

Feb. 28, 1939.

R. GONZÁLEZ-RINCONES

2,149,140

ANGULAR PILLOW

Filed July 14, 1936

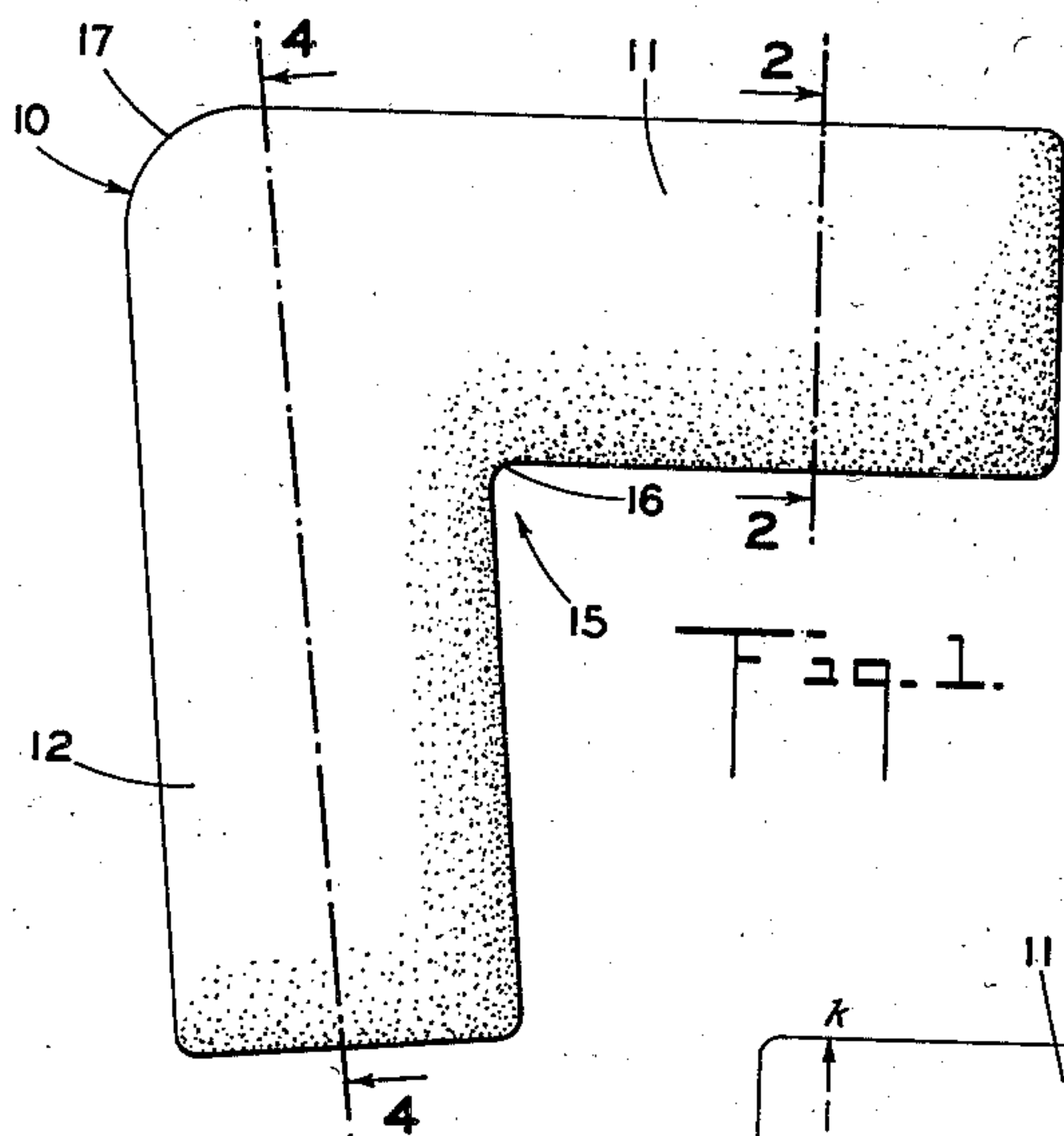


Fig. 1.

