

July 27, 1943.

A. A. KENT

2,325,324

READING APPARATUS

Filed Jan. 26, 1943

2 Sheets-Sheet 1

Fig. 3.

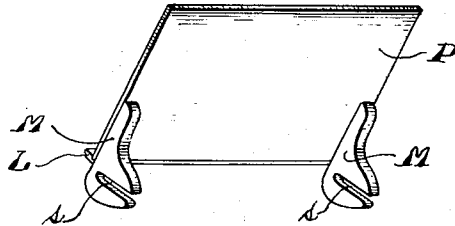


Fig. 1.

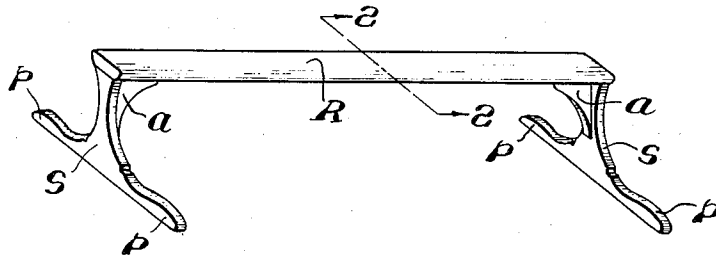


Fig. 4.

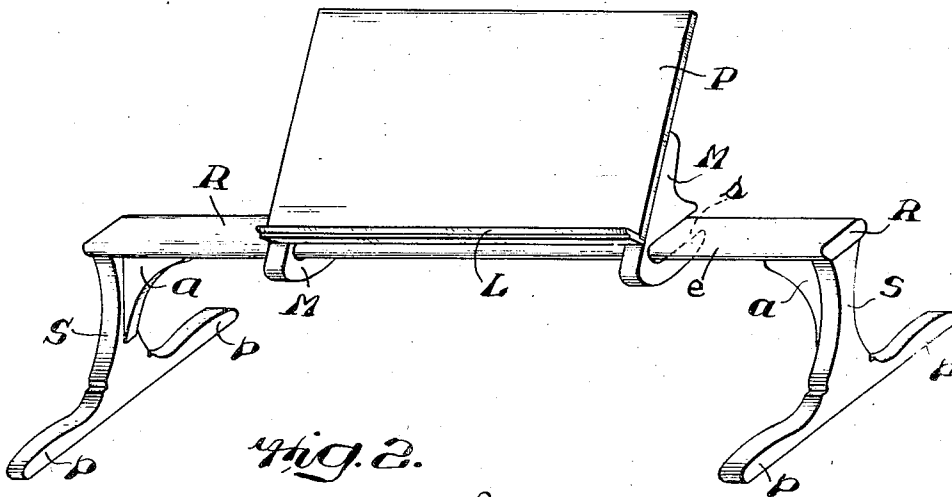
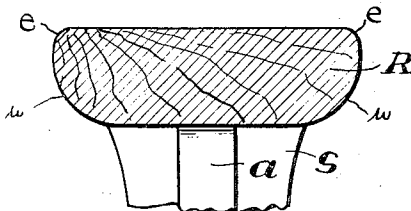


Fig. 2.



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Fig. 5.

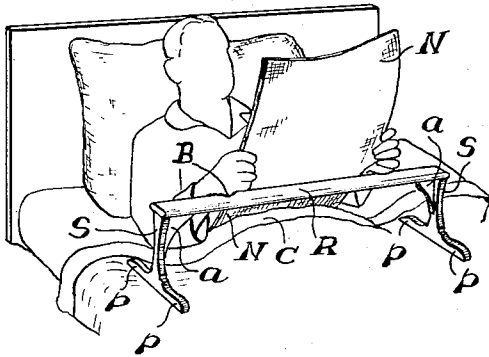


Fig. 7.

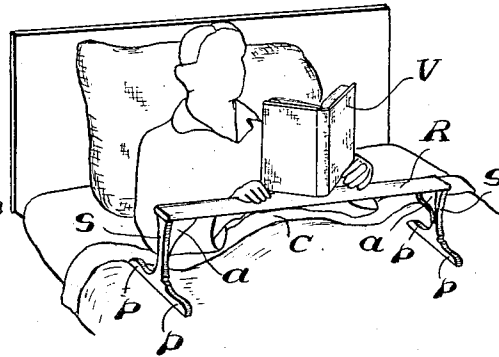


Fig. 6.

