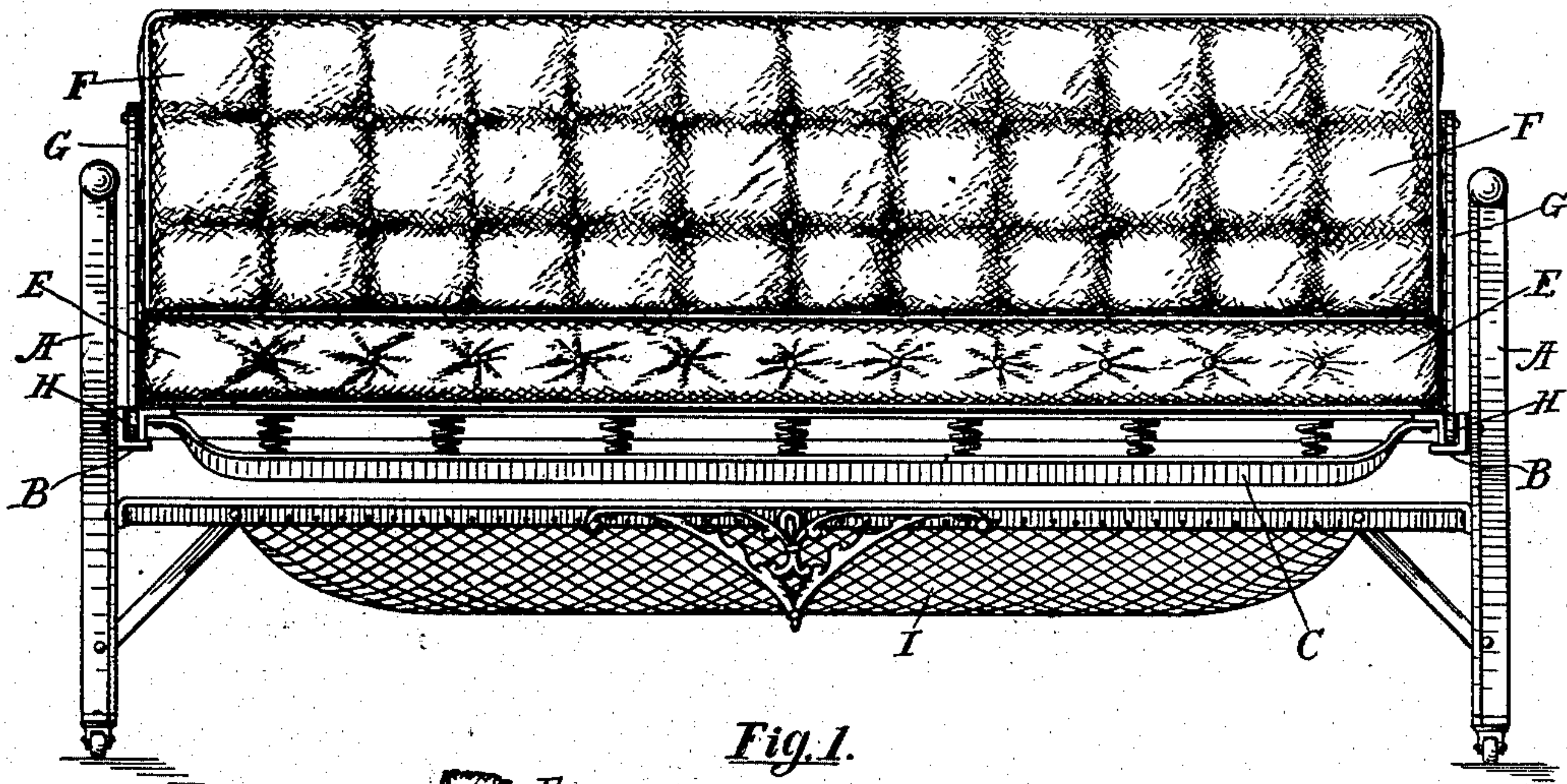


Fig. 1.

