

(No Model.)

E. O. KUHNKE.
FOLDING CRUTCH.

No. 595,637.

Patented Dec. 14, 1897.

Fig. 1.

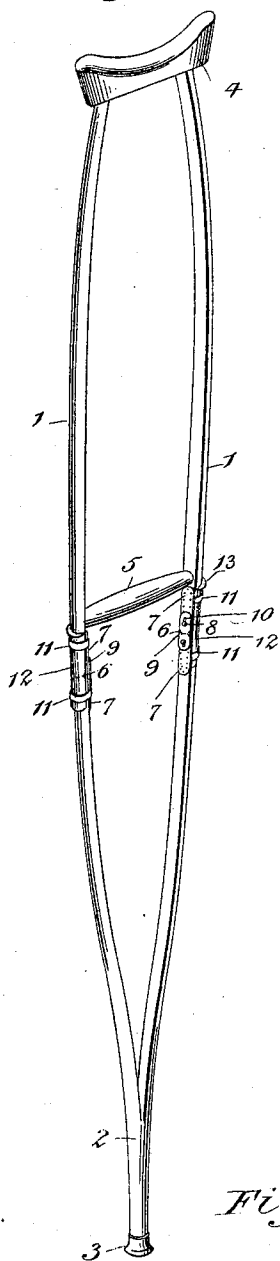


Fig. 2.

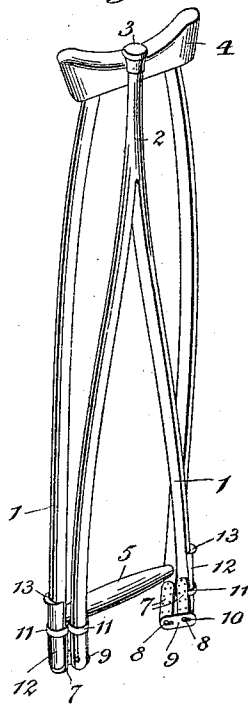


Fig. 3.

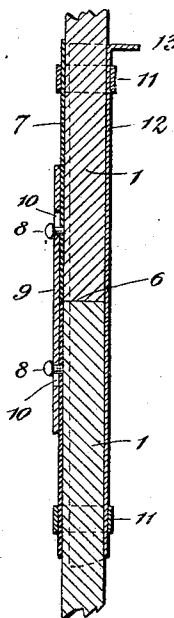


Fig. 4.

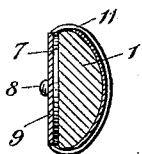


Fig. 5.

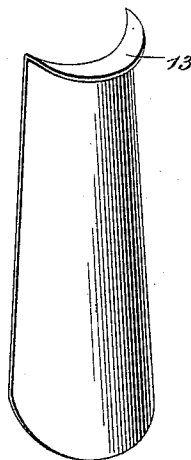
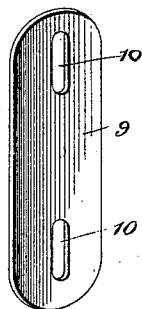


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

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FOLDING CRUTCH.

SPECIFICATION forming part of Letters Patent No. 595,637, dated December 14, 1897.

Application filed December 23, 1896. Serial No. 616,767. (No model.)

To all whom it may concern:

Be it known that I, EMMA OTTO KUHNKE, a citizen of the United States, residing at Covington, in the parish of St. Tammany and State of Louisiana, have invented certain new and useful Improvements in Folding Crutches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to crutches, and has for its object to provide a crutch of novel construction which may be easily and quickly folded at an approximately central point, so as to occupy but one-half the space that is usually required. As is well known, crutches are very often in the way when not in use, especially in carriages and on railway-trains, and it is therefore very desirable to make such articles so that they may be folded into compact shape and stored in the bottom of the carriage or laid against the back of the car-seat. At the same time provision must be made for securely locking the sections of the crutch in their operative positions, so as to prevent the accidental folding or collapsing of the crutch.

