Jan. 6, 1925. 1,522,079

J. READ

BOOK EASEL

Filed Feb. 18, 1924 2 Sheets-Sheet 1

Fig. 1.

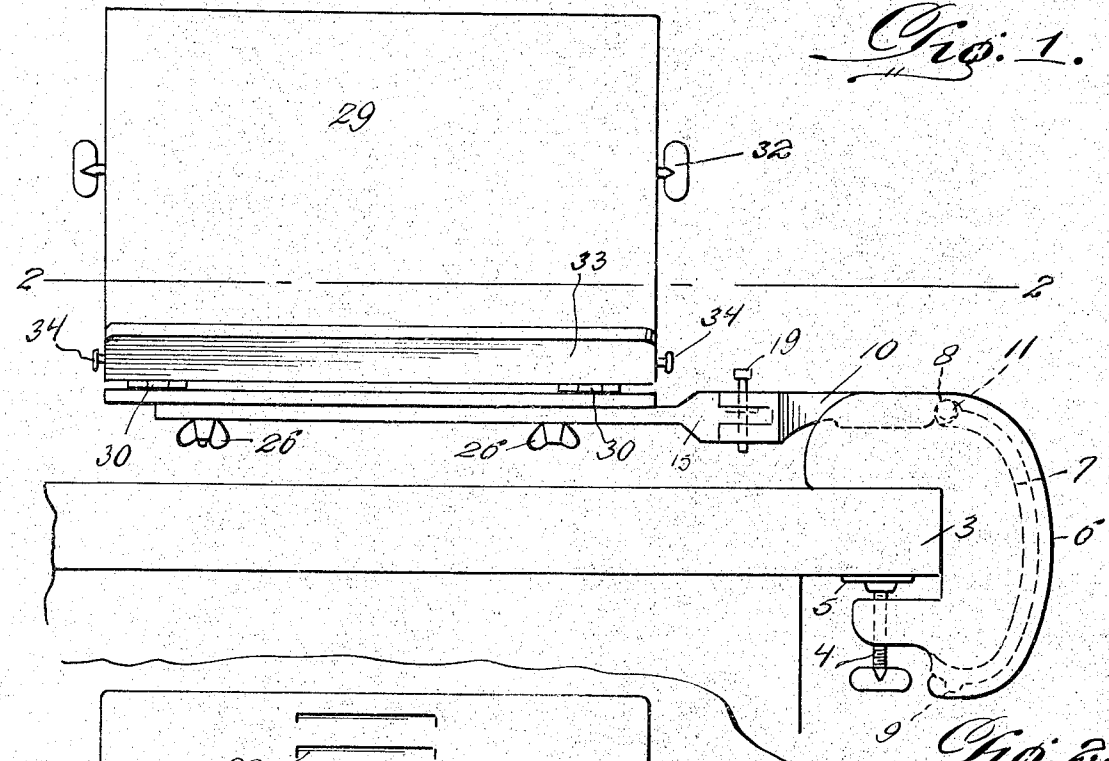
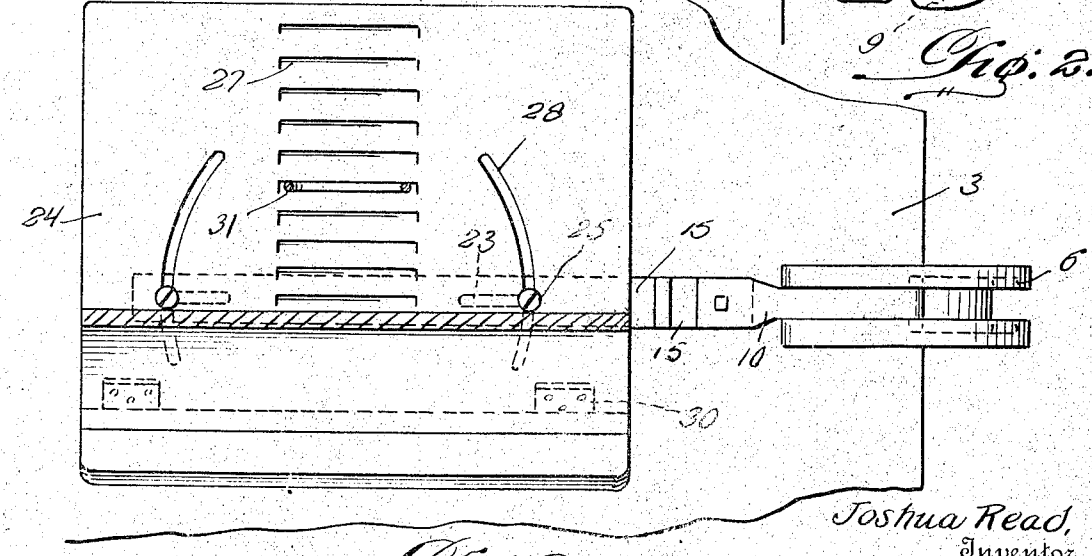
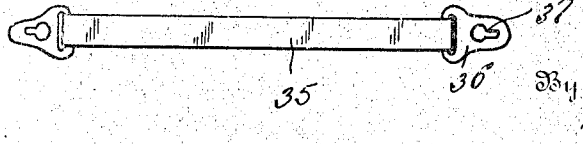