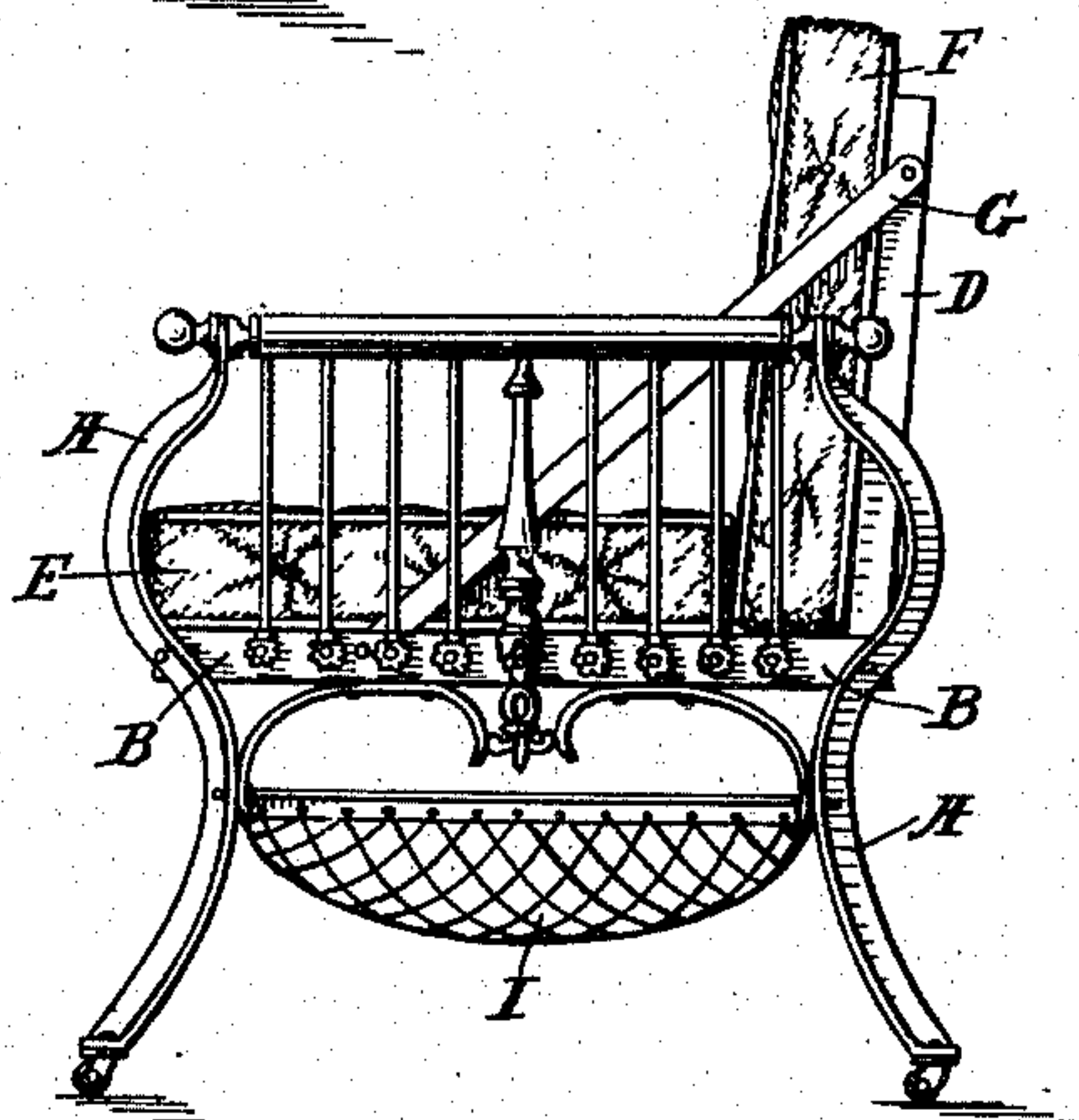


Fig. 2.

