

Nov. 29, 1955

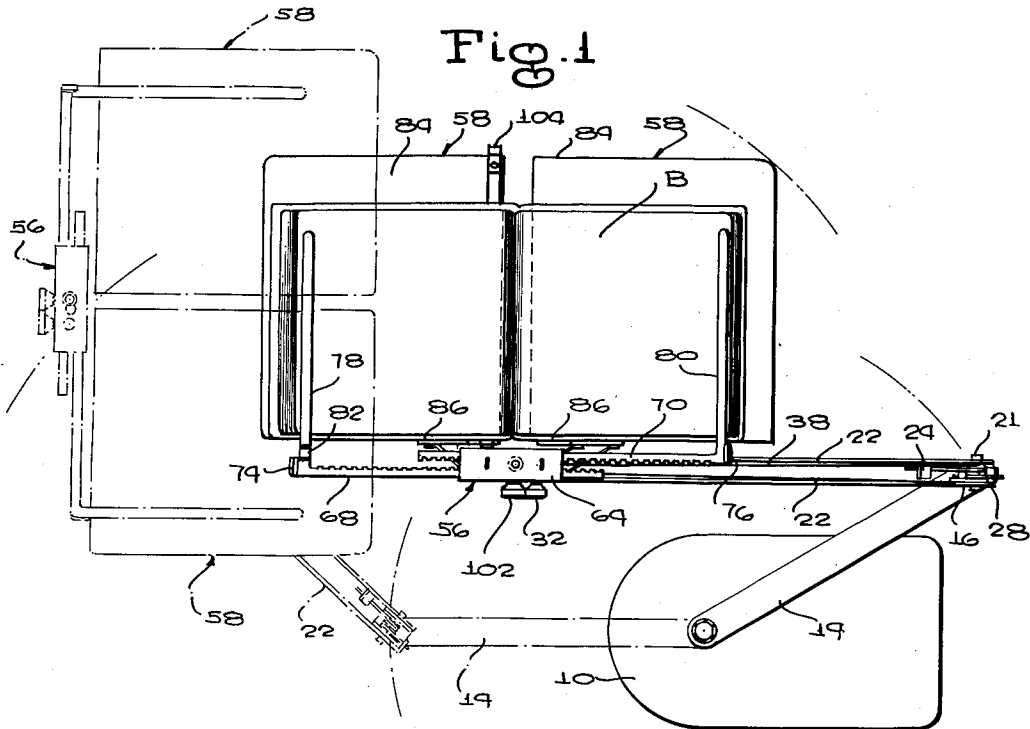
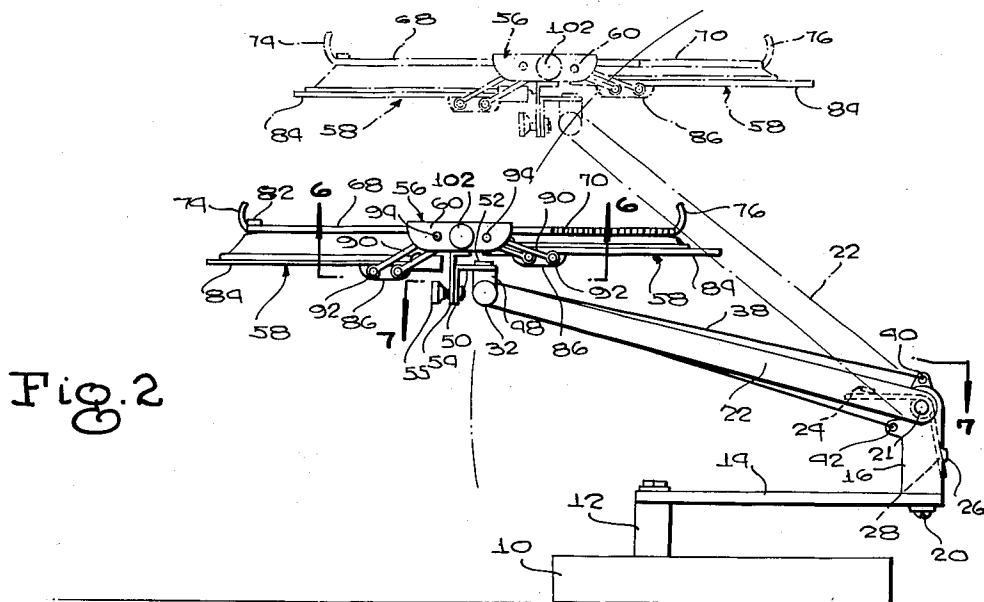
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2,724,923

