Oct. 3, 1961 M. T. NELSON ET AL 3,002,201

HEAD REST

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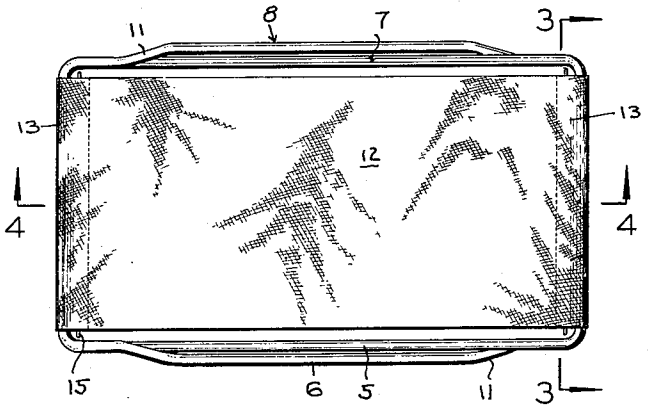


FIG. 1

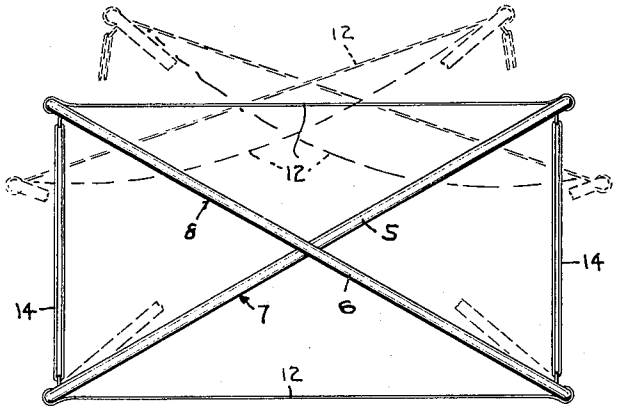


FIG. 2

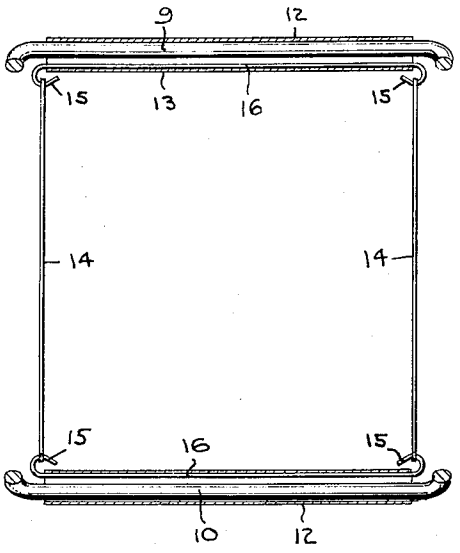


FIG. 3

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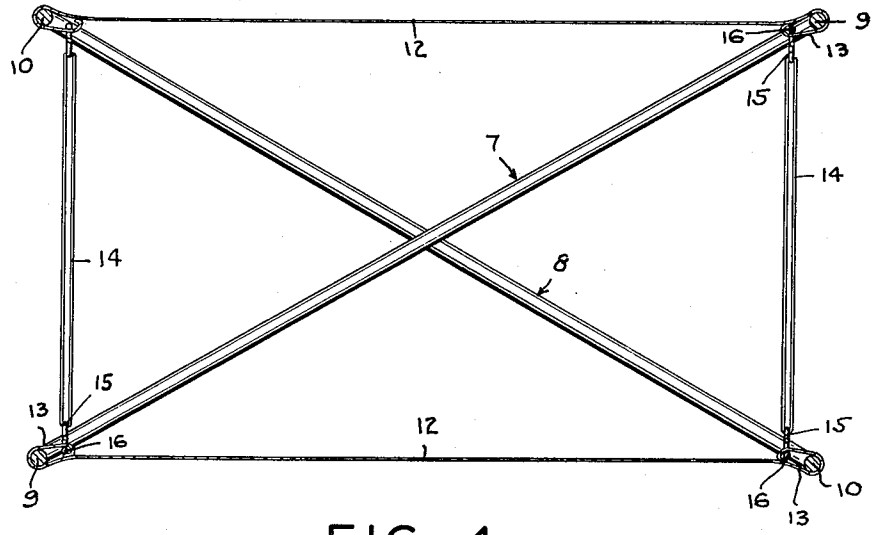