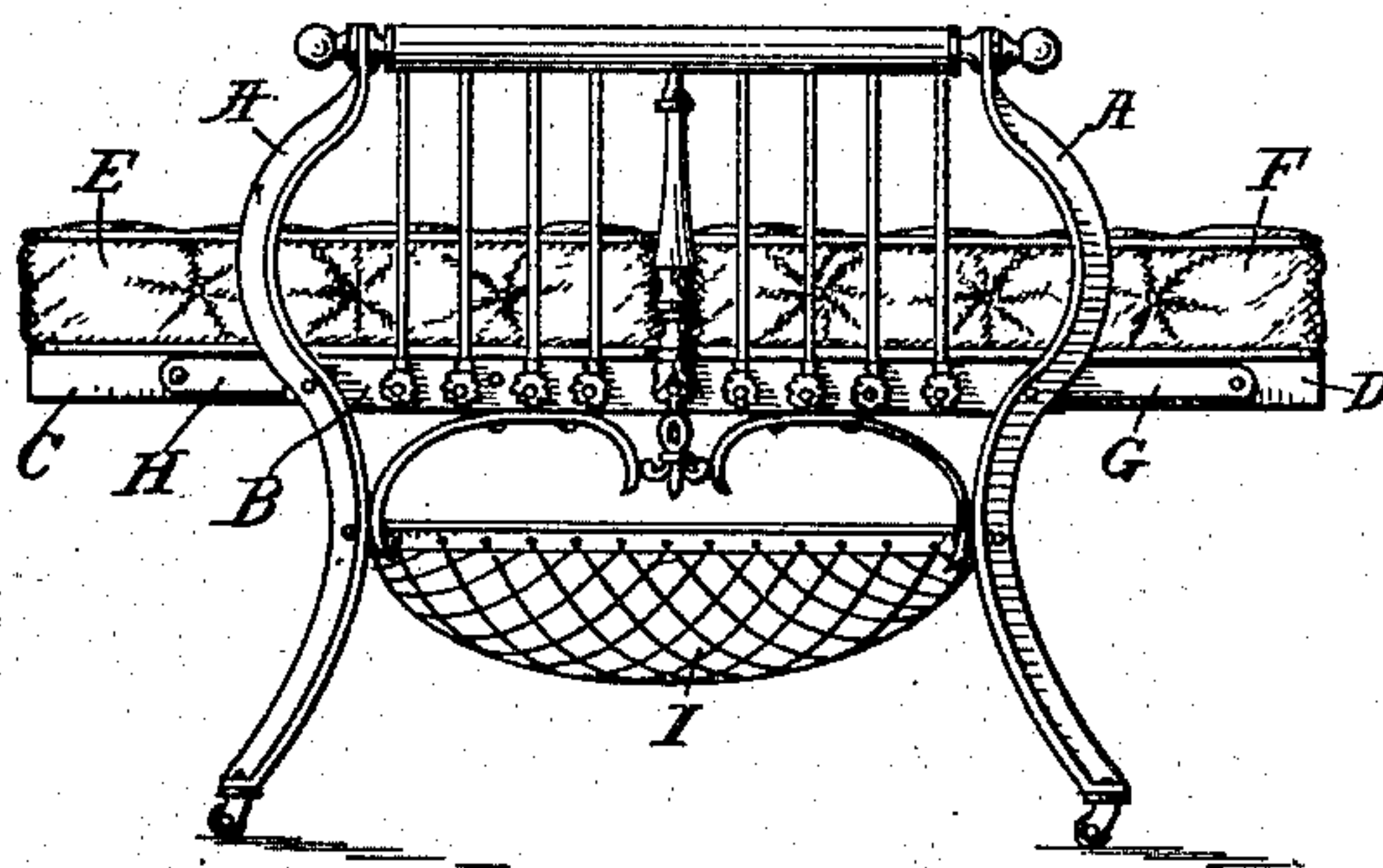


Fig. 3.

