March 19, 1957 J. A. E. GOGUEN 2,785,418

POSTURE BOARD

Filed April 7, 1954

Fig. 1.

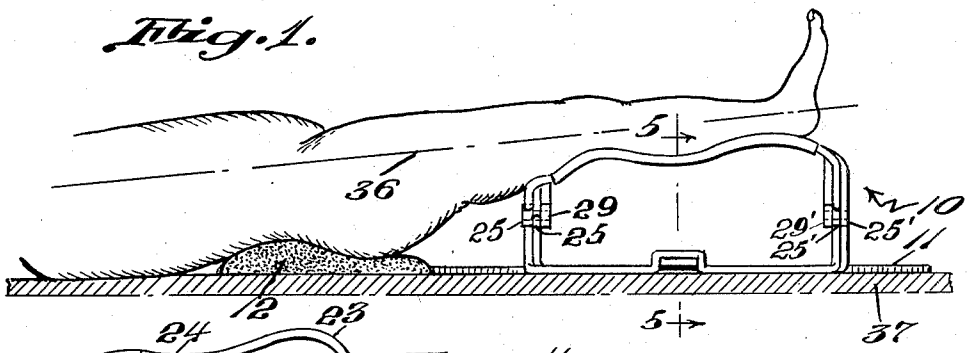


Fig. 4.

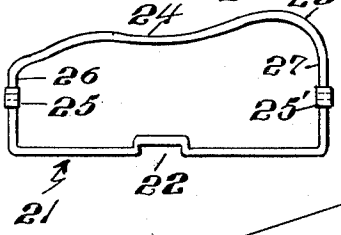


Fig. 2.

Fig. 3.

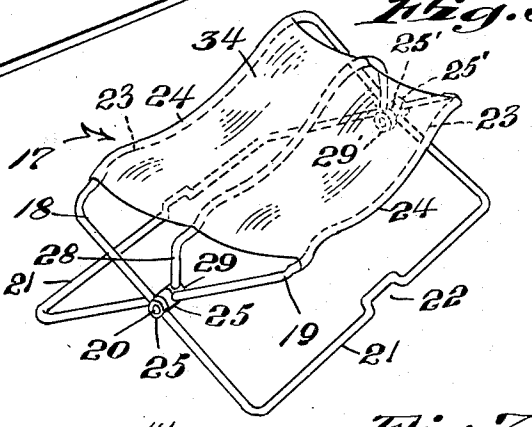


Fig. 5.

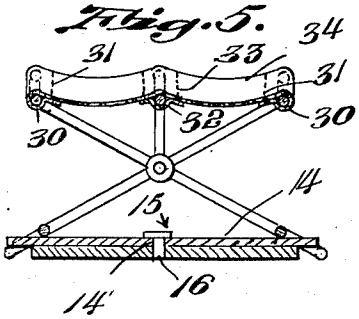


Fig. 7.

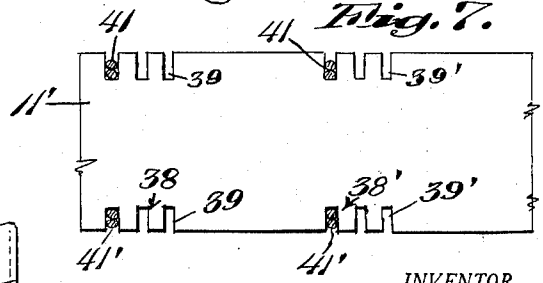
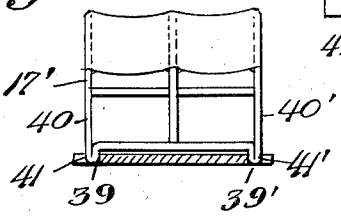


Fig. 6.



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2,785,418

POSTURE BOARD

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7 Claims. (Cl. 5—327)

This invention relates to a posture board or apparatus and has for an object to provide a device of this character which is particularly adapted for supporting the body of a person in a lying position with the lower limbs upwardly inclined in a manner to promote comfort and relaxation.

Another object of the invention is to provide an apparatus for supporting the body of a person at an upwardly inclined position in a generally straight line extending from adjacent the shoulders to the feet.

