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Curtis

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(54) **RUG ANTI-SLIP DEVICE**

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A47G 27/04 (2006.01)

(52) **U.S. Cl.** **16/4**

(58) **Field of Classification Search** 16/4, 6, 16/8, 17.1; 24/90.1, 55, 60, 63, 314, 350, 24/351, 354–357, 380; 40/1, 1.5, 1.6, 586, 40/661.04, 661.11, 662; 428/53, 61, 62, 428/99, 100, 223
See application file for complete search history.

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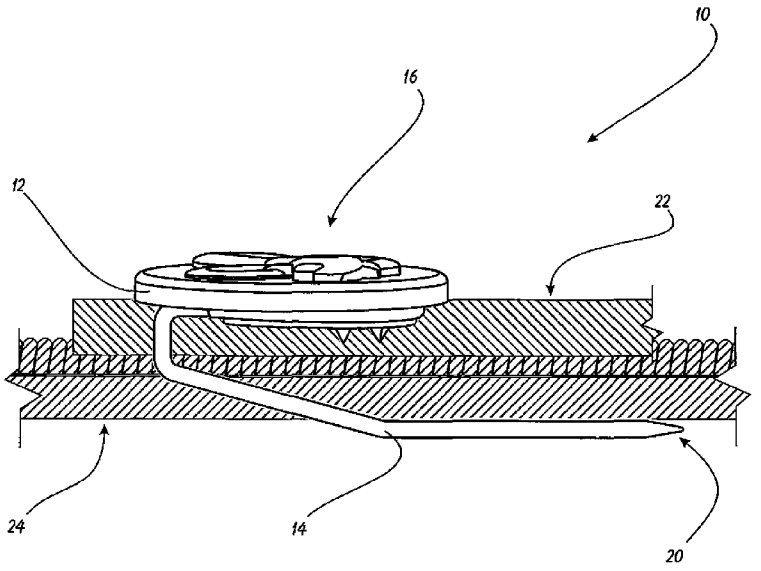
(57) **ABSTRACT**

A Rug Anti-slip Device. The device includes a pin-shaped element that has a sharpened tip end for poking through a mat and into the underlying carpet. The device further has a handle tab made from plastic or other suitably durable and aesthetically pleasing material. The handle tab is designed to stay above the surface of the mat or rug when the pin-shaped element is holding the mat or rug in place. The upper face of the handle tab may have indicia inscribed upon it, or embossed/raised above it in order to provide a decorative aspect to the device beyond the utilitarian purpose of holding the mat or rug in place.