BOOK HOLDING READING TABLE

Filed May 15, 1953

3 Sheets-Sheet 1



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3 Sheets-Sheet 2

Fig. 3

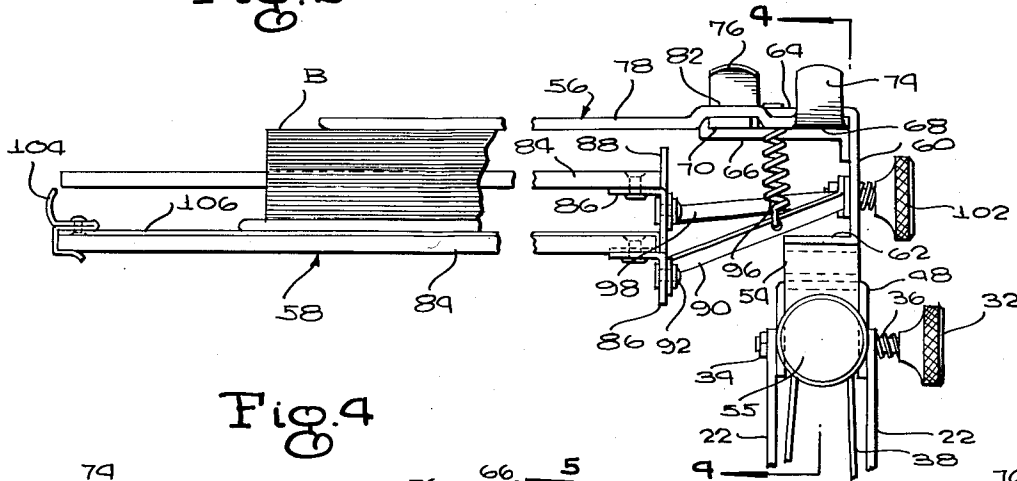


Fig.4

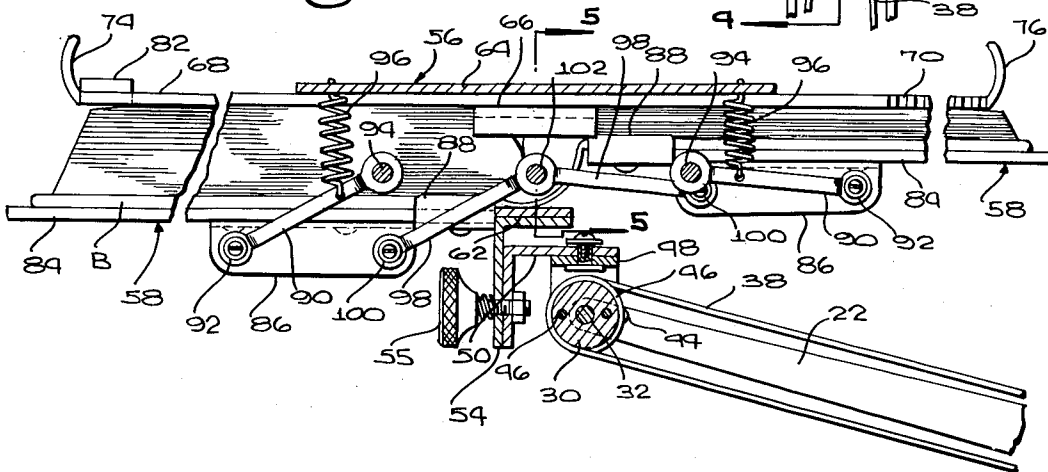
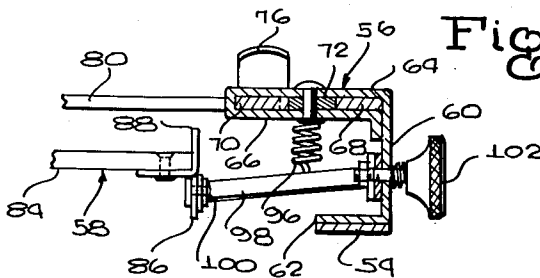


