

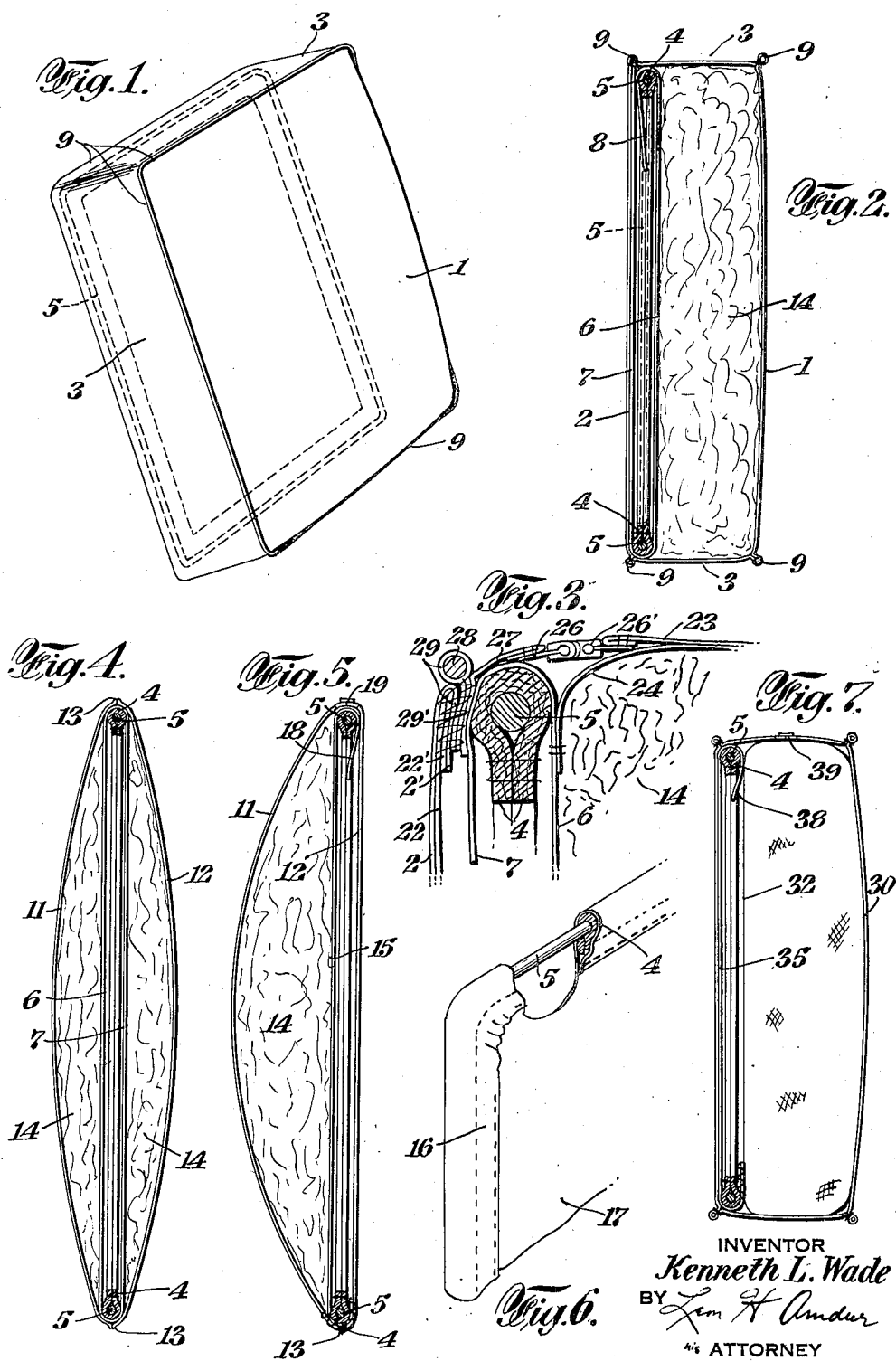
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CUSHION AND PILLOW STRUCTURE

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CUSHION AND PILLOW STRUCTURE

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1 Claim. (Cl. 5—327)

This invention relates to cushions or pillows, and more particularly to a novel structure contained within the pillow or cushion to give the same sufficient rigidity to permit a person to recline against the cushion or pillow inclined at any angle desired to give maximum comfort.

The main object of my invention is to provide means which may be built in, or placed within, a cushion or a pillow, to give the pillow or cushion sufficient rigidity to permit it to be inclined at any angle and to support a person reposed or inclined against the cushion or pillow in a manner to provide maximum comfort and relaxation to the user and to automatically hold the body in correct posture. Allied to this object, is to provide a means which will accomplish these purposes, and which will not add to the bulk of the pillow or cushion, and will not materially increase its weight; a further object is to provide a construction accomplishing these purposes which shall be simple and inexpensive from a production viewpoint. A further object is to provide a means of the character described which may be readily insertable into, and removable from, a pillow or cushion.

