

(No Model.)

2 Sheets—Sheet 1.

J. F. A. SPAET.
BOOK SUPPORT.

No. 585,714.

Patented July 6, 1897.

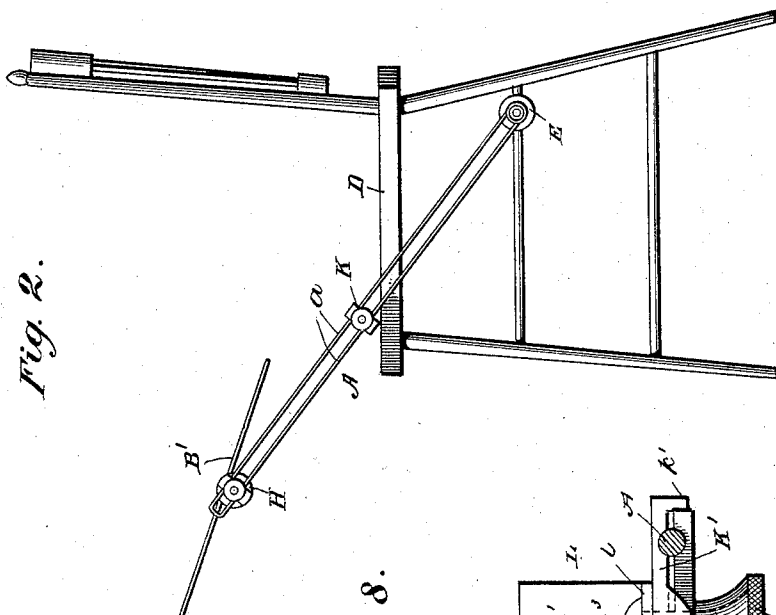


Fig. 8.

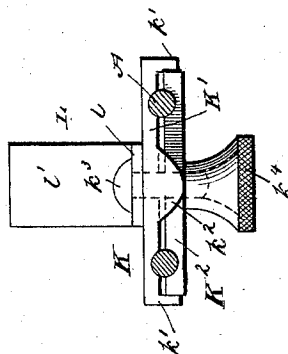
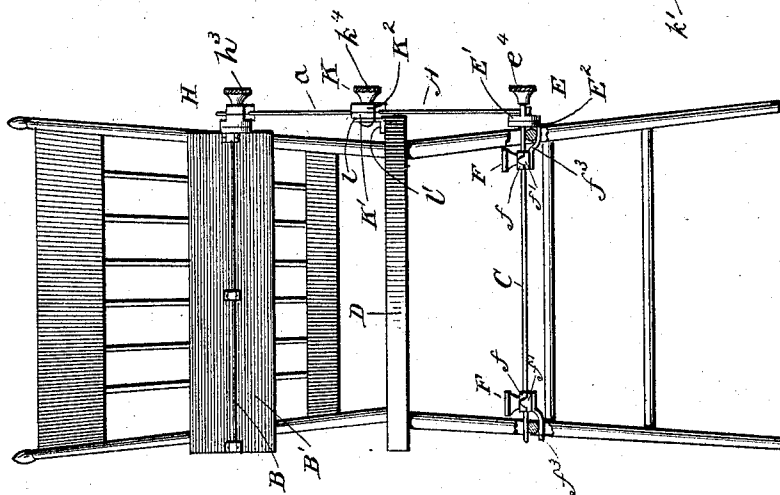


Fig. 1.



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Charles E. Rindon

Inventor.
Joseph F. A. Spaet
By Butterworth & Duce
his Atty.

