July 21, 1970 M. H. GREENAWALT 3,521,310

PILLOW CONSTRUCTION

Filed July 25, 1968

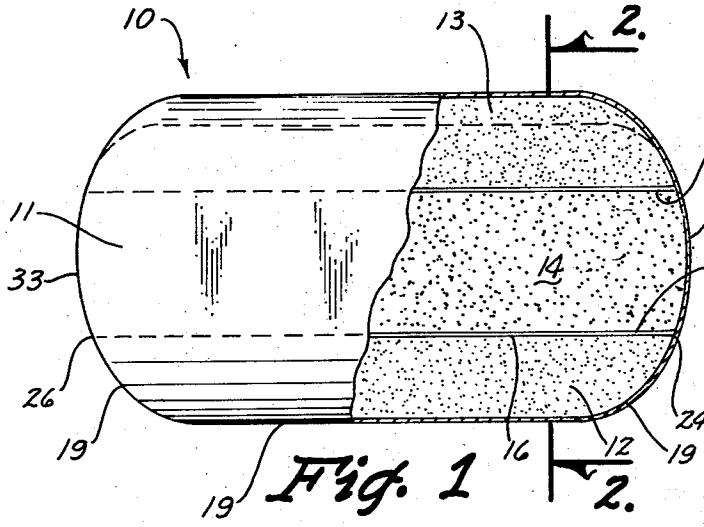


Fig. 1

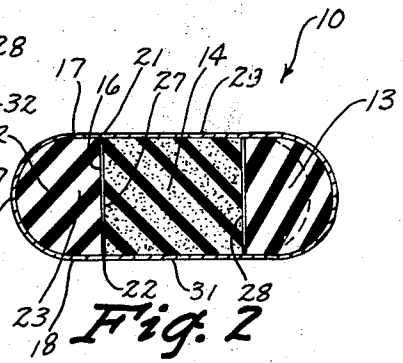


Fig. 2

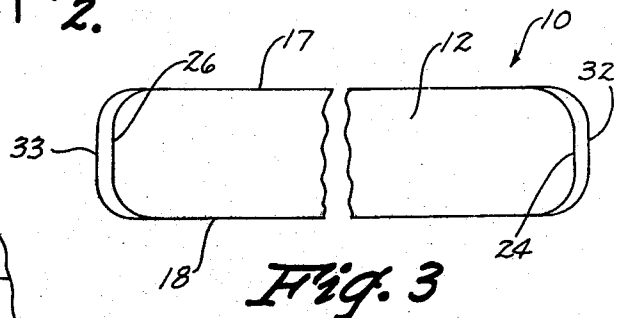


Fig. 3

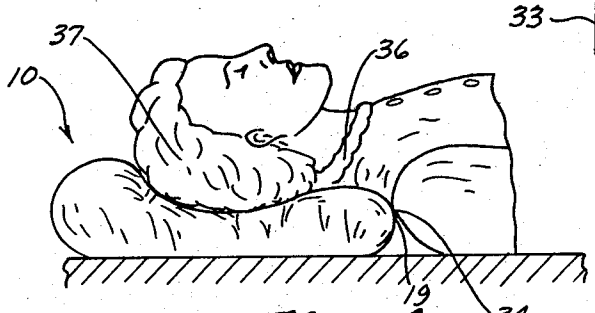


Fig. 4

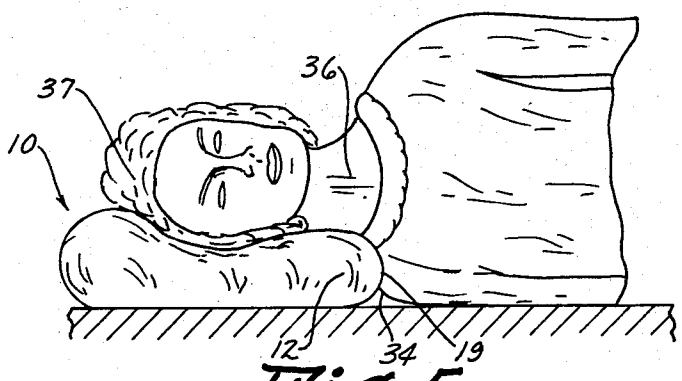


Fig. 5

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3,521,310

PILLOW CONSTRUCTION

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ABSTRACT OF THE DISCLOSURE

This invention relates to a pillow constructed to provide firm support to the neck portion of an individual while providing less firm support to the head portion, the pillow comprising a pair of firm outer members and a less firm intermediate member, the upper and lower surfaces of the intermediate member being coextensive with the upper and lower surfaces of the outer members respectively, the upper and lower surfaces of the outer members tapering laterally away from the intermediate member to form a convexly curved outer edge.