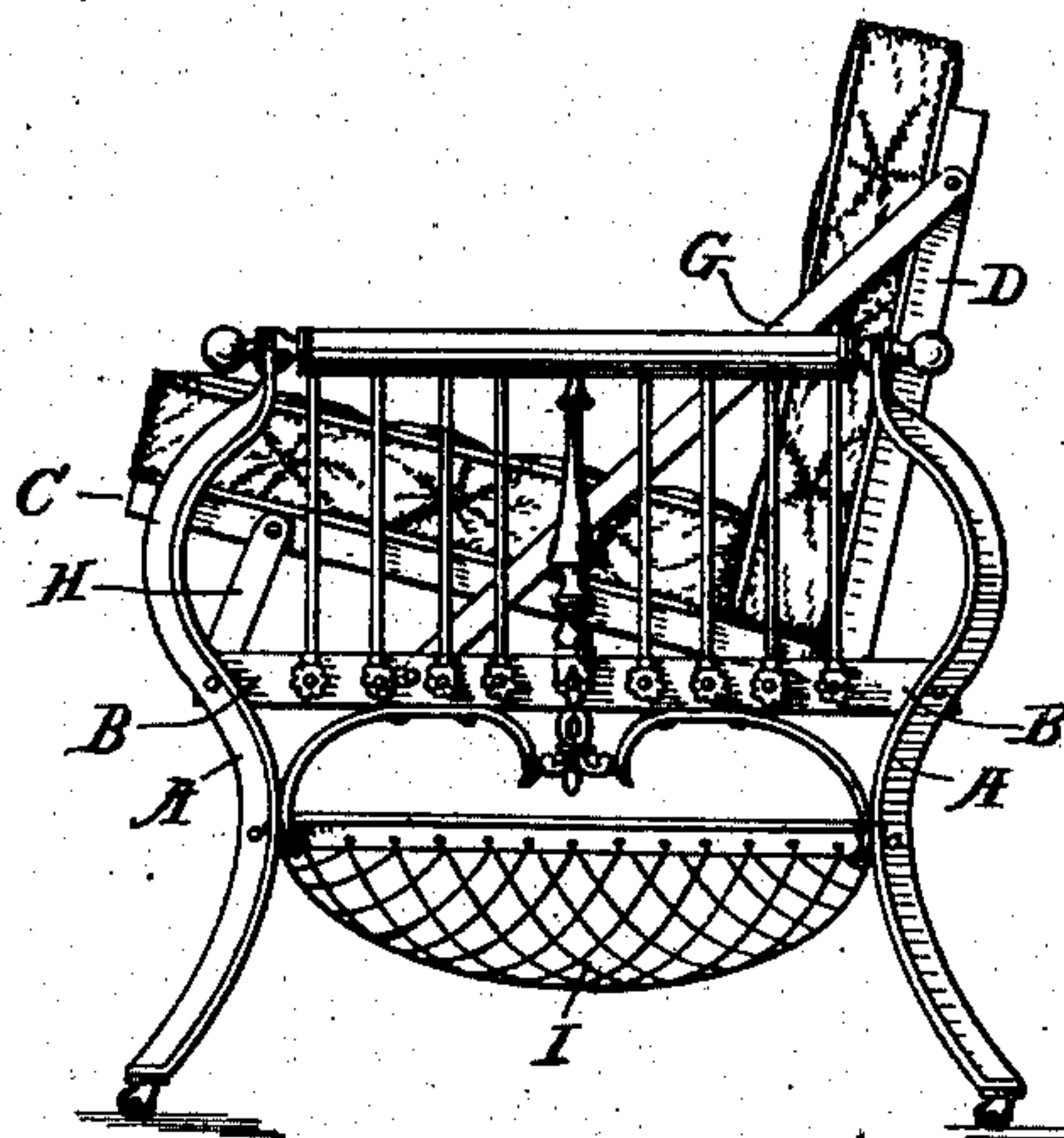


Fig. 4.

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2 SHEETS—SHEET 2.

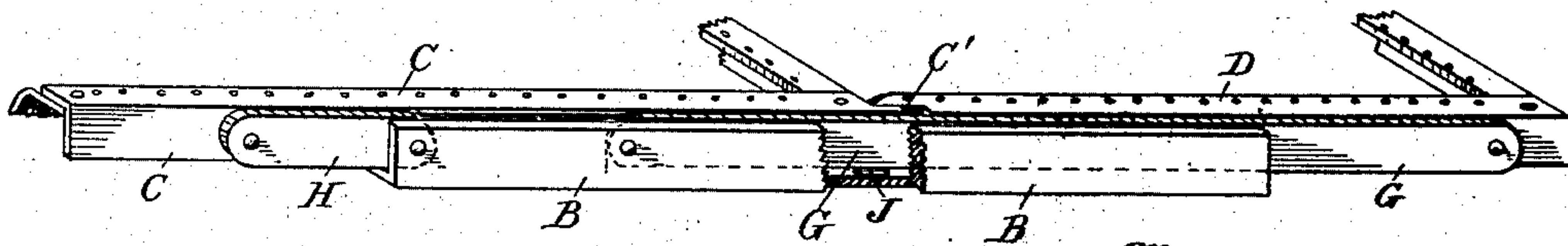


Fig. 5.

