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C. B. HUGHES

CRUTCH

Filed May 26, 1923

Fig. 1

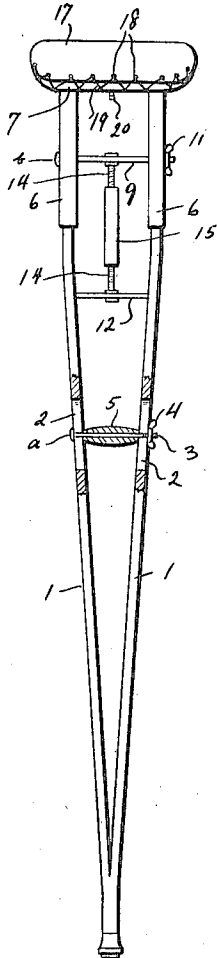


Fig. 2

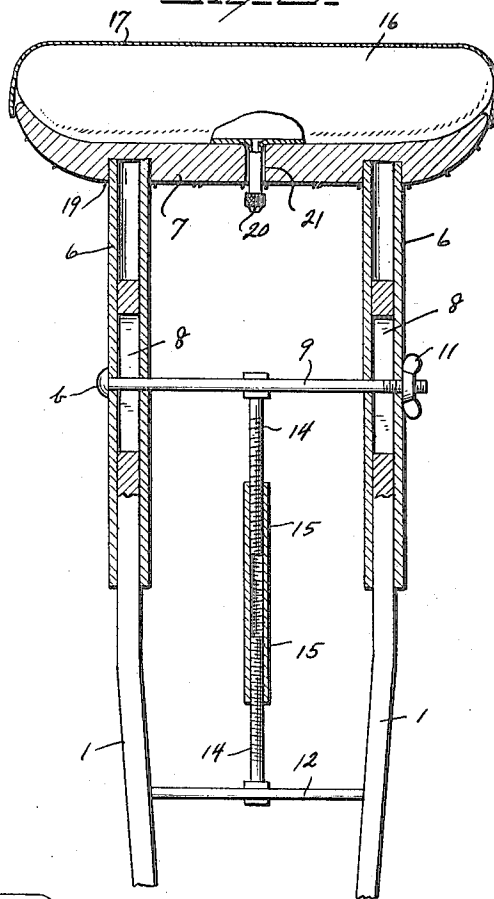
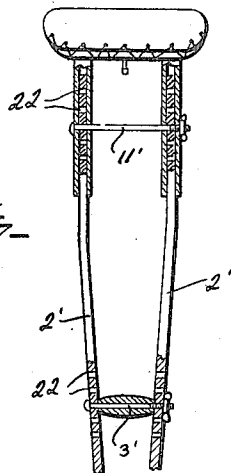


Fig. 3



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CRUTCH.

Application filed May 26, 1923. Serial No. 641,676.

To all whom it may concern:

Be it known that I, CHARLES B. HUGHES, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Crutches, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in crutches and it is an object of the invention to provide a device of this general character embodying novel and improved means whereby the same may be readily extensible or adjustable so as to be employed by persons of different heights.

It is also an object of the invention to provide a novel and improved device of this general character wherein the crutch head or saddle has associated therewith a pneumatic pad or cushion to afford greater ease and comfort under the arm-pit.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved crutch whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:—

Figure 1 is a view partly in elevation and partly in section illustrating a crutch constructed in accordance with an embodiment of my invention;

Figure 2 is an enlarged fragmentary view partly in section and partly in elevation illustrating in detail certain features of the crutch as comprised in Figure 1;

Figure 3 is a fragmentary view partly in elevation and partly in section illustrating a crutch constructed in accordance with another embodiment of my invention;

As disclosed in the accompanying drawings, the crutch rods 1 at predetermined points intermediate their ends are provided with longitudinally disposed slots 2 through which are directed the headed rod 3, the head *a* thereof having contact from with-

out with one of the rods 1 while engaged with the outer edge of the second rod is a wing nut 4 or the like threaded upon said rod. The rod is also disposed through a hand grasp or handle 5. By loosening the nut 4 the hand grasp or handle 5 may be adjusted lengthwise of the slots 2 in accordance with the necessities of practice and maintained in such desired adjusted position upon tightening movement of the nut.

The upper end portions of the rods 1 are telescopically engaged within the sleeves or casings 6 carried by the opposite end portion of the crutch head or saddle 7 and the portions of the rods 1 extending within the sleeves or casings 6 are also provided with the longitudinally disposed slots 8 through which is directed the headed rod 9; said rod being also disposed through the sleeves or casings 6. The head *b* of the rod 9 has exterior contact with a sleeve or casing 6 while the opposite end portion of said rod has threaded thereon a nut 11 having exterior contact with a second sleeve or casing.

Bridging the space between the rods 1 and secured thereto is a fixed rod 12, said rod being positioned at a desired point between the hand grasp or handle 5 and the outer ends of the sleeves or casings 6. The central portions of the rods 9 and 12 are provided with the members 14 disposed one toward the other and reversely threaded. Engaged with the members 14 is a nut or sleeve 15 whereby upon requisite turning movement of the nut or sleeve 15 the head or saddle 7 can be moved toward or from the adjacent ends of the rods 1 whereby the crutch in its entirety may be lengthened or shortened as required. The coacting members 14 and nut or sleeve 15 constitute a turn-buckle connection between the rods 9 and 12. It is to be understood that before the nut or sleeve 15 is operated, the nut 11 is loosened and that after the desired adjustment of the head or saddle 7 has been obtained, said nut is tightened.

Associated with the head or saddle 7 is an inflatable member or tube 16 maintained in applied position upon said head or saddle by the casing 17 of soft leather or other suitable material, said casing in its marginal portion being provided with the grommets or eyelets 18 through which is suitably threaded a lacing 19, said lacing 19 also

being disposed under the head or saddle 7 whereby the casing 17 maintains the tube 16 in applied position.

Operatively carried by the tube 16 is an inflating valve 20 of a conventional type and which is disposed through a suitable opening 21 in the head or saddle 7 and extending inwardly thereof.

While I have hereinbefore shown the adjustments for the hand grasp or handle and the saddle to be effected through the provision of suitable slots in the crutch rods, said rods 2' as illustrated in Figure 3 may be provided at suitable points thereon with a series of longitudinally spaced openings 22 through which the rods 3' and 11' are adapted to be selectively disposed. This latter structure is particularly adapted for use in homes or permanent use while the first form of invention is particularly adapted for use in hospitals or other institutions where a great many crutches are employed.

From the foregoing description it is thought to be obvious that a crutch constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is

susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:—

An extensible crutch comprising, in combination, a saddle, sleeves depending therefrom, crutch rods telescopically engaged within the sleeves, the inserted end portions of the crutch rods being provided with longitudinally disposed slots, a rod extending through the sleeves and through the slots of the crutch rods, said second named rod bridging the space between the sleeves, said second named rod being provided with means co-acting with the sleeves to hold the rod in a fixed position lengthwise of the slots of the crutch rods, a second rod connecting the crutch rods outwardly of the sleeves, and a turn-buckle connection between said last named rods.

In testimony whereof I hereunto affix my signature.

CHAS. B. HUGHES.