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T. D. COLE

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PILLOWS OR CUSHIONS

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Fig. 1.

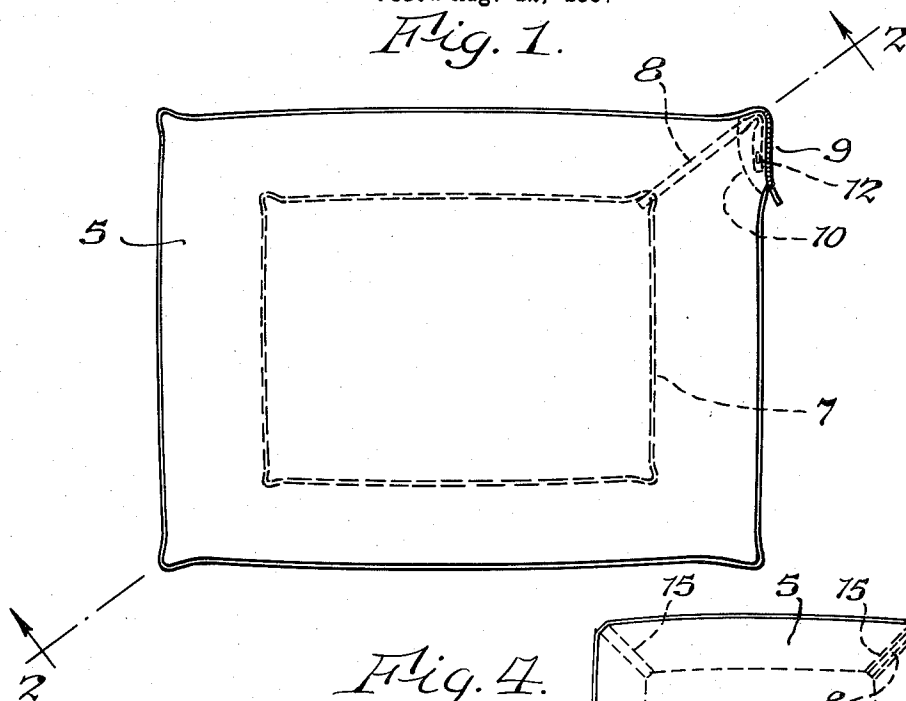


Fig. 4.

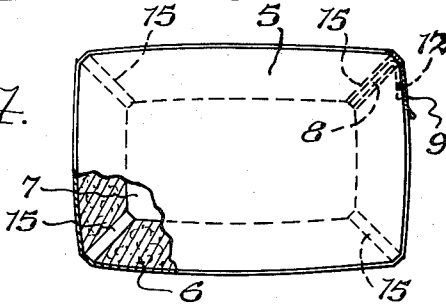


Fig. 2.

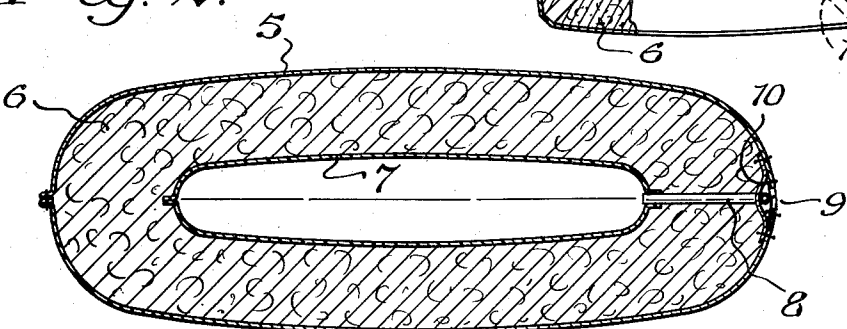
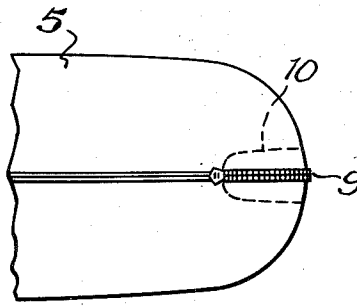


Fig. 3.



