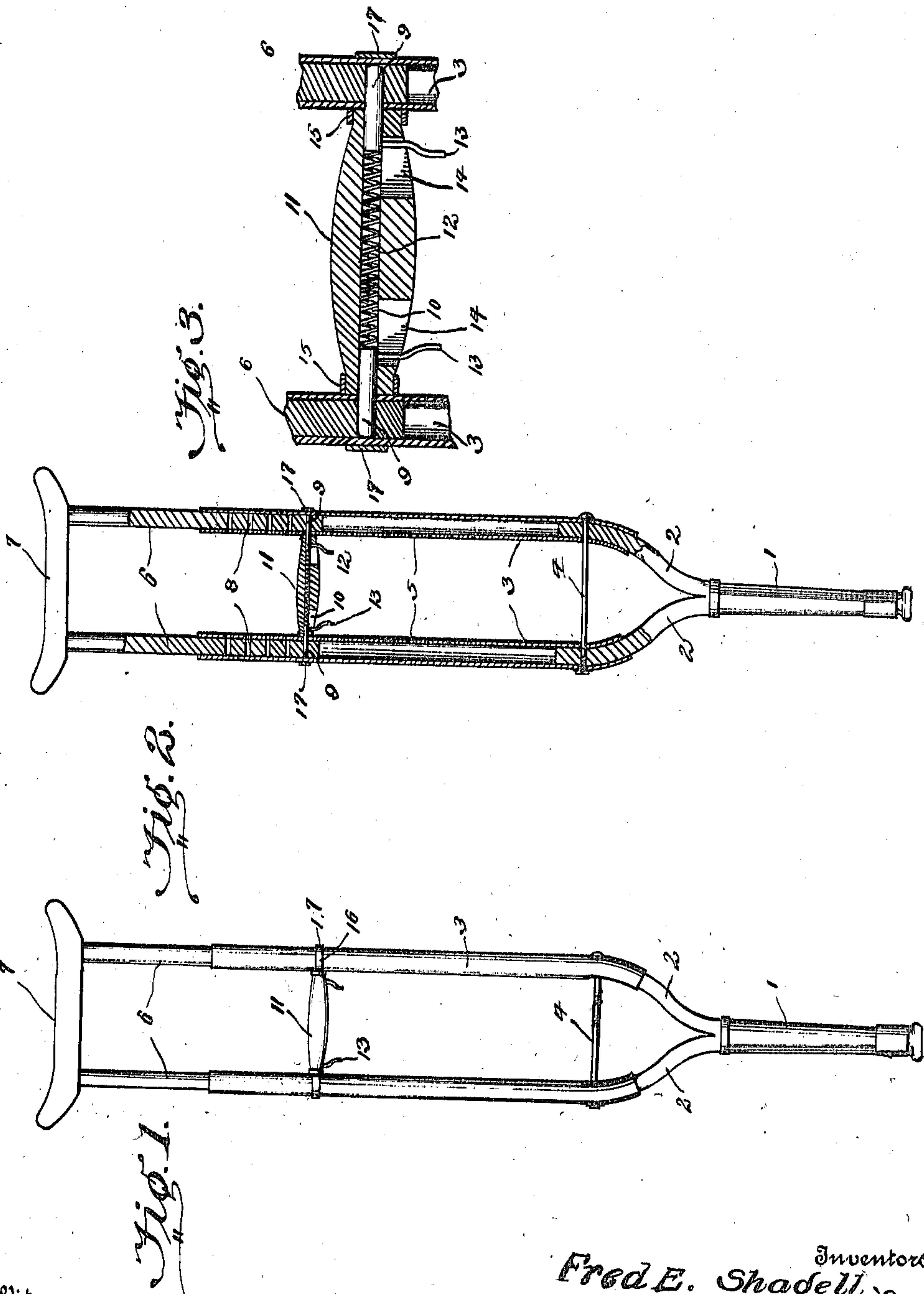


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ADJUSTABLE CRUTCH.

APPLICATION FILED JUNE 1, 1910.

987,497.

Patented Mar. 21, 1911.



Witnesses

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# UNITED STATES PATENT OFFICE.

FRED E. SHADELL AND FREDERICK W. CASSIDY, OF PHILADELPHIA, PENNSYLVANIA.

## ADJUSTABLE CRUTCH.

987,497.

Specification of Letters Patent.

Patented Mar. 21, 1911.

Application filed June 1, 1910. Serial No. 564,365.

*To all whom it may concern:*

Be it known that we, FRED E. SHADELL and FREDERICK W. CASSIDY, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Adjustable Crutches, of which the following is a specification.

This invention relates to crutches and the object of the invention is the provision of a device of this character which may be readily adjusted to accommodate the device to people having different heights and different lengths of reach.

A further object of the invention is the provision of a single means carried by the handle for both locking the supporting uprights and the handle in adjusted position upon the tubes.

Further objects of the invention will appear as the following specific description is read in connection with the accompanying drawing which forms a part of this application, and in which:

Figure 1 is a side elevation. Fig. 2 is a detail vertical section. Fig. 3 is a detail vertical section on an enlarged scale.

Referring more particularly to the drawing 1 represents the lug of the crutch to which is connected in the usual manner the crotch pieces 2. In this instance, the crotch pieces 2 have connected thereto vertical tubes 3 and are held separated and prevented from expanding by a tie bolt 4 which not only acts to perform the functions stated, but secures the tubes upon the crotch pieces 2. These tubes are apertured on their inner sides as at 5 throughout the major portion of their length and have slidably mounted therein the arm rest uprights 6 to which is connected in the usual manner the arm rest 7.

The uprights 6 are laterally apertured as at 8 so as to register with the apertures 5 in the tubes and to receive the locking bolts 9 which are slidably mounted in the central bore 10 formed in the handle 11. These bolts are projected in opposite directions by a spiral spring 12 and are retracted so as to be disengaged from the openings by thumb

pieces 13 which travel in slots 14 extending inwardly from each end on the underside. Suitable reinforcing rings 15 are secured upon the ends of the handles to prevent splitting.

In order to slidably mount the handle upon the tubes, there is secured thereto a band of metal 16 which is provided with looped ends 17 which extend around the tube and prevent disengagement of the handle therewith and also prevent the handle from turning thereon. It will thus be seen that the bolts 9 as operated by the spring 10 hold the uprights in adjusted position in the tubes and the handle in adjusted position on the tubes and by this arrangement the crutch may be adapted for all heights of persons and the handle may be adjusted to accommodate the different lengths of reach.

Having thus described the invention, what is claimed is—

1. A crutch, crotch members, vertical tubes connected to said crotch members, uprights slidably mounted in said tubes, a handle slidably mounted on said tubes, and a single means carried by the handle for holding it in adjusted position and for holding the uprights adjusted in the tubes.

2. A crutch comprising a pair of crotch members, tubes carried thereon having apertures therein, a pair of arm rest uprights slidably mounted in said tubes and having apertures to register with the apertures in the tubes, a handle arranged between and slidably mounted on said tubes, spring pressed sliding bolts carried by said handle and adapted to engage the apertures in the tubes and uprights whereby the uprights are held in adjusted position in the tubes and the handle is held in adjusted position on the tubes, and means for preventing the handle from turning on the bolts.

In testimony whereof we affix our signatures in presence of two witnesses.

FRED E. SHADELL.

FRED. W. CASSIDY.

Witnesses:

GEORGE D. GREW,  
WM. C. GREW.