Fig. 5



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Fig.6

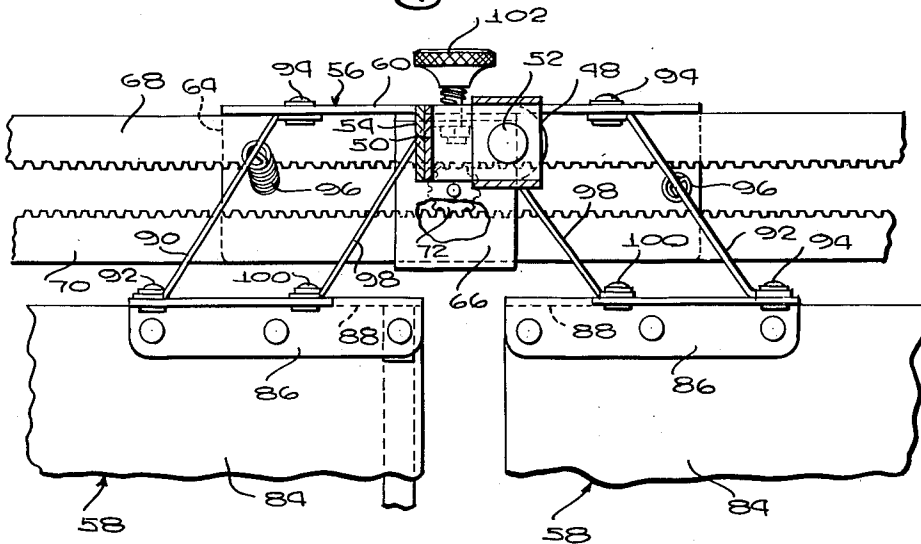


Fig. 7

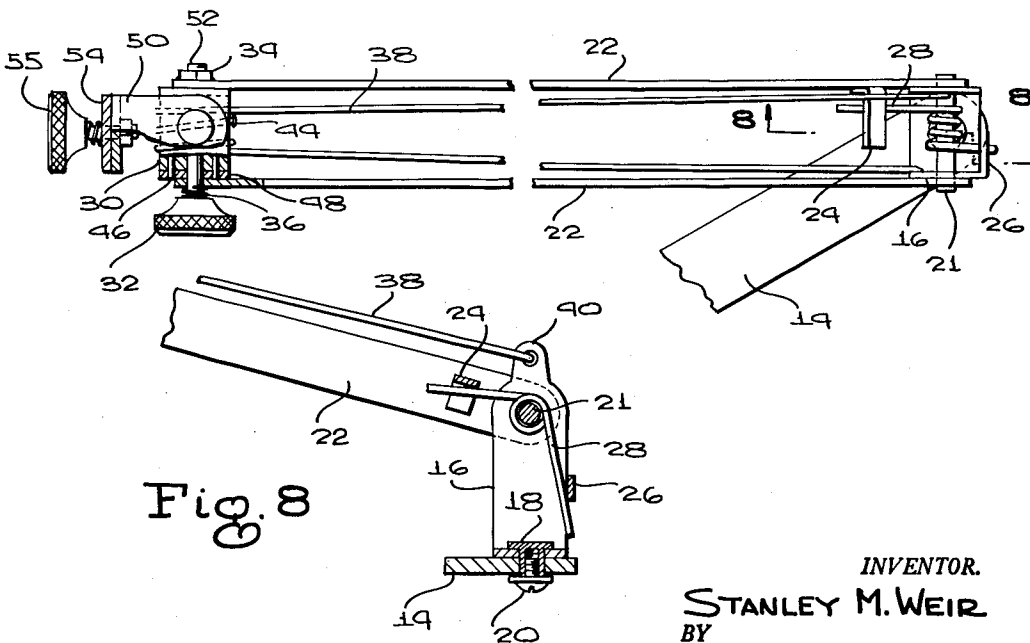
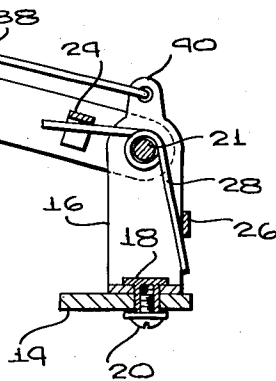


Fig. 8



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2,724,923

BOOK HOLDING READING TABLE

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Application May 15, 1953, Serial No. 355,313

5 Claims. (Cl. 45—61)

This invention relates to a reading table. More particularly, the invention has reference to a structure of this character that is adapted to facilitate measurably the reading of a book supported thereon.

One important object of the present invention is to provide, in a device of the type stated, a book support means which will automatically cause the uppermost pages of the respective side portions of an open, supported book to be held in a substantially common plane, without regard to the continuously changing, different thicknesses of said side portions.

Another object of importance is to provide, in a book support means as described, a pair of side by side book supporting assemblies, each of which will support one of the side portions of the open book, said assemblies being resiliently suspended from a main frame that includes a pair of hold-down elements disposed in a substantially common plane, the respective assemblies being spring-biased in the direction of their associated hold-down elements independently of one another, thus to effect the retention of the uppermost pages of the side portions of the book in engagement with said hold-down elements, from beginning to end of the reading of the book.

Another object of importance is to provide a reading table as described, wherein the book support means described above will be carried by a main support means that will adjust the book support means both vertically and horizontally to selected locations relative to the reader.

Another object of importance is to provide a reading table as stated, wherein the book support means can be bodily tilted to selected inclinations, according to the desires or needs of the reader.

Still another object of importance is to provide a structure as described, wherein the main frame of the book support means, that includes the hold-down elements overlying the uppermost pages of the open book, will be so designed as to permit said hold-down elements to be adjusted simultaneously toward and away from one another equal distances, to compensate for different book sizes.

Another object of importance is to provide a reading table as described, wherein the book support assemblies, that are resiliently urged toward the hold-down elements, will be connected to the main frame by parallelogram linkages, in such a manner as to insure that the respective assemblies will be retained in planes parallel to the common plane of the hold-down elements, in each position to which said assemblies are biased toward the hold-down elements.

Another object is to provide a mechanism which will automatically level the table portion thereof, regardless of the elevation to which said table portion is adjusted.

