Feb. 5, 1957 B. V. LAING 2,780,027

READING MATERIAL SUPPORT

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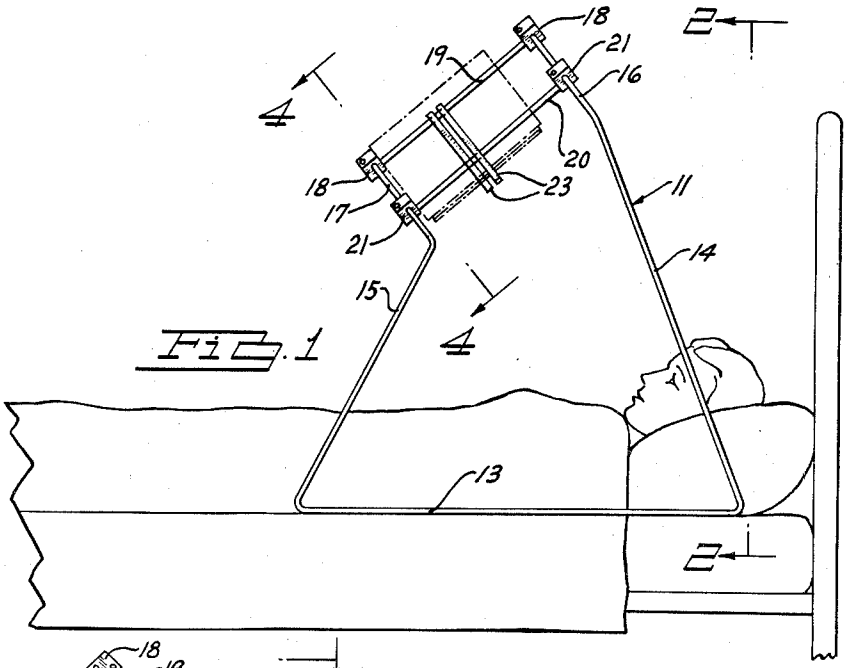


