June 16, 1953 H. L. PEDLEY ET AL 2,642,074

WALKING APPLIANCE

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Fig. 1.

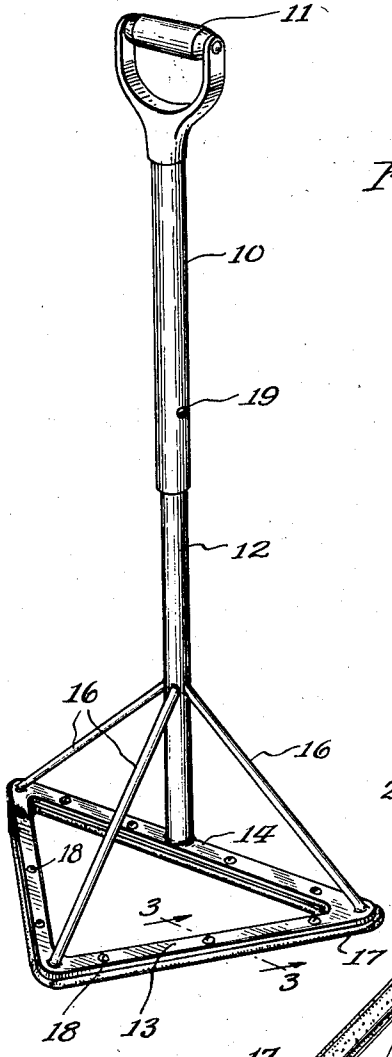


Fig. 2

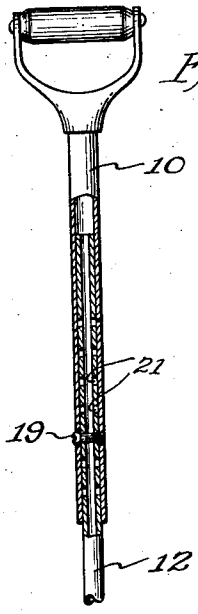


Fig. 4.

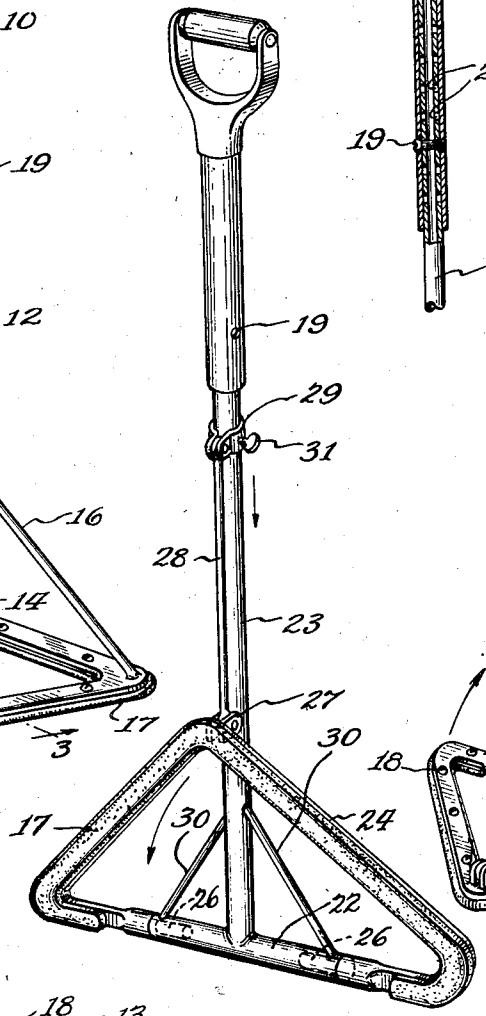


Fig. 5.

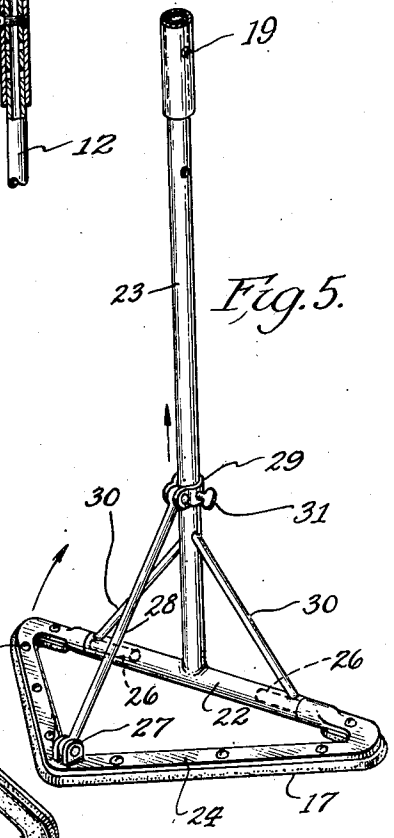
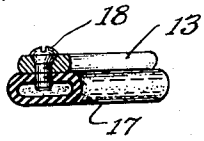


Fig. 3.



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WALKING APPLIANCE

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3 Claims. (Cl. 135—45)

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This invention relates to appliances for assisting invalids and others in walking.

One of the objects of our invention is the provision of an appliance to assist persons in various stages of physical recovery in walking, which will eliminate fear and create confidence in the user and through the use of which they may propel themselves with facility and with a minimum of effort.