Heretofore, those reading tables or book holding devices of which I have knowledge have had a common characteristic, in that the open book has always been supported upon a flat member, that does not compensate

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for differences in the thicknesses of the opposite side portions of the open book. As a result, the uppermost pages of said side portions have, except at the halfway point of the book, been disposed in different planes, an arrangement which does not lend itself toward comfortable reading. I have attempted, in carrying out the present invention, to approach the problem from an entirely new viewpoint, and utilize a planiform hold-down means that overlies the uppermost pages of the side portions of the open book, thus to cause the uppermost pages to be retained in a substantially common plane, this construction being utilized in combination with independently and resiliently suspended support assemblies including side by side plates that underlie the opposite side portions of the open book, with said plates being biased independently of one another toward the hold-down means, to compensate for the continuously changing thicknesses of the respective side portions. The arrangement has the advantageous characteristic of not only holding the uppermost pages in a common plane, throughout the reading of the book, but also permitting one to turn pages with ease while at the same time positioning the turned page under a hold-down element, merely by exerting downward pressure against one of the resiliently supported side portions of the book.

Heretofore, those reading tables or book-holding devices of which I have knowledge have not adequately provided for the constant need of the reader to freely move the reading matter to different desired positions while in the process of reading, that is, said devices have not permitted movement of the reading matter without making many time-consuming adjustments, or changing one's reading position.

It is proposed, accordingly, to provide a construction wherein the backward and forward, and side to side motion of the table portion of the assembly will always be free and possessed of a high degree of flexibility, the construction which I have devised being such as to permit horizontal motion of a supported book within a selected plane, without adjustment of any levers or knobs, but rather, merely by a slight push or shove of the hand.

It is further proposed, in this regard, to provide a construction wherein the selected elevation and inclination of the reading table top can be freely chosen, with said table top being held in the selected position by friction, without the necessity of the reader's having to adjust any knobs, levers, etc. Friction knobs used on the invention for controlling these two motions should, as will be made presently apparent, be locked in one position when the reading begins, to insure a steady frame for the book-holding, i. e. page-turning, portion of the table, but thereafter, changes in the knob positions are unnecessary.

To sum up, it is an important aim of the present invention to provide a reading table characterized distinctly by the flexibility and ease of movement of the various parts thereof, which make possible positioning of the reading matter at the location found most suitable for the particular reader, without the reader having to make constant and time-consuming adjustments of knobs, levers, etc.

Other objects will appear from the following description, the claims appended thereto, and from the annexed drawings, in which like reference characters designate like parts throughout the several views, and wherein:

Figure 1 is a top plan view of a reading table formed in accordance with the present invention, the dotted lines indicating one position to which the book support means can be adjusted upon its associated base;

Figure 2 is a side elevational view, the dotted lines indicating a second position to which the book support means can be adjusted relative to the base;

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Figure 3 is an enlarged view, in elevation, of the book support means as it appears when seen from the left in Figure 2, portions being broken away;

Figure 4 is a vertical sectional view taken substantially on line 4—4 of Figure 3;

Figure 5 is a transverse sectional view taken substantially on line 5—5 of Figure 4;

Figure 6 is an enlarged, detail sectional view taken substantially on line 6—6 of Figure 2;

Figure 7 is an enlarged sectional view on line 7—7 of Figure 2; and

Figure 8 is a detail sectional view taken substantially on line 8—8 of Figure 7.

The reading table constituting the present invention is formed with an adjustable supporting structure for the book support means illustrated per se in Figures 3—5. The support structure has been shown to particular advantage in Figures 1, 2, 7, and 8, and as shown in Figures 1 and 2, includes a flat, stationary base 10. The base 10 can, of course, be of any desired outer configuration, and further, need not necessarily be of flat formation. It is mainly important that the base 10 remain stationary in any location at which it is disposed.

Extending upwardly from the base 10 is a relatively short post 12, and pivotally connected at one end to the upper end of the post 12 is a relatively elongated, horizontally disposed lower support arm 14. Arm 14 swings within a horizontal plane about the axis of its pivotal connection to post 12, and carried by the outer end of said arm 14 is a relatively short, upwardly and vertically extending, U-shaped yoke 16. The bight of yoke 16, as shown in Figure 8, has a center opening, and extending downwardly through said opening is a downwardly opening socket member 18, interiorly threaded for engagement therein of a screw 20. Socket member 18 extends downwardly through an opening formed in the outer end of arm 14, and thus it is seen that the yoke 16 is mounted upon the arm 14 for rotation about a vertical axis.

Extending between the upwardly extending arms of yoke 16 is a pivot pin 21, that extends through transversely aligned openings formed in elongated, parallel, vertically swingable, upper support arms 22. Arms 22 can thus be adjusted vertically about the axis of pin 21, and can be swung, for example, to the full and dotted line positions shown in Figure 2. Of course, the arms 22 can be jointly swung to any of the various other positions, and the vertically swingable adjustment of the arms 22 can be carried out independently of or in combination with the horizontally swingable adjustment of the arm 14.