Fig. 2.



Joshua Read,
Inventor

Fig. 3.



By Clarence A. O'Brien
Attorney

Jan. 6, 1925. 1,522,079

J. READ

BOOK EASEL

Filed Feb. 18, 1924 2 Sheets-Sheet 2

Fig. 3.

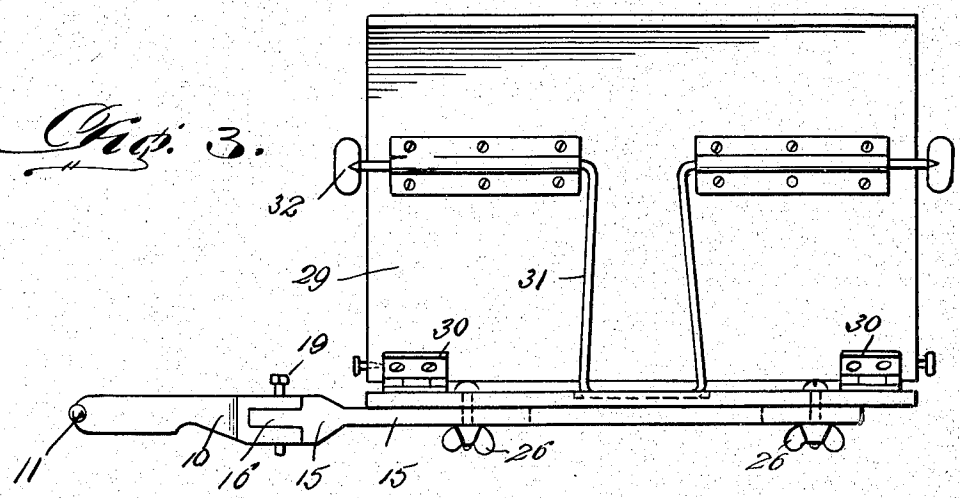


Fig. 4.

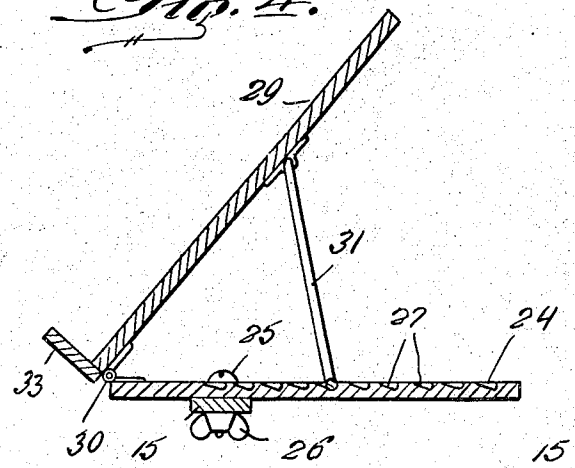


Fig. 5.