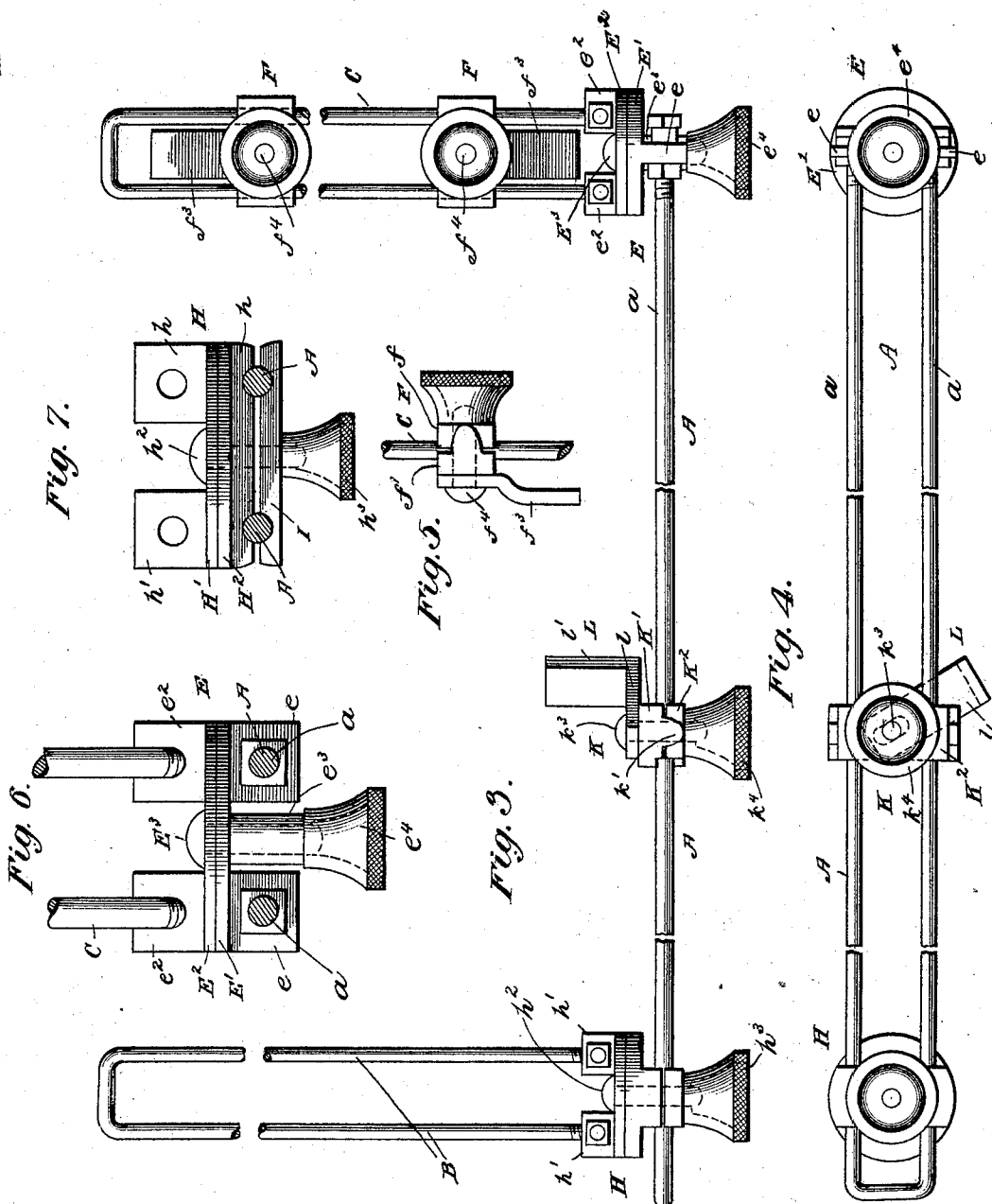
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2 Sheets—Sheet 2.

J. F. A. SPAET.
BOOK SUPPORT.

No. 585,714.

Patented July 6, 1897.



Witnesses.
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Inventor.
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UNITED STATES PATENT OFFICE.

JOSEPH F. A. SPAET, OF MOLINE, ILLINOIS.

BOOK-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 585,714, dated July 6, 1897.

Application filed August 17, 1896. Serial No. 603,068. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. A. SPAET, a citizen of the United States, residing at Moline, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Book-Supports; 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.