My invention may be applied either to a "box" type cushion, i. e., one having a wide perimeter, or to a "knife edge" pillow, i. e., one in which the two faces are sewed together to form an edge of no appreciable width. The "box" cushion—which will be hereinafter referred to simply as a "cushion"—is used mainly in conjunction with studio couches, divans, chairs, etc., whereas the use of "knife edge" pillows—which will be hereinafter referred to simply as a "pillow"—is confined to beds and for sleeping purposes. Of course, cushions may find many other uses, such as on benches, boats, canoes, as a back support on terrace lounges, etc., as an inclined support for one sitting on the floor, veranda, porch, steps, etc., and may of course be used by a person reclining in a bed.

For the attainment of these and such other objects as may hereinafter appear or be pointed out, I have shown certain forms of my invention in the accompanying drawing, wherein

Fig. 1 is a perspective view of a cushion made in accordance with my invention, shown in an inclined position as it would be ordinarily used;

Fig. 2 is a section through a cushion showing one form of my invention employing a double web;

Fig. 3 is a sectional detail of the double web construction of Fig. 4, which is made readily removable;

Fig. 4 is a section through a pillow, also employing the double web construction of the previous figures;

Fig. 5 is a section through a pillow illustrating

a form in which one face of the pillow constitutes part of the web construction;

Fig. 6 is a perspective view of a corner of a construction using a single web having a sewed border enclosing the frame; and

Fig. 7 is a section through a cushion illustrating the construction of Fig. 5 in which a separate outer covering is used.

The box or studio cushion—referred to simply as "cushion"—shown in Figs. 1 and 2 comprises a front face 1 and a rear face 2 of suitable textile fabric and a perimeter 3 of appreciable width, also formed of the same fabric, the edges between the perimeter and the faces being provided, if desired, with a piping 9. Although the cushion as shown in Fig. 1 is square, my invention may be applied to cushions and pillows of any shape or size. The cushion is filled with kapok 14 or other suitable material. Within the cushion and, as shown in Figs. 1 and 2, at the rear face 2, is provided a rigidifying and body supporting member comprising a frame 5 formed of preferably round bar metal and of a dimension to fit snugly around the four sides of the cushion and a front web 6 and a rear web 7 of suitable textile material which forms a bag fitting tightly around the frame.

In one form of my invention, web bag 6—7 is closed on all four sides of frame 5; this is illustrated in Fig. 4 in connection with the application of my invention to pillows. I have found that one of the four sides may be left open to serve as an opening for placing the frames within web bag 6—7; this form of the invention is illustrated in Fig. 2, the top side being open. One of the webs, e. g., the front web 6, may be provided at the said top opening with a flap 8 which is brought over the top bar of the frame after the latter is inserted in web bag 6—7 and tucked in, as shown.

Instead of a bag formation of the webs (as shown in Figs. 2 and 4), a single web, such as web 17, Fig. 6, may be used; web 17 has along all four sides a border portion 16 which, after the frame 5 is set in position, is folded over the bars of the frame and the edges of the borders 16 sewed to the web 17, as shown.

In both forms, i. e., the double web or web-bag form, Figs. 2 and 4, or the single web form, Fig. 6, I have found it advantageous to surround the metal bars of the frame with wadding 4 of felt or similar material. Wadding 4 is conveniently made from a strip of felt of a length corresponding to the perimetric distance of the frame and of a width sufficient to allow the strip to be folded over the frame bars and the edges loosely stitched together as shown in the figures. The wadding prevents wear which might be otherwise caused at points along the pillow or cushion material in contact with the bare metal

of the frame, and obviates the possibility of impact or contact with the hard metal frame.

The provision of a webbing (whether the double web or bag or the single web construction) tautly stretched between the metal bar frame, is an important feature of my invention. Through the medium of the web, the rigidity and support afforded in the first place by the metal frame is transmitted and made available at all points of the pillow or cushion. When pressure is applied at any point of the web, as by the pressure of a person's shoulders or head against the pillow or cushion, the web becomes a tension member and transmits the force applied to the frame. It should be noted that the web affords sufficient resistance to the pressure exerted by the reclining person to guard against "sinking in" or embedding in the soft cushion or pillows. That is, the web permits the cushion or pillow, maintained in inclined position by the metal frame, to support the weight and pressure of a person, i. e., his back, shoulders and head, reclining against the pillow or cushion.