Another object of the invention is to provide an apparatus adapted for engaging and supporting the small of the back in an elevated position.

A more specific object is to provide an apparatus of the above character wherein the legs will be supported outstretched from the thigh to the feet and the body will be supported at the small of the back all along an upwardly elevated inclination.

Another object is to provide an apparatus having a rigid support provided with a back-engaging portion which extends along the general contour of the small of the back with leg and thigh-engaging portions conforming generally to the back side of the legs from the thigh to the feet when outstretched.

Another object is to provide an apparatus of the above character having a back-engaging portion of a leg-engaging portion which may be adjustable as to the spacing therebetween.

Another object of the invention is to provide an apparatus of the above character which may be easily dismantled and the parts folded together for storage or other purposes.

With these and other objects in view, the invention consists of certain novel features of construction as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings:

Figure 1 is a side elevational view of an apparatus embodying my invention and illustrating a person supported thereby in an upwardly inclined lying position;

Figure 2 is a perspective view of the base portion of the apparatus shown in Figure 1;

Figure 3 is a perspective view of the leg rest portion of the apparatus;

Figure 4 is a side elevational view of one of the frames of the support shown in Figure 3;

Figure 5 is a section taken substantially along lines 5—5 of Figure 1;

Figure 6 is an end elevation partly in section of a modified construction; and

Figure 7 is a top plan view of a fragmental portion of the base shown in Figure 6.

The posture board or apparatus according to the invention comprises base and rest portions which are attached together and arranged to support a person in a lying position so that the body will be supported at an upwardly inclined position along a generally straight line from the shoulders to the feet with the feet uppermost.

Thus, a better circulation of the blood may be had to the upper regions of the body to promote a more complete relaxation than were the person lying in a usual manner on a horizontal bed. This is accomplished by supporting the legs in the said inclined position from a location above the knee to a location adjacent the feet. Thus the legs from the hips extend in a general straight line. The back rest portion engages the small of the back and adjacent body portions so as to elevate and support the body at the mid section at the general inclination of the legs. Thus the entire body from adjacent the shoulders is comfortably supported in an upwardly inclined position in a general straight line.

Referring to the drawings, **10** designates generally a posture board or apparatus comprising a base **11** which is of elongated form (see Figure 2) and may be made of any suitable stiff material, as for example wood. The base **11** may be conveniently made of ply wood, since such material may be had in sheet form of a dimension to permit the base to be cut out therefrom as a single unit without waste. At one end of the base **11** I form a back support **12** as by means of a padding which is arranged to extend lengthwise of the base on a curvature which is particularly adapted to fit the small of the back and adjacent body portions of the user to cause the user to be comfortable. The padding is not made sufficiently yieldable for the body to sink therein but will yield slightly to be deformed to follow the general contour of the body portion engaged thereby. This rest is of a height to raise the part engaged or mid section of the body to incline the same upwardly from the shoulders of the user. The base is additionally provided with a plurality of openings **13** therethrough, and these may be equally spaced from each other lengthwise of the base and centrally thereof. A bar **14** is provided with an opening **14'** (see Figure 5) therethrough and is positioned to extend laterally across the base with its opening **14'** in register with a selected one of the said openings **13**. A pin **15** is provided with a shank portion **16** which is removably received in the opening **14'** to extend into the selected opening **13** in register with said opening **14'**, thus securing the bar **14** in adjusted position lengthwise of the said base. The bar **14** is of a length to extend beyond the opposite sides of the base, as shown.