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2,942,281

PILLOWS OR CUSHIONS

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1 Claim. (Cl. 5—341)

This invention relates to pillows or cushions.

In pillows or cushions the stuffing material eventually becomes packed down through use. Furthermore it has been the custom of manufacturers of pillows to make them in different degrees of firmness by including more or less stuffing material in the pillows since some persons like relatively firm pillows and others prefer softer or fluffier pillows. If a person purchases a pillow of a certain degree of firmness or fluffiness and then finds he would prefer a pillow of a different degree of firmness, he cannot exchange the pillow since the laws of most States for sanitary reasons prohibit exchanging of the pillows after they have been used.

It is one of the objects of this invention to provide a pillow or cushion having an inner member or insert in the form of an air bag or pneumatic member which is surrounded by the filler material and which may be filled or inflated to the desired extent to produce either a relatively firm or a soft pillow. It is also an object to provide within a pillow an inflated member of this type which is provided with a valve controlled inlet tube, accessible from the exterior of the pillow, whereby the amount of air contained in the inflatable member may be varied to suit the user of the pillow. Another object is to provide a pillow of this kind in which the outer end of the air inlet tube is arranged within the covering material of the pillow where it is not likely to be damaged by contact with other objects and where it will not interfere with the normal use of the pillow.

In the accompanying drawing, Fig. 1 is a face view of a pillow embodying this invention.

Fig. 2 is a sectional view thereof approximately on line 2—2, Fig. 1.

Fig. 3 is a view of the corner of the pillow at which the outer end of the filler tube terminates.

Fig. 4 is a face view of a pillow of modified construction.

The pillow shown in Figs. 1-3 is provided with the usual outer cloth covering 5 which is filled with any usual or suitable filler material 6, which is preferably of a fibrous nature and within the middle portion of this filler and spaced from the covering 5 is provided a flexible pneumatic member or bag 7 which may be inflated with air so as to vary the bulk of the pillow as well as its firmness. The bag 7 may be made of any suitable or desired air-tight material such for example as sheets of a vinyl or other plastic composition. Rubber or other rubber-like materials may be used, but since these materials nearly always have an odor I prefer to use a vinyl plastic material which is also non-allergic, in making the pneumatic bag.

The pillow is readily adjustable so that it will be suitable for persons preferring a relatively soft pillow or persons requiring firmer pillows. The difference in degree of firmness of the pillow can readily be controlled by varying the amount of air admitted into the bag or pneumatic cushion 7. For persons who prefer a relatively firm pillow, the central pneumatic member or bag

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7 may be inflated with more air than would be used for persons preferring a softer pillow.

In order to make it possible to vary the amount of air within the bag or pneumatic member 7, I preferably provide the bag with a filler tube 8 which is connected at one end with the inflatable bag. This filler tube extends to a portion of the cloth covering 5 of the pillow into a position accessible from the exterior of the pillow for inflating or deflating the pneumatic bag. For example, in the construction shown the filler tube extends from one corner of the pneumatic bag to the adjacent corner of the pillow and the pillow is provided near the outer end of the filler tube with a zipper 9. Upon opening the zipper, the outer end of the filler tube will be readily accessible. In order to prevent any of the stuffing material of the pillow from escaping when the zipper 9 is opened, I provide a pocket in the edge portion of the pillow formed by a lining member 10 which extends across the portion of the pillow, which may be opened by the zipper 9. The outer end of the inflation tube extends through the lining member and lies in the pocket where it is readily accessible by opening the pocket by means of the zipper or other closure.

The inflation tube 8 is preferably provided with a check valve 12 of any suitable type to prevent escape of air from the inside of the pneumatic bag. This check valve is preferably located adjacent to the outer end of the inflation tube and may be of a construction similar to valves of this type used on pneumatic tires so that the valve may be opened to discharge some of the air from the pneumatic bag or if desired more air can be blown by mouth through the tube 8 into the pneumatic bag.

