Sept. 5, 1950 L. B. McGUFFAGE 2,521,530

ADJUSTABLE PILLOW BLOCK

Filed July 29, 1948

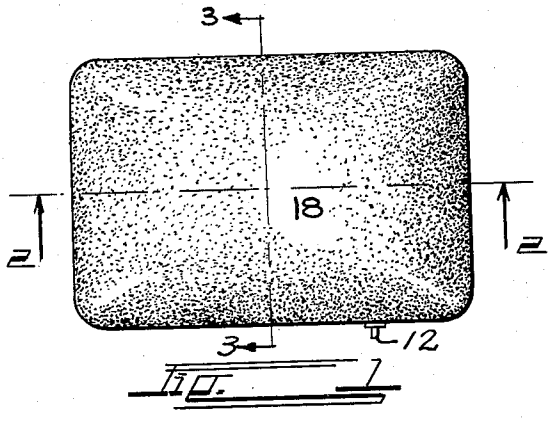


Fig. 1

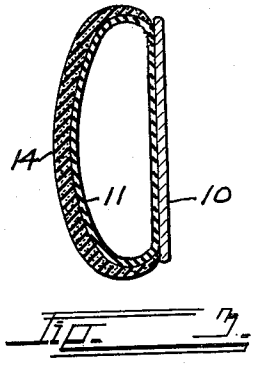


Fig. 3

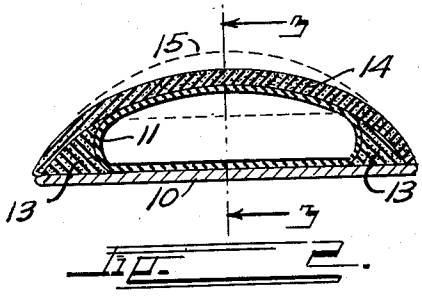


Fig. 2

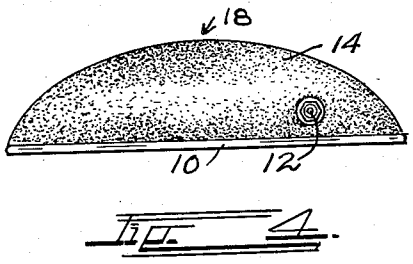


Fig. 4

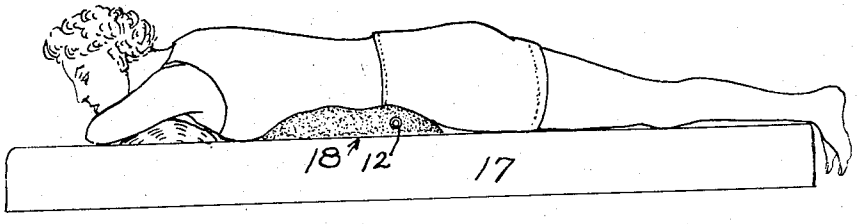


Fig. 5

INVENTOR.
LOIS B. McGUFFAGE.
BY
Martin E. Anderson
ATTORNEY.

Patented Sept. 5, 1950 2,521,530

UNITED STATES PATENT OFFICE

2,521,530

ADJUSTABLE PILLOW BLOCK

Lois B. McGuffage, Denver, Colo.

Application July 29, 1948, Serial No. 41,360

2 Claims. (Cl. 5—327)

1

This invention relates to improvements in physical therapy apparatus and relates more particularly to an adjustable pillow block for use in giving physical therapy treatments, such as massage and other manipulative treatments.

In giving physical or manipulative treatments, it is frequently necessary to support certain portions of the body out of contact with the table on which the patient rests, and for this purpose pillows or pillow blocks have been employed.

It is the object of this invention to produce a pneumatic pillow block for the purpose indicated, that can be readily adjusted as to thickness to adapt it to the need of the patient.

A further object is to produce a pillow block of such construction that it will retain its form and will be yieldable to conform to the body curvature without causing discomfort.

A still further object is to produce a device for the purpose specified which shall be sanitary and readily cleanable.