Means is provided for normally biasing the arms 22 upwardly within their vertical plane of swinging movement, and to this end (see Figure 8) I provide a spring 28 coiled about pivot pin 21 and having its ends engaged with lugs 24, 26 respectively, carried by one arm 22 and one of the arms of the yoke 16.

Disposed between the other ends of the parallel arms 22 is a leveling cylinder 30, having an axial bore registering with transversely aligned openings formed in the arms 22. Extending through said transversely aligned openings and axial bore is the shank of a friction adjustment pin, said pin serving to mount the cylinder 30 rotatably upon and between the arms 22. The pin 32, at one end, has a knurled hand knob (Figure 7), the other end of the pin being threaded for engagement with a nut 34 welded or otherwise fixedly secured to one of the arms 22. A spring 36 is coiled about the shank of the pin, adjacent the hand knob, and is held under compression between said hand knob and the adjacent arm 22.

It will be seen that this arrangement permits the frictional engagement of the arms 22 with the opposite ends of the cylinder 30 to be adjusted, responsive to threading of the pin inwardly or outwardly of the nut 34. The freedom of rotatable movement of the cylinder is thus correspondingly adjusted.

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Wound about the cylinder 30 is the midlength portion of a leveling cable 38, connected at one end to an upstanding ear 40 formed upon one arm of yoke 16, and connected at its other end to a laterally projected ear 42 formed upon the other leg of said yoke (see Figure 2). The portion of cable 38 that is wound about the cylinder 30 is secured to the cylinder by means of a nail or similar fastening element 44, and thus it is seen that when the arms 22 are adjusted upwardly or downwardly, the cable will effect such rotation of cylinder 30 as will insure that a bracket means carried thereby, and to be described hereinafter, will be held level.

The cylinder 30 is provided with diametrically opposite, longitudinally extending pins 46, said pins projecting beyond the opposite ends of the cylinder, into the depending legs of a bracket 48 of inverted U-shape. By reason of this arrangement, the bracket 48 is fixedly connected to the cylinder, and will be held level at all times during the up and down movement of the arms 22, due to the cable arrangement described above.

It is to be noted that tightening of knob 32 will cause the arm 22 to be locked at any desired height.

A bracket member 50 of inverted L-shape is provided with a horizontally extended leg (Figure 4) connected as at 52 to the bight of the bracket 48. The connection 52, if desired, can be utilized to permit the bracket member 50 to be rotatably adjusted upon the bracket 48, about a vertical axis defined by said connection 52.

To the vertically depending leg of the bracket member 50 there is connected the vertical leg of an inverted main frame support bracket 54, said main frame support bracket being attached to bracket member 50 by means of a pin 55. Pin 55 has a threaded shank and a hand knob, said threaded shank extending through the smooth walled, registering openings formed in the bracket member 50 and the main frame support bracket 54. The threaded shank of the pin 55 is engaged with a nut fixedly secured to the vertically depending leg of the bracket member 50, a spring being circumposed about the shank of said pin 55 between the hand knob at the support bracket 54. This arrangement, as will be appreciated, permits the support bracket 54 to be adjusted about a horizontal axis defined by the said pin 55, with the connection being designed to hold the parts in selected positions of adjustment, by closing the vertical legs of the bracket member 50 and support bracket 54 to bind frictionally against one another.

I secure to the support structure defined by base 10, post 12, arm 14, yoke 16, arms 22, and brackets 48, 50, 54, a book support means which can appropriately be considered as comprising three main components or assemblies. Said assemblies constitute a main frame designated generally by the reference numeral 56, and a pair of side by side, identical though opposite, book support assemblies resiliently suspended from the main frame and designated generally by the reference numeral 58.

Considering first the construction of the main frame 56, this includes a stationary housing 60, which can conveniently be formed from a single piece of sheet metal material bent to shape to include a vertical side portion formed integrally, at its lower edge, with an inwardly extended, horizontally disposed foot 62 fixedly connected to the horizontal leg of the main frame support bracket 54 (Figures 3—5).

The piece of metal material of which the housing 60 is formed is bent to provide a rectangular upper portion including a top wall 64 integral with a bottom wall 66. The top and bottom walls 64, 66 lie in horizontal planes, and are spaced apart a short distance, thus to form a guide casing of shallow, rectangular cross section in which are slidably mounted hold-down elements 68, 70.

The hold-down elements 68, 70 are each of an L-shape, said elements being oppositely arranged as best

shown in Figure 1. Each element includes an elongated leg slidably mounted in one side of the guide casing defined by the spaced walls 64, 66 of housing 60, the housing-engaged lengths of the elements 68, 70 being formed with opposing rack teeth.

Rotatably mounted in the midlength portion of the guide casing is a pinion 72, said pinion being disposed between and being in mesh with the rack-like legs of the hold-down elements 68, 70. By reason of this arrangement, it will be seen that if one of said legs is shifted in the direction of its length, the other leg will be shifted an equal distance in the direction of its length, said legs moving in opposite directions, toward and away from one another as the case may be.