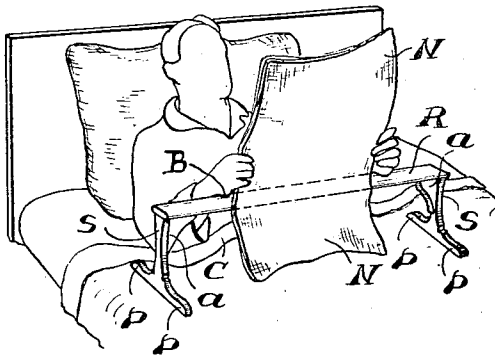


Fig. 9.

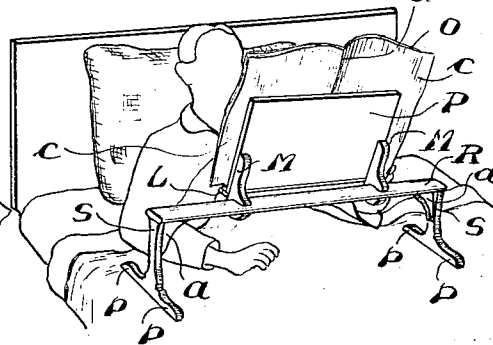


Fig. 8.

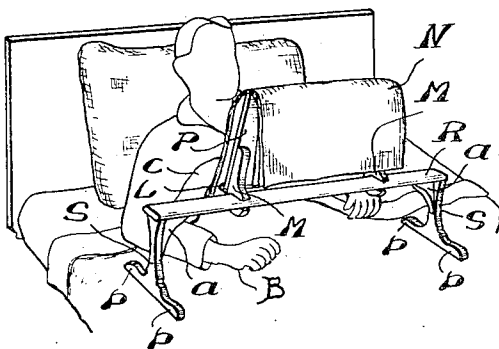
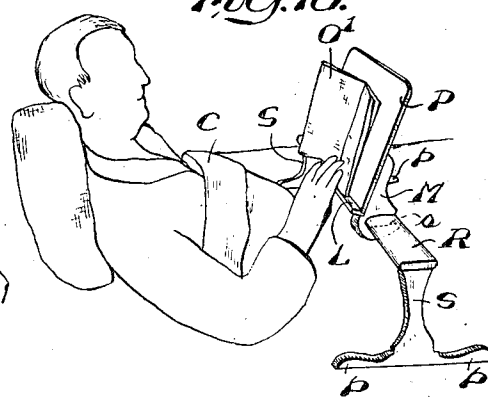


Fig. 10.



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2,325,324

READING APPARATUS

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Application January 26, 1943, Serial No. 474,031

4 Claims. (Cl. 45—57)

My invention has for its object facilitating reading and kindred visual examination of books, magazines, newspapers and the like by normal persons and particularly invalid, wounded or convalescent persons, reclining or lying in or on beds, couches, chairs or the like, by recourse to structure easily manipulated by the reader to or from reading position without assistance, and when in reading position affording to the reader high degree of comfort for his person.

In accordance with one aspect of my invention there is provided a rest-bar extending transversely of the body of the reader and carried upon pedestals, at or adjacent its opposite ends, resting upon the bed, couch or the like, or on the bed clothes or covering under which the body of the reader may be disposed; the bar is preferably long enough and by the pedestals held high enough to provide substantial freedom of movement of the body of the reader, and to prevent the bed clothes or cover, when used, from pulling tightly over the reader's body. The bar preferably is quite narrow, as measured in the direction lengthwise of the body of the reader, as compared with the width, in like direction, of a bed-table or the like supported either on the bed or the like, or upon a stand resting on the floor; the bar, though so narrow, provides width sufficient for resting upon it, mainly adjacent an edge only thereof, one or both hands, wrists or fore-arms, of the reader while holding or otherwise positioning a newspaper or like relatively large non-rigid matter; or upon the bar may be stood an open book or similar substantially rigid matter which may be held by either or both hands of the reader simultaneously resting upon the bar; further in accordance with my invention the width of the rest-bar is so small that a newspaper or the like when held in reading position by the hand or hands upon the rest bar may extend downwardly either in front or back of the rest-bar, in either case being supported or held by the hand or hands itself or themselves resting upon the bar.