The web and frame not only cooperate in the manner indicated to hold up a person leaning against the inclined pillow or cushion, but cooperate in a manner to afford the greatest comfort and ease to the user. The web presents a slightly yieldable resistance to the body pressure, and it should be noted that the yieldable nature of the support is not localized at the point at which the body pressure bears but is transmitted and distributed throughout the entire web. The yieldable property of the web is due to a small extent, to the slightly stretchable nature of the material of which it is composed. But the greater degree of flexibility is given to the web by the frame itself. The frame is constructed of bars sufficiently light to flex slightly when pressure is applied to the web 6—7. That is, the upper bar, see Fig. 2, would be moved a small extent downwardly and the lower bar would move a slight extent upwardly in that figure.

The invention may be applied to a cushion ("box" type), as in Figs. 1 and 2, or to a pillow ("knife edge") or sleeping pillow, as shown in Figs. 4 and 5, in which the pillow front is designated 11 and the rear is designated 12, the two faces being brought together at edge 13. In Fig. 4 the rigidifying and supporting member comprising web 6—7 and frame 5 is left permanently in the pillow and is preferably positioned centrally of the pillow as shown, with kapok 14 or other suitable filling material equally distributed on each side of the frame and web.

The double web or bag type of rigidifying and supporting member may be simplified by utilizing one face of the cushion or pillow itself as one of the webs, shown in Figs. 5 and 7, so that a pocket is formed in the cushion or pillow, its said face constituting one half of the pocket and a supplementary lining sewed to the cushion or pillow constituting the other half of the pocket. In the pocket type of rigidifying and supporting member shown in Fig. 5, the outer face 12 of the pillow becomes one half of the pocket. To the pillow face 12 and inside the pillow is sewed supplementary lining 15. Lining 15 is sewed to the pillow face 12 along three sides, the fourth side is left open to permit insertion and removal of the frame 5 (together with its wadding 4); the open side of the pocket lining 15 is provided with a flap 18 which is tucked around the frame bar, the top one as shown in Fig. 5. The top

side of the pillow may be sewed together to permanently retain the rigidifying member in place, or it may be provided with a slide fastener 19 to permit withdrawal and insertion of the frame in the supplementary web pocket of the pillow.

The pocket type of rigidifying and supporting member of Fig. 7 differs from that of Fig. 5 just described, in that the supplementary pocket is formed on the outside, rather than within, the pillow or cushion. Also, in Fig. 7 an outer covering or slip 30, preferably provided with a slide fastener 39 along one side, encases an inner cushion. To the face 32 of the inner cushion and outside thereof is served the supplementary lining 35. As in the construction of Fig. 5, one edge is left open and provided with a flap 38.

A detail of a box type cushion provided with a removable frame unit is shown in Fig. 3. The unit is the double web (6 and 7) type and positioned preferably at the rear, 7, of the cushion. The cushion material at the back comprises in addition to facing material 2, a lining material 22. The edges of both the facing material 2 and the lining material 22 are folded over to form hems designated 2', 22' respectively. The piping material 29 is folded over the cord 28 and the folds, 29, 29' placed next to the hemmed ends of the facing and lining material 2, 22 (2', 22'). Next to the piping folds 29, 29', is placed a short strip of facing material 27. The parts mentioned, namely, facing material 2, lining material 22, their hems 2' and 22', folded piping material 29, 29' and the short strip of facing material 27, are sewed together, as shown in Fig. 3.

To the free edge of 27 is sewed strip 26 of the slide fastened 26—26', the other cooperative strip 26' being sewed to an edge of the facing material 23. The slide fastener, which extends short distances beyond one side of the cushion, is opened to permit the insertion of the frame unit (frame 5 and webs 6, 7) which is placed close to the rear face 2 of the cushion, the filling of kapok 14 or other suitable material occupying the space between the frame unit and the front face of the cushion. A flap 24 may be sewed to web 6 and tucked around the kapok filling to prevent any possible loss of the kapok through the slide fastener or through the opening during the insertion or removal of the frame unit.

In the appended claim the term "pillow" is used in a broad sense to include box type cushions as well as knife edge or sleeping pillows.

I claim:

55 The combination with an ordinary pillow having an outside covering and stuffing material, of a rigid frame of bar material having an outline conforming to, but slightly smaller than, the said pillow, a narrow strip of padding material equal in length to the perimetric dimension of the said frame and folded over the said bars of the frame, and a web of textile material having an outline conforming to, but somewhat larger than, the said frame, the edges of the said web being folded over the said padding-encased bars and sewed to the body portion of the web to tautly stretch the said web on the said frame, the said padding-encased and web-tensioned frame being adapted to be inserted in the said pillow to provide a tension member to support the weight of a person's back and head reposed against the inclined pillow supported at only two of its opposite sides.

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