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Inventor(s)	Veenstra; Joan A.

Walking cane hanger

Abstract

A cane hanger adapted to stably support a walking cane on a horizontal surface includes a body having a base attachable to a side of a walking cane, a beam projecting away from the base, a leg depending from a distal end of the beam, and a support engagement surface either at a bottom of the leg or located on a foot pivotably attached to a distal end of the leg.

Inventors:	Veenstra; Joan A. (Novi, MI)
Applicant:	Veenstra; Joan A. (Novi, MI)
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References Cited

U.S. PATENT DOCUMENTS

Patent No.	Issued Date	Patentee Name	U.S. Cl.	CPC
4300742	12/1980	Hunn	N/A	N/A
4794743	12/1988	Lehneis	N/A	N/A
4895330	12/1989	Anstead	N/A	N/A
5000418	12/1990	Vogt	N/A	N/A
5456437	12/1994	Chander	N/A	N/A
11344088	12/2021	Bowens	N/A	N/A
2009/0145470	12/2008	Couper	N/A	N/A
2011/0017901	12/2010	Denburg	N/A	N/A

FOREIGN PATENT DOCUMENTS

Patent No.	Application Date	Country	CPC
2326590	12/1997	GB	N/A

Primary Examiner: Hawk; Noah Chandler

Attorney, Agent or Firm: BUTZEL LONG

Background/Summary

CROSS-REFERENCE TO RELATED APPLICATIONS (1) This application is a continuation-in-part of U.S. application Ser. No. 17/972,126 filed on Oct. 24, 2022 which is incorporated herein by reference in its entirety.

FIELD OF THE DISCLOSURE

(1) This disclosure relates to walking canes that can be stably supported on a flat horizontal surface such as a tabletop, countertop or appliance top, and to a walking cane accessory to facilitate stable support of the walking cane on a flat horizontal surface.

BACKGROUND OF THE DISCLOSURE

(2) Known devices for supporting a walking cane at the top of a counter or table have generally included a base or clamp for either permanently or releasably attaching a walking cane holding device to a walking cane, and a clip, grapple, or the like for engaging a surface of a counter, tabletop or other work surface. While some of these devices perform adequately, there remains a need for a walking cane hanger that is easy to use while exhibiting improved stability when supporting a cane at the edge of a tabletop, countertop, household appliance top or the like.

SUMMARY OF THE DISCLOSURE

(3) A walking cane hanger in accordance with this disclosure includes a hanger body having a base configured for attachment to a side of a walking cane, a beam extending laterally away from the base and cane, a leg extending downwardly from the beam, and a support engagement surface at a distal end of the leg or at a bottom of a foot pivotably attached to a distal end of the leg. The

engagement surface has a substantially flat exposed surface for frictionally engaging a tabletop or other horizontal surface.

Description

BRIEF DESCRIPTION OF THE DRAWINGS

- (1) FIG. 1 is a side view of a walking cane hanging device in accordance with this disclosure.
- (2) FIG. 2 is a side view of a walking cane with the disclosed hanging device used to support a walking cane in free balance on a tabletop.
- (3) FIG. 3 is a top view of the hanging device shown in FIG. 1.
- (4) FIG. 4 is a side view in partial cross-section of another embodiment of a walking cane hanging device having a pivoting foot in accordance with an aspect of this disclosure.
- (5) FIG. 5 is a side view of a walking cane with the disclosed hanging device having a pivotably attached foot used to support a walking cane on a support surface in which space below the support surface is generally inaccessible.
- (6) FIG. 6 is a side view in partial cross-section of another embodiment of a walking cane hanging device having a pivoting foot with a pivot barrel captured in a recess in accordance with another aspect of this disclosure.