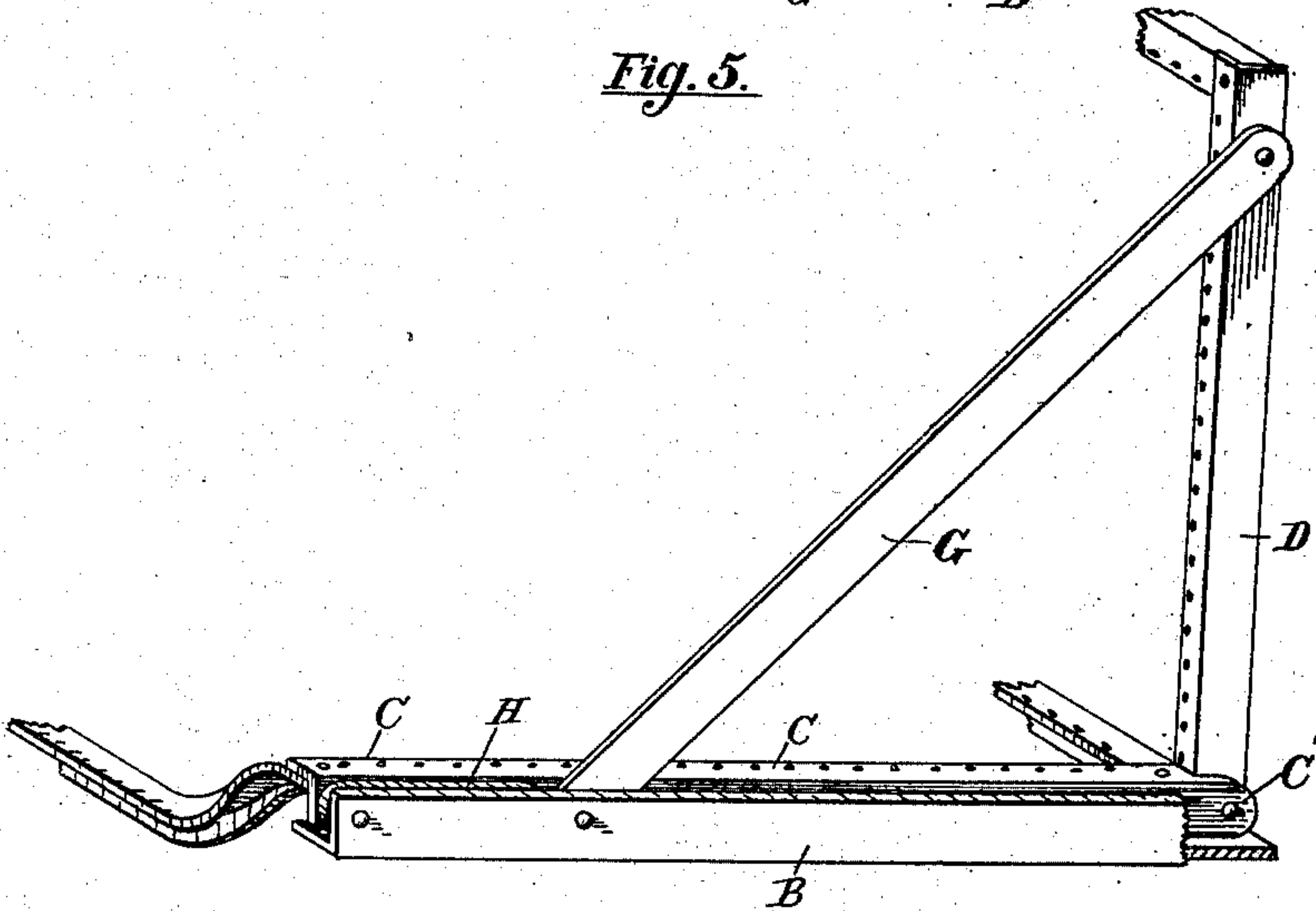


Fig. 6.