It is thus seen that the hold-down elements are simultaneously adjusted, with the adjustment being uniform in every instance, the adjustment being carried out merely by grasping one or the other of said elements and shifting it in a selected direction.

On the outer end of the rack-like leg of hold-down elements 68 is an upwardly extended finger grip 74, a correspond grip 76 being provided upon the outer end of the corresponding leg of the hold-down element 70. Either of these finger grips can be grasped for the purpose of facilitating the adjustment of the hold-down elements in the manner described above.

Integrally or otherwise rigidly secured to the outer end of the rack-like legs 68, 70 are hold-down fingers 78, 80. Fingers 78, 80 are of elongated formation, and as shown in Figure 1, are adapted to overlie the uppermost pages of the opposite side portions of an open book B supported therebelow. The fingers thus normally keep the uppermost pages from turning, to permit the book to be read without annoyance or inconvenience.

It is to be noted that at the inner end of the hold-down finger 78, there is provided an upwardly offset portion 82 (Figures 1 and 3).

By reason of the construction so far illustrated and described, it is to be noted that the hold-down elements of the main frame 56 are, at all times, disposed within a substantially common plane, the adjustment of the fingers 78, 80 toward one another being effected within said plane.

Considering now the construction of the assemblies 58, each of these assemblies includes a flat support plate 84 adapted to underlie and provide a support for the associated side portion of the open book B. Thus, when the book is opened, one cover of the book will be in contact with one support plate 84, while the cover will be in contact with the other plate 84.

The plates 84 are connected to the housing 60, for movement toward and away from the hold-down elements disposed thereabove, each plate 84 being shiftable toward and away from its associated hold-down element, independently of the other plate.

By reason of this arrangement, and as best shown in Figures 2 and 4, the plates compensate for changing thicknesses of the side portions of the open book, thereby to hold the uppermost pages of said side portions in a common plane in which said uppermost pages are engaged against the respective hold-down fingers 78, 80.

To accomplish this highly desirable result, I provide, in each book supporting assembly 58, a parallelogram linkage whereby the support plate 84 of the assembly is resiliently suspended from the housing 60, for movement toward and away from the main frame, the plate being held at all times in a plane parallel to the common plane of the hold-down elements 68, 70 of the main frame.

The linkage includes an angle bracket 86 fixedly secured to that edge of each plate 84 disposed nearer the housing 60, each angle bracket 86 being integral with an upwardly extended ear 88, that provides a stop lim-

iting movement of the book B in the direction of the housing 60.

The parallelogram linkage of each assembly 58 includes an outer connecting link 90 pivotally connected at 92 to the depending leg of bracket 86, and pivotally connected at 94 to the vertical portion of housing 60. A spring 96 is hooked at one end through closely spaced openings formed in the upper portion of housing 60, and at its other end is hooked through an opening formed in link 90 intermediate the ends of said link. Therefore, spring 96, tending to compress, biases link 90 upwardly, thereby to continuously but yieldably urge the plate 84 in the direction of the hold-down elements.

Spaced inwardly from and extending in parallelism with the link 90 is an interconnecting link 98, pivotally connected at 100 to the bracket 86. The innerlinks 98 of the respective parallelogram linkages are pivotally connected, at their other ends, to housing 60 by means of a pin 102, a single pin 102 being utilized as best shown in Figure 4.

The pin 102 is threadably engaged in a nut that is adapted to limit movement of the pin 102 outwardly from the housing 60, a spring being held under compression between the hand knob provided upon the pin, and the adjacent portion of housing 60. By reason of this arrangement, rotatable adjustment of pin 102 will be adapted to vary the frictional engagement of the links with one another, to adjust, in turn, the freedom of swinging movement of the said links 98.

The pin or knob E, when tightened, is effective to lock the support plates 84 rigidly, this being the primary purpose of said knob or pin 102.

A stop 104 (Figure 3) is secured to the outer edge of one of the plates 84, to limit movement of the book B outwardly from the housing 60. Secured at one end to the stop 104, and overlying the associated plate 84, is an elastic element 106, said element 106 being connected at its other end to the inner edge of the plate 84.

The element 106 is utilized whenever the book support means defined by main frame 56 and book support assemblies 58 is tilted bodily out of the substantially horizontal position shown in the drawing, to a steeply inclined or completely inverted position. In other words, the adjustable mounting of said book support means permits the same to be adjusted through 180° from the position shown in the drawing. In this position, of course, it is desirable that the center portion of the book be held in contact with the book support assemblies 56, and in such instances, the elastic element 106 can be extended over one of the covers of the side portions of the open book. The hold-down fingers, of course, will engage the opposite side edges of the open book, to cooperate with the elastic element in supporting the book to the main frame 56 and assemblies 58. The device thus can be used by bed patients in hospitals, to permit them to read even while lying completely flat on their backs. This does not prevent the device from being used in the same manner, of course, by anyone desiring to read while lying flat.

