

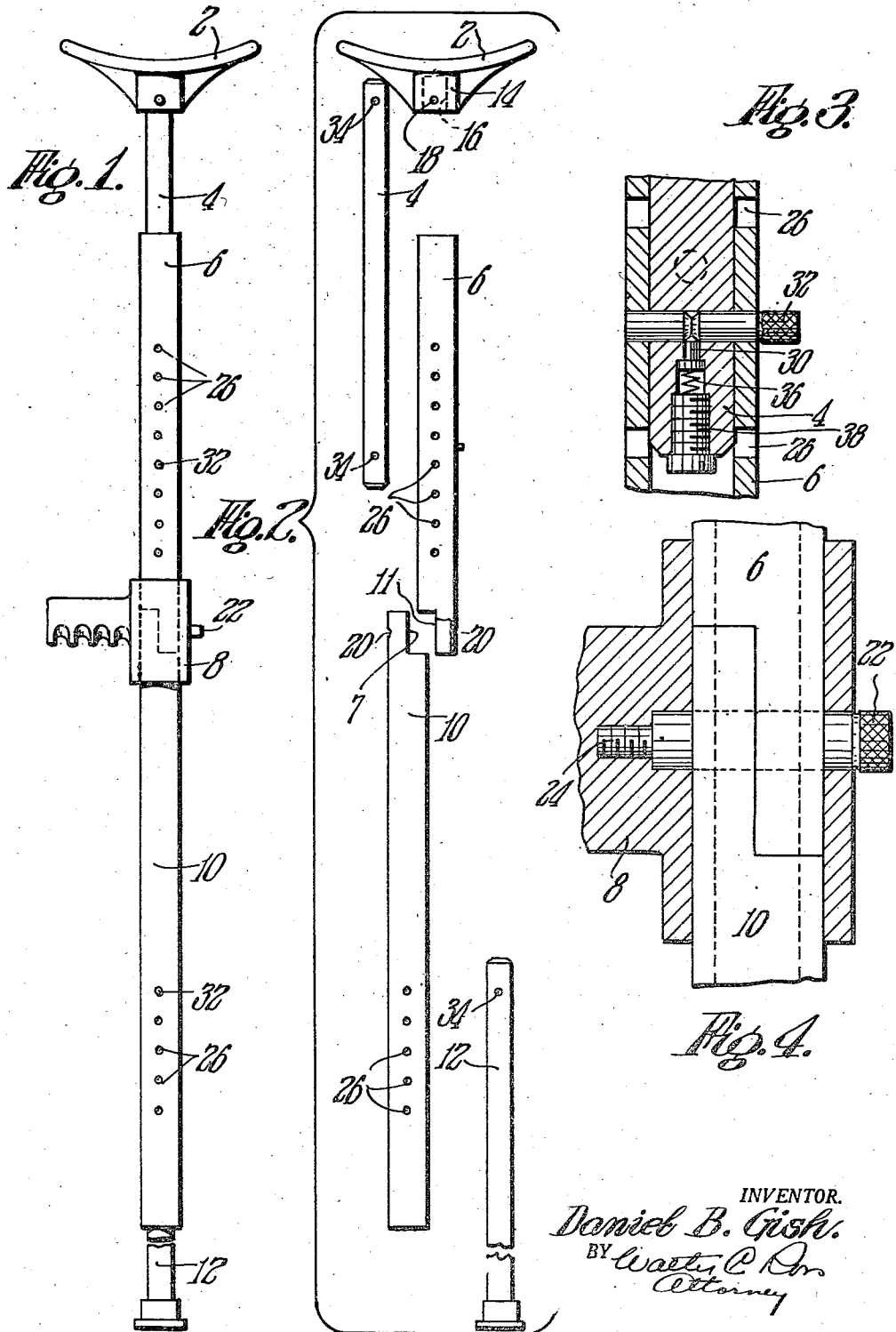
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CRUTCH

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CRUTCH

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3 Claims. (Cl. 135—50)

This invention relates to improvements in crutches.

The principal objects of the invention are directed to the provision of a crutch which comprises a plurality of separable members arranged and constructed for ready and easy assembling and disassembling and for ready and easy relative adjustment of the members.

According to novel features of the invention, the components of the crutch may be made from light, rigid and strong material such as lightweight metal and the adjustability makes it possible to vary the distance between the support for the armpit and an intermediate hand-grip as well as to vary the distance between the said hand-grip and lower end of the crutch.

With the foregoing and various other novel features and advantages and other objects of my invention as will become more apparent as the description proceeds, the invention consists in certain novel features of construction and in the combination and arrangement of parts as will be hereinafter more particularly pointed out in the claims hereunto annexed and more fully described and referred to in connection with the accompanying drawing wherein:

Fig. 1 is a side elevational view of a crutch embodying the novel features of the invention;

Fig. 2 is a side elevational view showing the important components of the crutch in disassembled relation;

Fig. 3 is a vertical sectional view showing the connection of one of the tubes and a rod; and

Fig. 4 is a vertical sectional view showing the connection between the tubes and hand-grip.