This invention relates to book-supports, but more particularly to that class of supports which are designed to be attached to a chair for the purpose of supporting a book or writing-tablet in convenient position for reading or writing.

The primary object of the invention is to provide a book-support which may be conveniently attached to an ordinary chair and which may be adjusted and secured in various positions for the purpose of supporting the book or writing-tablet in different positions more or less removed from the person using the same and at different elevations, so as to relieve the user of the weight of the book and of the necessity of supporting it in a convenient and desirable position for reading.

A further object is to provide a simple, inexpensive, and efficient support which may be variously adjusted and readily applied to various forms of chairs or other articles.

These and other objects may be accomplished by the devices substantially as exhibited in the drawings, wherein—

Figure 1 represents a front elevation of a chair with my book-support attached in position for use. Fig. 2 is a side elevation of the same. Fig. 3 represents a plan view of the complete device removed from the chair, the several parts being brought close together, so as to permit better illustration. Fig. 4 represents a side elevation of the parts, as shown in Fig. 3. Fig. 5 is a detail view of one of the adjustable clamps for attaching the device to the rounds of a chair. Fig. 6 is a plan of the adjusting device for connecting the upright arm or support with the horizontal supporting-bar, the upright arm or support and supporting-arm being disposed at substantially right angles to each other. Fig. 7 is a plan of the adjusting device for connecting the upright arm or support with the book-rest or

shelf-supporting arm, the relative position of the parts being slightly changed from that shown in Fig. 3; and Fig. 8 is a plan of the intermediate clamp and rest.

Referring to the drawings by letters of reference, A denotes the upright arm or bar which supports the book-rest or supporting-arm B, and which is secured to the horizontal bar C by means of a suitable device E, which will permit the support A to be adjusted and secured at different inclinations for the purpose of bringing the book-rest B into any desired position relatively to the seat of the chair D on which it is supported and within the range of the adjustment afforded by the clamp. The support or arm A consists, preferably, of a single rod which is bent twice at right angles, or substantially so, intermediate its ends, so as to provide two parallel arms *a a*, the ends of which may be screw-threaded and passed through apertures formed in the lugs or flanges *e e*, projecting from one member of the rotating clamping device E, said member consisting of a disk *E'*, having the flanges *e e* thereon and adapted to rotate in frictional contact with a fixed member also consisting of a disk *E²*, having lateral flanges or lugs *e² e²*, similar to the flanges *e e*, to receive the screw-threaded ends of the bar C, by which means the fixed member *E²* of the clamp E is secured to the said bar C, a bolt *E³* being passed through the center of the two disks and through a sleeve or washer *e³* and having a thumb-nut *e⁴* screwed upon its outer end, by which means the two members of the clamp may be adjusted and secured in a fixed position relatively to each other, so as to sustain the support or arm A in whatever position it may be adjusted.

The bar C preferably consists of a rod bent similarly to the rod forming the support or arm A and having its ends screw-threaded and turned at an angle to the main body portion, so as to pass through apertures in the lugs *e²* of the disk *E²*, as shown in Figs. 3 and 6. On the rod or bar C is placed a sliding clamp or clamps F, each of which may consist of two plates *f* and *f'*, Figs. 1 and 5, placed one above the other, so as to bind the two arms of the bar C between them, the inner faces of said plates being formed or provided with grooves or recesses extending transversely thereof to

receive said arms. These plates are preferably of the same construction as the clamp, which is illustrated more clearly in Fig. 8 and which will be hereinafter more specifically described. Below the under plate f^1 is placed an angle-plate having a projecting portion or tongue f^3 , adapted to project underneath the round of a chair, as indicated in Fig. 1 of the drawings, so that when the parts are adjusted as shown in said figure the horizontal bar may be firmly secured to the rounds of the chair, so as to hold the main support or arm A in the desired position thereon, a single bolt f^4 serving to secure said upper and lower plates and the angular plate together and to clamp the same to the bar C. Two of these clamps are ordinarily employed in securing the horizontal bar to the two rounds of the chair, the tongues f^3 being caused to project from the clamps in opposite directions, one under each round, so that when the bolts f^4 are tightened the rounds will be clamped securely between the horizontal bar and the angle-bars carried by the clamps thereon. By this means the upright arm and the book-rest may be rigidly supported upon the chair, so as to be adjustable to various positions in order to be within convenient reach of the user.

