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PILLOW.

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926,563. Patented June 29, 1909.

Fig. 1.

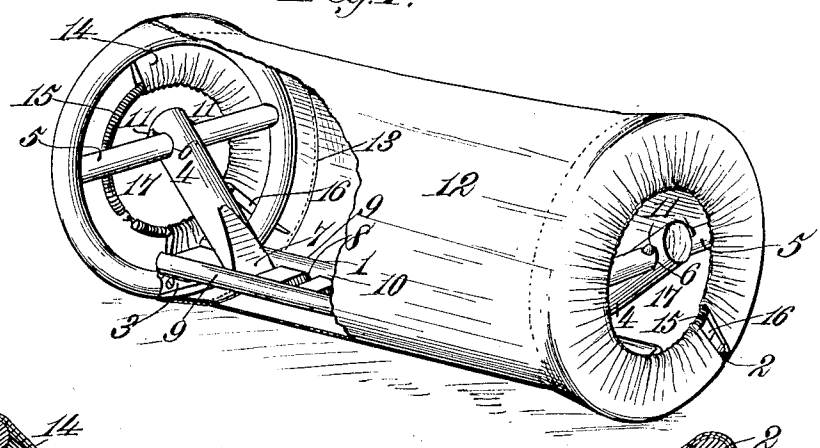


Fig. 2.

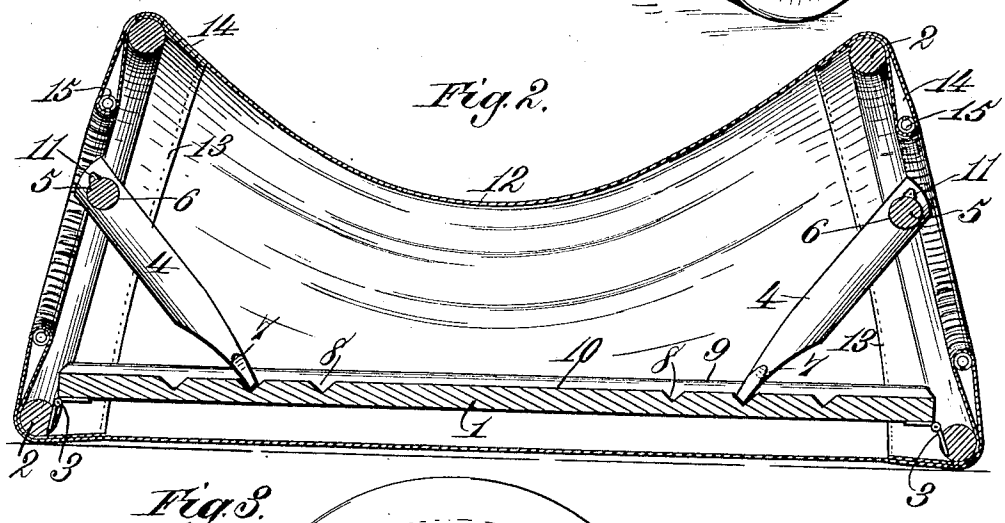
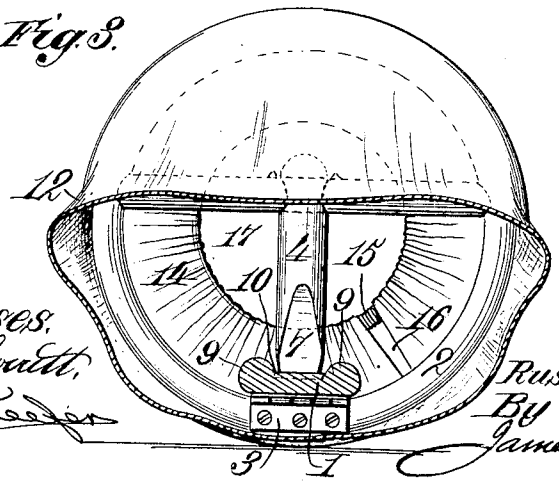


Fig. 3.



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UNITED STATES PATENT OFFICE.

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No. 926,563. Specification of Letters Patent. Patented June 29, 1909.

Application filed August 26, 1908. Serial No. 450,322.

To all whom it may concern:

Be it known that I, RUSSELL B. HOBSON, a subject of the King of Great Britain, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Pillows, of which the following is a specification.