DETAILED DESCRIPTION OF THE ILLUSTRATED EMBODIMENTS

- (7) Shown in FIGS. 1-3 is a first embodiment of walking cane hanger **10** attached to a walking cane **12**. Hanger **10** includes a body having a base configured for attachment to cane **12**. In the illustrated embodiment of FIG. 1, hanger **10** has a circular curved section **14** that conform with the outer surface of cane **12** having a circular cross-sectional profile. It is possible that hanger **10** can be formed integrally with cane **12**. However, it can also be manufactured separately as an add-on accessory that can be attached to a cane **12**, such as with an adhesive, screws, or a combination of mechanical fasteners, such as dowels used with an adhesive material.
- (8) The body of hanger **10** includes a base portion **16** (the portion attached directly to cane **12**), a beam portion **18** that projects laterally (outwardly and away from base portion **16**), and a leg portion **20** that extends downwardly (i.e., depends) from an end of beam **18** that is distal from cane **12**. The base **16**, beam **18** and leg **20** are integral parts of a one-piece body, and are not hinged or articulated with respect to each other. However, the base, beam and leg can be fabricated together or as separate parts that are fixed together. The base portion **16** has a cane engaging surface contoured to continuously abut a portion of a side of a cane along a portion of the length of the cane.
- (9) In the embodiment shown in FIG. 1, a support engagement surface **22** is located at a bottom of leg **20**. Surface **22** is substantially flat and configured for frictionally engaging a flat horizontal support surface (such as tabletop **24**, shown in FIG. 2). Surface **22** is or preferably includes a gripping pad that is soft and non-abrasive to facilitate gripping (i.e., frictional engagement with tabletop **24**) without scratching or otherwise marring the top surface **24**. Surface **22** can comprise a rubber pad adhesively bonded to hanger **10** or a rubber coating applied to the bottom of leg **20**. While the exposed surface **22** engaging tabletop **24** is substantially flat (i.e., planar), it can be provided with bumps, knurls, treads, or other patterned surface irregularities to enhance frictional engagement with a support surface (e.g., tabletop **24**).
- (10) In order to more stably support cane **12** on a horizontal support surface (e.g., tabletop **24**), the center-of-mass **26** of cane **12** is located approximately below an edge **28** of tabletop **24**, with a lower portion of cane **12** slanting toward and beneath the tabletop **24**. This is achieved by providing hanger **10** with an engagement surface **22** that is inclined (i.e., at an angle relative to a plane **30**) that is normal (perpendicular) to the main length of cane **12**. The angle of inclination (α) can be about 5 degrees to about 15 degrees. A preferred angle is about 11 degrees (e.g., 6 to 10 degrees).

(11) An alternative embodiment **110** is shown in FIGS. **4** and **5**. Hanger **110** is generally similar to hanger **10**, except that it includes a foot **122** that is pivotably attached to leg **120** at pivot axis **170**. Foot **122** can include a foot base layer **172** and a gripping layer **174** that can be attached to the bottom surface of base layer **172** or coated on to the bottom surface of base layer **172**. As with surface **22**, the grip layer **174** can be made of rubber, preferably a soft, non-abrasive rubber material, and can be provided with a gripping relief pattern comprising nubs, knurls, treads or the like. The pivot is preferably configured to allow rotation of the substantially flat bottom surface of foot **122** relative to leg **120** through an angle (δ) of about 20 degrees to about 30 degrees. A preferred angle (δ) is about 20 degrees (e.g., 17 degrees to 25 degrees). The pivotability of foot **122** relative to leg **120** allows the cane to be supported, with complete stability, on a horizontal surface of an object such as washing machine **124** that does not allow the cane to swing freely below the top surface. It can also allow greater flexibility in positioning of hanger **110** along the length of the cane, such as to accommodate a particularly heavy knob or top of the cane, while maintaining stable support of the cane on a horizontal support surface. Pivot axis **170** can be a modified ball and socket arrangement in which sides of the ball normal to the pivot axis are flattened to limit rotation of the foot relative to the leg in a single plane.

(12) As with hanger **10**, the distal end of leg **120** has an exposed surface **121** that is substantially flat and inclined at an angle (α') which can be about 5-20 degrees, preferably about 11 degrees (e.g., 5 to 15 degrees).

(13) Hangers **10** and **110** can be sold separately as an after-market accessory or can be pre-attached or integrated to a cane. The walking cane hanger can be generally made of wood, plastic or other suitable materials, with the optional foot pad or coating **22**, **174** made of rubber or other soft, non-abrasive gripping material.

(14) As can be seen in reference to FIG. **4**, the pivot for foot **122** can include a pivot barrel **180** located within a conforming recess **182** at a bottom of leg **120**. Recess **182** is configured so that stem **184** is engageable with edges **186**, **188** of recess **182** to limit or allow about 20 to about 30 degrees of rotation.

(15) Shown in FIG. **6** is a slightly modified embodiment **210**, similar to that shown in FIG. **4**, in which the pivot barrel **280** is cylindrical and the recess **282** in which the barrel **280** is received has a key-hole shape configured to capture barrel **280**. As with the embodiment shown in FIG. **4**, recess **282** has inclined surfaces **286**, **288** that engage stem **284** to limit or allow about 20 to about 30 degrees of rotation.

(16) While the present invention is described herein with reference to illustrated embodiments, it should be understood that the invention is not limited hereto. Those having ordinary skill in the art and access to the teachings herein will recognize additional modifications and embodiments within the scope thereof. Therefore, the present invention is limited only by the claims attached herein.

Claims

1. A walking cane hanger, comprising: a base having a cane engagement surface contoured to continuously abut a side surface of a walking cane; a beam projecting laterally away from the base; a leg extending downwardly from an end of the beam that is distal of the cane engagement surface, wherein the base, the beam, and the leg are integral parts of a one-piece body, and are not hinged or articulated with respect to each other; and a foot pivotably attached to the leg, the foot including a pivot barrel located within a conforming recess at a bottom of the leg, and a substantially flat exposed surface for frictionally engaging a horizontal support surface wherein the recess has a key-hole shape in which the pivot barrel is captured.