In accordance with a further aspect of my invention, there is provided a platen which, preferably devoid of or without recourse to any fasteners, locks, catches, hinges or other accessories, is carried by the rest-bar; for which purpose it may be provided with structure, such as one or more slotted members embracing the rest-bar, on which latter the platen is slidable lengthwise of the bar as well as swingable horizontally with respect thereto through a substantial angle while located anywhere between the limits of its said movement lengthwise of the bar, whereby the

platen may take an infinite number of positions from which the reader selects the one most comfortable or convenient for any necessary or chosen position of his body; some types of reading matter, such as a newspaper or like pliant or non-rigid matter may rest upon or hang astride the top edge of the platen and extend downwardly on opposite sides thereof in front and back of the platen and/or rest-bar, either or both hands of the reader being either free or resting upon the rest-bar and either or not holding the newspaper; furthermore the platen may be provided on its side nearest the reader's eyes with a ledge or shelf-like member upon and against which and a face of the platen inclining forwardly from bottom toward the top away from the reader's eyes, may rest a book-like periodical or pamphlet, usually more rigid than a newspaper and less rigid than a bound book; or a pamphlet, such as a magazine, or a bound book may rest upon the ledge and/or against aforesaid inclined face of the platen.

For an understanding of my invention and for illustration of an embodiment thereof, reference is had to the accompanying drawings, in which:

Fig. 1 is a perspective view of the rest-bar unit;

Fig. 2 is a fragmentary view showing a cross-section of the rest-bar on line 2—2, Fig. 1;

Fig. 3 is a perspective view of the platen unit;

Fig. 4 is a perspective view of the assembly of the rest-bar and platen units;

Figs. 5 and 6 are perspective views of the rest-bar unit in position with respect to the recumbent reader in whose hands, resting upon the rest-bar, is held a newspaper or the like extending downwardly in front of the rest-bar, Fig. 5, or downwardly on the rear thereof, Fig. 6;

Fig. 7 is a generally similar perspective view showing a bound book or the like, resting upon the rest-bar upon which rest also the reader's hands while holding the book;

Fig. 8 is a perspective view of the rest-bar and platen assembly, showing a further mode of support of a newspaper or similar non-rigid matter;

Fig. 9 is a perspective view of the assembly of rest-bar and platen, upon which latter rests a periodical or the like;

Fig. 10 is a similar perspective view illustrating a magazine or the like positioned on the platen.

Referring to Figs. 1, 2 and 4, R is the rest-bar, mounted at its ends or other suitable positions lengthwise thereof, upon standards or pedestals S, having forwardly and rearwardly extending members or portions p which may rest unsecured directly upon the bed or the like, or may rest

unsecured upon the bed clothes or other covering. In the angles between supports S, S and rest-bar R, preferably are provided stiffening brackets *a, a*, secured to both bar R and supports S, S.

The length of rest-bar R (for example about thirty inches) and the distance between the supports S, S, are preferably such as to provide that the rest-bar unit, comprising the standards and rest-bar, shall extend across or straddle the body of the reader; and the standards S, S preferably are high enough to provide clearance beneath the bar to allow a substantial degree of freedom of movement of the body of the reader and to prevent bed clothes or other covering, if employed, from pulling tightly over the reader's body; preferably the members or portions *p* of each standard S have rounded edges to prevent catching in covers or clothing. The distance between forward and rear tips of members *p, p* of each standard S preferably is several times (e. g. three or more) the width of bar R, and in any event sufficient to provide against substantial forward or rearward tilting or upset of the rest-bar unit when used alone, or when used in combination with the hereinafter described platen unit, either when the bar R alone is weighted by the reading matter and/or the hand or hands of the reader, or when the weight of the reading matter is borne partly or wholly by the platen unit, and therefore by the bar R, which may or may not bear also the weight of one or both hands of the reader.

