March 20, 1956 H. JAFFE ET AL 2,738,834

FOLDABLE CUSHION

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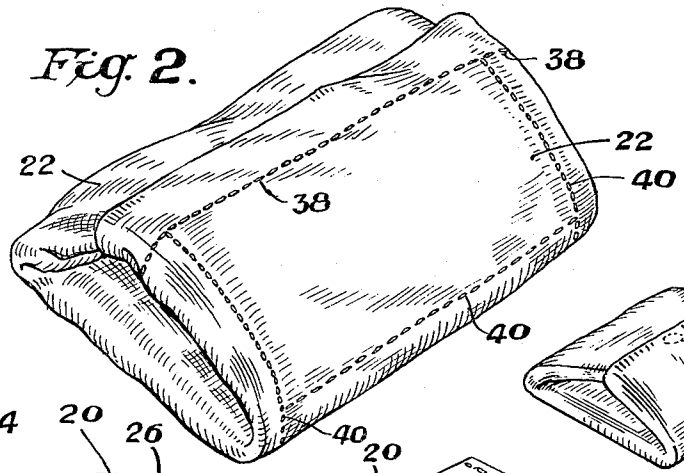
Fig. 2.



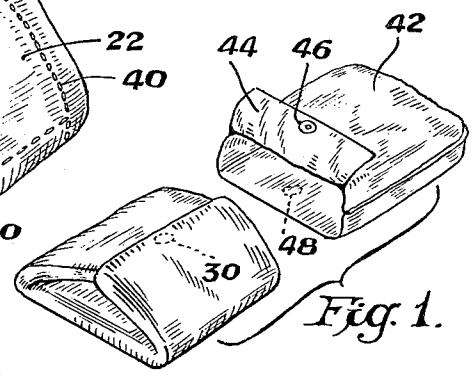


Fig. 1.

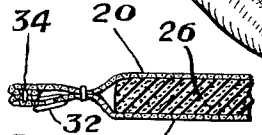


Fig. 6.

Fig. 3.

Fig. 5.

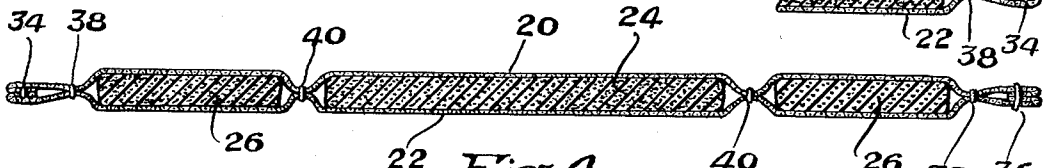


Fig. 4.

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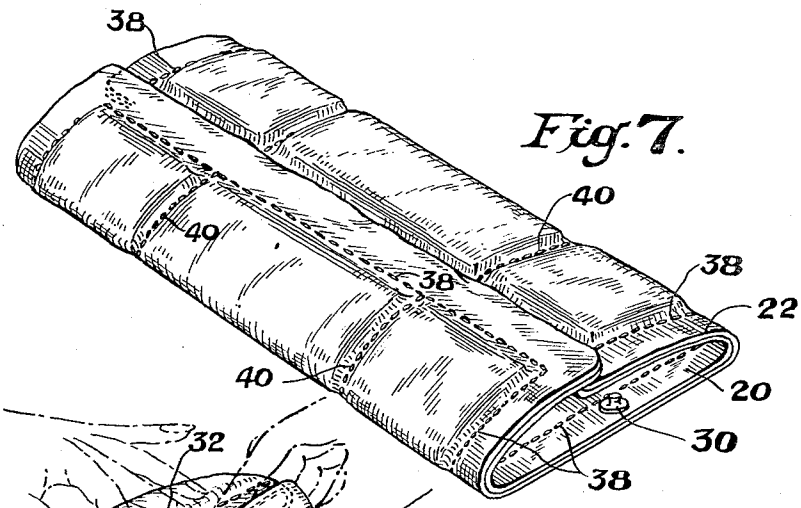

Fig. 7.