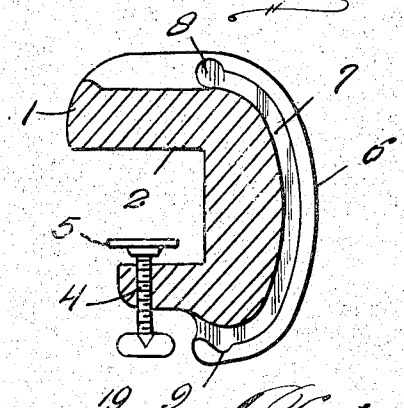


Fig. 6.

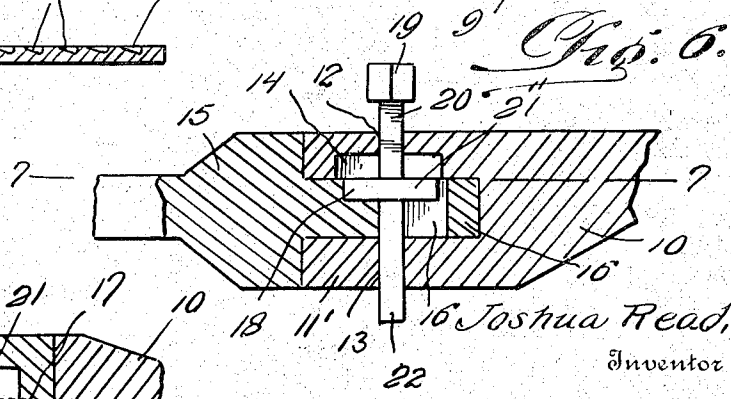
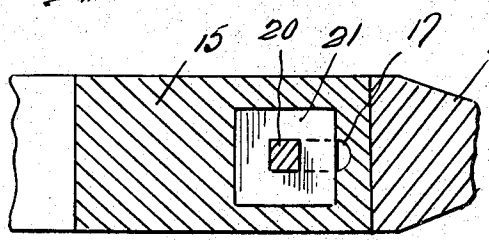


Fig. 7.



Joshua Read,
Inventor

By Clarence A. O'Brien
Attorney

Patented Jan. 6, 1925. 1,522,079

UNITED STATES PATENT OFFICE.

JOSHUA READ, OF LA FAYETTE, ILLINOIS.

BOOK EASEL.

Application filed February 18, 1924. Serial No. 693,593.

To all whom it may concern:

Be it known that JOSHUA READ, a citizen of Great Britain, residing at La Fayette, in the county of Stark and State of Illinois, has invented certain new and useful Improvements in Book Easels, of which the following is a specification.

This invention relates to a book easel attachment adapted to be applied to the edge of a table or other support and it consists in the novel features hereinafter described and claimed.

An object of the invention is to provide an easel of simple and durable structure which may be readily applied to or detached from the support and which will properly hold a book, manuscript or the like, so that the reader or student is relieved of the labor of supporting the book or manuscript and consequently the faculties and efforts of the reader may be concentrated upon the subject matter of the contents of the supported book or manuscript. The easel may be adjusted to correctly hold the text of the book or manuscript in position whereby the reader or student may adapt his posture during the time of reading so that the body is not cramped and the organs thereof may perform their natural functions under normal conditions, and without handicap incident to the study or perusal of the text of the book or manuscript. In the easel structure, the parts are adjustable whereby correct focus of the reading matter with relation to the eyes of the reader may be maintained thus reducing or eliminating eye strain during the process of study or reading.

With the above objects in view, the easel structure comprises a clamp bracket adapted to be applied to a support and provided with spaced flanges having opposed curved grooves which receive the end portions of a pin carried by an arm which is movably mounted upon the said bracket. A bar is adjustably connected with the said arm and the means for connecting the bar with the arm is susceptible of manipulation whereby the bar may be secured at a fixed position with relation to the arm. A plate is adjustably mounted upon the bar and a shelf is hingedly mounted upon the said plate, there being provided a prop member pivotally connected with the shelf and engageable with the plate to hold the shelf at a desired angle with relation to the plate. The shelf is provided along its edge with a ledge against which the edge of the book or manuscript may rest when in position upon the shelf. An elastic element is provided to be used in conjunction with the shelf and may be stretched across the book or manuscript and secured at its end portions to the end edges of the shelf whereby the book or manuscript is held in an open position upon the shelf.