The above and other objects that may become apparent as this description proceeds are attained by means of a construction and an arrangement of parts that will now be described in detail, and for this purpose reference will be had to the accompanying drawing in which the invention has been illustrated in its preferred form, and in which:

Figure 1 is a top plan view of the pillow block;

Figure 2 is a longitudinal section taken on line 2—2, Figure 1;

Figure 3 is a transverse section taken on line 3—3, Figures 1 and 2;

Figure 4 is a side elevation looking upwardly in Figure 1; and

Figure 5 is a view showing the manner in which the pillow block is employed illustrating one position of the patient with respect thereto.

The pillow block that forms the subject of this invention and which has been illustrated on the drawing, consists of a flat base 10 that has considerable rigidity. This base may be made of any suitable material, either rubber, plastic or wood, but is preferably formed from some rubber or rubber-like material compounded and cured in such a way that it will bend to a considerable extent without breaking, but will also have sufficient rigidity to keep the pillow block in its proper shape.

Supported on the top of the base and vulcanized or otherwise secured thereto, is an airtight bag that has been designated by reference numeral 11. This bag may be made from natural or artificial rubber and is provided on one side

2

with a valve stem 12, so that air may be introduced into the bag by means of an ordinary tire pump. The rubber bag is of substantially the same width as the base, as shown in Figure 3, but is slightly shorter than the base, as shown in Figure 2. At each end of the bag, sponge rubber abutments 13 are positioned. These abutments are preferably attached to the base and to the ends of the bag by some suitable agglutinant. The function of the abutments is first to limit the lengthwise expansion of the bag, and, secondly to assure that when the bag is partially inflated, it will not collapse completely at its ends, but will be held at least in partly open position, the weight of the body supported thereon being at least partially supported by the soft sponge rubber abutments. Enclosing the whole pillow block is a cover 14 of sponge rubber. This may be detachably secured to the pillow block so that it may be readily removed therefrom, if desired. It is also possible to have covers shaped somewhat differently so as to obtain various effects by interchanging such covers. In Figure 2, the expanded position of the pillow block has been indicated by dotted line 15, while a similar line 16 shows the position in deflated condition.

This pillow block is designed for use in giving physical therapy treatments, such as massage and/or chiropractor or osteopath treatments; in fact wherever manual manipulation is used.

In Figure 5, the table has been designated by reference numeral 17 and the pillow block in its entirety by reference numeral 18. The pillow block is positioned on the table and the patient then lies down on the same. In the view shown in Figure 5, the patient is lying face downwardly, but there may be times when the pillow block is positioned under the patient's back, or wherever necessary or desirable.

By means of an air pump the pillow block may be inflated so as to raise the patient from the table to any extent desired. The flexibility of the bag with its cover assures that the surface of the pillow will conform to the shape of the body, especially with low internal air pressures. The air pressure within the pillow block may be increased, thereby increasing the rigidity of the pillow block to any extent deemed desirable.

In addition to the uses pointed out above, this pillow block is especially designed for use in traction and elongation of the spine.

From the above description it will be apparent that the pillow block that has been illustrated

on the drawing and description herein is of a simple and substantial construction, that it can be readily adjusted as to thickness by inflation and that due to the presence of the end abutments 13, the upwardly curvature will always remain at a considerable angle, regardless of the air pressure within the bag. It is apparent that without the abutments 13, the bag, if made of elastic material, would extend longitudinally and that any pressure applied to its edges could completely collapse the bag along the edges where such pressure is applied, whereas with the use of the abutments this cannot take place.

Having described the invention what is claimed as new is:

1. An inflatable physical therapy device comprising, a flat base adapted to rest on a flat supporting surface, an airtight bag of flexible material attached to the upper surface of the base, a valve stem in communication with the interior of the bag, the bag being substantially the same width as the base, but of less length, the ends of the base projecting beyond the ends of the bag, and sponge rubber abutments of triangular cross section at the ends of the bag.

2. A physical therapy device comprising, a base adapted to rest on a supporting surface, an airtight bag of flexible material attached to the upper surface of the base, the base extending beyond the ends of the bag, fillers of sponge rubber of triangular cross section attached to the base adjacent each end of the bag forming abutments for the latter and a covering of sponge rubber for the top of the bag and for the end abutments.

LOIS B. McGUFFAGE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,795,304	Howard	Mar. 10, 1931
2,077,233	Greenhill	Apr. 13, 1937

FOREIGN PATENTS

Number	Country	Date
435,730	Great Britain	Sept. 26, 1935