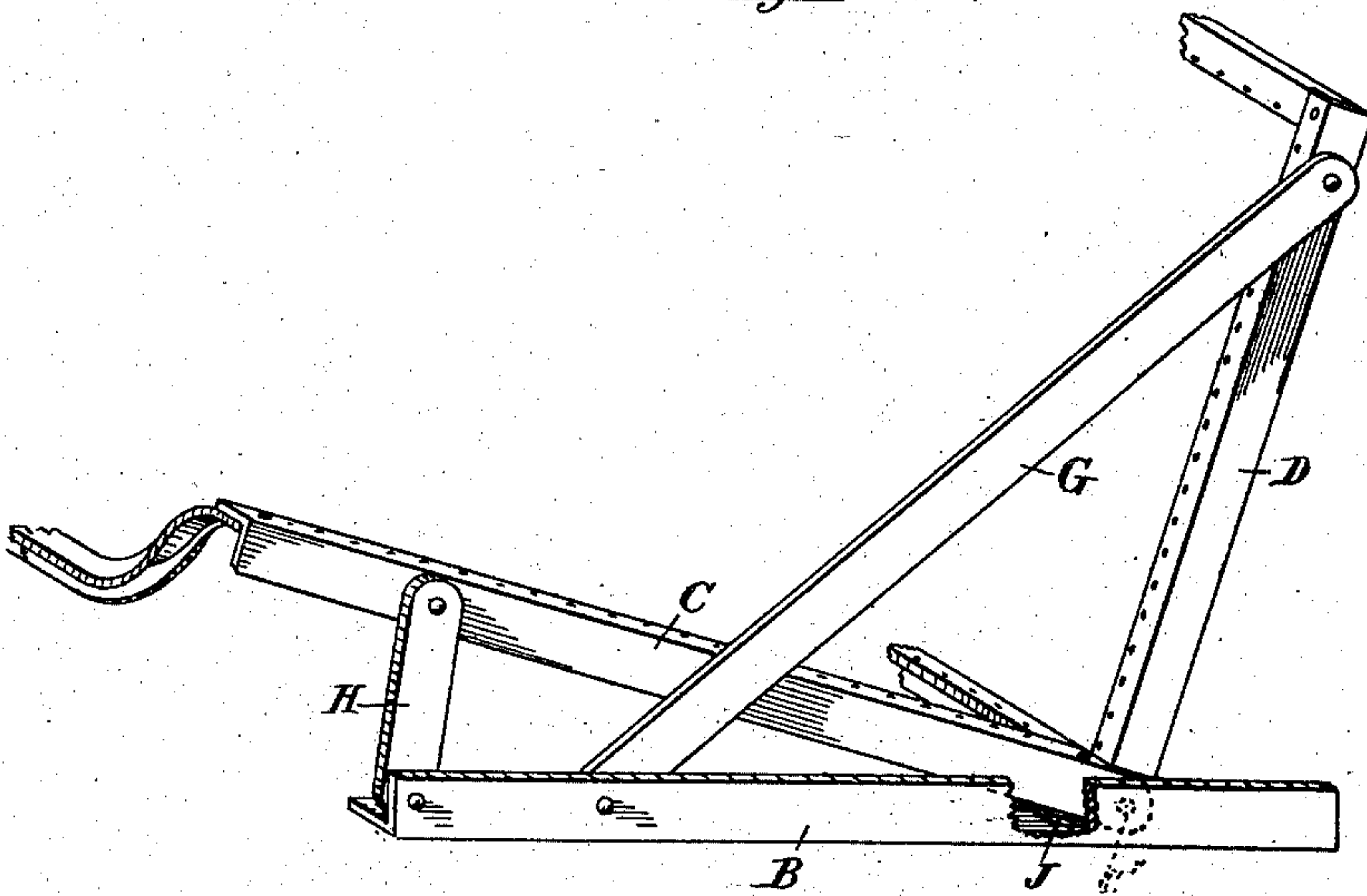


Fig. 7.

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UNITED STATES PATENT OFFICE.

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PETER H. BENJAMIN, OF GRAND HAVEN, OTTAWA COUNTY, MICHIGAN.

SOFA-BED.

SPECIFICATION forming part of Letters Patent No. 749,789, dated January 19, 1904.

Application filed April 27, 1903. Serial No. 154,413. (No model.)

