

(No Model.)

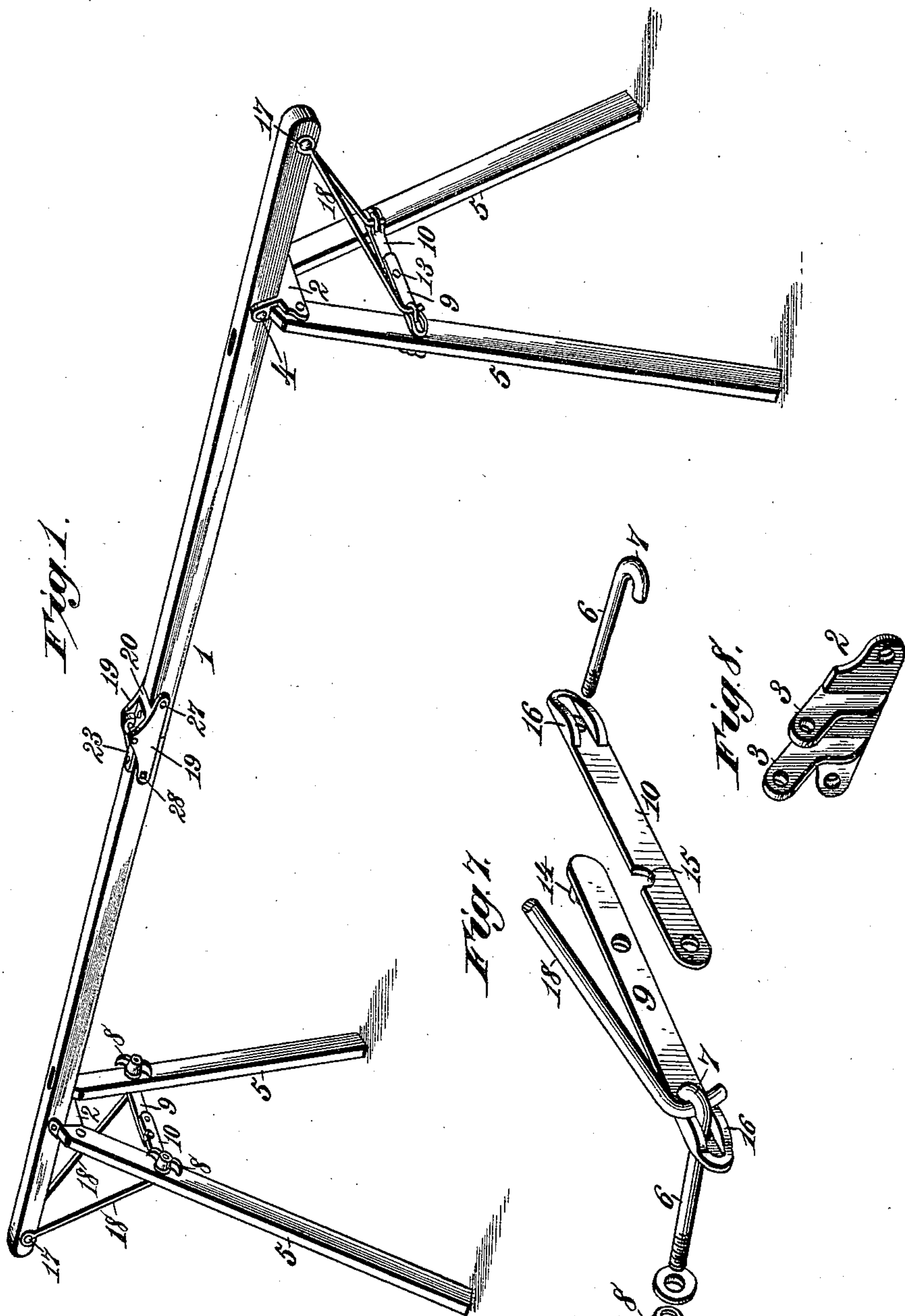
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W. F. PARMELEE.

SUPPORT FOR HAMMOCKS, CHAIRS, SWINGS, &c.

No. 466,010.

Patented Dec. 29, 1891.



Witnesses,
Robert Emmett,
J. A. Rutherford.