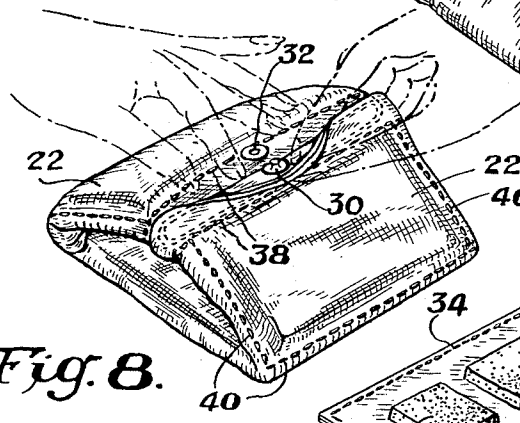

Fig. 8.

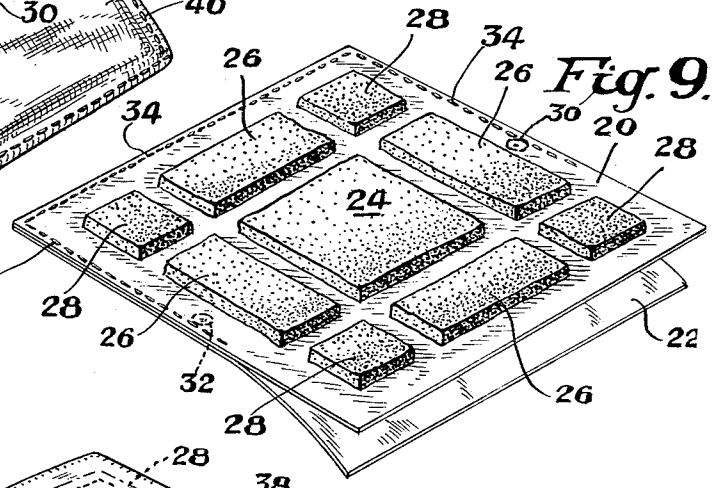

Fig. 9.

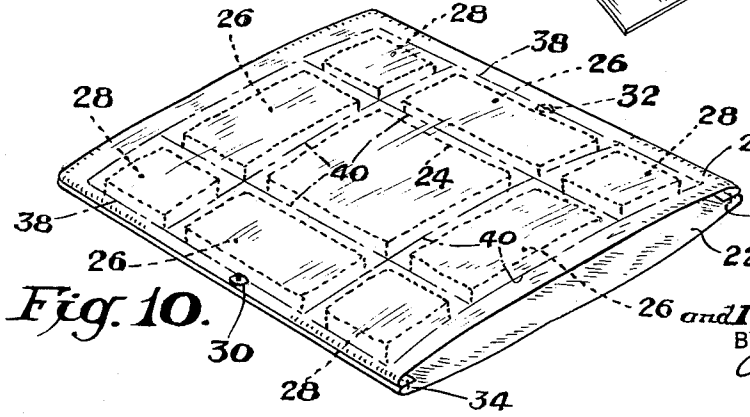

Fig. 10.

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FOLDABLE CUSHION

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Application July 17, 1953, Serial No. 368,751

2 Claims. (Cl. 155—182)

The present invention relates generally to pads, cushions and mats and the like, and it relates more particularly to articles of this type which are intended to be carried about from place to place for use in different localities.

An object of the present invention is to provide a new and useful foldable pad, cushion or mat or the like, as well as a novel method of forming the same. Another object of the present invention is to provide a novel pad, cushion, mat or the like which can be opened for sitting or reclining comfort, and which can be folded and secured quickly and easily for convenience in transportation. Other objects and advantages of the present invention are apparent in the following detailed description, appended claims and accompanying drawings forming part hereof.

At various outdoor places of entertainment, such as ball games, concerts, etc., the seating accommodations consist of wood or concrete benches, which are hard and extremely uncomfortable. As a result, many patrons bring with them stuffed cushions or pads which are bulky and clumsy to carry. A similar problem exists at beaches, picnic grounds, etc., to which it is customary to bring large and bulky mats or pads for comfort in reclining.

The present invention contemplates a novel construction for such pads, cushions, mats and the like, which will enable them to be folded up and secured in the form of a compact, easily transportable package, capable of being opened instantaneously to provide a soft and comfortable large-area seating or reclining surface.

For the purpose of illustrating the invention, there is shown in the accompanying drawings a form thereof which is presently preferred and which has been found in practice to give satisfactory results. However, the invention is not limited to the precise arrangements and instrumentalities shown; variations and equivalents thereof being within the purview of the invention.