17 Claims, 5 Drawing Sheets



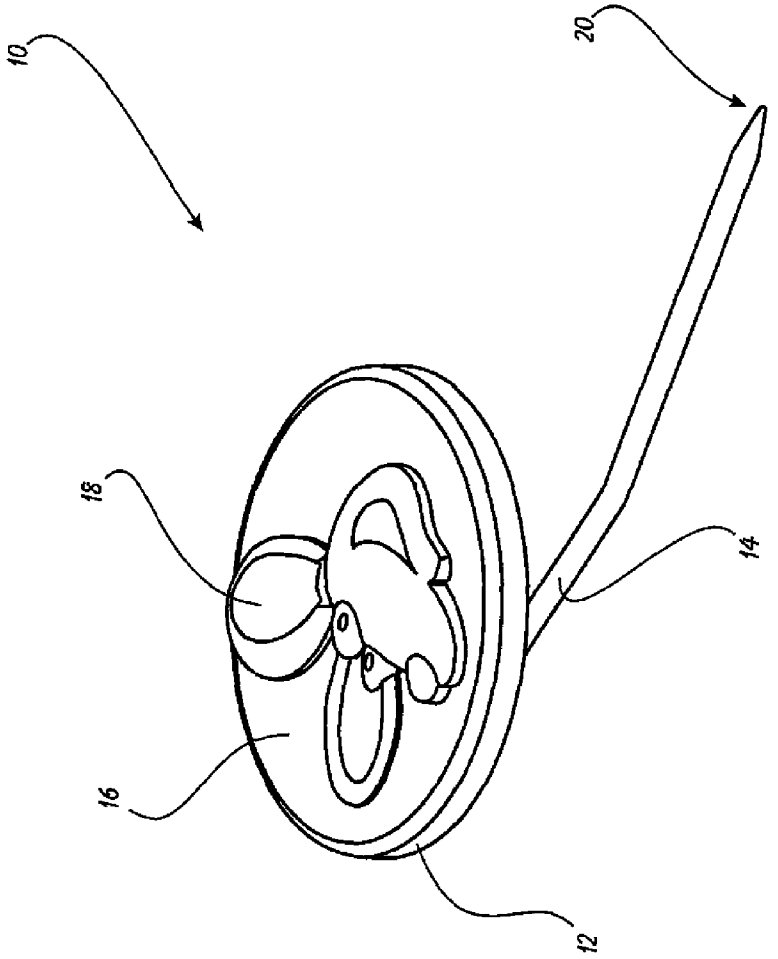


FIG. 1

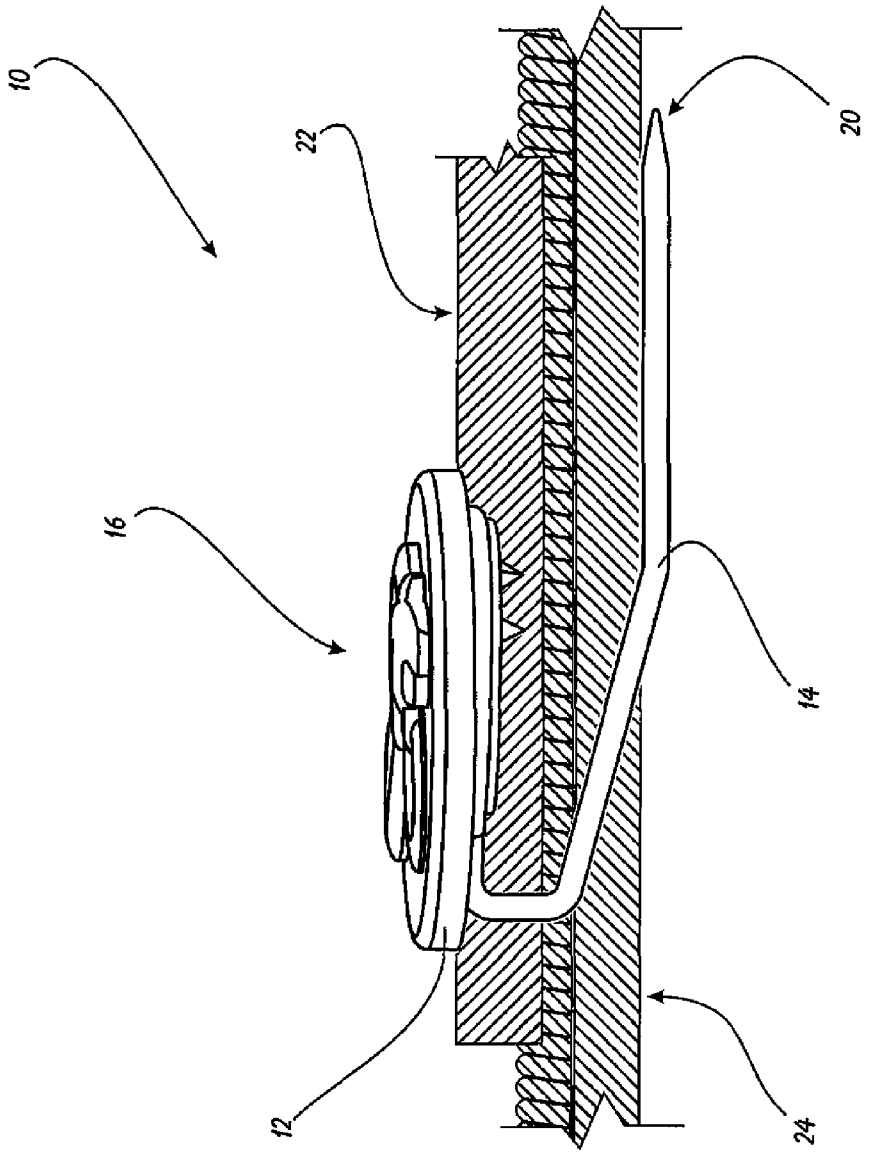


FIG. 2

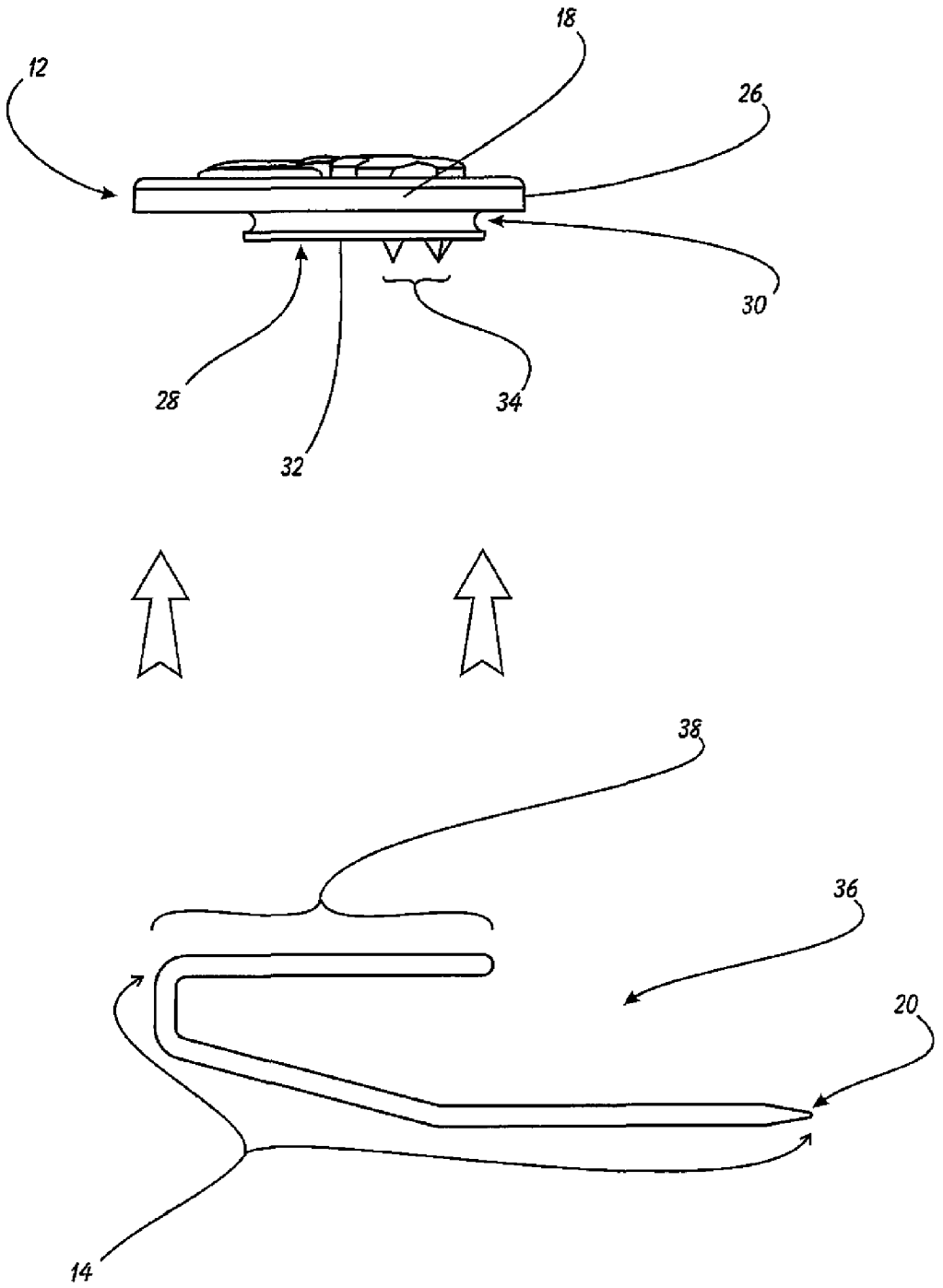


FIG. 3

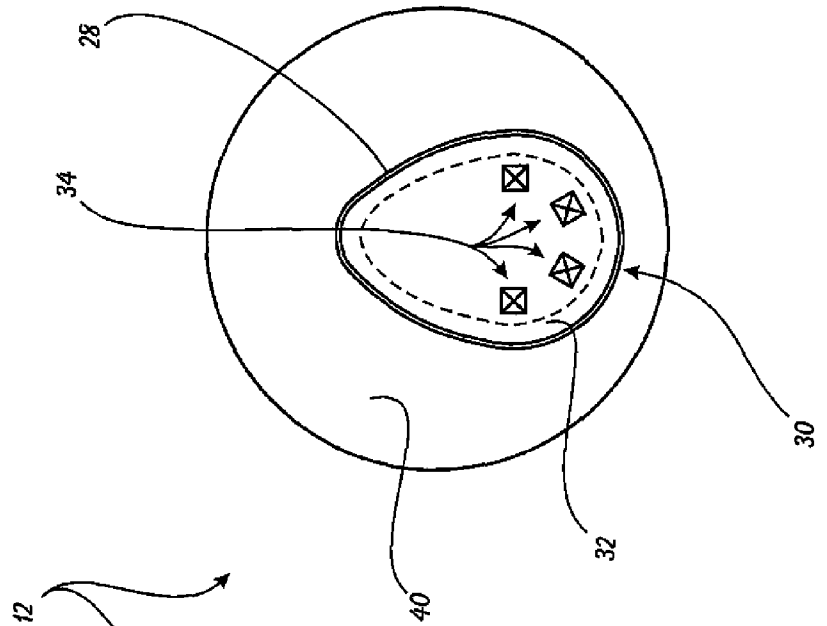


FIG. 4B

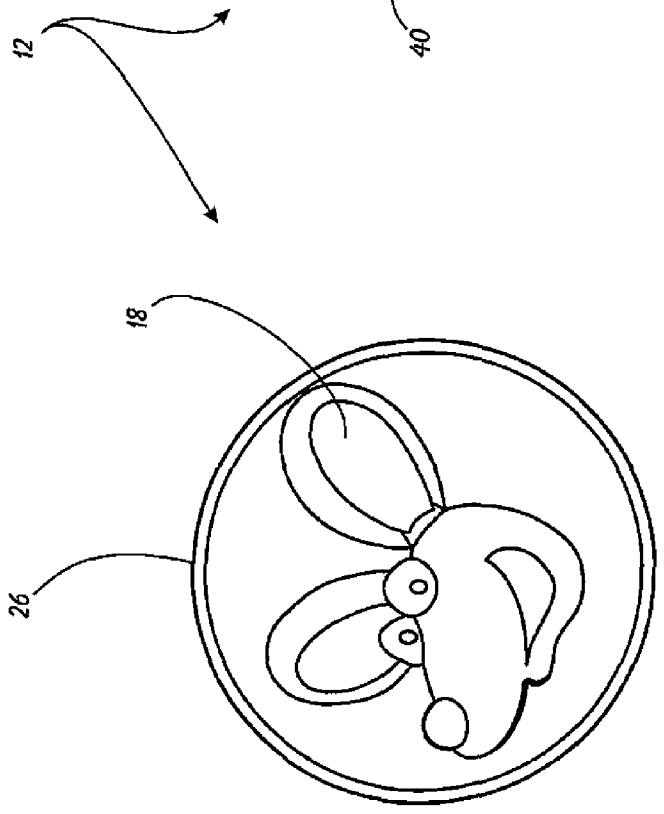


FIG. 4A

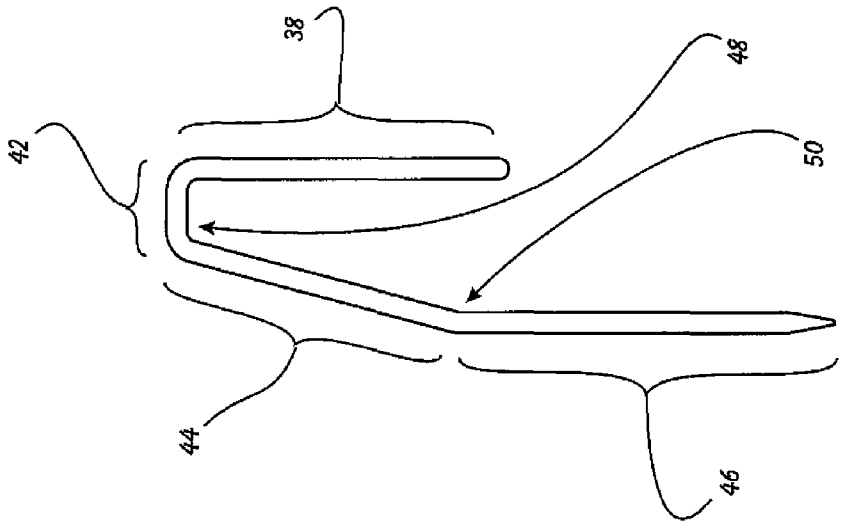


FIG. 5B

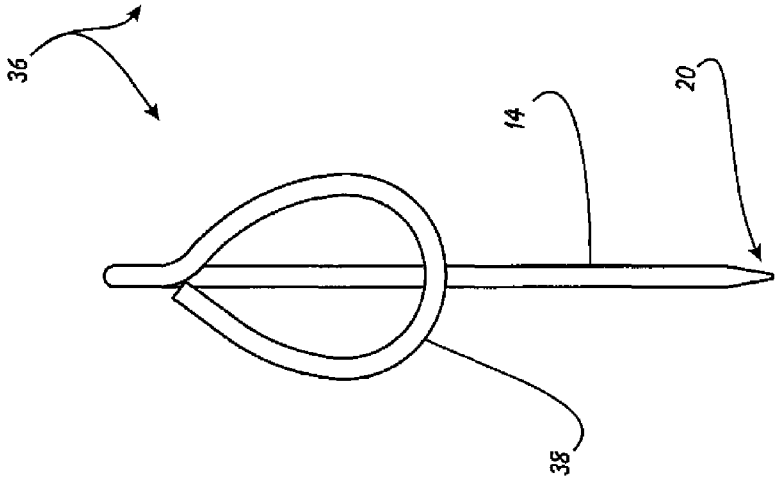


FIG. 5A

RUG ANTI-SLIP DEVICE

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates generally to floor coverings and accessories therefore and, more specifically, to a Rug Anti-slip Device.

2. Description of Related Art