Inventor,
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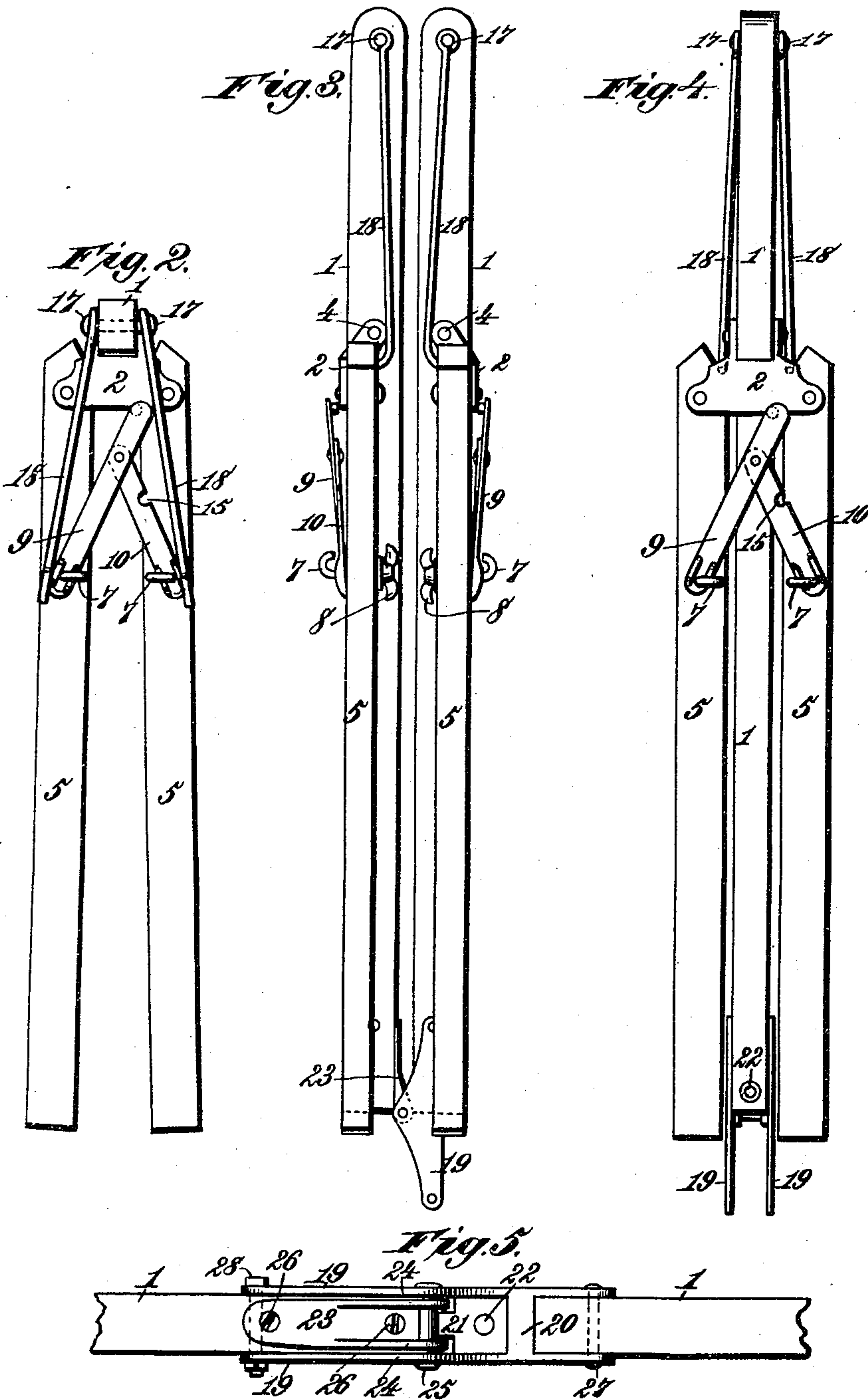
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2 Sheets—Sheet 2.