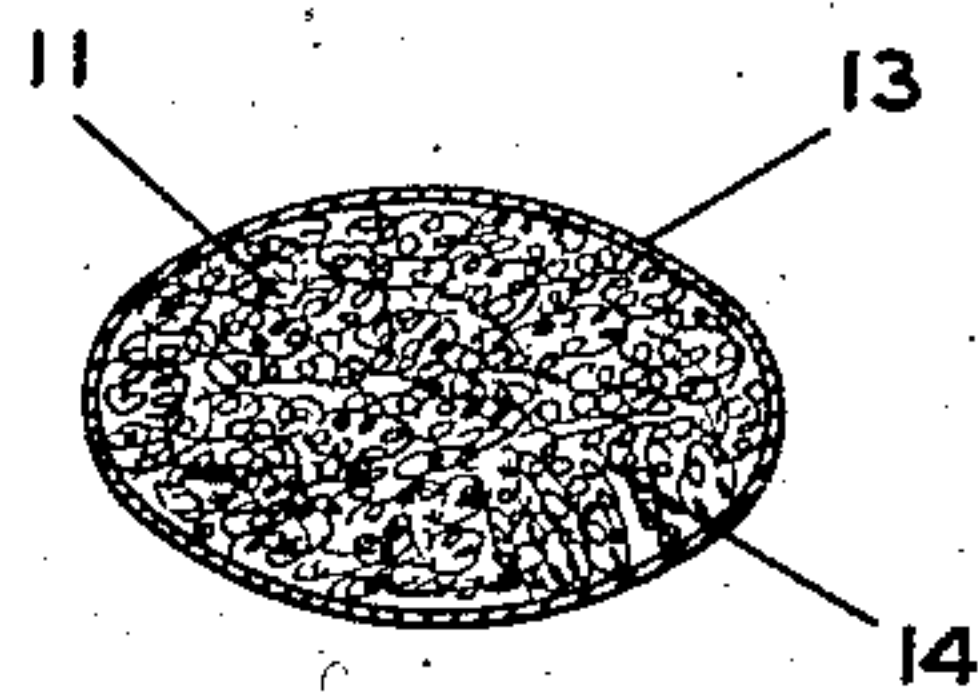


Fig. 2.