In the accompanying drawings:

Figure 1 is a fragmentary edge elevation of the table or similar support with the book easel applied thereto.

Figure 2 is a horizontal sectional view of the book easel cut on the line 2—2 of Figure 1.

Figure 3 is a fragmentary rear elevational view of the book easel.

Figure 4 is a transverse sectional view of the book easel.

Figure 5 is an enlarged detail sectional view of the bracket member of the book easel structure.

Figure 6 is an enlarged fragmentary detail sectional view of the means for securing the bar to the arm of the book easel structure.

Figure 7 is a horizontal sectional view of said securing means cut on the line 7—7 of Figure 6.

Figure 8 is a plan view of the elastic member which may be used in combination with the shelf or the book easel structure for holding the book or manuscript in an open and exposed position.

As illustrated in the accompanying drawing, the book easel structure includes a clamp bracket member 1 having at one side a recess 2 adapted to receive the edge portion of a table 3, or similar support. A clamp screw 4 passes transversely through the lower portion of the bracket member 1 and is provided with a head 5 which is located within the recess 2 and which is adapted to engage the under surface of the top of the table, or support, when the bracket is applied and the screw 4 is tightened. Along its outer portion, the bracket member 1 is provided with longitudinally curved and spaced flanges 6 and each of the said flanges is provided at its inner side with a curved groove 7, the groove 7 is disposed transversely across the recess 2 of the bracket member, and the groove is provided at its upper end with a diametrically enlarged socket and

the lower end of the groove 7 is open at the intermediate and lower portion of the bracket member 1. At its lowest point, the groove 7 is provided at its outer side with a recess 9, the said recess being located just within the open lower end of the groove 7. The flanges 6 are spaced from each other and disposed parallel with relation to each other and the grooves 7, sockets 8 and recesses 9 of the two flanges are opposite or juxtaposed with relation to each other and transversely of the bracket member 1.

The book easel structure also includes an arm 10 which is provided at one end with outstanding lugs 11 which are normally received within the grooves 7 of the flanges 6 of the bracket member 1. As the arm is shifted with relation to the bracket member, these lugs may enter the sockets 8 and they may also deposit in the recesses 9 provided in the said grooves. Also the arm may be disconnected from the bracket member by moving the lugs out of the grooves at the lower open end thereof.

The outer end of the arm 10 is bifurcated as at 11′. The upper bifurcation 11′ is provided with an opening 12 having angularly disposed side walls and the lower bifurcation 11′ is provided with a circular opening 13, the said openings being alined with each other. The upper bifurcation of the arm is provided at its lower side with a recess 14 having angularly disposed edge walls, the said recess opening into the space between the said bifurcations of the arm.

The book easel structure also includes a bar 15 having a shank end 16 which is adapted to enter the space between the bifurcations 11′ of the arm 10. The shank 16 is provided with a longitudinally disposed slot 17 which lies between the openings 12 and 13 of the bifurcations of the said arms. The shank 16 is provided at its upper side and at the end of the slot 17 with a recess 18, the edge walls of which are disposed at angles with relation to each other. The recesses 14 and 18 are disposed opposite each other and the recess 14 is of greater transverse dimensions than the corresponding dimensions of the recess 18. The shank of a pin 19 passes through the opening 12, recess 14, recess 18, slot 17 and opening 13. The shank of the said pin is provided with a section 20 having angularly disposed side surfaces and the said section is adapted to fit snugly in the opening 12 but is free to slide therein. The shank of the pin 19 is provided at a point between its ends with a block 21 which is adapted to fit snugly in the recess 18 but which may enter the recess 14. The shank of the pin 19 is further provided with a cylindrical section 22 which fits snugly within the opening 13 and which may slide therein and which also passes through the slot 17 of the shank 16 of the bar 15.

When the block portion 21 is received in the recess 18, the bar 15 is locked in alinement with the arm 10. However, when the pin 19 is raised, the block 21 is moved into the recess 14 and the bar 15 may be turned with relation to the arm 10 and in the event that the arm 15 is turned to a position at a right angle to the arm 10, the pin 19 may be lowered whereby the block 21 may engage in the recess 18 and hold the bar 15 in a fixed position and at the adjusted position with relation to the arm 15. The bar 15 is provided with slots 23 which are disposed longitudinally of the said bar.