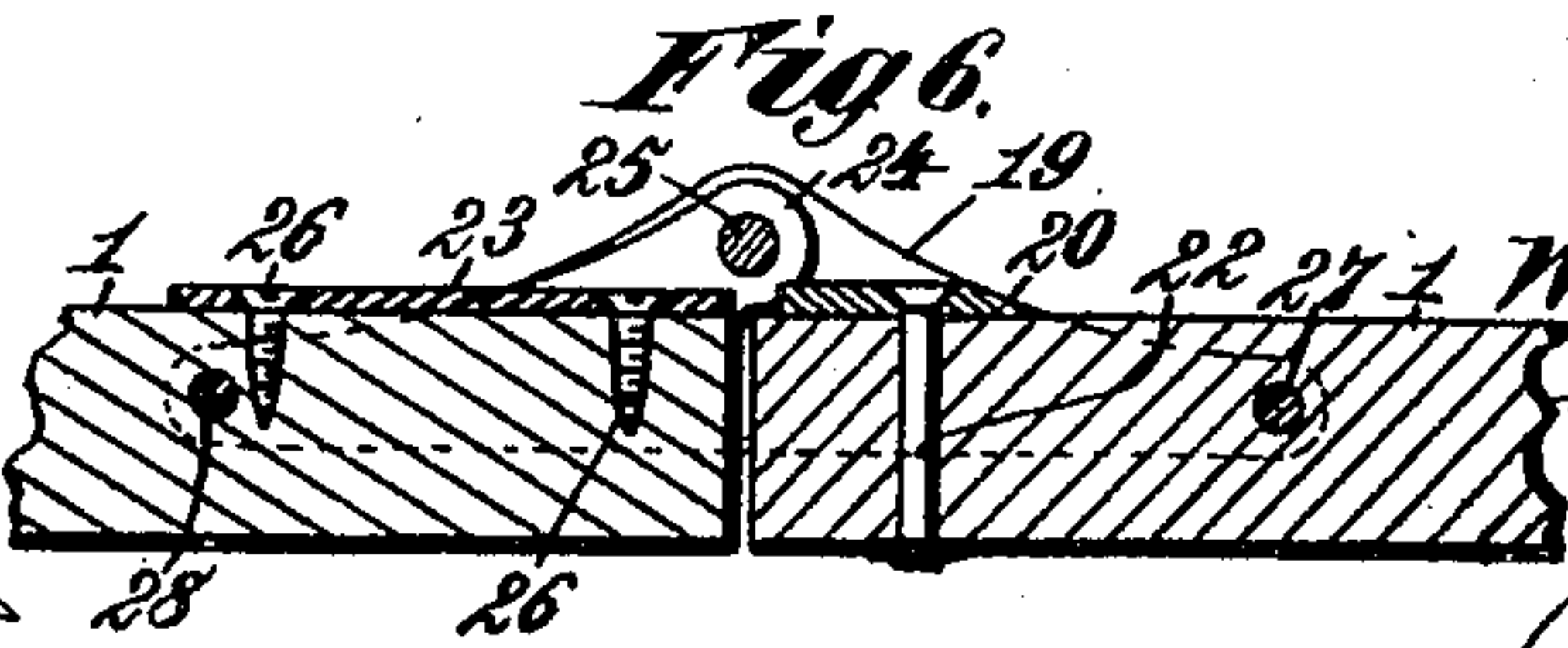
W. F. PARMELEE.
SUPPORT FOR HAMMOCKS, CHAIRS, SWINGS, &c.

No. 466,010.

Patented Dec. 29, 1891.



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Inventor:
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UNITED STATES PATENT OFFICE.

WILBUR F. PARMELEE, OF MIDDLETOWN, CONNECTICUT.

SUPPORT FOR HAMMOCKS, CHAIRS, SWINGS, &c.

SPECIFICATION forming part of Letters Patent No. 466,010, dated December 29, 1891.

Application filed March 18, 1891. Serial No. 385,528. (No model.)

To all whom it may concern:

Be it known that I, WILBUR F. PARMELEE, a citizen of the United States, residing at Middletown, in the county of Middlesex and State of Connecticut, have invented new and useful Improvements in Supports for Hammocks, Chairs, Swings, &c., of which the following is a specification.

My invention relates to hammock-supports of the class made in several parts and jointed together to form a prolonged or extended frame.

It is the purpose of my invention to provide a support of this kind which shall be light, portable, and strong, and in which the legs are connected to the horizontal bar and braced in such manner as not to interfere with the hammock attachments.

It is my purpose, also, to provide a novel form of hinge-joint adapted to either the horizontal bar of the supporting-frame or to the legs, whereby said parts shall have when extended a strength and stiffness as great as if they were made each in a single piece.