The book-rest or supporting-arm B is secured to the support or arm A by means of a clamp H, Figs. 3 and 7, which may consist of two members, each having a body portion in the form of a disk, one of which, H^1 , is provided with apertured lugs $h^1 h^1$ to receive the bent screw-threaded ends of the rod or bar B, forming the book-rest, while the other member H^2 may be formed or provided with a raised or bulged portion h , having, preferably, recessed portions or grooves in the face thereof opposing similar grooves in a cross-plate I, placed on the opposite side of the arms of the bar A, so that a single bolt h^2 , passing centrally through the disks or body portions of the two members and through the plate I, will clamp the book-rest firmly to said support or arm and hold the same in whatever position it may be desired, a thumb-nut h^3 being provided by which the book-rest may be adjusted vertically on said support or arm or rotatively, so as to change the inclination thereof as may be desired.

The book-rest or shelf-supporting arm B is preferably provided with a suitable board or table B^1 , on which the book or writing-tablet may rest, said table being fixed to the rod or bar B by clamps or in any proper manner.

In order that the weight of the book or other article supported upon the book rest or shelf B or B^1 may not be supported solely by the bar C or the clamp carried thereby, I provide between said bar and the book-rest a slide or adjustable clamp K, Fig. 8, which may consist of two plates K^1 and K^2 , between which the arms of the support A are clamped, the inner faces of said plates being formed with opposing grooves or depressions to receive

said arms. One of the plates, as K^1 , is formed or provided with outwardly-projecting ends k^1 and on opposite sides thereof centrally or between its ends with outwardly-projecting ears or lugs k^2 , between which the opposite plate K^2 is fitted. A single bolt k^3 and thumb-nut k^4 serve to bind the two plates together with the support clamped between them. Said bolt also passes through a slot in a vertically-slotted arm l of a bracket or angle-plate L, the pendent portion or foot l' of which is adapted to rest upon the seat of the chair when the device is in use, so as to aid in supporting the weight upon the rest and relieve the clamp device or bar C. By means of the described connection the clamp K may be adjusted vertically to adapt the angle-plate L to rest upon the seat of the chair with the support or arm A inclined to whatever position may be desired.

The book-support thus constructed may be applied to any ordinary chair, the clamps applied to the horizontal bar being adapted to slide along said bar and to fit around the rounds of chairs having legs at different distances apart, and owing to the rotary adjustment provided by the clamps which secure the support or arm and book-rest to the horizontal bar the book-rest may be adjusted and secured in various positions, the main support or arm being inclined either forward or back or arranged in an upright position, while the book-rest may be set at different inclinations and at different elevations to adapt it to the uses to which it is to be put and to persons of different sizes using the same. Great range of adjustability is thus secured and there may be comparatively few pieces which are unlike each other, several parts being formed substantially alike—that is, the different parts of the clamps, for instance, and the several arms or bars are alike, so that in making a number of these machines the parts may be easily duplicated, thereby cheapening the construction. Moreover, the supports may be composed of bent rods, while the other parts of the device may be formed of cast metal, so that there is no difficult forging or work which cannot be done on any ordinary bench.

It is obvious that the construction, form, and arrangement of some of the parts may be changed or the upright arm A may be duplicated, so as to provide an arm on each side of the chair, if desired, and that some of the parts may be dispensed with or others substituted therefor without departing from the spirit of my invention.

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

1. A book or other support comprising a bar provided with a slidable clamp comprising two opposed members adapted to embrace and secure said bar to the round of a chair, an upright pivotally held to the bar so as to

permit adjustment to various inclinations, a supporting-arm adjustably held upon the upright, and means for securing said support in various positions, whereby the supporting-arm may be rigidly held so as to support a book or other article in a convenient position for use, substantially as described.