There have been several attempts at solving the problem of holding mats or rugs in place atop a carpeted floor area. Dichtel, U.S. Pat. No. 4,860,402, for a "Carpet Mat Retainer Clip" discloses a metallic, spring-like clip that grasps the edge of the rug and holds that rug edge to the carpet.

U.S. Pat. No. 1,598,127 to J. G. Fleming discusses a "Corner Piece for Rugs" that is designed to prevent the corners of a rug from curling up when the rug is placed atop a polished floor surface, like a hardwood floor.

The "Automobile Mat and Securing Clip" device awarded U.S. Pat. No. 5,003,664 to Wong is a metallic pin that pins through the carpet surface. Cooperating sections of hook-and-loop fastener material on the top surface of the Wong clip and the bottom surface of the automobile mat releasibly attach to one another in order to hold the mat in its desired location.

U.S. Pat. No. 581,634 to I. N. Veal for a "Rug Fastener" is a two-piece pin/clip assembly that pins through the carpet and then clips to a device attached to the underside of the rug.

The "Carpet Fastener" of N. M. Harrison, U.S. Pat. No. 493,401 is, essentially, a specialized safety pin that pins through the rug and carpet and then attaches to itself (to safely protect the protruding pin tip).

Finally, the "Rug Anchor" of U.S. Pat. No. 5,761,765 to Fuzzell is a device having upwardly-turned teeth and downwardly-turned teeth on its respective top and bottom surfaces. The Fuzzell device is placed between the rug and carpet and the teeth engage both to keep the rug from moving.

While each of these devices may serve the purposes that their respective inventors sought to serve, that is to prevent movement of a rug, none seems to have achieved any real penetration into the market. It is believed that this is because they each suffer from one of the following problems: (1) too expensive to make; (2) difficult to install; (3) not durable enough for long-term installations; (4) none actually adds to the aesthetics of the rug or mat; or (5) safety issues related to their use.

The device of the present invention succeeds where these prior devices fail, and, as discussed herein, does not suffer from any of the itemized problems.