It is also my purpose to provide and combine with the horizontal bar and the legs a simple and novel form of brace lying wholly outside the leg-frames and connected therewith by positive clamping devices, whereby an exceedingly strong, stiff, and unyielding support is afforded for either a hammock, a chair, or a swing, said support being capable of folding for storage or transportation, into a small bulk, having compact arrangement and comparatively light weight.

My invention consists to these ends in the several novel features of construction and new combinations of parts hereinafter fully described, and then more particularly pointed out in the claims following this specification.

To enable others skilled in the art to understand and use my said invention, I will proceed to describe the same in detail, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a hammock-support in which my invention is embodied. Fig. 2 is an end view of the same, showing the legs extended, but not spread. Fig. 3 is a side elevation of the supporting-frame, showing the parts folded. Fig. 4 is an elevation taken at right angles to the elevation in

Fig. 3, showing the same parts. Fig. 5 is a detail plan view of the hinge-joint uniting the parts of the horizontal bar. Fig. 6 is a longitudinal section of the same. Fig. 7 is a detail perspective view of the leg-extension brace, the parts thereof being separated. Fig. 8 is a detail view of one of the metallic leg-brackets.

In the said drawings, the reference-numeral 1 indicates the horizontal bar of the supporting-frame, which is of suitable length and provided at or about its middle point with a hinge-joint of peculiar construction. At a little distance from the outer ends of the hinged sections of the horizontal bar are attached metallic leg-brackets, each consisting of a plate 2, having lugs 3, which rise from the face of the plate and extend from one edge at an angle with the plate. These lugs lie upon the vertical sides of the horizontal bar, to which they are pivotally connected by a bolt or rivet 4. The angle of these lugs with the plate is such that when turned in one direction the plate will lie flat against the under side of the bar, and when turned in the other direction it will lie at right angles therewith, or substantially so, the edge of the plate between the lugs abutting against the bar and preventing further movement.

To the ends of the plate 2, which project at each side of the horizontal bar, are pivotally attached the ends of legs 5, which may be formed each in a single piece, as shown, or in two pieces united by a hinge similar to that used upon the horizontal bar, which will be described hereinafter. The upper ends of these legs are beveled upon their inner or adjacent edges to lie flat against the lugs 3 when extended. At a point below the upper ends of the legs are formed openings through which pass bolts 6, having upon their ends, which project on the outer faces of the legs, hooks 7, their opposite ends being threaded to receive thumb-nuts 8. These bolts pass loosely through openings in the ends of a two-part metallic brace-plate, one of the parts 9 being extended to overlap upon the other part 10, to the end of which it is pivotally connected by a rivet 13. Upon the end of the extended portion 9 is formed or mounted a lug, pin, or nipple 14, which drops, when the legs are ex-

tended, into a notch 15 in the edge of the other section 10. Upon the ends of both parts of this brace are formed lugs or lips 16, between which pass the hooked ends of the bolts 6. Through the ends of the horizontal bar 1 are passed horizontal headed rivets 17, upon the ends of which are pivotally mounted braces 18, the free ends of which are bent at an angle with the body portion, the angle being such that when the legs are extended, in position to support the horizontal bar, the bent ends may be inserted in the open hooks 7, which are then clamped thereon by operating the thumb-nuts 8. By this construction and arrangement of parts I obtain a strong but light leg-frame, which will fold into parallelism with the horizontal bar, or be extended and rigidly braced to support the same, the braces lying beyond the outer faces of the legs, where they cannot interfere with the devices attaching the hammock to the long bar 1.

The two parts of the horizontal bar 1 are connected at or about their middle by a hinge consisting of two parallel metallic plates 19, connected by a web of metal 20, cast as part of said plates. These plates, which are counterparts in form, are of considerably greater width at their central portions than at their ends, their length being such that they extend some distance upon each side of the point of division of the horizontal bar. The web 20 is located upon one side of this central point, and is so arranged that when it rests flat upon the upper edge of one of the parts of the bar, with a tongue 21 close to the end of said part, the central portions of the plates 19 will rise above the bar to some little distance. Through the web 20 passes a bolt or rivet 22, which not only holds the plates in position, but also strengthens the bar by preventing all tendency to split when heavy vertical strain is applied. Upon the upper edge or surface of the other part of the horizontal bar rests a metal plate 23, having upon each edge lugs 24, which rise from the plate and project over the ends of the bar. These lugs lie just inside the plates 19, their lower edges lying in slots between said plates and the edges of the tongue 21. They are pivotally connected to the central portions of said plates by a pintle or pivot 25. The plate 23 is secured to the end of that part of the bar 1 on which it rests by screws 26, for which I may substitute bolts or rivets, if preferred. Through the plates 19 at one end thereof is passed a rivet 27, which traverses one section of the horizontal bar, and through the other ends thereof and through the other section of the bar is passed a removable bolt 28. The ends of the two sections of the bar being brought closely together, this hinge forms a union between them as strong and rigid as if the bar were formed in one piece. I may, as I have already indicated, apply a similar joint to each of the legs, if desired.