Fig. 1

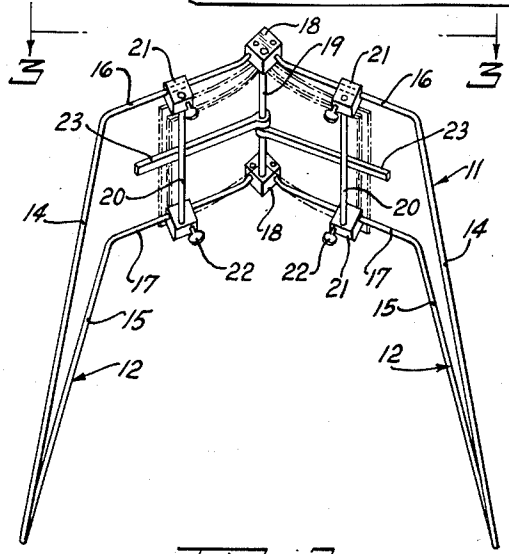


Fig. 2

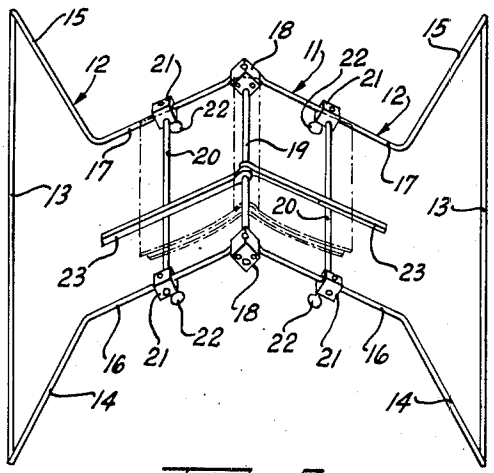


Fig. 3

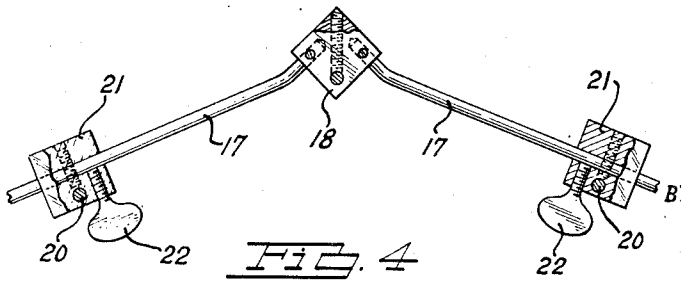


Fig. 4

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READING MATERIAL SUPPORT

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7 Claims. (Cl. 45—82)

This invention relates to a reading stand particularly adapted to support a book, magazine or the like with the reading material facing substantially downwardly in position to be read by a person in an upwardly facing reclining position.

Frequently, as a matter of choice or in the case of invalids, as a matter of necessity, persons are desirous of reading while lying in or on a bed. Maintaining a book, magazine or the like in a readable position while lying flat on one's back rapidly becomes a very tiring endeavor, especially when the muscles are weak from illness. Thus, it would appear that a reading stand or reading material supporting structure would have great utility for those who desire to read while reclining. And, although reading stands of the general class to be herein described have been provided, most of them have either been too bulky or have been complicated structures not entirely satisfactory for the purpose for which designed.

It is an object of the present invention to provide an improved reading stand of simplified and light weight construction, yet one that has a high degree of rigidity and stability.

Further objects and the features of construction embodied in the present invention to attain such objects will be apparent from the following description and appended claims, reference being had to the accompanying drawings forming a part of this specification wherein like reference numerals designate corresponding parts in the several views.

Fig. 1 is a side elevation of the reading stand embodying the present invention and shown in functional position on a bed.

Fig. 2 is an elevation looking in the direction of the arrows 2—2 in Fig. 1.

Fig. 3 is a plan view looking in the direction of the arrows 3—3 in Fig. 2.

Fig. 4 is a fragmentary sectional view taken substantially through the line 4—4 of Fig. 1 looking in the direction of the arrows.

Before explaining in detail the present invention, it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also it is to be understood that the phraseology of terminology employed herein is for the purpose of description and not of limitation.

In the drawing there is illustrated, by way of example, a preferred embodiment of the reading stand, generally designated 11. The reading stand comprises a framework made of stiff metal rod stock, preferably an aluminum alloy. The framework comprises two symmetrical half sections 12. Each half section is made of unitary piece of rod stock formed to provide a base member 13 having upstanding leg portions 14 and 15 angularly related to the base portions and extending upwardly

therefrom. As viewed from a side elevation, the leg portion 14 is somewhat longer that the leg portion 15 and both leg portions are inclined toward each other at substantially equal angles to the base portion 13. As viewed in front elevation, when the half sections 12 are assembled, the leg portions 14 and 15 of each half section are inclined toward the center of the reading stand 11.

It will be noted that the base portions 13 are illustrated as being substantially parallel to each other. If desired, the distance between the base portions 13 at the front of the reading stand 11 may be somewhat greater than the distance between the base portions at the rear of the reading stand to provide more arm movement room.

Each leg portion 14 and 15 terminates in an extension 16 and 17, respectively. The extensions 16 and 17 are substantially equal in length and extend in substantially parallel directions. In side elevation, that is, as viewed in Fig. 1, the extensions are shown as being angularly upwardly and rearwardly inclined relative to their respective leg portions.

The two half sections 12 are held together by means of corner blocks 18, the front corner block 18 receiving the end of each extension 16 and the rear corner block 18 receiving the end of each extension 17. To provide greater rigidity and also to provide the required support of the book or magazine at the center thereof, the two corner blocks 18 have extended therebetween a rod member 19 providing in effect a ridge pole. Again referring to Fig. 1, it will be noted that the rod member 19 slopes downwardly from front to rear, the front being considered the plane of the reading stand nearest the user's head.

