Sept. 21, 1971 M. N. HAROCOPO 3,606,898

CRUTCH SUPPORT

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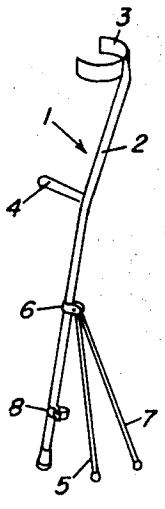


FIG. 1

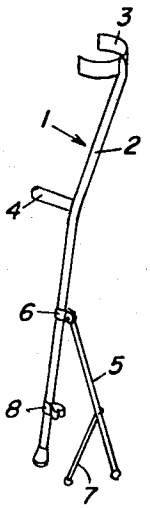


FIG. 2

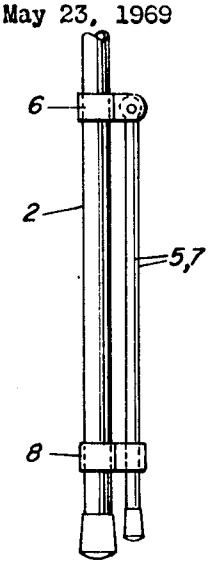


FIG. 3

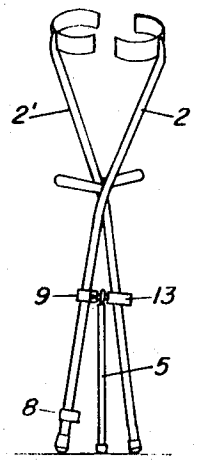


FIG. 4

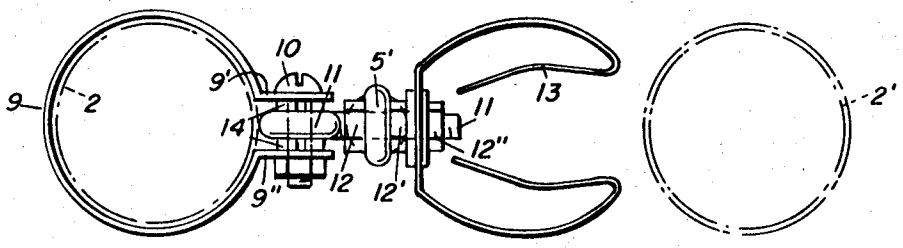


FIG. 5

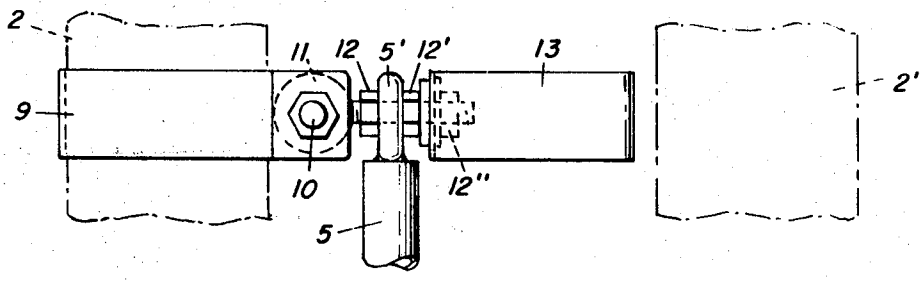


FIG. 6

INVENTOR

MARINO N. HAROCOPO

BY Fred L. Witherspoon, Jr.

ATTORNEY

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CRUTCH SUPPORT

Marino N. Harocopo, Villa Casa Silva, Via Fontana Vecchia 5, Taormina, Sicilia, Italy

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ABSTRACT OF THE DISCLOSURE

Crutch support means in the form of a tripod wherein at least one of the tripod members is a crutch and the other two tripod members are supporting legs so that the crutch may be maintained in a generally upright position when not in use.

In the past when a person using crutches was resting in a chair or the like, it was the practice for the person to lay the crutches down on the floor or lean them up against some nearby convenient support. In both cases, the practice was unsatisfactory because cumbersome devices like crutches lying on the floor present a substantial safety hazard and are also difficult for the crutch user to pick up. As for leaning crutches against vertical supports, it seems that they ultimately end up on the floor due to their unweldly nature. It is with the problem of crutch support in mind that the device of this invention was developed.

In view of the above, it is an object of this invention to provide a support for crutch means so that the crutch means will be self-supporting in an upright position.

It is a further object to provide a tripod arrangement for supporting a single crutch wherein two support legs are provided to complete the tripod.

It is a still further object to provide crutch supporting means wherein a clip is provided on the crutch to retain the supporting legs when the crutch is in use.

It is yet another object of this invention to provide crutch support means in tripod form wherein two of the tripod members are crutches and the third member of the tripod is a supporting leg to maintain both crutches in an upright position.

The above and other objects and advantages will become more apparent when taken in conjunction with the following detailed description and drawings.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is an elevational view of one form of the invention wherein a single crutch is provded with two generally equilength supporting legs to form with the crutch a tripod.

FIG. 2 is an elevational view of another embodiment of this invention wherein a single crutch is provided with a single supporting leg which in turn has attached thereto a supporting leg which with the crutch forms a tripod.

FIG. 3 is an elevational view illustrating the manner in which the supporting legs are clipped onto the crutch.