The width of the rest-bar R, at right angles to its length, is relatively small (importantly contributing to reduction of the weight and increase in yieldability of the unit to permit the reader himself without assistance, especially when injured or ill, to handle and position it) particularly as compared with the width, in the same direction, of the relatively wide, heavy and cumbersome bed-tables or the like commonly heretofore known. The width of bar R preferably is or need be no greater than to permit a newspaper of the like, Figs. 5 and 6, to hang below the hand or hands and rest-bar either at its front or rear; for this purpose alone the width of bar R may be quite small, though for a second and concurrent purpose, to facilitate support of the platen P, for example Fig. 4, it is wide enough, for example about two to about three inches, to provide sufficient forward and rearward bearing upon bar R of the platen supporting members M, M, to prevent undue forward and rearward rocking of the platen and its load.

Whatever the width of the bar R, its upper longitudinal edges *e, e*, or at least that upper edge of the bar nearest the reader's head, is, though slightly rounded as in Fig. 2, in any event sharp enough upon which to rest and/or hang the wrist or fore-arm, or especially the side edge of the palm of the hand, on the fourth finger side thereof; more especially the hand may so rest on and/or depend from the edge of bar R at or by the natural enlargement or ball B, Figs. 5, 6, 8, at the so-called heel of the hand or palm. From one or both aforesaid upper longitudinal edges of bar R the latter preferably is undercut, as in receding curved surfaces *u, u*, Fig. 2, preferably to an extent the more definitely to limit region of contact of the hand, wrist or fore-arm with bar R.

Referring to Figs. 3 and 4, the platen unit comprises besides the platen proper (such as a plate member P, which may comprise superposed

sheets of wood or other material) the aforesaid members M, M attached to the platen P at each end thereof or any other suitable position or positions longitudinally thereof. Each member M is forked, by provision of a slot *s* at such angle with respect to the platen-engaging edge of the upstanding portion of member M, as will cause the platen P when in place on rest-bar R suitably to incline upwardly and forwardly from the reader's head. Preferably the slot *s* will be shaped to conform substantially with the cross-section of the bar R, and fit loosely enough thereon to allow shifting of the platen unit to any desired position longitudinally of the bar R, and yet snug enough to prevent undue forward and rearward rocking of the platen unit with respect to bar R; slotted members M, M also permit swinging or rotating the platen horizontally, i. e. about an axis normal to the top face of bar R, through an angle, for each position of the platen between the limits of its movement longitudinally of bar R, so permitting like swing or rotation of the reading matter to best position with respect to the reader's eyes. The extent of angular swing for a given width of bar R increases with increase of length of slot *s*. These longitudinal and rotational adjustments severally and jointly provide, without need for any accessory means or device, comfort to the reader in accord with his individual and particular need or convenience. A ledge or shelf L, or equivalent structure, detachably or fixedly secured to platen P, projects outwardly from a face thereof and upon the ledge may rest reading material, more particularly a book, periodical or magazine, in the manner, for example, illustrated in Figs. 9 and 10.

The rest-bar and platen units, and the parts thereof, preferably are, as in the illustrations thereof and as described, free of, and do not require, such appliances or accessories as fasteners, catches, adjusting devices, hinges or other pivotal mounting or structures, or the like; with the advantage that the structure as a whole and each unit thereof are simple and less costly, and with the advantage of avoidance of catching of such accessories in the bed clothes or the like, and freedom from need for servicing of such accessories; which are considerations of importance to the reader, particularly when ill or injured.

Both units are preferably light in weight; disregarding which they may be made, in whole or in part of any suitable material, including metal, wood, plywood or equivalent, or plastic. It is preferred however the units and the parts thereof be made of wood; preferably light in weight, the lighter the better, of importance, especially in hospitals, in making possible the handling and use of the units by the reader himself. For example, each of the rest-bar and platen units, when of light wood, may weigh as little as about one pound.

Referring to Figs. 5 to 10 inclusive, the reader is shown reclining on a bed, couch, chair or the like, with a portion of the body beneath bed clothes or other covering C. The rest-bar unit in this case is supported upon the covering C, though it shall be understood that it will rest directly on the couch, bed, or the like in the absence of covering C.

In Fig. 5 the reading matter N, representing generically a newspaper or generally correspondingly pliant or non-rigid matter, is grasped by the reader's hands which rest upon bar R, and hangs and extends downwardly from the hands

below the bar R, at the front thereof, on the side of the bar nearest the reader's head.

In Fig. 6, the newspaper or like matter N, hangs downwardly on the rear side of the bar whose width, as aforesaid, is small enough to permit the reading matter to hang below the hands and bar on that side thereof which may be chosen by the reader as best suiting his comfort or need.