Two rod members 20 paralleling the rod members 19 are provided. The rod members 20 are carried by blocks 21 which are slidably mounted on the extensions 16 and 17. The slidable mounting permits the rods 20 to be moved away from or toward the center rod 19. Thumb screws 22 are provided to releasably secure the movable rod members 20 in their desired position of adjustment. It will be understood that the rods 20 may be adjusted to accommodate the width of the particular magazine or book being read.

It will be noted that the rod 19 and the rods 20 are mounted in their respective mounting blocks so as to be below the level of the pairs of extensions 16 and 17. With the rods so positioned the rear corner block 18 and the rear slidable blocks 21 provide retaining means preventing the book or magazine from sliding off the reading stand while being maintained at a proper reading angle.

To prevent the book or magazine pages from curling inwardly and thereby sliding off the rods 20, a pair of laterally extending rods 23 are provided. The rods 23 are pivotally mounted on the center rod or pole 19 and are of sufficient length to overlie the side rods 20 in substantially their maximum position of adjustment away from the center rod 19.

It is believed readily apparent, particularly from the drawing, that the reading stand embodying the present invention is a light weight structure. Further, the spread base portions and the inwardly angularly inclined leg and extension portions contribute toward a high degree of stability. The book or magazine being read is quite solidly supported above the reader and is so supported that only the occasional lifting of the arms is required to perform a simple manipulation to turn the page of the book or magazine.

As mentioned earlier, the rod stock utilized in making the frame structure is preferably aluminum alloy. Preferably, the material is required to have the required rigidity with sufficient resiliency to spring back to the shape illustrated since a convenient way of storing the reading stand will be to tie or clip the base portions 13 to-

gether. Further, the adjustment of the height of the reading material may be accomplished by the spreading or the moving closer together of the base portions 13. The further apart the base portions 13 are spread the lower the reading material will be positioned.

The blocks 18 and 21 may be made of any suitable material and are illustrated as being of a plastic material. The lateral page support rods 23 are preferably made of transparent plastic permitting the words in the page underlying the rods 23 to be read without the necessity of moving the rods.

I claim:

1. A reading stand comprising a framework consisting of two half sections, each half section comprising a base portion and two leg portion formed of a unitary piece of wire stock, said leg portions being angularly inclined toward each other, each leg portion having an extension portion extending at an upward angle relative to its respective leg portion, said extension portions being substantially parallel to each other, the free ends of the extension portions of one half section being connected to the free ends of the corresponding extension portions of the other half sections, a first member forming a ridge pole between the points of connection of said extension portion ends, said first member being adapted to provide support for reading material at the center thereof, and second members positioned on each side of said first member to provide support for the side edges of the pages of said reading material.

2. A reading stand comprising a framework consisting of two half sections, each half section comprising a base portion and two leg portions formed of a unitary piece of wire stock, said leg portions being angularly inclined toward each other, said base portion and leg portions forming the side frame members of said framework, each leg portion having an extension portion extending at an upward angle relative to its respective leg portions, said extension portions being substantially parallel to each other, the free ends of the extension portions of one half section being connected to the free ends of the corresponding extension portions of the other half sections, a first member forming a ridge pole between the points of connection of said extension portion ends, said first member being adapted to provide support for reading material at the center thereof, and second members positioned on each side of said first member to provide support for the side edges of the pages of said reading material.

3. A reading stand comprising a framework consisting of two half sections, each half section comprising a base portion and two leg portions formed of a unitary piece of wire stock, said leg portions being angularly inclined toward each other, said base portion and leg portions forming the side frame members of said framework, each leg portion having an extension portion extending at an upward angle relative to its respective leg portion, said extension portions being substantially parallel to each other, the free ends of the extension portions of one half section being connected to the free ends of the corresponding extension portions of the other half sections, a first member forming a ridge pole between the points of connection of said extension portions ends, said first member being adapted to provide support for reading material at the center thereof, and second members positioned on each side of said first member to provide support for the side edges of said reading material, said second members being movable toward and away from said first member to accommodate reading material of any width.