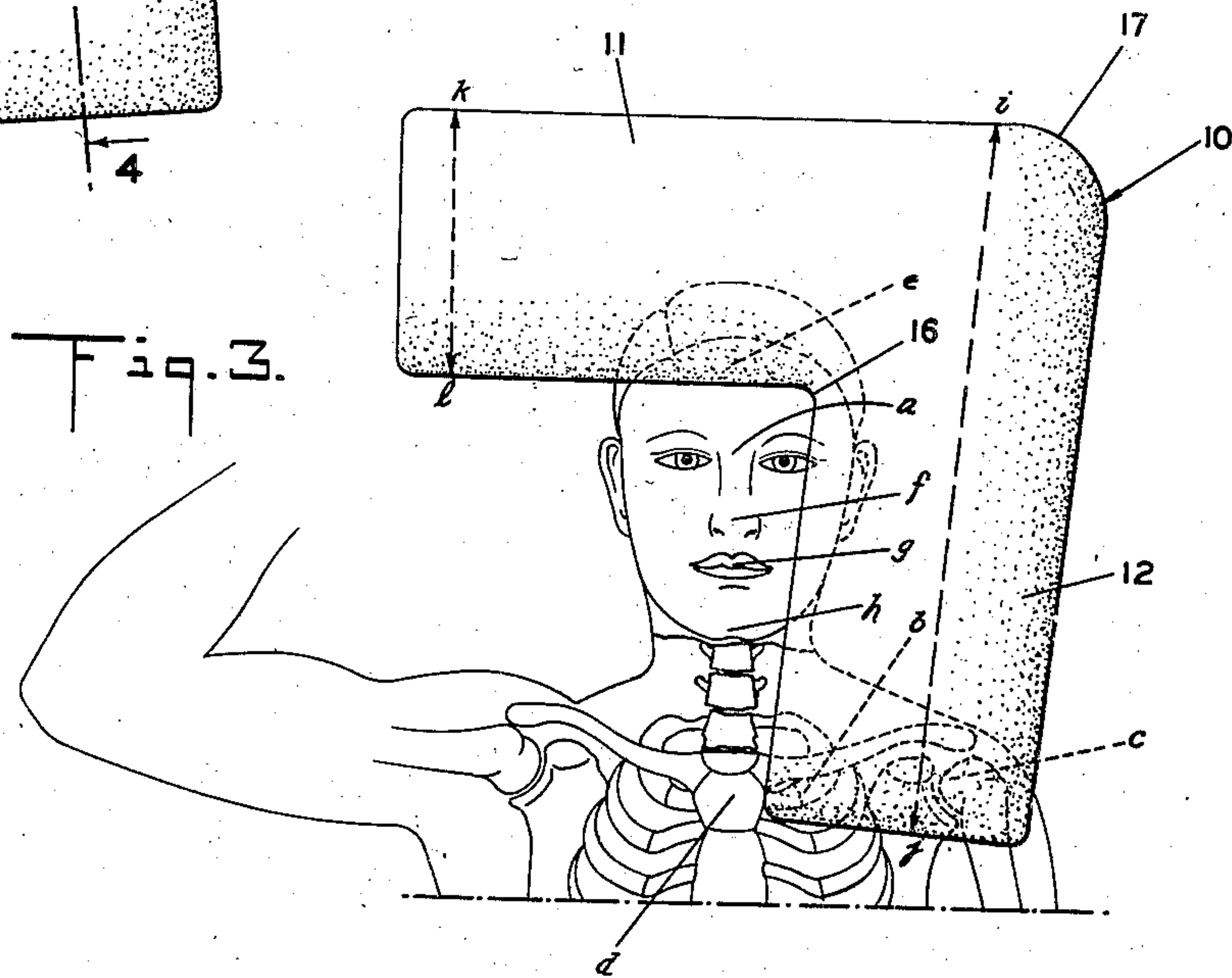


Fig. 3.

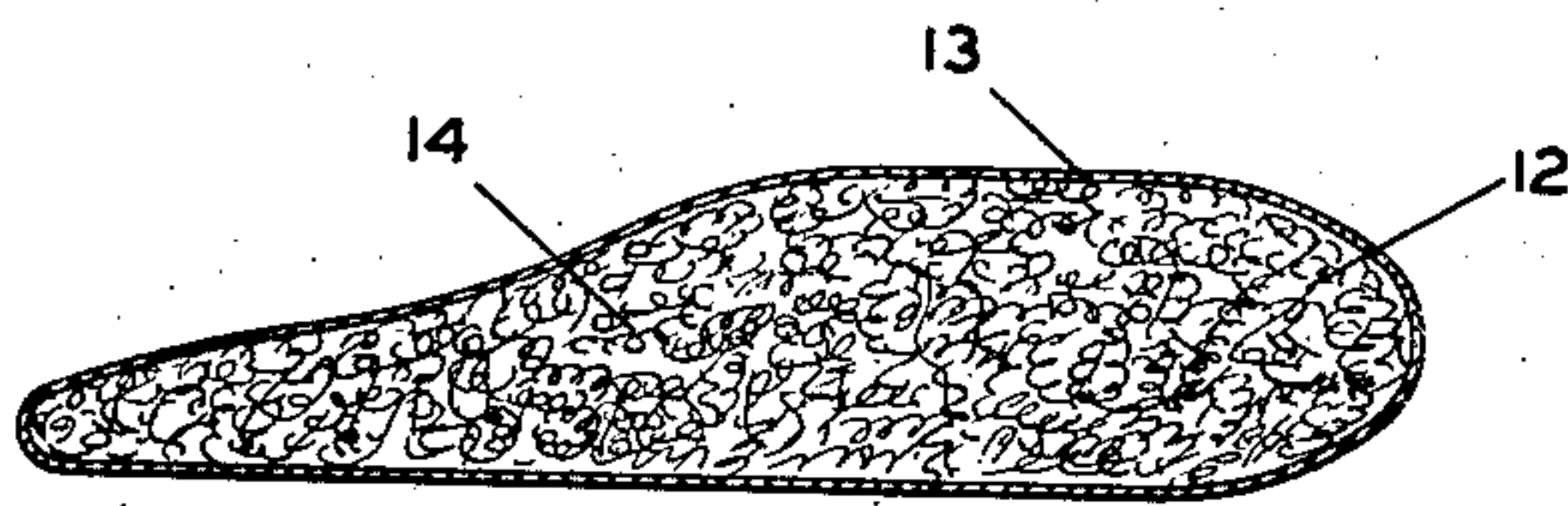


Fig. 4.

See Wilson

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ANGULAR PILLOW

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Application July 14, 1936, Serial No. 90,484

3 Claims. (Cl. 5—338)

The invention relates to a device for supporting the upper portion of a person while in a face downward, or ventral decubitus position and the invention will be referred to sometimes herein-
 5 after as a combined pillow and chest supporter.