To all whom it may concern:

Be it known that I, JOHN HARVEY, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Sofa-Beds; and I do hereby 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.

My invention relates to improvements in sofa-beds; and its object is to provide the same with certain new and useful features, hereinafter more fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of a device embodying my invention adjusted as a sofa; Fig. 2, an end elevation of the same; Fig. 3, the same adjusted for a bed; Fig. 4, the same with the seat raised; Fig. 5, an enlarged perspective detail of a part of one end of the device adjusted as in Fig. 3; Fig. 6, the same adjusted as in Fig. 2, and Fig. 7 the same adjusted as in Fig. 4.

Like letters refer to like parts in all of the figures.

A represents the ends of the main or stationary frame, made in any suitable design, preferably made of metal, and having laterally-extended upper portions to more effectively hold the pillows and bedding when the device is used as a bed. Forming a part of these ends and suitably located to support the movable frames are horizontal angle-bars B, having their vertical portions projecting upward and their horizontal parts extending inward to support two suitable movable frames consisting of a seat-frame C and a back-frame D, which frames are hinged to each other, as at C', and adapted to turn from a position in the same plane to a position substantially at right angles to each other.

E and F represent any suitable cushions or mattresses adapted to be placed upon the respective frames C and D and when adjusted in the same plane as in Fig. 3 to form a suit-

able bed and when adjusted as in Fig. 2 to constitute the seat and back cushions of a sofa. 50

Within the lower part of the main frame is supported any suitable receptacle for the bedding when the latter is not in use. I prefer to make the receptacle of a suitable net, as at I, and attach the same to suitable angle-iron 55 girders, forming a part of the main frame.

To adjust and hold the frames C and D in the various positions shown, I provide the connecting rods or braces G and H, each being pivoted at one end to the vertical part of 60 the angle-irons B and at the other end to the respective movable frames and so proportioned as to operate as hereinafter described. These rods are preferably flat bars, and the frames C and D have a length sufficiently less 65 than the distance between the vertical parts of the irons B to leave room for these rods, as shown in Figs. 1 and 5. The rods H are pivoted near the front ends of the irons B at one end and at the other end to the frame C, 70 at a distance from the front thereof about equal to the length of the rod H, and said rods are of such length that when turned outward the seat-frame will be moved forward a proper distance, so that the back-frame and 75 the seat-frame will project equally at each end of the irons B, and when the rods H are turned inward between the frame C and iron B the said frame will be directly above the iron B. The rods G are pivoted at one end 80 to the vertical portions of the irons B a sufficient distance from the front ends thereof to leave room for the rods H and at the other end to the back-frame D at such point and have such length that when the back-frame is hori- 85 zontal and the seat-frame moved to forward position said rods will extend horizontally between the frames and the irons B and engage lugs J on the frame C, whereby said rods serve to hold the adjacent edges of the 90 frames from rising if any weight is applied to the front side of the frame C, and when the frame D is turned up and the frame C is moved back these rods G serve to support the back-frame in slightly-inclined position. 95 The rods G when horizontal also engage the

angle-iron B, and thus support the outer side of the back-frame. When the rods H are in either of the horizontal positions shown, they serve to securely hold the seat-frame from sliding horizontally, and thus lock the device in adjustment without other devices for the purpose, and when the rods are in mid-position, as in Figs. 4 and 7, they support the front of the seat-frame C in a suitable elevated position to afford access to the receptacle for inserting the bedding therein or removing the same therefrom. The rods H thus perform the functions of adjusting the seat-frame in both positions, of locking the frame when adjusted, and of supporting the front of the frame in an elevated position, and the rods G serve to support the back in its elevated position and when engaged with the lugs J serve to hold the joint C' from turning upward. It will also be observed that the angle-irons B offer suitable means for pivoting the rods, afford a support and ways for the frames, and also constitute a part of the end frames of the main framework.

I thus provide a simple, effective, cheap, and durable structure.

I have shown a preferred form of my device; but obviously it may be variously modified without departing from my invention. I do not, therefore, limit myself to the precise construction shown.