2. A book or other support, comprising a bar adapted to be secured to a chair, an upright pivotally held to the bar so as to permit adjustment to various inclinations, a supporting-arm adjustably held upon the upright, means for securing said support in various positions, and an adjustable clamp or slide arranged upon the upright adapted to rest upon the seat of the chair, whereby a book or other article may be rigidly supported in various positions within convenient reach of the user, substantially as described.

3. In a book or other support, the combination with a horizontally-arranged bar provided with slidable clamps each comprising two opposed members adapted to embrace and secure said bar to the rounds of a chair, of an upright pivotally held to the bar so as to swing either forward or backward, a supporting-arm adjustably secured to the upright, a rest for the book or other article arranged upon the supporting-arm, together with means for securing the rest in various positions, whereby a book or other article may be rigidly supported in various positions within convenient reach of the user, substantially as described.

4. In a book or other support the combination with an upright and means adapted to rigidly hold the same upon a chair, of a supporting-arm provided with a rest for a book or other article, together with a clamp adapted to slide upon the upright comprising two rotatable members and means for simultaneously securing the upright and rotatable members together, whereby the supporting-arm may be secured in various positions so as to place the book within convenient reach of the user, substantially as described.

5. In a book or other support the combination with an upright and means adapted to rigidly hold the same upon a chair, of a supporting-arm provided with a rest for a book or other article, together with a clamp arranged upon the upright comprising two members, a bolt passing through said members so as to rotatably hold the members together, a plate, and a nut for adjustably securing the upright, plate, and members together, substantially as described.

6. In a book or other support, the combination with an upright and means for adjustably supporting a book or other article thereon, of a horizontally-arranged bar provided with a sliding clamp or clamps adapted to secure said bar to the round or rounds of a chair, together with a clamping device comprising two members rotatable with respect to each other, one of which is secured to the bar and the other to the upright, and means

for securing the members rigidly together, substantially as described.

7. A book or other support, comprising an upright, means for adjustably supporting a book or other article thereon, a horizontally-arranged bar provided with a sliding clamp or clamps adapted to secure said bar to the round or rounds of a chair, and a rotatable clamping device comprising two members, one of which is secured to the bar and the other to the upright, a bolt passing through said members, and a nut for securing the members together, whereby the book may be rigidly secured and held in various positions, substantially as described.

8. In a book or other support, a rotatable clamp comprising two members each provided with laterally-projecting lugs adapted to have the upright and the horizontal bar secured thereto, a bolt passing through the members, and a nut for securing the members rotatably together, substantially as described.

9. In a book or other support, a clamping device comprising two members rotatable with respect to each other, one of which is provided with laterally-extending lugs adapted to have the supporting-arm secured thereto, and the other member adapted to rest and slide upon the upright, a bolt passing through the members, a plate fitting over the bolt and adapted to abut against the opposite side of the upright, and a nut for simultaneously securing the plate and members together, substantially as described.

10. In a book or other support, the combination with an upright, of a slide or adjustable clamp comprising two opposed plates arranged on opposite sides of the upright, a bracket or angle-plate, a bolt passing through the plates and bracket, and a nut engaging the bolt so as to adjustably hold the clamp to the upright, substantially as described.

11. In a book or other support, a sliding clamp comprising two plates adapted to be arranged upon opposite sides of a horizontally-arranged bar, an angle-plate having a projecting portion or tongue adapted to project underneath the round of a chair, a bolt passing through the plates, and a nut arranged on the end of the bolt, substantially as described.

12. A book or other support comprising an upright, a horizontally-arranged bar, a supporting-arm, and means for rigidly supporting the parts upon a chair; said arm, upright, and bar, each consisting of a rod bent so as to form two parallel arms having screw-threaded ends and nuts arranged thereon for securing the same to the supporting means, substantially as described.

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

JOSEPH F. A. SPAET.

Witnesses:

HERBERT G. COPP,
GEO. W. WOOD.