BACKGROUND OF THE INVENTION

This invention relates to an improved pillow construction which affords unprecedented head and neck support to the user, entirely different from the usual cushion design, resulting in a stretching and relaxing of the neck muscles to provide greater comfort and rest to the user.

The ordinary pillow as is commonly found today is constructed of a filler or latex body being of equal firmness throughout, resulting in a pillow wherein the body is so soft that the neck support area compresses to result in no support or the body is so firm that the head sits considerably higher than the shoulders of the user, resulting in an abnormal sleeping or resting position, creating a feeling of stiffness or soreness in the neck region of the user upon embarking on the day's activities.

Various types of pillows or the like have heretofore been designed to bolster the pillow's firmness to support the neck region of the user while providing a softer support for the head. The various pillows may be exemplified in U.S. Pats. Nos. 655,087, 1,020,444, and 2,880,428 teaching a bolster construction of cylindrical tubes inflatable with air or liquid, firmer filled oval compartments overlapped by softer filling, and a core of rigid material inserted under the neck supporting region encircled by the usual soft filler, respectively. As illustrated, it has hereinbefore been the practice to cushion the firm end or neck support by under-inflating the inflatable tubes or to surround the firming member with the softer filling of the body of the pillow. The prior art also shows that it has been customary to provide a gradual softening of the pillow body rather than an abrupt transition from firm to soft support, thereby only partially alleviating the problems as hereinbefore discussed with the ordinary pillow.

SUMMARY OF THE INVENTION

This invention relates to an improved pillow adapted to enhance the rest and comfort of the user by integrating a firm support for the neck together with a soft support for the head of the user, the pillow comprising a pair of firm outer members having downwardly curved upper surfaces and upwardly curved lower surfaces providing a thick area adjacent one longitudinal side, the surfaces tapering toward the opposite side to form a convexly curved edge, and an intermediate member connected to each outer member along the longitudinal side adjacent the thick area, the upper and lower surfaces of the intermediate member being coextensive with the upper and lower surfaces of the outer members respectively, the intermediate member being substantially softer than the outer members.

It is an object of this invention to provide an improved pillow.

It is another object of this invention to provide a pillow having a firm support member for the neck and a relatively softer support member for the head of the user with the support members being integrally connected.

It is a further object of this invention to provide a pillow which may be inserted in the ordinary pillowcase.

It is yet another object of this invention to provide a pillow that will stretch the contracted neck muscles causing them to relax.

It is still another object of this invention to provide a pillow wherein the neck muscles are selectively stretched.

It is still a further object of this invention to provide a pillow which will support the head of the user in proper position and is adaptable for use when the user is horizontally resting on one side or in a supine position.

It is another object of this invention to provide a pillow which is reusable, and may be cleaned and sterilized.

It is a further object of this invention to provide a pillow which is simple in construction, economical in use and will retain its shape.

These objects and other features and advantages will become apparent from the following description when read in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view of the pillow of this invention, showing the neck supporting members in relation to the head supporting member, and with certain parts cut away for illustrative purposes;

FIG. 2 is a reduced cross-sectional view as taken along the line 2—2 of FIG. 1;

FIG. 3 is a foreshortened elevational view of the pillow of this invention;

FIG. 4 is a side elevational view of the invention in use by an individual in a supine position; and

FIG. 5 is a side elevational view of the invention in use by an individual resting upon her side.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings and particularly FIG. 1, the pillow of this invention is indicated generally by the numeral **10**. The pillow **10** is partially enclosed within an ordinary pillow cover **11** which gives the pillow **10** the appearance of a conventional pillow. The pillow cover **11** is cut away to show the pillow construction **10** comprising a pair of outer members **12, 13** and an intermediate member **14**.

