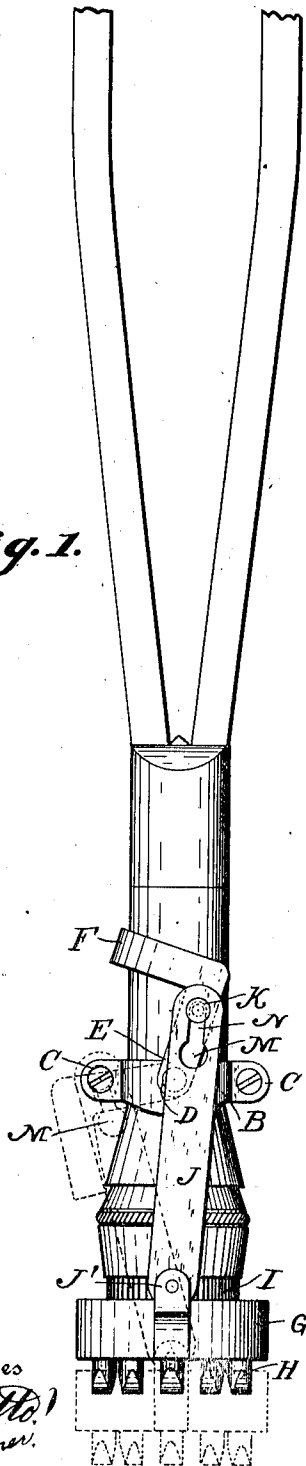


E. CONRAD.
 ANTISLIPPING ATTACHMENT FOR CRUTCHES.
 APPLICATION FILED DEC. 20, 1911.

1,031,247.

Patented July 2, 1912.

Fig. 1.



Witnesses
A. Otto
A. J. Bremer

Fig. 3.

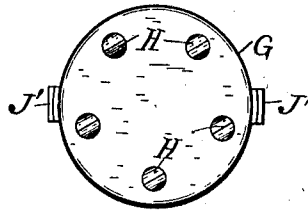
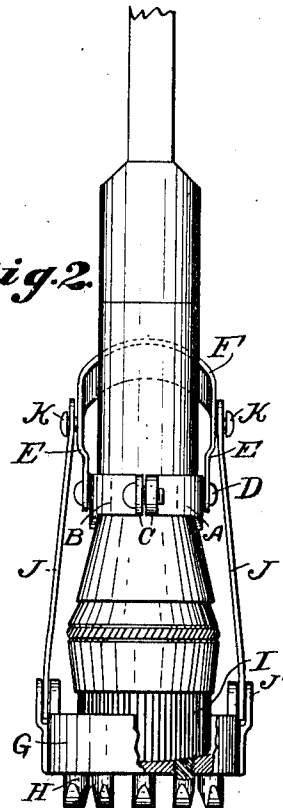


Fig. 2.



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ANTISLIPPING ATTACHMENT FOR CRUTCHES.

1,031,247.

Specification of Letters Patent.

Patented July 2, 1912.

Application filed December 20, 1911. Serial No. 666,882.

To all whom it may concern:

Be it known that I, ELISE CONRAD, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Antislipping Attachments for Crutches, of which the following is a specification.

My invention relates to improvements in anti-slipping attachments for crutches.

The object of my invention is to provide a form of attachment which can be readily applied to any ordinary form of crutch, and removed when not required for use. Also to provide convenient means for adjusting the working portion of the attachment into and out of position of use without removing it from the crutch. Also to provide a form of construction whereby the working portion of the attachment may be conveniently separated from its supporting portion and removed from the crutch while leaving the supporting portion of the attachment in position ready for use when the working portion is reapplied.

In the drawings:—Figure 1 is a view of the lower portion of a crutch showing my invention applied thereto. Fig. 2 is a view of the same as seen at right angles to the position shown in Fig. 1. Fig. 3 is a detail view of the foot piece as seen from the under side.

Like parts are identified by the same reference characters throughout the several views.

A clamping member, comprising two parts A and B connected by screws C, is adapted to embrace the lower portion of the crutch, and to be bound securely thereon. The parts A and B are respectively provided with headed pins or projections D to which the arms E of a yoke shaped lever are pivotally secured. The arms E are connected at their upper ends by the yoke proper, which comprises an outwardly curved band F, adapted, when the lever arms are in one position, to fit partially around the crutch shank as shown in Fig. 1.