I believe that the construction illustrated and described has certain important characteristics, which are thought worthy of note at this point. A wide range of adjustments is possible, due to the particular design of the supporting structure, and after said adjustments are made, the book support means itself can be adjusted relative to the support structure. Further, the construction illustrated and described is such as to insure that the uppermost pages of the opposite side portions of an open book will be held in a common plane. Heretofore, the problem of supporting a book for reading has been approached by disposing the book upon a flat, relatively rigid surface. However, in the invention, the book is not so supported, and instead, the opposite sides of the open book are supported upon relatively adjustable support assemblies, which can be disposed different distances from the coplanar hold-down elements against which the uppermost pages are engaged.

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Due to this arrangement, the uppermost pages of the side portions of the open book will always be disposed in a common plane, regardless of the portion of the book being read. This is true from end to end of the book, as will be readily apparent.

It is also thought important to note that the construction illustrated and described is such as to facilitate the turning of the pages. Assuming, for example, that one desires to turn the page shown at the right in Figure 1, it is merely necessary that the upper right hand corner of said page be grasped, to slip the page out from under the right hand hold-down finger 80. The page is then turned to the left hand side of the book, and in order to dispose the page under the left hand finger 73, it is merely necessary that the user exert a slight downward pressure against the left hand side portion of the book. This will be translated into downward movement of the left hand support plate 84, and when the plate 84 moves downwardly from the finger 78, the turned page is adapted to move under the finger. Release of the page will, of course, cause the plate 84 to be resiliently biased upwardly once again by its associated spring 96.

In a commercial embodiment of the invention, I may desire to utilize, instead of a finger grip 74, a handle on the left hand hold-down element, so that when a page is turned and pushed down by the right hand, the left hand can steady the table or move it to another desired position. In such an instance, locking of the knobs used to control vertical and inclined adjustment of the table top is made unnecessary.

It is believed apparent that the invention is not necessarily confined to the specific use or uses thereof described above, since it may be utilized for any purpose to which it may be suited. Nor is the invention to be necessarily limited to the specific construction illustrated and described, since such construction is only intended to be illustrative of the principles of operation and the means presently devised to carry out said principles, it being considered that the invention comprehends any minor change in construction that may be permitted within the scope of the appended claims.

What is claimed is:

1. A book holder comprising: a main frame including a housing adapted for disposition midway between the opposite side edges of an opened book, outwardly from one end of the book; substantially identical though opposite hold-down elements sliding in the housing along parallel lines, and formed with like fingers disposed in a common plane and adapted to overlie the uppermost pages of the book; means in the housing in engagement with the elements for slidably adjusting the elements simultaneously in opposite directions to selectively vary the distance between the fingers; a pivot pin on the housing centered between the fingers; a pair of book support plates below the respective fingers at opposite sides of the pin; a parallelogram linkage for suspending each plate from the frame for movement toward and away from the fingers independently of each other, the linkage of each plate comprising a pair of parallel links pivotally connected at one end to the plate, one link of each pair being pivotally connected at its other end to the frame, the other link of each pair being pivotally connected to the pivot pin, the several links and the plates swinging in planes normal to the common plane of the fingers; and springs connected between the frame and the respective linkages, tensioned to bias the plates toward the fingers.

2. A book holder comprising: a main frame including a housing adapted for disposition midway between the opposite side edges of an opened book, outwardly from one end of the book; substantially identical though opposite hold-down elements sliding in the housing along parallel lines, and formed with like fingers disposed in a common plane and adapted to overlie the uppermost pages of the book; means in the housing in engagement with the elements for slidably adjusting the elements

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simultaneously in opposite directions to selectively vary the distance between the fingers; a pivot pin on the housing centered between the fingers; a pair of book support plates below the respective fingers at opposite sides of the pin; a parallelogram linkage for suspending each plate from the frame for movement toward and away from the fingers independently of each other, the linkage of each plate comprising a pair of parallel links pivotally connected at one end to the plate, one link of each pair being pivotally connected at its other end to the frame, the other link of each pair being pivotally connected to the pivot pin, the several links and the plates swinging in planes normal to the common plane of the fingers; and springs connected between the frame and the respective linkages, tensioned to bias the plates toward the fingers, the housing being formed from a single piece of sheet material shaped to include a side portion in which the pivot pin is mounted and an upper portion formed of flat, closely spaced, top and bottom walls normal to the side portion and between which the elements are slidably engaged, the first-named links of said pairs having their other ends attached to the side portion at opposite sides of the pivot pin to effect their connections to the frame.