When the stuffing is of fibrous material it can be in the form of batting which may be wrapped around the pneumatic bag so as to enclose the same entirely in this material. One end or side of the cloth covering of the pillow may be left open so that the pneumatic bag and the material wrapped about it may be inserted as a unit into the covering and the filler tube inserted into the pocket, whereupon the open end or side is sewn. When constructed in this manner, there is always an ample thickness of stuffing material between a person sleeping on the pillow and the bag 7, so that the presence of the pneumatic bag in the pillow is not objectionable. By wrapping sheets of fibrous material about the bag, this type of stuffing will hold the bag in the middle portion of the pillow.

My improvement may also be used in connection with pillows stuffed with feathers, down or other loose material which cannot be wrapped around the pneumatic bag to center the same within the pillow. When this kind of stuffing is employed, I provide suitable flexible means for centering the pneumatic bag in the cloth covering of the pillow. For this purpose, as shown in Fig. 4, I provide spacing members 15 which may be arranged in any suitable manner, for example, by extending from the corners of the pneumatic bag to the corners of the covering material of the pillow. Consequently, feathers, down or other stuffing material not in sheet form can be placed in the pillow around the faces and edges of the pneumatic bag, and during the use of the pillow, this loose stuffing material will remain disposed with fair uniformity in the spaces between the pneumatic bag and the covering material of the pillow.

Heretofore pillow manufacturers found it necessary to make pillows of varying degrees of firmness to satisfy different customers, which necessitated carrying inventories of each kind of pillow. The pillow herein described has the advantage that a pillow manufacturer can make these pillows all alike and the degree of firmness may then be controlled by the use of the same thus reducing materially the inventory he is required to main-

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tain. As the stuffing of the pillows becomes more compacted, the user can readily restore the same to approximately the same firmness which they had when originally purchased.

While I have described my improvements mainly for use with a bed pillow, it will be obvious that my improvements may be equally well used in connection with cushions of various types.

It will be understood that various changes in the details, materials and arrangements of parts, which have been herein described and illustrated in order to explain the nature of the invention, may be made by those skilled in the art, within the principle and scope of the invention as expressed in the appended claim.

I claim:

A pillow comprising a single flexible unicellular inner pneumatic bag of substantial length and width disposed in a horizontal position, said pneumatic bag having a substantially oval configuration in both longitudinal and transverse vertical cross sectional planes when inflated, 20 fibrous filler material surrounding said pneumatic bag completely enclosing all surfaces and edges of the same with a substantial thickness of said fibrous filler material, a cloth covering enclosing said filler material and pneumatic bag, the external surface of said pneumatic bag being materially spaced from said covering at all points, said filler material substantially filling the space between said pneumatic bag and said cover, and a flexible tube communicating at one end with said pneumatic bag and having the other end extending through the 30

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filler material to a point adjacent said cloth covering, said cloth covering having a readily closable opening disposed over said other end of said tube through which the outer end of the tube is accessible for increasing or decreasing the air in said pneumatic cushion, and means on said tube normally preventing the escape of air from said bag, said pillow having a substantially oval configuration in both longitudinal and transverse cross sectional planes, said pneumatic bag and said pillow being 10 of alined polygonal configuration in a horizontal cross sectional plane and include a plurality of flexible members holding said bag substantially in the middle of said pillow, said flexible members including one member disposed at each corner of said pneumatic bag, each member having one end secured to the corresponding corner of said pneumatic bag and the other end secured to the corresponding corner of said cloth covering. 15

References Cited in the file of this patent

UNITED STATES PATENTS

795,108	Doellinger	July 18, 1905
931,361	Weinberg	Aug. 17, 1909
1,270,298	Jones	June 25, 1918
2,238,035	Char	Apr. 15, 1941
2,566,266	Uhle et al.	Aug. 28, 1951
2,691,179	Kann	Oct. 12, 1954
2,822,554	Wenzelberger	Feb. 11, 1958

FOREIGN PATENTS

1,113,473	France	Dec. 5, 1955
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