In Fig. 7, the reading matter is a book or volume V, bound in covers stiff or rigid enough to permit the volume without crumpling or deformation itself to rest on the bar R, on which also one or both hands of the reader may rest while holding the volume. In this instance again the small width of the bar suffices properly to support the book, and importantly suffices for supporting either or both hands, wrists or fore-arms, while the book is held.

In Fig. 8, with the rest-bar and platen units assembled, as in Fig. 4, a newspaper N or the like may rest upon the top edge of the platen P and hang down both in front and to the rear thereof, again permitting matter N to hang either in front of or back of the bar R itself. Grasping or control of matter N by the reader's hand or hands usually is not in this instance as necessary as in Figs. 5 and 6; nevertheless either or both of the reader's hands, wrists or fore-arms may be rested for comfort and effectiveness upon the bar R, whether or not when in that position the newspaper is held or grasped by the reader.

In Fig. 9, there is supported on the ledge L of platen P a magazine or other reading matter O (for example a copy of the magazine Life) higher and/or wider than the platen P, and of less rigidity than that of book or volume V, Fig. 7, but usually with sufficient rigidity, especially along the binding edge d, notwithstanding the cover elements c, c are pliant, not to crumple. Again either or both of the hands, wrists or fore-arms may rest upon the bar R, as they may in all the arrangements illustrated, either for a comforting change of position for resting them, and/or additionally to graps the reading matter.

The arrangement in Fig. 10 is generally similar to that in Fig. 9 except that the reading matter O is a magazine, such for example as Harper's, relatively shorter and stockier, and more rigid than the larger magazine of Fig. 9.

For brevity in the appended claims the term "bed" is generic to beds, couches, chairs and the like; and the term "hand" is generic to hand, wrist and fore-arm.

What I claim is:

1. Reading apparatus comprising a rest-bar unit, itself comprising a long narrow bar, of materially less than bed-table width, and on which may be directly rested either or both hands, supports secured to said bar on opposite sides of the body of the reader recumbent upon a bed, and of height effecting substantial clear-

ance between the bar and the body, each of said supports at its lower end resting unsecured upon the bed, and a platen unit comprising a platen on which reading matter is supported, and means secured to the platen, for attachment thereof to said bar, engaging with the bar unsecured thereto and permitting sliding of the platen longitudinally and transversely of the bar.

2. Reading apparatus comprising rest-bar and platen units, the rest bar unit comprising a narrow bar, of materially less than bed-table width, on which may be directly rested either or both hands, supports for said bar secured thereto on opposite sides of the body of the reader recumbent upon a bed, each of said supports at its lower end resting unsecured upon the bed, the platen unit comprising a platen materially shorter than said bar and on which reading matter is supported, and means for mounting the platen unsecured upon said bar, said means having a slot for embracing said bar in prevention of tilting of the platen with respect to the bar and permitting sliding of the platen longitudinally of the bar.

3. Reading apparatus comprising rest-bar and platen units, the rest bar unit comprising a narrow bar, of materially less than bed-table width, supports for said bar secured thereto on opposite sides of the body of the reader recumbent upon a bed, the platen unit comprising a platen materially shorter than said bar permitting resting of either or both hands upon said bar, and means, for mounting the platen unsecured upon said bar, having a slot embracing said bar permitting sliding of the platen longitudinally of the bar and permitting the platen, in any of its positions longitudinally of the bar, to swing horizontally through a substantial angle.

4. Reading apparatus comprising rest-bar and platen units, said rest-bar unit comprising a long narrow bar having a flat top of fixed length on which may be directly rested either or both hands beside said platen unit, supports secured to said bar on opposite sides of the body of the reader recumbent upon a bed, and of height effecting substantial clearance between the bar and the body, each of said supports at its lower end resting unsecured upon the bed, said platen unit comprising a platen on which reading matter is supported, and means secured to said platen, for attachment thereof to said bar, engaging with the bar unsecured thereto and permitting resting and sliding of the platen unit upon and longitudinally of the bar on the flat top thereof, said means permitting said platen, in any of its positions longitudinally of the bar, to swing horizontally through a substantial angle while resting unsecured upon said top of said bar.

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