3. A book holder comprising: a main frame including a housing adapted for disposition midway between the opposite side edges of an opened book, outwardly from one end of the book; substantially identical though opposite hold-down elements sliding in the housing along parallel lines, and formed with like fingers disposed in a common plane and adapted to overlie the uppermost pages of the book; means in the housing in engagement with the elements for slidably adjusting the elements simultaneously in opposite directions to selectively vary the distance between the fingers; a pivot pin on the housing centered between the fingers; a pair of book support plates below the respective fingers at opposite sides of the pin; a parallelogram linkage for suspending each plate from the frame for movement toward and away from the fingers independently of each other, the linkage of each plate comprising a pair of parallel links pivotally connected at one end to the plate, one link of each pair being pivotally connected at its other end to the frame, the other link of each pair being pivotally connected to the pivot pin, the several links and the plates swinging in planes normal to the common plane of the fingers; and springs connected between the frame and the respective linkages, tensioned to bias the plates toward the fingers, the housing being formed from a single piece of sheet material shaped to include a side portion in which the pivot pin is mounted and an upper portion formed of flat, closely spaced, top and bottom walls normal to the side portion and between which the elements are slidably engaged, the first-named links of said pairs having their other ends attached to the side portion at opposite sides of the pivot pin to effect their connections to the frame, the element-adjusting means including a pinion rotatably mounted on and between the top and bottom walls, the elements being formed with rack teeth meshing with the pinion.

4. A book holder comprising: a main frame including a housing adapted for disposition midway between the opposite side edges of an opened book, outwardly from one end of the book; substantially identical though opposite hold-down elements sliding in the housing along parallel lines, and formed with like fingers disposed in a common plane and adapted to overlie the uppermost pages of the book; means in the housing in engagement with the elements for slidably adjusting the elements simultaneously in opposite directions to selectively vary the distance between the fingers; a pivot pin on the housing centered between the fingers; a pair of book support plates below the respective fingers at opposite sides of the pin; a parallelogram linkage for suspending each plate from the frame for movement toward and away

from the fingers independently of each other, the linkage of each plate comprising a pair of parallel links pivotally connected at one end to the plate, one link of each pair being pivotally connected at its other end to the frame, the other link of each pair being pivotally connected to the pivot pin, the several links and the plates swinging in planes normal to the common plane of the fingers; and springs connected between the frame and the respective linkages, tensioned to bias the plates toward the fingers, the housing being formed from a single piece of sheet material shaped to include a side portion in which the pivot pin is mounted and an upper portion formed of flat, closely spaced, top and bottom walls, normal to the side portion and between which the elements are slidably engaged, the first-named links of said pairs having their other ends attached to the side portion at opposite sides of the pivot pin to effect their connections to the frame, the element-adjusting means including a pinion rotatably mounted on and between the top and bottom walls, the elements being formed with rack teeth meshing with the pinion, each element including an upwardly projecting finger grip disposed at one end of the finger thereof for manual adjustment of either element to produce a corresponding adjustment of the other element.

5. A book holder comprising: a main frame including a housing adapted for disposition midway between the opposite side edges of an opened book, outwardly from one end of the book; substantially identical though opposite hold-down elements sliding in the housing along parallel lines, and formed with like fingers disposed in a common plane and adapted to overlie the uppermost pages of the book; means in the housing in engagement with the elements for slidably adjusting the elements simultaneously in opposite directions to selectively vary the distance between the fingers; a pivot pin on the housing centered between the fingers; a pair of book support plates below the respective fingers at opposite sides of the pin; a parallelogram linkage for suspending each plate from the frame for movement toward and away

from the fingers independently of each other, the linkage of each plate comprising a pair of parallel links pivotally connected at one end to the plate, one link of each pair being pivotally connected at its other end to the frame, the other link of each pair being pivotally connected to the pivot pin, the several links and the plates swinging in planes normal to the common plane of the fingers; and springs connected between the frame and the respective linkages, tensioned to bias the plates toward the fingers, the housing being formed from a single piece of sheet material shaped to include a side portion in which the pivot pin is mounted and an upper portion formed of flat, closely spaced, top and bottom walls, normal to the side portion and between which the elements are slidably engaged, the first-named links of said pairs having their other ends attached to the side portion at opposite sides of the pivot pin to effect their connections to the frame, the pin rotating in the side portion and having a nut threaded thereon at one side of the side portion, the pin-connected links being interposed between the nut and side portion, the pin being formed at the other side of the side portion with a knob and being spring-urged axially in a direction to force the nut against the pin-connected links so as to selectively vary the frictional engagement of the pin-connected links with one another, and thus correspondingly adjust in like degree the freedom of swinging movement of the respective linkages.

References Cited in the file of this patent

UNITED STATES PATENTS

337,435	Ranson et al. -----	Mar. 9, 1886
431,036	Dawson -----	July 1, 1890
625,054	McKernan -----	May 16, 1899
898,692	Shepard -----	Sept. 15, 1908
1,070,848	Schwab -----	Aug. 19, 1913
1,377,230	Taylor -----	May 10, 1921
1,919,835	Giese -----	July 25, 1933
2,418,670	Schubert et al. -----	Apr. 8, 1947