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3,114,545 COLLAPSIBLE AND ADJUSTABLE HEAD STAND APPARATUS

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2 Claims. (Cl. 272-60)

This invention relates to physiotherapy and deals with improvements in head stands.

The present invention is a carrying forward of the basic ideas expressed in Patent No. 2,919,918, issued to me on Jan. 5, 1960, entitled Head Stand.

The invention to be hereinafter described and claimed has been designed to provide improvements in the type of head stand disclosed in the above mentioned patent.

The primary object of this invention is to provide a collapsible head stand that can be easily and quickly assembled and disassembled for carrying in a hand portable carrying case.

Another object is to provide a head stand that meets all the requirements for strength and durability and presents a nice workmanlike appearance.

A further object is to provide a head stand having quick adjustments for accommodating the stand to people of various sizes.

Briefly stated, the invention comprises three main pieces all of which are essentially flat and may be packed into a rather thin carrying case. The weight has also been given consideration by making the supporting structure of thin wall material which lends itself readily to shaping and presenting a workmanlike device. The three pieces are assembled into a head stand by means of two telescoping joints and two specially designed screw threaded couplings.

Other objects and advantages will become apparent as the description proceeds in conjunction with the drawing in which:

FIG. 1 is a side view of my complete device;

FIG. 2 is a side view, partly in section, of one of the side arms removed from the base, with the shoulder support removed;

FIG. 3 is a side view of the base showing how the telescoping joints and the screw threaded couplings are constructed;

FIG. 4 is a side view of the shoulder support;

FIG. 5 is a plan view of the under side of the shoulder support;

FIG. 6 is a cross section taken on line 6-6 of FIG. 5; and

FIG. 7 is a perspective view of the device as it appears when set up for use.

Referring to the drawing and particularly to FIG. 7, it will be seen that my invention consists of three main parts, namely, a base 11 made of any suitable material such as hard wood or plastic, and two side arms, generally designated 12, which are identical and which include the shoulder support that for purpose of general description shall be considered as part of the arm to which it normally is attached.

Taking up the above parts for a more detailed description, it is pointed out that the base 11 carries an upright stud 13 on each side adapted to slidably receive the lower end of an upright section of pipe 14 forming a

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standard for the arm 12. The lower end of the pipe 14 rests on a shoulder 15 on the bottom of the stud 13 forming an enlarged head 16 that is press fitted into a hole in the base 11 and may be cemented in place if desired.

Near the upper end of the pipe 14, I connect another section of pipe 17 which extends outwardly and downwardly and carries a plug 18 in the lower end which is formed with a flange 19 above a conical terminating stud 21. Mounted over the flange 19 is a screw threaded collar 20. When the pipe 14 is fitted over the stud 13, the conical termination 21 at the end of pipe 17 will coincide with a cavity 22 in the upper end of a short screw threaded stud 23, which is also press fitted in the base 11 similar to the stud 13 thus forming a solid connection between the base and the side arm.

The upper end of the pipe 14 carries a shoulder supporting arrangement consisting of a rod 24 adapted to slidably fit into the pipe 14 and is regulated in height by a pin 25 passing holes 26 and a hole 27 in the upper end of the pipe. A plate 28 is secured to the upper end of the rod 24 and it will be seen in FIG. 5 that the rod 24 is offset with respect to the center line of the plate 28, thereby providing means for adjusting the distance between the shoulder supports to accommodate the stand to people of various sizes by rotating one or both of the supports in the pipes 14. A pad 29 is secured to the plate 28 by folding a piece of carpet, or any other suitable soft material, upon itself and attaching the folded carpet to the plate by means of cross strips 30 which extend in over the inturned edges of the carpet and hold it in place on the plate by small screws 31. In applying the carpet, it is allowed to extend beyond the ends of the plate and is loosely applied which makes a soft yielding pad that protects the user from any contact with the plate.

On the surface of the base member 11, I fix a similar piece of carpet 32 in any suitable manner to protect the head of the user.

To disassemble the device, for carrying purposes, the screw threaded collars 20 are loosened and the arms 12, with the shoulder pads in place, are lifted off the base and, as it can be seen, the arms are so designed as to lay on the base intact opposite each other thereby producing a flat package arrangement suitable for carrying in a case, which is a part of this invention.

The whole is a neat, smooth, light, durable, and workmanlike arrangement for a head stand that will fit into any surroundings and lend itself readily to any decorative effects.

I claim:

1. A head stand comprising a base member, two side arms, means for detachably mounting said side arms on opposite sides of said base member respectively, said means including an upstanding stud on two opposite sides of said base member, an upstanding screw threaded stud having a tapered cavity in the end thereof spaced from each of said first mentioned studs along the side of said base member, said side arms having an upright tubular member adapted to slidably fit over said first mentioned stud, a member fixed to and extending from said upright member, a tapered terminating member on the end of said extending member adapted to fit into said cavity in said screw threaded stud, and a collar as-

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sociated with said terminating member arranged to engage said screw threaded stud to hold said arm on said base member.

2. Claim 1 and add, a rod slidably mounted in the upper end of said upright tubular member, means for fixing said rod at selected fixed points in said tubular member, a plate supported on the upper end of said rod, and a pad attached to said plate, said rod and said plate being connected at a point offset with respect to a longitudinal center line of said plate.

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