In order to fold the frame, the thumb-nuts

8 are turned to release the hooks 7 from the bent ends of the braces 18, and the two-part brace 9 10 is folded by raising the pin or nipple 14 out of the notch 15 and drawing the legs together. They are then turned upon the pivot pin or bolt 4 until they lie upon each side of the horizontal bar and parallel with it, or substantially so. The removable bolt 28 is then detached and the parts of the horizontal bar are then folded one upon the other.

What I claim as my invention is—

1. In a support for hammocks and other objects, the combination, with a horizontal bar, of transverse brackets pivoted to the horizontal bar by transverse pivot-pins, a pair of legs pivoted to each bracket by pivot-pins arranged parallel with the horizontal bar, a collapsible brace connecting each pair of legs and composed of two sections pivoted together between the legs, an adjustable clamping-bolt having a hooked extremity and securing each brace-section to one of the legs, and braces pivoted to the horizontal bar and having hooked extremities detachably engaging the hooks of the adjustable clamping-bolts, substantially as described.

2. In a support for hammocks and other objects, the combination, with a horizontal bar, of metallic brackets, each provided with a pair of lugs embracing and pivoted to the horizontal bar by transverse pivot-pins, a pair of legs pivoted to the extremities of each bracket by pivot-pins arranged parallel with the horizontal bar, a collapsible brace connecting each pair of legs and composed of two sections pivoted together and provided, respectively, with a pin and a notch which engage each other when the brace is extended, adjustable clamping-bolts passing through the brace-sections and legs and having hooked extremities, and braces pivoted to the horizontal bar, having hooks engaging the clamping-bolts and rigidly clamped by the latter against the sections of the collapsible braces, substantially as described.

3. In a support for hammocks and other objects, the combination, with a divided horizontal bar having pivoted supporting-legs, of a hinge composed of the web 20, formed integral with the parallel side plates 19, extending longitudinally across the dividing-line of the bar and rising above the latter, permanently pivoted at one extremity to one section of the bar and detachably connected at the opposite extremity to the other section thereof, and the plate 23, having lugs 24 pivoted between the parallel side plates, substantially as and for the purposes described.

4. In a support for hammocks, chairs, swings, &c., the combination, with a horizontal bar, of leg-frames consisting of legs pivotally attached to bracket-plates pivoted to swing in the line of said bar, said legs being extended by a collapsible brace pivoted at its ends upon bolts having hooks upon their outer ends and thumb-nuts upon their threaded

inner ends, and braces pivoted at the ends of said bar, their outer ends being clamped by the hooked ends of the pivot-bolts of the collapsing brace, substantially as described.

5 5. In a support for hammocks, chairs, swings, &c., the combination, with a horizontal bar formed in two parts, of a hinge consisting of two parallel metallic plates lying upon the vertical faces of the said parts, their
10 central portions rising above the same, and a plate attached to one of said parts and having lugs lying within the plates and connected to the high central portions thereof by a pin-
15 tle or bolt, said plates being connected by a metallic web resting on one of the parts and fastened by a vertical bolt, a bolt permanently attaching one end of the parallel plates to the horizontal bar, and a detachable bolt for re-
20 movably connecting the opposite end of the parallel plates to the bar, substantially as described.

6. In a support for hammocks, chairs, swings, &c., the combination, with a divided bar, of parallel metallic plates joined by a web resting on one of said parts and fastened by 25 a bolt passing through the bar, the ends of the plates being also permanently bolted to the bar, and a plate lying on and secured to the other part of said bar and having lugs pivotally connected to the central parts of the par- 30
allel plates, the ends of the latter being connected to the parts last named by a removable bolt, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of 35 two subscribing witnesses.

WILBUR F. PARMELEE. [L. S.]

Witnesses:

LUCY R. PARMELEE,
EDLA L. PAYNE.