The invention consists in certain novel features and details of construction, as are hereinafter fully described, illustrated in the drawings, and embodied in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a crutch constructed in accordance with this invention. Fig. 2 is a similar view showing the crutch folded. Fig. 3 is a detail longitudinal section taken through the joint at one side of the crutch. Fig. 4 is a detail cross-section taken adjacent to the joint. Fig. 5 is a detail perspective view of one of the locking-slides, and Fig. 6 is a detail view of one of the links which connect the two sections of the crutch.

Similar numerals designate corresponding parts in the several figures of the drawings.

The improvements contemplated herein may be applied to a crutch of any usual or preferred form, the crutch illustrated in the drawings comprising the bowed side bars 1, which merge at their lower ends, as indicated at 2, and have the usual ferrule 3, said bars being connected at their upper ends to the

arm-rest 4 and connected at an intermediate point by a cross-tie brace 5.

Just below the tie-brace 5 and near the proximal center of the crutch the side bars are divided in transverse alinement at the points 6. Secured to the inner surfaces of the side bars 1, at each side of the divisions therein, are plates 7, each provided adjacent to the divisions in the side bar with inwardly-extending studs 8. The two sections of the crutch are connected by means of a pair of links 9 in the form of oblong plates provided at spaced points with longitudinal slots 10, adapted to receive the studs 8, above referred to, and to permit a slight longitudinal movement of the crutch-sections in order to enable the square abutting ends at the points 6 to be separated or moved apart sufficiently to enable one portion of the crutch to be folded flatwise against the remaining portion, as indicated in Fig. 2. The plates 7 may be secured to the crutch-sections by any suitable fastening means.

Upon the outer side of each side bar 1 of the crutch is arranged a pair of metal loops or keepers 11, corresponding in size and curvature to the cross-sectional shape of the side bar at the points where said keepers are located. One of said keepers of each pair is slightly smaller than the other, and each pair is adapted to receive a locking-slide 12, which consists, preferably, of a piece of sheet metal, of the necessary width and length, curved to conform to the outer surface of the side bar 1 and also made tapering to conform to the taper of said side bar. The keepers 11 of each pair are located upon opposite sides of the division in the side bar 1, and when the locking-slide 12 is engaged under both keepers it will be apparent that the two sections of the crutch are firmly locked in longitudinal alinement with each other, thus making the crutch as strong as an ordinary crutch which is not adapted to fold. The locking-slide at its wider ends is provided with an outwardly-projecting lip 13, forming a finger-hold, by means of which said slide may be moved into and out of engagement with the smaller keeper 11.

The construction above described is very simple and effective and provides for easily and quickly folding the crutch into compact

shape while at the same time making the crutch practically as strong as if it were not divided intermediate its ends.

It will be understood that the construction above described is susceptible of changes in the form, proportion, and minor details, which may accordingly be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described the invention, what is claimed as new is—

1. A folding crutch, comprising sections having squared ends pivotally connected to each other and adapted to fold flatwise upon each other, in combination with longitudinally-slotted links connecting said sections and engaging projecting studs thereon, and locking means for rigidly connecting said sections so as to prevent the breaking of the joints, substantially as described.

2. A crutch divided on a transverse line intermediate its ends and provided adjacent to the division with stud-plates, in combination

with slotted links engaging said stud-plates and pivotally connecting the sections of the crutch while at the same time allowing a limited relative longitudinal movement thereof while the sections are in alinement, and a locking device for holding the sections of the crutch rigidly in longitudinal alinement, substantially as described.

3. A crutch embodying jointed sections having squared meeting ends, in combination with spaced keepers of different relative sizes located at each side of the joint, and a tapering locking-slide wedge movable beneath the said keepers and provided at one end with a laterally-projecting lip forming a finger-hold, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EMMA OTTO KUHNKE.

Witnesses:

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