This invention relates to new and useful improvements in pillows and more particularly to a pillow of the ventilating type which, while being highly advantageous for general use, is especially applicable for use in camps and hospitals.

A primary object of the invention is the provision of novel adjusting parts whereby the height of the pillow may be adjusted as desired to promote the convenience and comfort of the user.

A further object of the invention is to provide for the free circulation of air through the head supporting portion and at the same time to render the construction proof against injurious drafts or currents of air which would otherwise enter under the pillow slip.

The invention has, as a further object the provision of a novel construction in which all the structural elements are readily accessible for the purposes of washing or sterilization.

Another object of the invention is the provision of a pillow which embodies novel collapsible parts in order that it may be readily "knocked down" and packed for transportation or storage.

The invention finally aims to provide a pillow in which the pillow slip is under tension in such manner that it will readily give or yield at all points and in any direction. A primary objection to ventilating pillows as ordinarily constructed is thus overcome, such objection being that in constructions wherein the pillow slip is under tension, the manner of supporting or suspending said slip is such that only the central portion of the slip is capable of yielding and the portions at either side of the slip are always tense or taut and consequently in order to attain comfort, the head of the user can rest in one position only. The yieldable nature of the pillow slip in the present invention allows of the head assuming any position with perfect ease and comfort, and the pillow will yield only at that point where pressure is applied.

The foregoing objects are carried out by a novel construction and arrangement of parts which may be described generally as comprising a base bar to which end frames are connected for adjustable movement, a pillow slip of textile fabric surrounding the frame work thus constructed, and resilient means for drawing or binding the ends of the pillow slip over said end frames.

The novel structural details by which the above and other objects are carried out will be set forth in the following description which is to be read in connection with the accompanying drawings wherein is disclosed a preferred and advantageous embodiment of the invention. The novel features of the invention will be defined in the claims hereunto appended.

In the said drawings:—Figure 1 is a perspective view of a pillow constructed in accordance with the present invention, the pillow slip being partly broken away in order to show more clearly the construction and arrangement of parts. Fig. 2 is a central longitudinal sectional view of the improved pillow, and Fig. 3 is a central transverse sectional view thereof.

Similar characters of reference denote corresponding parts throughout the several views.

The base bar to which reference has been made is indicated by the numeral 1 and has the length of an ordinary pillow. Skeleton end frames 2 are connected to said base bar at its ends by hinges 3, which are so arranged that the end frames may be moved toward the base bar and may lie upon the same when the pillow is collapsed. The frames shown in the drawings are annular, that is to say they are shown in the form of circular rings, but it is obvious they may be of other form, oval for example.

The movement of the frames 2 on the hinges 3, is, however, primarily for the purposes of adjustment, and means to support said end frames at selected positions to which they may be moved are provided, such means as shown in the drawings comprising arms 4 pivotally mounted on transverse bars 5 extending diametrically of each end frame and having their ends secured in the frames 2 and extending through openings 6 provided therefor in the upper ends of the arms 4. Said arms have their lower ends pointed or tapered as at 7, to engage in recesses or notches 8 formed at desired intervals along

the length of the bar 1. The latter is constructed at each side thereof with raised beads 9, defining a longitudinal groove 10 in which the pointed ends 7 are disposed, the recesses or notches 8 being formed in the groove 10. The beads 9 serve to guide the ends 8 in their movements longitudinally of the bar 1, when the end frames are being adjusted. Means for holding the arms 4 against movement on the bars 5 transversely of the frames 2, are provided, the means shown in the drawings consisting of stop pins 11 secured in the bars 5, at each side of the arms 4.

The pillow slip is designated generally by the numeral 12 and comprises a cylindrical section of textile fabric which surrounds and is held on the frame work above described. The end portions of the slip 12 may be folded inwardly and secured by stitching as 13, two ply end casings, as 14, being thus formed. The casings 14 surround the frames 2, and inasmuch as the greatest wear is imposed upon the fabric along the lines where it is stretched over the end frames, the double thickness of the casings affords an effective means for taking up such wear.

Within the casings 14 resilient draw rings 15 are arranged, the latter being preferably, as shown, formed of coiled spring wire, although elastic fabric bands may be advantageously employed if desired. The rings 15 are of materially less diameter than the frames 2, and consequently gather the ends of the slip 12 over the end frames, thereby effectively holding said slip against accidental displacement from said end frames. In order to provide for the ready insertion of the springs 15, the casings 14 are slitted as at 16, the slits 16 being preferably coincident with the longitudinal seam of the slip 12, and aiding somewhat in the giving or yielding action of the head supporting portion of said slip.