Referring to the accompanying drawings in which like reference characters indicate like parts throughout:

Figure 1 is a perspective view of a folded seat cushion or pad embodying the present invention, shown in position for insertion into a carrying case or envelope.

Figure 2 is an enlarged perspective view of the folded cushion of Fig. 1.

Figure 3 is a perspective view of the cushion of Fig. 2 shown in flat unfolded position, ready for use.

Figure 4 is a cross-sectional view taken generally along the line 4—4 of Fig. 3.

Figure 5 is a cross-sectional view taken generally along the line 5—5 of Fig. 3.

Figure 6 is a cross-sectional view taken generally along the line 6—6 of Fig. 3.

Figure 7 is a perspective view of the cushion of Figs. 2 and 3 showing an intermediate stage in the folding operation.

Figure 8 is a perspective view showing the last stage of the folding operation.

Figure 9 is a perspective view showing an intermediate stage in the method of forming the cushion of Figs. 2 and 3.

Figure 10 is a perspective view showing a subsequent stage in the method of forming the cushion of Figs. 2 and 3.

In Figs. 1–10, there is shown a foldable seat cushion or pad forming one embodiment of the present invention. In this embodiment, the cushion is formed of two generally rectangular panels **20** and **22** of any suitable flexible material; as for example woven cloth (which may be woven from any natural or synthetic yarn or thread) or synthetic resin film, etc. The panels **20** and **22** are stitched together along peripheral seam lines, in a manner to be hereinafter described and are also provided with intermediate criss-crossing seam lines which form spaced pockets within which are disposed individual blocks of foam rubber which form the padding of the cushion.

As best shown in Fig. 9, it is possible to provide nine of the individual foam rubber blocks, of varying sizes. Thus, the center block **24** may be the largest in size and generally square in configuration. Outward of, and parallel to the four sides of the center block **24**, we may provide four rectangular blocks **26** having a longitudinal dimension generally the same as the length of the sides of the center block, but having a somewhat smaller transverse dimension. At the corners, we may provide four more blocks **28** which are generally square; the length of the sides being generally the same as the transverse dimension of the blocks **26**.

The blocks **24**, **26** and **28** are spaced from each other to permit them to be encased in individual pockets or compartments as will be hereinafter described. Mounted adjacent one edge of the panel **20** is a male snap-fastener element **30**, while a female snap-fastener element **32** is mounted adjacent the opposite edge of the panel **22**. In other words, when the cushion is in flat unfolded position, one of the elements faces upward and the other downward as indicated in Figs. 3, 5 and 6.

In producing the cushion of Figs. 2 and 3, the sponge rubber blocks **24**, **26** and **28** may first be adhesively or otherwise suitably affixed to one face of the panel **20**, after which the panel **22** is stitched to the other face of the panel **20** by seam lines **34** extending along three sides thereof, as indicated in Fig. 9.

The partially stitched panels **20** and **22** are then turned inside out, in the manner shown in Fig. 10, after which the fourth edges of the two panels are united by a seam line **36**. It should be noted that, when the two panels are turned inside out as mentioned above, the configuration is changed to place the rubber blocks between the two panels as illustrated in Fig. 10.

Thereafter, a continuous rectangular seam line **38** is sewn through the panels **20** and **22**; the seam line **38** extending along the outer edges of the blocks **26** and **28** in encompassing relationship thereto. As indicated in Fig. 3, the same line **38** generally parallels the seam lines **34** and **36** but is spaced somewhat inward therefrom, passing just inside the snap-fastener elements.

Finally, two pairs of criss-crossing seam lines **40** are sewn through the panels **20** and **22** intermediate the seam line **38**; the seam lines **40** passing between the blocks **24**, **26** and **28**. As is apparent in Figs. 3 and 4, the seam lines **38** and **40** form nine generally enclosed compartments or pockets, each holding one of the rubber blocks **24**, **26** and **28**.

In folding up the open cushion of Fig. 3, it is folded along one pair of seam lines **40** in the manner indicated in Fig. 7; that is, so as to position the male element 30 in upwardly-directed relationship and with the two sides of the cushion folded upward and inward. The transverse dimension of the blocks **26** is preferably not appreciably more than half the dimension of the center block **24**, so that, in the position of Fig. 7, the juxtaposed edges of

the blocks **26** and **28** do not overlap (although the edges of the panels beyond the seam line **38** do overlap).