SUMMARY OF THE INVENTION

In light of the aforementioned problems associated with the prior devices, it is an object of the present invention to provide a Rug Anti-slip Device. The device should include a pin-shaped element that has a sharpened tip end for poking through a mat and into the underlying carpet. The device should further have a handle tab made from plastic or other suitably durable and aesthetically pleasing material. The handle tab should be designed to stay above the surface of the mat or rug when the pin-shaped element is holding the mat or rug in place. The upper face may have indicia inscribed upon it, or embossed/raised above it in order to provide a decorative aspect to the device beyond the utilitarian purpose of holding the mat or rug in place.

BRIEF DESCRIPTION OF THE DRAWINGS

The objects and features of the present invention, which are believed to be novel, are set forth with particularity in the appended claims. The present invention, both as to its organization and manner of operation, together with further objects and advantages, may best be understood by reference to the following description, taken in connection with the accompanying drawings, of which:

FIG. **1** is a perspective view of a preferred embodiment of the mg anti-slip device of the present invention;

FIG. **2** is a side view of the device of FIG. **1** in use;

FIG. **3** is an exploded side view of the device of FIGS. **1** and **2**;

FIGS. **4**A and **4**B are top and back views, respectively, of the handle tab of the device of FIGS. **1-3**; and

FIGS. **5**A and **5**B are top and side views, respectively, of the pin portion of the device of FIGS. **1-3**.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The following description is provided to enable any person skilled in the art to make and use the invention and sets forth the best modes contemplated by the inventor of carrying out his invention. Various modifications, however, will remain readily apparent to those skilled in the art, since the generic principles of the present invention have been defined herein specifically to provide a Rug Anti-slip Device.

The present invention can best be understood by initial consideration of FIG. **1**. FIG. **1** is a perspective view of a preferred embodiment of the rug anti-slip device **10** of the present invention. The device **10** has two major components: the handle tab **12** and the pin portion **14**. The handle tab **12** generally is defined by a face **16** from which an indicia element **18** may be imprinted upon or raised therefrom. The pin portion **14** terminates at its furthest end by a pointed tip **20**. In this current embodiment of the device **10**, the indicia **18** is the shape of a rat's head. In this version, that indicia **18** serves to promote the brand name of the device **10**. In other versions other indicia **18** could be other shapes or messages.

If we now turn to FIG. **2**, we can continue to explore the value of this new device. FIG. **2** is a side view of the device of FIG. **1** in use. As shown here, the device **10** is designed to pin through the mat **22** and into the carpet **24**. The benefit of this design is that the device **10** can be placed anywhere on the mat, either at the edges or even in the center, depending on the size of the mat **22** or the location of the mat **22** on the carpet **24** in the traffic pattern.

The pin portion **14** penetrates the mat **22** and into the carpet **24**. This is aided by the sharpened tip **20**, as shown here. When it is fully installed, the handle tab **12** continues to sit atop the mat **22** which makes it easy to grasp either for installation or removal. It should also be clear the face **16** is clearly visible and, therefore, becomes an aesthetic part of the mat **22** and the carpet **24**. FIG. **3** provides additional detail.

FIG. **3** is an exploded side view of the device of FIGS. **1** and **2**. The handle tab **12** in this version is made from a molded plastic. Plastic is used because it is highly durable and can be painted or made from a colored material. This gives a virtually unlimited variety of options to the manufacturer in creating a highly durable and very inexpensively made product. The tab **12** is defined by a base portion **26**, which in this version is flat and generally circular in shape, but may be in other shapes for other versions.

There is an attachment hub **28** extending downwardly from the backside of the base portion **26**. The attachment hub is defined by a hub face **32** from which a series of teeth **34** extend downwardly. The teeth **34** serve to bite into the top surface of the mat **22** (see FIG. **2**) in order to prevent the device **10** from being inadvertently kicked aside or from

slipping loose. The groove **30** formed at the perimeter of the attachment hub **28** is provided as an interface location for the attachment loop **38** of the wire member **36**. The wire member **36** is made from high-strength metallic material that preferably provides some spring tension to prevent it from being deformed while in use. As such, the attachment loop **38** can have an interference fit with the groove **30** of the attachment hub **28**, so that when it is snapped over the attachment hub, the loop **38** will continue to be snugly captured within the groove **30**. The pin portion **14** extends downwardly from the attachment loop **38**. As discussed above and depicted in FIG. **2**, that pin portion **14** is the section of the wire member **36** that penetrates the mat and the carpet.