The book easel also includes a plate 24 having bolts 25 passing transversely therethrough, the said bolts also passing through the slots 23 and the bolts are secured to the bar 15 by means of wing nuts 26 which are screwed upon the lower ends of the bolts and which bear at their faces against the under surface of the bar. Thus means are provided for adjustably securing the plate 24 upon the bar. The plate 24 is provided upon its upper surface with a series of notches 27, the said notches being arranged in a row and disposed parallel with the length of the bar 15. The plate 24 is further provided with arcuate slots 28 which receive the bolts 25 hereinbefore described, and by means of which the plate may be turned with relation to the bolts and secured at an adjusted position upon the bar by tightening the bolts as hereinbefore described. A desk panel 29 is connected by means of hinges 30 with one edge portion of the plate 24 and a U-shaped prop member 31 is pivoted at the back of the desk panel 29 and its intermediate portion is adapted to engage in any one of the notches 27, whereby the desk panel 29 is held at a desired angle with relation to the plane of the plate 24. Knobs 32 are provided at the ends of the prop member 31 and are disposed beyond the edges of the desk panel 29 and may be used for swinging the prop member 31 with relation to the panel 29 whereby the intermediate portion of the said prop member may be inserted in any particular or desired notch 27 of the series of notches.

The desk panel 29 is adapted to support a book or manuscript (not shown), and hold the same in proper position before the reader or student. A ledge strip 33 is mounted at the lower edge of the desk panel 29 and upon which the lower edge of the book or manuscript may rest. Studs 34 are mounted at the opposite side edges of the desk panel 29. An elastic strip 35 is provided at its ends with metallic clips 36 having key-hole slots 37. The strip 35 may be stretched and disposed over the lower portion of the book or manuscript which is in position on the desk panel 29 and the slot 37 may be engaged over the studs 34 where-

by the said strip 35 is held in a stretched condition over the book or manuscript and holds the same in a proper open position upon the said desk panel.

It is obvious that the arm 10 may be swung with relation to the bracket member 1 and the lugs 11 may be moved from the socket 8 along the grooves 7 and engage in the recesses 9 whereby the said arm and the parts attached thereto may hang pendent from the bracket member 1. By moving the lugs 11 in an upright direction, they may be disengaged from the recesses 9 and pass out of the lower end of the slots 7 and thus the arm and its attached parts may be completely disconnected from the bracket member.

Having thus described the invention, what is claimed is:

1. An easel structure comprising a bracket member, means for securing the bracket member to a support, the said bracket member having parallel flanges provided with longitudinally curved slots, the flanges having enlarged sockets at one end of the slots, the opposite ends of the slots being open, an arm having lugs adapted to move along the slots and enter the sockets, and a desk panel connected with the arm.

2. An easel structure comprising a bracket member, means for securing the bracket member to a support, the bracket member being provided with parallel flanges, said flanges having at their inner sides curved slots and provided at the upper ends of the slots with enlarged sockets, the lower ends of the slots being open, the lower edge walls of the slots being provided with recesses located in the vicinity of the open ends of the slots, an arm having lugs adapted to move along the slots and enter the sockets and the recesses thereof, and a desk panel carried by the arm.

3. An easel structure comprising a bracket, an arm detachably connected with the bracket, and provided with a bifurcated end, one of the bifurcations of the arm being provided with an opening having angularly disposed walls, the other bifurcation of the arm being provided with an opening which is circular, said openings being alined with each other transversely of the arm, one bifurcation of the arm being provided at its inner side with a recess, a bar having a shank adapted to enter the space between the bifurcations of the arm and being provided with a slot and a recess, a pin adapted to pass through said openings, the recesses and the slots, said pin having a cylindrical portion adapted to snugly fit within the cylindrical opening and having a portion provided with angularly disposed side surfaces adapted to fit snugly in the opening of the arm having angularly disposed wall surfaces, the intermediate portion of the pin adapted to move along the slot in the shank, and a block portion carried by the pin and movable from one recess to the other.

In testimony whereof I affix my signature.

JOSHUA READ.