Another object of our invention is the provision of an appliance of the foregoing character which has a relatively wide cushioning bearing area, which is efficient to prevent slipping and which is light in weight and rigid and substantial in construction.

A further object of our invention is the provision of an appliance of the character described which is adjustable to meet the requirements of users of different heights.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combination of parts hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In the drawing, forming a part of this specification and in which like numerals of reference indicate similar parts in the several views:

Figure 1 is a perspective view of a preferred embodiment of our invention.

Figure 2 is an elevational view partly in cross section showing certain structural details.

Figure 3 is a cross sectional view on an enlarged scale taken on line 3—3 of Figure 1.

Figure 4 is a perspective view of a modified form of our invention in collapsed or folded condition.

Figure 5 is a similar view of the device shown in Figure 1 showing the same in extended or ready to use position.

Referring particularly to Figs. 1–3 of the drawings, our improved appliance comprises a tubular body section 10 to which is attached a hand grip 11. Telescoped within the tubular section 10 is a tubular shank 12 the bottom end of which is connected as by welding to a triangularly shaped base member 13. As will be seen in Fig. 1 the base member 13 is preferably in the shape of an isosceles triangle and the shank 12 is joined to the side 14 which constitutes the base of the triangle and which is disposed substantially in the same plane as the handle 11, the joint being

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located at a point substantially medially of the length of side 14.

A plurality of bracing struts 16 welded to the shank 12 radiate therefrom in a downwardly inclined direction and are joined to the corners of the triangular base member 13 as by welding, thereby providing a structure of substantial rigidity.

Suitable resilient anti-slipping means here in the form of a hollow rubber tubular structure 17 is attached to the underside of the base 13 in a suitable manner as by screws 18. It will be understood that the said means may be of any suitable form or material and may be detached from the base 13 for replacement when worn out.

The tubular section 10 is perforated to receive a screw 19 which is passed through one of the series of perforations 21 in the shank 12. It will be readily understood from the above description that the hand grip 11 may be raised or lowered to conform to the arm length of the user and also that the hand grip 11 is always caused to be in alinement with the side 14 of the base 13 in any position of adjustment.

In the modified embodiment shown in Figs. 4 and 5 the base includes a tubular section 22 welded to the shank 23 and braced by struts 30, and a substantially V-shaped member 24 having inturned ends terminating in cylindrical portions 26 which are receivable in the open ends of the tubular section 22. The V-shaped member 24 is pivotable about the axis of the section 22 and may be swung either to the collapsed position shown in Fig. 4 for storage or to the extended position shown in Fig. 5, for use.

It will be seen that the V-shaped member 24 in combination with the tubular section 22 provides a triangularly shaped base similar in form to that shown in Fig. 1. Mounted at the apex of the triangular base are a pair of spaced perforated lugs 27 between which is pivotably secured a rod 28, which serves as a bracing strut.

A slidable clamp embracing the shank 23 is pivotally connected to the other end of the rod 28 and is provided with a thumb screw 31 for securing the base 24 in any position of adjustment.

The base 24 is also provided with a resilient anti-slipping means and the shank and hand grip of this modified embodiment are identical in structure with corresponding elements hereinabove described.

In use two of the appliances are employed, the user walking between the appliances with the triangular bases directed outwardly.

While the floor engaging portions or bearing areas of the devices herein shown and described are substantially triangular in form, it is to be understood that the particular form is merely illustrative of one embodiment of our invention and that the bearing area may be of any suitable continuous form such as a quadrilateral, polygon, or sector or secant of a circle. Manifestly the invention as described is susceptible of modification without departing from the inventive concept.

It will be apparent from the foregoing that we have provided an appliance to assist a user in walking, in which the floor engaging portion is in the form of a continuous triangle so as to provide adequate support to the user when walking up or down stair steps, or in walking on uneven surfaces or soft ground. The appliance is rigidly braced to give a user confidence in walking during an early stage of physical recovery while providing a relatively large bearing area is of sufficiently small dimensions to permit a user to pass through a conventional doorway.

We claim:

1. An appliance of the character described comprising an upright member having a hand grip thereon, a transverse member having open ends and fixed to the lower end of said upright member, a substantially V-shaped member having inturned ends received in said open ends so as to be pivotally associated with said transverse member and forming therewith a substantially triangular base adapted to rest on a supporting surface, and means for selectively securing said V-shaped member in extended position to rest on a supporting surface or in collapsed position.

2. An appliance of the character described comprising an upright member having a hand grip thereon, a transverse member having open ends and fixed to the lower end of said upright member, a substantially V-shaped member having inturned ends received in said open ends so as to be pivotally associated with said transverse member and forming therewith a substantially triangular base adapted to rest on a supporting surface, and a strut member associated with said upright member and said V-shaped member for securing said V-shaped member in extended position to rest on a supporting surface or in collapsed position.

3. An appliance of the character described comprising an upright having a hand grip thereon, a transverse member fixed medially thereof to the lower end of said upright member and being in the same vertical plane with the upright member, a substantially V-shaped member pivotally associated with said transverse member and forming therewith a substantially triangular base at the side of said upright member adapted to rest on a supporting surface, a strut pivotally connected to said upright member and to the apex of said V-shaped member for selectively securing said V-shaped member in extended position to rest on a supporting surface or in a collapsed position substantially vertically adjacent said upright.

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