As shown in Fig. 1, the slip 12 is arranged at its maximum height. To lower the height of said slip, the frames 2 are given an initial outward pull sufficient to disengage the arms 4 and then said frames are moved inwardly to the extent desired, at which time the arms 4 are engaged with their ends 7 in the notches 8, the arms 4 thus supporting the frames 2 at any desired position. The slip is shown as being somewhat lowered, in Fig. 2. It will be apparent that the slip is raised by pulling the frames 2 outwardly and engaging the arms 4 in the manner stated.

The annular form of the end frames 2, in connection with the resilient nature of the annular securing springs 15 permits of the slip 12 yielding at any point and in any direction, under pressure. It will be obvious that when the slip 12 thus yields, the end portions thereof will be drawn to a greater or less degree over the frames 2 and it is in resisting the wear attendant upon such action that the double thickness of the casings 14, is of advantage. Furthermore, while the slip will yield readily when pressure is applied thereto, there is sufficient frictional contact between the wear resisting casings 14 and the end frames 2 to prevent undue or too ready yielding, such as would result in a trembling or vibrating action, at every slightest movement of the head of the user. This is an important advantage since it offsets an objectionable feature of the great majority of pillow structures in which a pillow slip or sheet of fabric is held tense or taut.

It will be apparent that the skeleton formation of the frame 2 and the cylindrical form of the slip 12 will permit of the passage of air longitudinally through the pillow structure. Inasmuch as said slip is open only at its ends and has contact throughout its length with the bed, it will be impossible for a strong draft or current of air to pass under or through the same upon the back or shoulders of the user. It will be further apparent that the pillow slip may be readily removed and that all parts of the supporting frame are accessible for washing or sterilization.

The rings 15 define openings 17 in the ends of the pillow structure through which the hands may be inserted in effecting an adjustment or movement of parts.

The bars 5, in addition to their function as pivot means for the arms 4, serve as hand grips for use when the parts are to be adjusted or in carrying the pillow from place to place.

When the slips 12 are removed, and the end frames 2 are folded upon the bars 1, the structure occupies small compass and a number of the frames may be conveniently packed together for storage or transportation.

The invention while intended primarily as a pillow structure, may, owing to its form be used to advantage as a sham bolster, without altering the arrangement of any of the parts.

It will be appreciated that the structure is very light and cool, and inasmuch as the frame may be made of wood, it is inexpensive to manufacture.

The pillow slip effectually conceals the working parts, so that a neat and attractive appearance is presented.

Having fully described my invention, I claim:—

1. In pillow structures of the type set forth, in combination, a base bar, end frames hinged thereto, means for supporting the end frames at any desired adjusted positions about their hinge joints and a pillow slip secured upon said end frames.

2. In pillow structures of the type set forth, in combination, a base bar, end frames

adjustably mounted thereon and movable with respect thereto toward or away from one another, means coöperating with the base bar for holding the end frames at selected adjusted positions, and a pillow slip secured upon the end frames.

3. In pillow structures of the type set forth, in combination, a base bar, a frame hinged at one side thereof to each end of said bar, pivoted supporting arms associated with said frames to engage said bar, and a pillow slip secured upon said end frames.

4. In pillow structures of the type set forth, in combination, end frames, a connection therebetween, a pillow slip having end portions folded over said end frames, and elastic means associated with said end portions to bind the same in position.

5. In pillow structures of the type set forth, in combination, annular end frames, a connection therebetween, a cylindrical pillow slip having its end portions folded under and secured by stitching to form casings, said casings being folded over said end frames and elastic rings secured in said casings to bind the slip upon said frames, said rings being of less diameter than said frames.

6. In pillow structures of the type set forth, in combination, a base bar having notches formed at intervals along the length thereof, end frames hinged to said base bar, pivoted supporting arms associated with said end frames and having their free ends formed to engage in said notches, and a pillow slip secured upon said end frames.

7. In pillow structures of the type set forth, in combination, a longitudinal base bar, end frames mounted upon said base bar for adjustable movement toward and away from one another, a pillow slip of cylindrical form surrounding said base bar and end frames, and elastic means for binding the end portions of said slip over said end frames.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

RUSSELL B. HOBSON.

Witnesses:
JOHN D. LANNON.
WM. BAILY.