A cup shaped tread piece G is provided with removable calks H, and is adapted to be adjusted under the lower end of the crutch receiving the rubber cushion I thereof. This tread piece is provided with a pair of links J, pivoted thereto at J', and adapted to be detachably engaged with headed pins or

projections K on the arms E of the lever between the yoke band F and the projections D. To facilitate the attachment and detachment of the links from the pins K, they are provided with holes M to receive the heads of the pins, and slots N extend upwardly from each of these holes to receive the shanks of the pins K after their heads have passed through the holes. When the yoke lever is in the position shown by dotted lines in Fig. 1, the tread piece G may be swung into or out of position under the lower end of the crutch, and the links may then be readily detached from the pins K by moving the links upwardly to a point where the heads of the pins will register with the holes M. The links are loosely pivoted to the tread pieces so that they may be readily swung laterally to a sufficient extent to disengage from the pins K.

It will be understood that when the tread piece is in the dotted line position shown in Fig. 1, the links being engaged with the pins K, if the yoke lever is then swung to its full line position, as illustrated in said figure, the pins K will move across the vertical plane of the pivot pins J' and will therefore lock the tread piece in position. The parts are so proportioned that the tread piece will be drawn forcibly against the rubber cushion I at the lower end of the crutch when the lever is in the above described locking position, and the resiliency of the rubber allows the tread piece to exert a certain compression of the cushion, which by reaction, draws downwardly upon the links J and holds the yoke band F firmly against the leg of the crutch until it is manually actuated to the releasing or dotted line position.

I claim:—

1. The combination with a crutch of a supporting member fixed thereon, a tread piece removably adjustable to and from the lower end of the crutch, and a lever pivoted to the supporting member and connected to actuate the tread piece.

2. The combination with a crutch of a supporting member fixed thereon, a tread piece removably adjustable to and from the lower end of the crutch, and a lever pivoted to the supporting member and connected to actuate the tread piece, said connections between the lever and tread piece comprising a set of pivotally attached links adapted to

permit the tread piece to swing out of operative position when the lever is in one position of adjustment.

3. The combination with a crutch, of a tread piece adapted to fit over the lower end thereof, a lever supported from the crutch and linked to the tread piece, and means for locking the lever in a raised position with the tread piece bound against the lower end of the crutch, said lever being also adapted in another position of adjustment to allow the tread piece to swing outwardly from beneath the crutch.

4. The combination with a crutch, of a tread piece adapted to fit over the lower end thereof, a lever supported from the crutch and linked to the tread piece, and means for locking the lever in a raised position with the tread piece bound against the lower end of the crutch, said lever being also adapted in another position of adjustment to allow the tread piece to swing outwardly from beneath the crutch, and said tread piece being detachably connected with the lever, whereby, when swung outwardly, it may be disengaged.

5. The combination with a crutch, of a tread piece adapted to fit over the lower end thereof, a yoke lever supported to swing about a pivotal axis transverse to the leg of the crutch, a set of links connected with the tread piece and provided with openings in their upper portions, and supporting projections on said lever adapted to enter said openings, said lever being adjustable to raise and lower the tread piece to and from the lower end of the crutch.

6. The combination with a crutch, of a removable tread piece adapted to receive the

lower end thereof, a clamping member engaging the leg of the crutch, a lever pivotally connected to the clamping member, and link connections between the lever and tread piece, said lever being arranged to raise and lower the tread piece, and said tread piece being detachably connected with the clamping member.

7. The combination with a crutch, of a removable tread piece adapted to receive the lower end thereof, a clamping member engaging the leg of the crutch, a lever pivotally connected to the clamping member, and link connections between the lever and tread piece, said lever being arranged to raise and lower the tread piece, and said tread piece being detachably connected with the clamping member and being also provided with calks adapted to prevent slipping.

8. The combination with a crutch, of a removable tread piece provided with calks, a set of apertured links pivoted thereto, and having slots extending upwardly from the apertures, a lever pivotally supported from the leg of the crutch and provided with projections having heads to enter said apertures and shanks to fit the slots, said lever being provided with a yoke adapted to engage the leg of the crutch when the lever is swung upwardly and inwardly along the side of the leg to carry said projections across the vertical plane of the link connections with the tread piece.

In testimony whereof I affix my signature in the presence of two witnesses.

ELISE CONRAD.

Witnesses:

LEVERETT C. WHEELER,
I. D. BREMER.