To all whom it may concern:  

Be it known that I, LEO CHAVIANO SANCHEZ, a citizen of the Republic of Cuba, residing at Cumanayagua, S. C., Cuba, have invented new and useful Improvements in Bookstand Attachments for Beds, of which the following is a specification.

This invention relates to supports for books and other periodicals.

An object of the invention is the provision of a book support, which may be adjustably secured to a bed or other support and which is capable of being adjusted to various positions, whereby a person reclining upon a bed may read without the necessity of holding the book, the invention being especially adapted for the use of invalids.

With the above and other objects in view, the invention further includes the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claims.

In the drawings—

Figure 1 is an elevation of the invention shown connected to a support, such as the post of a bed.

Figure 2 is a top plan view of the same.

Figure 3 is a section on the line 3—3 of Figure 1.

Figure 4 is an enlarged detail sectional view of the connection between the hanger and the vertically movable arm.

Figs. 5 and 6 are enlarged views of the parts forming the universal joint.

Referring in detail to the drawings, wherein like characters of reference denote corresponding parts, the reference character 10 indicates a support which is herein shown as the post of a bed, although it is obvious that the invention may be attached to a support of a different character.

Adjustably mounted upon the support 10 is a clamping sleeve 11, which serves to secure the invention to the post 10 and which provides means whereby the elevation or height of the book rest may be regulated.

Secured to the clamping sleeve 11 is a bracket 12, which includes spaced ears 13.

Having openings therein for the passage of a pivot or hinged bolt 14, the upper end of which has secured thereto spaced ears 15, secured between the ears 15 is the inner section 16 of a horizontally swinging arm 17.

The said arm being braced by means of an inclined brace 18. The brace 18 has one end secured beneath the outer end of the section 16 and the opposite end secured to the hinged bolt or pivot 14.

Extending outwardly from the end of the section 16 of the horizontally swinging arm are upper and lower apertured ears 19, which are adapted to co-operate with similar ears 20 carried by the outer section 21 of the arm 17. A pivot or hinged bolt 22 passes through the ears 19 and 20 and is provided at opposite ends with lock nuts 23, which may be adjusted to clamp the sections 16 and 21 of the arm 17 against accidental movement.

Pivotingly mounted beneath the outer section 21 of the arm 17 as shown at 24, is the inner end of a vertically movable arm 25, the outer end of the latter being urged upward by means of a spring 26 which is carried by the outer section 21 of said arm 17.

The outer or free end of the arm 25 is provided with spaced ears 27, between which is pivotally mounted as at 28 an arcuate rack bar 29. The teeth of this rack bar are adapted for engagement with a plate 30 extending from the outer end of the outer section 21 of the arm 17 and the free end of the rack bar is guided in a loop or yoke 31 extending from said outer section. A spring 32 which connects the outer end of the arm 25 and the rack bar 29, serves to yieldingly hold the teeth of the rack bar in engagement with the plate 30. The lower end of the rack bar 29 is extended to provide an operating handle 33.

Secured to the lower edge of the arm 25 near the outer end of the same is a universal joint 34 which has extending therefrom a threaded pin or shank 35, whose free end is connected to a bar 36 of a hanger 37. This hanger extends downwardly beneath the arm 25 and may be moved to any desired position, owing to its universal connection with the arm 25 and will be held in its adjusted position against accidental movement by means of a clamping nut 38.

The hanger 37 includes spaced parallel members 39, which are adjustably secured to the bar 36 by means of a bolt 40 and a clamping nut 41, so that the said hanger may be moved vertically to a desired position. The lower ends of the spaced bars 39 are provided with a horizontally disposed supporting ledge 42, upon which a book or
periodical is adapted to rest, spring fingers 43 serving to hold the lower edge of the book or periodical in place.

Adjustably mounted upon the spaced bars 39 is a spring clamp 44 which is adapted to engage the upper end of the book or periodical, so that the latter may be held in convenient position.

The construction just described provides a book rest or support, which may be initially adjusted as to its height upon the support 10 and further adjusted by positioning the arm 25, regulating the relative vertical positions of the bar 36 and the spaced bars 39. Horizontal adjustment may be obtained by swinging the arm 17 upon the pivots 14 and 22, while the book or periodical may be adjusted to the proper angle for the eyes of the reader by means of the universal joint 34.

One of the spaced ears 15 has extending therefrom an arm 45, which has pivotally secured thereto as at 46, one end of an arm 47, the outer end of which carries a lamp 48. The lamp may thus be adjusted to any desired position horizontally, so as to properly position the light.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is hereinafter reserved to make such changes as properly fall within the scope of the appended claims.

Having described the invention what is claimed is:

1. A book support comprising a pivotally mounted horizontally swinging arm, a hanger located below the arm, means carried by the hanger for engagement with a book, a vertically movable arm connecting the hanger and the horizontally swinging arm and means including a pivotally mounted rack bar engageable with the outer end of the horizontally swinging arm and operatively connected to the hanger, whereby the vertically movable arm may be adjusted.

2. A book support comprising a pivotally mounted horizontally swinging sectional arm having its sections hingedly connected together, a vertically movable arm having one end pivotally secured to the horizontally swinging arm beneath the latter, a spring pressed rack bar pivotally secured to the vertically movable arm, means carried by the horizontally swinging arm for engagement by the rack bar, a guide for the free end of the rack bar, a hanger adjustably secured to the vertically movable arm and means for holding a book in position upon the hanger.

In testimony whereof I affix my signature.

LEO CHAVIANO SANCHEZ.