FIG. 4 is an elevational view of yet another embodiment wherein two crutches are connected together and with a single supporting leg form a tripod support arrangement.

FIG. 5 is a plan view illustrating one form of fastening means for the two crutch embodiment of FIG. 4, and

FIG. 6 is a side view of the fastening means of FIG. 5.

DETAILED DESCRIPTION

As illustrated in FIG. 1, the type of crutch 1 most adaptable for use with this invention comprises a U-shaped support 3 adapted to receive the lower arm of the user. This support 3 is attached to a crutch tube 2 having a handle 4 extending outwardly therefrom which is gripped by the user. The tube 2 is angled slightly from the handle

4 downward in a manner such that the lower portion will be generally parallel with the position of the lower arm when the crutch is in use.

A pipe clip 6 is affixed to the lower portion of tube 2 and pivotally mounts supporting legs 5 and 7 of generally equal length. One conventional manner of mounting supporting legs 5 and 7 is to flatten their upper end portions and provide each with an aperture. The flattened and apertured ends of supporting legs 5 and 7 are aligned with openings in the clip 6 and by means of suitable fastening means, such as pins or bolts, the flattened ends are pivotally secured to the aforesaid clip 6. A tension means could be employed to maintain the desired tripod position.

When it is desired to use the crutch 1, supporting legs 5 and 7 are swung inwardly to be held tight against tube 2 by means of spring clamping means 8 secured thereto.

In the embodiment illustrated in FIG. 2, the crutch 1 is of the same construction as in FIG. 1. Clip 6 is secured to the tube 2 and pivotally mounts a supporting leg 5 which in turn pivotally carries a shorter supporting leg 7 intermediate its ends. Here the tripod arrangement is formed in a slightly different manner but the result is identical, namely that the crutch is held in an upright position. As in FIG. 1, a spring clamp 8 secures supporting legs 5 and 7 to the tube 2 when the crutch is in use.

FIG. 3 is an enlargement more clearly illustrating the manner in which supporting legs 5 and 7 are held onto the crutch tube 2 when the crutch is in use.

As might be expected, there are persons who are required to use two crutches and for them the proper support and storage of said crutches is quite important. Here again, the tripod support arrangement is employed. As shown in FIG. 4, the crutch tubes 2 and 2' constitute two legs of the tripod and supporting leg 5, the third member thereof. The means for securing the two tubes 2 and 2' and leg 5 together to form a tripod is somewhat different from the other embodiments.

Referring particularly to FIGS. 5 and 6, a pipe clamp 9 is fastened to tube 2 by means of a nut and bolt assembly 10 acting through confronting flange portion 9' and 9'' of clamp 9. An eyebolt 11 is pivotally connected to clamp 9 by means of the bolt of the nut and bolt assembly 10 which passes through the eye of the eyebolt.

The flattened and apertured end portion 5' of the supporting leg 5 is passed over eyebolt 11 and held in lateral position by means of retaining nuts 12 and 12' placed on opposite sides thereof. Next spring clip 13 having an aperture sized to fit over eyebolt 11 is fitted thereon and secured thereto by means of retaining nut 12''. The clip 13 is thus rotatable about the longitudinal axis of the eyebolt 11.

In practicing the invention in accordance with the FIG. 4 embodiment, the spring clamp 9 is secured to tube 2 by means of nut and bolt assembly 10 and then tube 2' is secured to clip 13. With both tubes in position, supporting leg 5 is adjusted to provide the desired tripod disposition to properly position the two crutches in an upright manner.

It should be noted that washers 14 are placed between the eyebolt and the inner faces of flanges 9' and 9'' to provide frictional adjustment of the eyebolt so as to maintain the position of the supporting leg 5 and tube 2' held by clip 13.

In use, the supporting leg 5 is pivoted and held on tube 2 by clip 8 and the tube 2' is separated from clip 13 so that both crutches are free for service.

There are innumerable modifications and changes which could be made to this invention, for example, in the embodiment of FIG. 4, the spring clamp 9 could be permanently secured to tube 2 and the spring clip 13 permanently secured to tube 2' with fastening means being

provided for attaching clamp **9** and clip **13** together. The supporting leg could be secured to tube **2** or **2'** in the manner of FIG. 1. Further with regard to the means for securing clamp **9** and clip **13** together, it is suggested that a T slot arrangement would be quite appropriate since it would maintain aforesaid members in fixed relation, i.e., no rotation or twisting. The clip **13** could mount the T slot and the clamp **9** could mount the T head. Additionally, means could be provided to retain the T slot arrangement in assembled condition, for example, a screw could be threadedly mounted in the portion having the T slot so as to frictionally engage the T head.

The foregoing is only one of many variations that could be made within the scope of this invention as measured by the following claims.

What is claimed is:

1. A tripod combination for supporting a pair of crutches in generally upright manner, said tripod combination comprising a crutch forming a first member of the tripod, a second and independent crutch forming the second member of the tripod, a clip-assembly securing both

crutches in spaced relation, said clip assembly being fixedly secured to the first crutch and releasably clipped to the second crutch, a support member pivotally secured to said clip assembly and forming the third member of the tripod combination.

2. The invention as set forth in claim **1** and wherein the first crutch is provided with a keeper to retain the support member on the first crutch when the second crutch is released from the clip assembly and the crutches are in use.

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PETER M. CAUN, Primary Examiner