Referring now to the drawing more in detail, the invention will be fully described.

The crutch of the invention in a general way includes a support 2, an upper rod and tube 4 and 6, a hand-grip 8 and a lower tube and rod 10 and 12.

The support 2 has a hub 14 which is provided with a socket 16 for receiving the upper end of rod 4 and it has a hole 18 extending there-through.

The upper end of the rod 4 which is receivable in the socket is held therein by means to be described. The tube 6 is adapted to receive the lower end of rod 4.

The hand-grip 8 is provided with a bore to receive adjacent ends of the tubes 6 and 10. Said tubes have the adjacent ends cut away at 7 and 11 or are formed for interfitting engagement within the bore of the hand-grip, as shown in Figs. 1 and 4.

The adjacent ends of the tubes 6 and 10 are provided with holes 20. A pin 22 is provided which is insertable in a hole provided in the hand-grip and in the holes 20 in the tubes said pin 22 has a threaded part 24 for screwing into a tapped hole in the hand-grip, see Fig. 4. With the adjacent ends of the tubes in the hand-grip and the pin 22 positioned, as shown, the said tubes are releasably held in the hand-grip.

The tubes 6 and 10 are provided with spaced holes 26, as shown. There may be other holes disposed ninety degrees from and intermediate the holes shown.

The rods 4 and 6 may be inserted in the ends of the tubes and releasably locked therein by the means to be described or by some other suitable means. Said means is disposed at upper and lower ends of rod 4 and the upper end of rod 12. In describing the said means reference will be made to Fig. 3.

A detent 30 is provided in the ends of the rods which are engageable in circumferential slots or recesses in pins 32. Said pins are insertable in the holes 26 of the tubes, holes 18 of the support 2, and holes 34 of the rods. Springs 36 are disposed between the detents 30 and screws 38 in engagement with the rods. By means of the detents the pins are releasably held in place to releasably lock the rods and tubes together.

By inserting the rods in the tubes that hole 26 in the tubes may be selected which will provide the desired distance between the hand-grip and support and between the hand-grip and lower end of rod 12. It is only necessary to match the holes in the tubes and rods and insert the pins 32. The pins 22 and 32 are readily inserted and withdrawn whereby the components are easily assembled or disassembled.

The invention may be embodied in other specific forms without departing from the essential characteristics thereof. Hence, the present embodiments are therefore to be considered in all respects merely as being illustrative and not as being restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all modifications and variations as fall within the meaning and purview and range of equivalency of the appended claims are therefore intended to be embraced therein.

What it is desired to claim and secure by Letters Patent of the United States is:

1. A crutch construction comprising in combination, a support having a socket and a hole transverse thereto extending into said socket, an

upper rod having an upper end receivable in said socket provided with a hole for registering with said hole in the support, an upper tube for receiving the lower end of said upper rod, a hand-grip provided with a bore, a lower tube, adjacent end portions of said tubes receivable in said bore, a lower rod having an upper end receivable in the lower end of said lower tube, said tubes and rods having registerable holes, means to releasably hold said adjacent ends of the tubes in the bore of the hand-grip, and means to releasably hold the rods in said tubes.

2. A crutch construction comprising in combination, a support having a socket and a hole transverse thereto extending into said socket, an upper rod having an upper end receivable in said socket and a hole for registering with said hole in the support, an upper tube for receiving the lower end of said upper rod, a hand-grip provided with a bore and a hole transverse thereto, a lower tube, adjacent end portions of said tubes receivable in said bore, a lower rod having an upper end receivable in the lower end of said lower tube, said tubes and rods having registerable holes, means to releasably hold said adjacent ends

of the tubes in the bore of the hand-grip, and means to releasably hold the rods in said tubes, said first-named means including a screw member having a part passing through said holes provided in said hand-grip and in said tubes.

3. A crutch construction comprising in combination, a support having a socket and a hole transverse thereto extending into said socket, an upper rod having an upper end receivable in said socket and a hole for registering with said hole in the support, an upper tube for receiving the lower end of said upper rod, a hand-grip provided with a bore and a hole transverse thereto, a lower tube, adjacent end portions of said tubes receivable in said bore, a lower rod having an upper end receivable in the lower end of said lower tube, said tubes and rods having registerable holes, means to releasably hold said adjacent ends of the tubes in the bore of the hand-grip, and means to releasably hold the rods in said tubes, said last-named means including pins insertable in said holes provided in the tubes and rods and spring pressed detents in said rods releasably engaging said pins.

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