The leg support or rest designated generally **17** (best seen in Figure 3) is preferably made of wire material and comprises a pair of frames **18, 19** which are pivotally secured to each other as at **20** whereby the frame may be folded to a closed position or unfolded to an open position, as shown in Figure 3. Each frame is substantially similar to the other and has a lower foot portion **21** (see Figure 4) of a general U shape, and the bight thereof has a recess **22** therein which is formed by bending the bight in an appropriate manner as shown. The upper part **23** is also of generally U shape, but the bight **24** thereof is made to extend on the curvature to follow the general contour of the back of the human leg from a location above the knee to adjacent the heel. The end extremities of the sides of the portions **21, 23** are joined to each other as by means of bearing blocks or disks **25, 25'** which are centrally apertured, the said portions **21, 23** being joined to these bearing blocks as by means of a welding operation. The side **26** of the upper portion **23** is made shorter than the side **27** so as to upwardly incline the said bight **24**. A center support **28** which is substantially similar to the frame portion **23** is likewise provided at the end extremities thereof with bearing blocks **29, 29'** which are likewise mounted on the pivot pins **20**. A flexible sheet of material such as canvas is secured at the opposite marginal edges thereof to the bight portions **24** of the frames and to the central support **28** in any appropriate manner, as for example by turning the mar-

ginal edges **30** to enclose the bight portion **24**, as shown in Figure 5, and there stitched as at **31** to the upper portion of the sheet. The central portion of the sheet may be secured to the support **28** as by means of a strip material **32** engaging the underside of the bight of the support **28** and stitched to the sheet as at **33**. Thus, there is provided a surface **34** adapted to be engaged by the legs of the user from the thigh to the heel portion thereof. This surface **34** extends on the general contour of the back side of the leg of the user from the said thigh portion to the heel. As previously stated, the bight portions **24** are inclined upwardly and the inclination is such that when the rest **17** is in the position of use, the angle of inclination is approximately 15 degrees from the horizontal. The rest **17** is attached and secured to the base **11** by placing the recesses **22** over the protruding ends 35 of the bar **14**.

Referring to Figure 1, it will be seen that the legs of the user are held upwardly inclined in an outstretched position and that the body is elevated and supported at the small of the back and adjacent body portions in a nearly straight line with the angle of inclination of the legs as indicated by dot and dash lines **36**. Thus, the mid section portion of the body is prevented from sinking into the bed **37**. Consequently, the entire body from some point adjacent the shoulders to the feet is inclined upwardly in a generally straight line whereby to promote relaxation as previously stated.

In Figures 6 and 7 I have shown a modified construction of base **11'** and leg rest portion **17'**. The base **11'** is provided with two groups **38**, **38'** of notches **39**, **39'** at opposite marginal edges thereof with the notches **39** being spaced from each other a distance similar to the spacing of the notches **39'**. The rest **17'** is non-collapsible, and its lower edges or sides **40** are provided with depending foot portions **41**, **41'** which are spaced a distance to correspond to the spacing between a notch **39** in the group **38** with a similarly disposed notch **39'** in the group **38'**. These foot portions **41**, **41'** are received in the said notches to adjustably secure the said rest **17'** on to the base **11'** (see Figure 7).

I claim:

1. An apparatus adapted for use to promote comfort and relaxation to a person in a lying position comprising a base having a leg rest member with a leg-supporting surface upwardly inclined on a sinuous curvature adapted for engagement of the back of the leg of the user and a back rest portion integral with the base at one end portion thereof and of a height adapted to be engaged by the small of the back of the user to elevate and support the mid portion of the user along the general inclination of the said leg-supporting surface.

2. An apparatus as set forth in claim 1 wherein said leg rest member is adjustably secured lengthwise of said base.

3. An apparatus as set forth in claim 1 wherein said leg-supporting rest extends on a sinuous curvature and of a length for engagement of the back contour of the human leg from the thigh to adjacent the heel.

4. An apparatus as set forth in claim 1 wherein said leg rest comprises a pair of similar frames having foot parts and upper sides and pivotally secured to each other and a flexible leg-supporting surface extending between the said upper side of said frames and secured thereto.

5. An apparatus adapted for use to promote comfort and relaxation of a person in a lying position comprising a base having a leg rest provided with a leg-engaging surface upwardly inclined on a sinuous curvature and a back rest portion raised from the plane of the base and extending on a curvature in cross section of the base.

6. An apparatus as set forth in claim 5 wherein said base has a laterally extending bar and said leg rest is provided with foot portions, each provided with a recess for engaging said bar for securing said leg rest in its relative position to said base.

7. An apparatus as set forth in claim 6 wherein said bar is adjustable lengthwise of said base.

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