FIG. 4

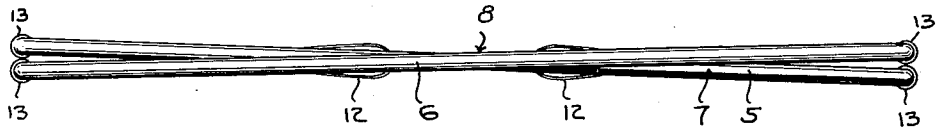


FIG. 5

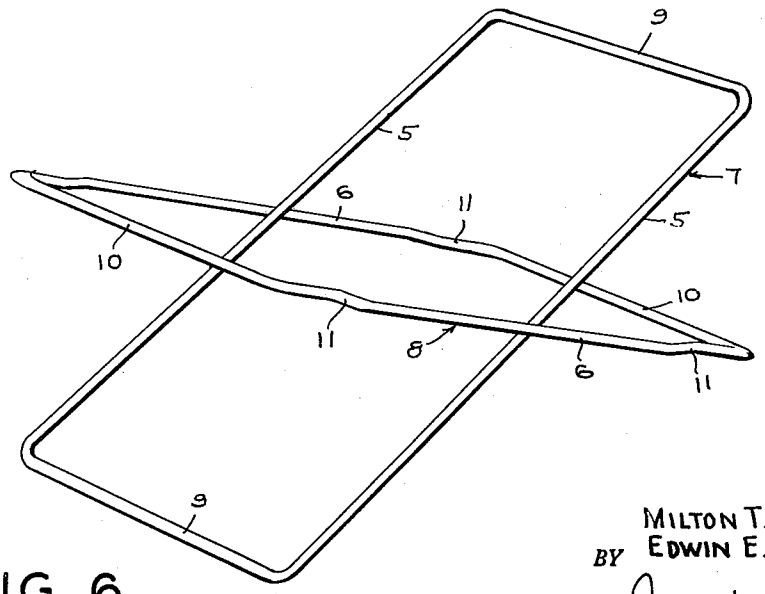


FIG. 6

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HEAD REST

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3 Claims. (Cl. 5—337)

This invention relates to a head rest for supporting the head in a slightly elevated position when a person is lying in a reclining position, such for instance as the use in beach areas where the individual hesitates to engage his head in the sand and also is adaptable to form a head rest in any location where it is desirable that the head be slightly elevated.

A novel feature of the invention comprises a pair of rectangular frames that are co-extensive in length and with one frame having its side rails offset outwardly to permit the frames to be disposed in crossed relation and with the end arms of each frame supporting a flexible section of fabric that constitutes the area for engagement of the head.

A further object of the invention resides in a pair of crossed rectangular frames that are connected at each end by biasing means that cause the frames to assume a crossed relation to maintain fabric panels in normally taut relation and with the frames being manually collapsible for transportation and storage purposes.

A further object of the invention resides in a head rest embodying a pair of crossed frames that are normally biased to crossed relation for providing the extended head rest and with the biasing means permitting the frames to rock downwardly at each end to accommodate the head rest to any comfortable position with respect to the head of the user.

Novel features of construction and operation of the device will be more apparent during the course of the following description, reference being had to the accompanying drawings wherein has been illustrated a preferred form of the device and wherein like characters of reference are employed to denote like parts throughout the several figures.

In the drawings:

FIGURE 1 is a plan view of a head rest constructed in accordance with the invention and shown in the extended or head rest forming position,

FIGURE 2 is a side elevation thereof,

FIGURE 3 is a vertical section taken on line 3—3 of FIGURE 1,

FIGURE 4 is a longitudinal section taken substantially on line 4—4 of FIGURE 1,

FIGURE 5 is a side elevation of the head rest in the collapsed position and,

FIGURE 6 is a perspective view of a pair of supporting frames.

Connected to upper head rails **9** and **10** and to lower head rails **9** and **10**, is a rectangular section of fabric **12**, connected with the head rails, through the medium of hems **13**. The sections of fabric **12** constitute the head rest and as will be obvious, the device is invertable to dispose either sections **12** upwardly to be engaged by the head of the user. The fabric sections **12** may be formed in various colors and ornamental design and the edges of the sections may be suitably treated to avoid ravelling, in use.

Means are provided to bias the frames apart so as to extend the fabric sections **12** to a relatively taut position and with the frames when extended, as in FIGURES 2 and 4, each section of fabric **12** has been fully extended and parallel with each other and with the fabric sections being spaced apart a predetermined distance calculated to support the head of the user at a proper elevation,

such elevation being in effect the height of a conventional pillow. The means for biasing the frames apart, comprises elastic bands **14**, connected to the adjacent upper and lower head rails **9** and **10** at each end of the frame sections. The bands **14** are connected to hooks **15**, that are carried at the opposite ends of wire sections **16**, that extends through the hems **13**. Elastic bands **14** have been illustrated as a simple means for biasing the frames apart but, it will be understood that any biasing means may be employed, such for instance as conventional coil springs. However, the elastic band has been found most suitable from the standpoint of the use of the device in beach areas or the like where there would be a tendency for coil springs to rust. The frame members **7** and **8** are formed of suitable aluminum rods bent to the particular shape illustrated. The aluminum rod obviously will have a relatively long life, since there would be no deterioration with respect to corrosion or rusting.