It has been appreciated, particularly by the medical profession, that there are many advantages in lying or sleeping face downwardly. It is recalled that in cases of extreme exhaustion,
 10 the exhausted person instinctively lies on his face and little children likewise take this position while sleeping. In this position the nose is able to drain itself and in the event of vomiting or milk regurgitation the chances of suffocation
 15 are minimized. In this position the circulation is aided as the weight of the viscera on the large vessels of the abdomen is relieved and in general all of the organs return to their natural placement with certain noticeable results, among
 20 which may be mentioned the fact that the feet become warm and there is a resulting sound, uninterrupted sleep. While these advantages have been appreciated, difficulty has been made in providing a form of pillow or rather head and
 25 body support which will permit free access of air to the mouth and nose of the person while in such ventral decubitus position. Certain cumbersome and complicated body rests have heretofore been suggested and which include trans-
 30 verse air channels between the forehead and the chest supporting parts of a bed mattress and into which channel the face of the user protrudes. These suggested constructions necessitate a new form of mattress which among other reasons are
 35 not practical because of the expense involved in constructing them and they can not be turned or adjusted to the requirements of the user as are the present forms of pillows.

The primary object of this invention is to provide a simplified, inexpensive pillow-like device which can be shifted about as present forms of pillows in general use can be adjusted from time to time while in use; which can be used as such
 40 pillows are now used while sleeping on the back or on either side and which additionally can be utilized when the user is in the ventral decubitus position to provide not only a head rest but also
 45 a shoulder support and at the same time to permit a free supply of air for breathing to the user while sleeping face downwardly.

Broadly, the invention is attained by providing a cushioning support resembling a conventional pillow except that it is angled, that is of an L-
 55 shaped or V-shaped form, or which when intend-

ed to be used by two persons may be of a double or T-shaped form.

While the device is intended to be marketed commercially in a limited number of sizes, as for instance in three standard sizes, one for adults,
 5 one for adolescents and one for small children, it is preferable that the device be custom-made for the individual who intends to use it, and when so made is dimensioned to correspond at least roughly to certain skeleton dimensions of the
 10 user's head and upper portion of the body.

Various other objects and advantages of the invention will be in part obvious from an inspection of the accompanying drawing and in part will be more fully set forth in the following par-
 15 ticular description of one form of device embodying the invention, and the invention also consists in certain new and novel features of construction and combination of parts hereinafter set forth and claimed. 20

In the accompanying drawing:

Fig. 1 is a plan view of a sleeping device constituting a preferred embodiment of the invention;

Fig. 2 is a transverse sectional view taken on
 the line 2—2 of Fig. 1;

Fig. 3 is an explanatory plan view looking from the underside upwardly of the device of Fig. 1 shown in its relation to the skeleton outline of the user with the head and left shoulder sup-
 30 ported while the user is in a ventral decubitus position; and

Fig. 4 is a longitudinal sectional view showing a modified form of the invention as if taken along the vertical plane indicated by the line 4—4 of
 35 Fig. 1.

Referring first to the showing in Fig. 1, there is disclosed a one-piece cushioning device 10, angular or L-shaped when in plan and formed of
 40 two identical sections 11 and 12 each of substantially pillow length and preferably of less length than the conventional form of bed pillows now in general use. The sections extend from each other at substantially 90°, and in the illustrated
 45 embodiment of the invention extend approximately at 85° so that the preferred form is more of a V than an L when considered in plan.

Sections 11 and 12 are of equal length and are elliptical in cross section as shown in Fig. 2. It will be understood that the construction may be
 50 elliptical, circular or any other form commonly found in pillows of conventional design and which construction will be referred to sometime hereinafter as a conic form in cross section. Except for the V or L-shaped configuration and the di- 55

mensions herein featured, the device is intended to represent in its construction any known form of pillow and thus is of greater softness than a mattress or furniture cushion. Like conventional

5 forms of pillows it includes a jacket or container 13 with conventional form of stuffing material 14 and is intended to be contained in a removable pillow case as is usual with conventional forms of pillows.

10 Referring to the skeleton outline shown in Fig. 3, the bridge of the nose of the user is shown at *a*, the first rib at *b*, the acromial joint at *c*, the supra-sternal notch at *d*, the forehead at *e*, the nose at *f*, the mouth at *g* and the chin at *h*.