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

1. The combination of a stationary frame, a seat-frame adjustable thereon, rods pivoted at their respective ends to the respective frames and turning on said pivots to opposite horizontal positions, a back-frame hinged to said seat-frame and adjusted thereby at one side, and rods pivoted at one end to the stationary frame near the front thereof, and at the other end to the back-frame near the top thereof to adjust and support the other side of the same.

2. The combination of a stationary frame, a seat-frame horizontally slidable on the stationary frame at the rear, rods pivoted at their respective ends to the front of the seat-frame and to the stationary frame and adapted to turn to reversed horizontal positions, a back-frame hinged to the seat-frame, and rods pivoted at their respective ends to the stationary frame and to the back-frame, and adapted to turn from a horizontal to an inclined position.

3. The combination of a stationary frame, a seat-frame horizontally movable on the same, rods pivoted at their respective ends to the respective frames near the front thereof and adapted to turn to opposite horizontal positions, a back-frame hinged to the seat-frame, and rods pivoted at their respective ends to the back-frame and the stationary frame and adapted to contact the stationary frame and support the seat-frame when horizontal.

4. The combination of a stationary frame, a horizontally-movable seat-frame mounted thereon, a receptacle beneath the seat-frame, and rods pivoted at one end to the stationary frame near the front thereof, and at the other end to the seat-frame, and adapted to turn to a substantially vertical position to support the front of the seat in an elevated position, and also adapted to turn to opposite horizontal positions to horizontally adjust the seat-frame.

5. The combination of a stationary frame, a movable seat-frame mounted thereon, a receptacle beneath the seat-frame, rods pivoted at their respective ends to the stationary frame and to the seat-frame, and adapted to turn to opposite horizontal positions about their stationary pivots and to support the front of the seat-frame when in mid-position, and to hold the seat-frame from moving when in horizontal position, a back-frame pivoted to the seat-frame, and rods pivoted at their respective ends to the stationary frame near the front thereof and to the back-frame near the top thereof.

6. The combination of a stationary frame, a movable seat-frame mounted thereon, means for adjusting and holding the seat-frame horizontally, lugs on the seat-frame, a back-frame pivoted to the seat-frame, rods pivoted at their respective ends to stationary frame and to the back-frame, and engaging the lugs on the seat-frame.

7. The combination of a stationary frame, angle-irons forming a part of the same and having upwardly-projecting vertical portions, and inwardly-projecting horizontal portions, a seat-frame and a back-frame hinged together and supported on the angle-irons, rods pivoted to the angle-irons near the ends thereof, and to the seat-frame, and adapted to adjust and to hold the same and also to support the same, rods pivoted to the angle-irons, and to the back-frame, and lugs on the seat-frame to engage said rods.

8. The combination of a stationary frame, a movable seat-frame mounted thereon, a back-frame hinged to the seat-frame, a receptacle supported in the stationary frame and beneath the seat-frame, rods pivoted to the stationary frame at one end and near the front thereof, and to the seat-frame at the other end, and adapted to turn to opposite horizontal positions, to adjust and hold the seat-frame and also supporting the front of the seat-frame when in mid-position, and rods pivoted to the stationary frame and to the back-frame, and adapted to turn from an inclined position to a horizontal position, and lugs on the seat-frame to engage the said rods.

9. The combination of a stationary frame, angle-irons forming a part of said frame, and projecting upward and inward, a movable seat-frame supported on said irons, a back-frame hinged to the seat-frame and also supported

by said irons, rods located between the vertical portions of said irons and the movable frames, and pivoted at one end to the vertical portions of said irons, and pivoted at the
5 other end to the respective movable frames to adjust and hold the said movable frames.

10 10. The combination of a stationary frame having laterally-enlarged ends, angle-irons forming portions of said frames, and projecting upward and inward, a movable seat-frame supported on the angle-irons, a back-frame hinged to the seat-frame and also supported
15 on said irons, a receptacle supported by the stationary frame and beneath the seat-frame, rods between the vertical portions of the an-

gle-irons and the seat-frame, and pivoted to each at their respective ends, to adjust said seat-frame and also to support and to hold the same, rods between the vertical portions of said irons and the back-frame and pivoted to
20 each at their respective ends to support the back, and lugs on the seat-frame to engage the said rods.

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

JOHN HARVEY

Witnesses:

LUTHER V. MOULTON,
GEORGIANA CHACE.