With the drive in the collapsed position as shown in FIGURE 5, the fabric sections **12** have been folded inwardly upon themselves and the frames moved manually to the position shown. To prevent the frames from automatically assuming their extended position, it is customary to extend an elastic band around the frame members which will retard any tendency for the bands **14** to shift the frames to a crossed relation. When the encircling band is removed, the bands **14** immediately cause the frames to assume their crossed relation to dispose the fabric sections **12** in the taut relation. As before stated, the device is equally serviceable when either of the sections **12** are disposed upon the sand or upon a floor area. With the head of the user disposed upon the upper section **12**, it normally shifts the upper ends of the frames **7** and **8** upwardly against the tension of the bands **14**, it being understood that the upper section **12** will flex downwardly under the weight of the head. When the person rolls his head from side to side, the frames are additionally rocked upwardly at one end and downwardly at the other, as illustrated in dotted lines in FIGURE 2, the bands **14** flexibly controlling the rocking motion. When the device is to be collapsed or folded, the operator engages his fingers in the apex of each crossed member and forces the frames toward a parallel relation to assume the position illustrated in FIGURE 5, such movement additionally stretching the bands **14** so that they assume a direct pull upon adjacent head rails **9** and **10**. With the device in the collapsed position of FIGURE 5 and with an encircling band disposed therearound, the device forms a relatively flat structure that may be conveniently packaged within an envelope or may be disposed within a pocket of the user.

It will be apparent that a very novel form of head rest has been provided. The device is simple, strong, durable and economic to manufacture. As before pointed out, the frame members have no pivotal connection with each other and are freely shiftable to and from a collapsed position. The novel means for connecting the elastic bands **14** avoids the necessity of employing hooks that would be connected to the cross rails **9** and **10** and that would also increase the cost of manufacture. The use of the elastic bands **14** as the biasing means also avoids the use of the objectionable coil springs and it is estimated, that the bands **14** will have a life span equal to springs, when it is taken into consideration that the springs are relatively costly and are subject to rusting. The bands can be quickly and easily replaced from time to time as the occasion may require.

It is to be understood that the invention is not limited to the precise construction shown, but that changes are contemplated as readily fall within the spirit of the invention as shall be determined by the scope of the subjoined claims.

Having described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A flexible and rockable head rest for use by persons in a reclining position, comprising a pair of rectangular open frames having side rails and connecting head rails, one frame having its side rails offset and whereby to overlie the other frame, the frames being non-pivotal and crossed with respect to each other and unconnected at their points of crossing, the head rails all being parallel and co-extensive, upper and lower flexible fabric panels connected to the frames and with each panel connected to a head rail of each frame at its ends and whereby the panels are parallel when the frames are in crossed unconnected relation, biasing means connected between adjacent end rails and with the biasing means moving the frames to the crossed relation with respect to each other and whereby to extend the panels in taut relation to the frames, the head rest being also foldable to dispose the frames in substantial parallelism, the head rest being also invertible to dispose either of the panels in a head supporting position.

2. A flexible and rockable reversible head rest for use by persons in a reclining position, comprising a pair of rectangular open frames having side rails and connecting head rails, one frame having its side rails off-set intermediate their length thereby to overlie the other frame and to dispose its end rails in parallel co-extensive relation to the head rails of the companion frame, the frames being non-pivotal and crossed with respect to each other and unconnected at their points of crossing, upper and lower fabric panels having hems at their opposite ends with the hems of each panel receiving a head rail of one frame and a head rail of the companion frame whereby the panels are parallel when the frames are in crossed relation, means disposed in each of the hems along with

the head rails but unattached thereto, said means consisting of rods having ends extending beyond the hems at their opposite ends, the said ends being in the form of connecting hooks, elastic means extending between the hooks at each end of the device to bias the frames together and to extend the fabric panels to a taut relation to form the reversible head rests, the said frames being shiftable in a reverse direction against the tension of the elastic means whereby the frames are disposed in a collapsed parallel relation with each other to also collapse the said panels.

3. A head rest for use by persons in a reclining position comprising, a pair of substantially similar rectangular frames, one of which fits through the other, each of the frames having side legs connected by cross members, the cross members at one end of each frame being connected by a flexible panel, the cross members at the opposite end of each frame being connected by a flexible panel, looped elastic bands disposed between the cross members of the frames at the ends thereof, said bands extending between the two panels at the ends thereof and being effective to urge the cross members toward one another to maintain the frames in X-formation and stretch the panels taut between the cross members.

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