4. A reading stand comprising a framework consisting of two half sections each comprising a base portion and upstanding leg portions, said base portion and leg portions forming the side frame members of said framework, the leg portions of each frame member being angularly inclined toward each other, said side frame members also being angularly inclined toward each other so as to provide greater distance therebetween at the base than at the top, each frame member leg portion having an extension extending at an upward angle relative to the respective leg portion to which it is attached, said extensions being substantially parallel to each other, the free ends of the extension portions of one half section being connected to the free ends of the corresponding extension portions of the other half sections, a first member forming a ridge pole between the points of connection of said extension portion ends, said first member being adapted to provide support for reading material at the seam thereof, and second members positioned on said extensions on each side of said first member to provide support for the side edges of the pages of said reading material.

5. A reading stand comprising a framework consisting of two half sections each comprising a base portion and upstanding leg portions, said base portion and leg portions forming the side frame members of said framework, the leg portions of each frame member being angularly inclined toward each other, the front leg portions of each frame member being longer than the rear leg portions, said side frame members also being angularly inclined toward each other so as to provide greater distance therebetween at the base than at the top, each frame member leg portion having an extension extending at an upward angle relative to the respective leg portion to which it is attached, said extensions being substantially parallel to each other, the free ends of the extension portions of one half section being connected to the free ends of the corresponding extension portions of the other half sections, a first member forming a ridge pole between the points of connection of said extension portion ends, said first member being adapted to provide support for reading material at the seam thereof, and second members positioned on said extensions on each side of said first member to provide support for the side edges of the pages of said reading material, said first member and second members being angularly inclined so as to be higher at the front than at the rear whereby the reading material will be angularly related to the plane of the base.

6. A reading stand comprising a framework consisting of two half sections each comprising a base portion and upstanding leg portions, said base portion and leg portions forming the side frame members of said framework, the leg portions of each frame member being angularly inclined toward each other, the front leg portions of each frame member being longer than the rear leg portions, said side frame members also being angularly inclined toward each other so as to provide greater distance therebetween at the base than at the top, each frame member leg portion having an extension extending at an upward angle relative to the respective leg portion to which it is attached, said extensions being substantially parallel to each other, the free ends of the extension portions of one half section being connected to the free ends of the corresponding extension portions of the other half sections, a first member forming a ridge pole between the points of connection of said extension portion ends, said first member being adapted to provide support for reading material at the seam thereof, and second members positioned on said extensions on each side of said first member to provide support for the side edges of the pages of said reading material, said second members being at a lower level than said first member, said first member and second members being angularly inclined so as to be higher at the front than at the rear whereby the reading material will be angularly related to the plane of the base while suspended thereabove in a face down position.

7. A reading stand comprising a framework consisting of two half sections each comprising a base portion and upstanding leg portions, said base portion and leg portions forming the side frame members of said framework, the leg portions of each frame member being angularly inclined toward each other, the front leg portions of each frame member being longer than the rear leg portions, said side frame members also being angularly inclined

toward each other so as to provide greater distance therebetween at the base than at the top, each frame member leg portion having an extension extending at an upward angle relative to the respective leg portion to which it is attached, said extensions being substantially parallel to each other, the free ends of the extension portions of one half section being connected to the free ends of the corresponding extension portions of the other half sections, a first member forming a ridge pole between the points of connection of said extension portion ends, said first member being adapted to provide support for reading material at the seam thereof, second members positioned on said extensions on each side of said first member to provide support for the side edges of the pages of said reading material, said second members being at a lower level than said first member, said first member and second members being angularly inclined so as to be higher at the front than at the rear whereby

the reading material will be angularly related to the plane of the base while suspended thereabove in a face down position, and a pair of laterally ending members pivotally mounted on said ridge pole positionable to support the pages of the reading material between the top and bottom edges thereof.

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