This results in a flattened sleeve-like configuration having a thickness not appreciably greater than twice that of the opened cushion of Fig. 3.

The cushion is next folded upward along the opposite pair of seam lines **40** so as to bring the snap-fastener elements **30** and **32** into juxtaposition, whereupon the folded edge carrying the female element **32** (which now faces upwardly) is tucked inside the folded edge carrying the male element **30** (which now faces downwardly), and the two elements are joined in the manner shown in Fig. 8.

This results in the fully closed configuration of Fig. 2 in which the cushion has about four times the thickness and about one-fourth the area of the opened configuration of Fig. 3.

The folded-in free edges visible in Fig. 7, as well as the folded edge carrying the female element **32** are all fully enclosed and concealed in the final closed configuration of Fig. 2, thereby giving a neat, compact article which can be transported conveniently from place to place. For example, a seat cushion which is 16 inches square when open, with a cushion area of about 13 inches square and ¾ inch thick, can be folded into an article only slightly more than 6 inches square and only slightly more than 3 inches thick, which can conveniently be slipped into a man's coat pocket or a woman's handbag.

While the folded-up cushion can be carried about in the form shown in Fig. 2, it is also possible to provide a separate carrying case or envelope **42**, shown in Fig. 1, having a flap **44**. The envelope **42** may be of polyethylene or other suitable inexpensive material which is relatively strong, waterproof and easy to clean. This separate carrying case makes for a more attractive vendible package and protects the cushion when the latter is not being used. Snap-fastener elements **46** and **48** may be provided on the case **42**, which can be folded up and slipped into a pocket or handbag when the cushion is in use.

It is obvious that the number, size and arrangement of individual blocks and pockets can be varied to provide different-size and different proportion cushion, pads and mats. Also, although we presently prefer to employ blocks of foam rubber as the cushioning material, it is possible to use, instead, cotton, kapok, down, hair, bonded foam, or any other suitable material for this purpose. Where down, hair or other loose material is used, it can either be placed into the stitched compartments in loose form or, instead, can first be enclosed in casings to give miniature pillows which can then be placed into the compartments in an obvious manner.

In place of snap fasteners, it is possible to provide the cushion with any other conventional type of detachable closure elements such as buttons, hook-and-eyes, slide fasteners, etc.

As used in the appended claims, the term "cushion" is intended to comprehend and include seating pads, beach pads, floor mats, and other similar structures.

The present invention may be embodied in other specific forms and, therefore, the foregoing embodiment is to be considered merely as illustrative and not descriptive, reference to be made to the appended claims as indicating the scope of this invention.

Having thus described our invention, we claim as new and desire to protect by Letters Patent the following:

1. A portable cushion comprising a pair of panels formed of flexible material, said panels being stitched together along their edges and being provided with additional intermediate criss-crossing pairs of parallel spaced panel-connecting seam lines forming a plurality of individual enclosed pockets, each of said pockets containing a resilient block of foam rubber adhesively secured to one of the panels in centered relationship within the pocket, said cushion being foldable inwardly along one pair of parallel seam lines into an open-ended multi-ply configuration and being thereafter foldable along the other pair of seam lines to form a small-size multi-ply configuration with one of the open ends inserted within and generally enclosed by the other, and co-acting detachable connecting means mounted at opposite edges of said cushion and so disposed that they are brought into juxtaposition and can be engaged when the cushion is folded so as to connect the aforesaid ends in inserted relationship, whereby the cushion can be converted to a compact closed easily transportable package.

2. A construction according to claim 1 wherein the intermediate seam lines are so arranged as to form a generally square center pocket, four generally square corner pockets each having a side dimension about half that of the center pocket, and four elongated generally rectangular edge pockets extending intermediate the corner pockets and having a longitudinal dimension generally the same as that of the center pocket and a transverse dimension about half the longitudinal dimension, and wherein the blocks of foam rubber correspond in shape to, but are somewhat smaller in size than, the individual pockets, whereby the cushion can be first folded along one pair of intermediate seam lines to provide a two-ply configuration, and then folded at right angles along the other pair of intermediate seam lines to provide a four-ply configuration in the closed package.

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