15 Each section 11 and 12, has a length along *i—j* at least equal to the distance from the bridge of the nose and the first rib *b*; has a width *k—l* equal substantially to the distance between the acromial-clavicular joint *c* and the supra-sternal notch *d*. Sections 11 and 12 provide a V-shaped opening 15 in the angle therebetween to receive the nose *f*, mouth *g* and chin *h* of the user disposed as noted in Fig. 3 in the crotch of the angle while the forehead *e* is supported on top of the

25 angled portion of the device, that is at the juncture of the sections 11 and 12. In this construction it will be noted that the breathing space 15 is exposed on one side that is, this space is wide open to the environmental atmospheric air to permit free breathing by the user while in the ventral decubitus position illustrated in Fig. 3. Making the angled opening sharply pointed as shown at 16 permits a large portion of the jaw to be supported by the underlapping section 11 or 12 and this, incidentally brings the mouth and nose up close to the forehead supporting section and this in turn tends to increase the open air clearance space to the outside air.

While the device as illustrated in Fig. 3 is supporting the left side of the face, it is understood that the device may be turned over about the axis *i—j* to support the right side of the face and may be reversed about a perpendicular axis with the same side uppermost so that, for instance,

45 section 11 may be utilized to support the upper portion of the chest rather than section 12 as in the position illustrated. It is also possible to utilize the device as conventional pillows are utilized when lying on the side or back by turning the shoulder supporting section upwardly or outwardly away from the body thus utilizing one or both of the sections on one or the other side of the external angle 17. It is also possible when the user is lying on the back to locate the crotch

55 16 in back of the neck with the ends of the sections 11 and 12 overlapping the shoulders of the user and thus provide a neck rest. These are simply alternative uses to which the device may be placed but it is primarily designed to promote restful sleep when the user is in a ventral decubitus position.

In the modified form of the invention suggested in Fig. 4, one section 12 is gradually reduced in depth from a mid-length portion towards the end of the shoulder supporting portion thereby to provide a support for the shoulder and which support will not be quite so high as the forehead supporting portion at the crotch and thus will

accommodate itself more readily to the contour of the user's shoulder than the sections of uniform depth suggested in the above description of Fig. 1.

It is obviously within the scope of the disclosure to so reduce the depth of the outer ends of both sections but even where this modified form of structure is utilized it is preferable to leave one of the sections of uniform depth from end to end so that the section of uniform depth may be utilized as is a conventional pillow.

Another form of the invention disclosed herein is illustrated in my application Serial No. 124,383 filed February 6, 1937.

While there have been shown, described and pointed out in the annexed claims, certain novel features of the invention, it will be understood that various omissions, substitutions and changes in the form and details of the device illustrated and in its operation may be made by those skilled in the art without departing from the spirit of the invention.

I claim:

1. A sleeping device constituting a combined pillow and chest supporter for use while the user is in a ventral decubitus position, said pillow being angled shaped when considered in plan and comprises two sections of substantially equal width and length and extending approximately at right angles to each other, each section being a conic section in transverse cross section and each section having a length at least equal to the distance between the bridge of the user's nose and the first rib and having a width substantially equal to the distance between the supra-sternal notch and the acromial-clavicular joint.

2. A sleeping device constituting a combined pillow and chest supporter for use by a person when in a ventral decubitus position, said device comprising two similar sections extending substantially at right angles to each other and each of substantially pillow length, the top part of the device adjacent the angle providing a support for the forehead of the user and each section having a length sufficient to extend only from the forehead to the shoulder of the user and having a width substantially equal to the distance between the supra-sternal notch and the acromial clavicular joint.

3. A pillow having a relatively flat upper and lower side each designed for supporting the upper portion of a person while in a ventral decubitus position, comprising a one-piece cushioning device including a relatively high support for the user's forehead and a relatively low support for at least one of the user's shoulders, said supports being of substantially the same configuration in plan and of substantially flat elliptical form in cross section, extending sharply at an angle to each other and providing therebetween a sharply pointed V-opening fashioned to receive the nose, mouth and chin of the user in the crotch of the angle while the forehead and one shoulder of the user is supported in such ventral decubitus position elevated off the support on which the pillow and the balance of the person rests.

RAFAEL GONZÁLEZ-RINCONES.

CERTIFICATE OF CORRECTION.

Patent No. 2,149,140.

February 28, 1939.

RAFAEL GONZÁLEZ-RINCONES.

It is hereby certified that error appears in the above numbered patent requiring correction as follows: In the drawing, lower left-hand corner thereof, strike out the notation "See Wilson 1900474 X5-357"; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 21st day of November, A. D. 1939.

(Seal)

Henry Van Arsdale,
Acting Commissioner of Patents.