The outer members **12, 13** are identical, therefore only one member **12** will be described. The outer member **12** is of a firm, resilient material such as hard latex or the like and comprises a flat vertical side **16**, and upper surface **17** (FIG. 2) and a lower surface **18**, the surfaces **17, 18** curving downwardly and upwardly, respectively away from the side **16** to merge and form a convexly curved side or edge **19** which forms the outer periphery of the member **12**.

The vertical side **16** extends parallel to the longitudinal axis of the pillow **10** the entire length of the member **12**, and defines in cross section the entire height of the member **12**. The upper surface **17** connects the side **16** at its uppermost edge **21** to form substantially a right angle therewith (FIG. 2). From the edge **21** the upper surface **17** curves downwardly and away from the side **16** to merge with the lower surface **18**. The surface **18** connects the lowermost edge **22** of the side **16** also at substantially a right angle, and curves upwardly and away

from the side **16**. This arrangement provides a thick area **23** between the surfaces **17**, **18** and immediately adjacent the longitudinal sides **16**.

As shown in plan view in FIG. 1, the edge **19** of member **12** curves inwardly at each end **19***a*, **19***b* of the member **12** toward the intermediate member **14** to form an acute angle with the ends **24**, **26** of the side **16**.

The intermediate member **14** (FIGS. 1 and 2) is of a soft, resilient material designed to exert negligible resistance when receiving the head of an individual user and includes a pair of vertical sides **27**, **28** extending parallel to the longitudinal axis of the pillow **10**, an upper surface **29** and a lower surface **31**, the surfaces **29**, **31** merging at their outer ends to form curved edges **32**, **33** (FIGS. 1 and 3).

The longitudinal sides **27**, **28** of the intermediate member **14** are a mirror image of the longitudinal sides **16** of each of the outer members **12**, **13**, and are laminated together with an appropriate bonding material to form the pillow **10**. The upper and lower surfaces **29**, **31** of the intermediate member are coextensive with the upper and lower surfaces **18**, **19**, respectively, of the outer members **12**, **13**, as are the edges **32**, **33** of the intermediate member **14** and the edges **19***a*, **19***b*, respectively, of the outer members **12**, **13**.

Referring to FIGS. 4 and 5 it can be illustrated that the curved outer edge **19** is positioned contiguous to the shoulder area **34** of the individual and the firmness inherent in the outer member **12** prevents the contoured member **12** from collapsing under the weight of the individual's neck **36**, keeping the neck **36** in proper alignment with the normal curvature of the spine when the individual is in a supine position (FIG. 4), and also resting in a side position (FIG. 5).

The abrupt transition from a firm member **12** (FIG. 2) for receiving the neck **36** to a relatively soft member **14** for receiving the head **37** provides the pillow **10** with the unique feature of stretching the neck muscles and permitting them to relax, thereby leading to a more restful sleep and reduced likelihood of neck and shoulder spasms. It should be recognized that by shortening the width of one of the outer members **13** (broken line, FIGS. 1 and 3) the pillow **10** is adaptable for use by those individuals having a short neck or desiring less muscle stretch.

Although a preferred embodiment of this invention has been described and disclosed hereinbefore, it is to be remembered that various modifications can be made thereto without departing from the true spirit and scope of the invention as defined in the appended claims.

I claim:

1. A pillow construction for receiving the head and neck of an individual in a resting horizontal position, the pillow construction comprising:

a pair of firm outer members adapted to receive the neck of the individual, said members each including an inner side extended longitudinally of the pillow and an outer side, each outer side having a convexly curved outer surface in transverse cross section; and

an intermediate member attached to and positioned between said outer members and being in contacting engagement with said inner sides, said intermediate member adapted to offer negligible resistance when receiving the head of the individual.

2. A pillow unit as defined in claim **1**, wherein said inner side is substantially flat.

3. A pillow unit as defined in claim **1**, wherein one of said outer members is wider than said other outer member.

4. A pillow unit as defined in claim **1**, wherein said outer members are composed of firm rubber.

5. A pillow unit as defined in claim **1**, wherein said intermediate member includes a top and bottom surface substantially coextensive with the upper and lower ends of said convexly curved outer surfaces of said outer members.

6. A pillow unit as defined in claim **1**, wherein said intermediate member is laminated to said inner side of each of said outer members.

7. A pillow unit as defined in claim **1**, wherein said intermediate member is of soft rubber.

8. A pillow unit as defined in claim **1**, wherein said combined inner and outer sides form a thick area therebetween.

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