If we now turn to FIGS. **4**A and **4**B we can examine the handle tab in additional detail. FIGS. **4**A and **4**B are top and back views, respectively, of the handle tab of the device of FIGS. **1**-**3**. The handle tab **12** as discussed above is defined by a generally circular base portion **26** from which the rat head raised indicia **18** protrudes. In this version, the circular base portion **26** was chosen for the purposes of flexibility but is by no means intended to limit the options available to the manufacturer. The attachment hub **28** extends from the rear face **40** of the base. As shown here, there are four teeth **34** that extend from the face of the hub **32**. The inner perimeter of the groove **30** is shown here by a dashed line. The attachment hub **28** has a teardrop shape to it. The intent behind this shape is to prevent the wire member (see FIG. **3**) from twisting with respect to the handle tab **12**. Other shapes may be used such as triangular or square or other polygon; however, it is unlikely that the manufacturer would ever choose that the attachment hub **28** be circular.

Finally, we turn to FIGS. **5**A and **5**B. FIGS. **5**A and **5**B are top and side views, respectively, of the pin portion of the device of FIGS. **1**-**3**. The wire member **36** has a teardrop-shaped attachment loop **38** and a pin portion **14** terminating in a tip **20**. As shown in FIG. **5**B, the pin portion in this version is defined by a proximal leg **42** that extends downwardly from the attachment loop **38**. The proximal leg **42** then transitions to the medial leg **44**. The medial leg **44** is separated from the proximal leg **42** by the first bend **48**. In this case, the first bend **48** is approximately 110 degrees because it provides a suitable declination angle for the medial leg as compared to the attachment loop **38**. This facilitates the insertion of the wire member **36** into the rug and carpet and then holding it snugly in place. The pin portion **14** terminates in the distal leg **46**, which is separated from the medial leg **44** by a second bend **50**. The angle of second bend **50** cooperates with the angle of first bend **48** such that the total is preferably 90 degrees so that the distal leg **46** is perpendicular to the proximal leg **42** which is, in turn, perpendicular to the loop **38**. It has been demonstrated in testing that the relationship between these bends **48** and **50** will provide supreme ease in installing the device through a mat and carpet while also holding that device snugly in place.

Those skilled in the art will appreciate that various adaptations and modifications of the just-described preferred embodiment can be configured without departing from the scope and spirit of the invention. Therefore, it is to be understood that, within the scope of the appended claims, the invention may be practiced other than as specifically described herein.

What is claimed is:

1. A rug or mat anti-slip device, comprising:

a generally flat handle tab defining a base portion having a face on a first side and an attachment hub extending from a second side opposing said first side and two or more pointed teeth protruding outwardly from a rear face defined by said attachment hub, said attachment hub rear face opposite said handle tab face; and

a pin portion attached to said attachment hub, and defined by a single elongate wire-shaped element terminating in a generally pointed tip, said pin portion further defined by a proximal leg extending from said attachment hub, a medial leg extending from said proximal leg, and a distal leg extending from said proximal leg, with each said leg separated by a bend in said wire-shaped element, with said proximal and medial legs being non-parallel to said attachment hub face and said distal leg being generally parallel to said attachment hub face.

2. The device of claim **1**, wherein said handle tab base portion defines said rear face, and said hub defines a hub face, with said hub extending outwardly from said base portion rear face such that said hub face and said base portion rear face are non-coplanar.

3. The device of claim **2**, wherein said hub is defined by a grooved wall extending between said base portion rear face and said hub face, said grooved wall extending around the periphery of said attachment hub and defined by a concave groove formed therein.

4. The device of claim **3**, wherein said pin portion attaches to said grooved wall of said attachment hub.

5. The device of claim **4**, wherein said pin portion is defined by an attachment loop at a first end opposing said generally pointed tip end, said attachment loop sized to cooperate with said grooved wall such that said attachment loop captures said grooved wall therewithin in order to affix said pin portion to said handle tab.

6. The device of claim **5**, wherein said bend between said attachment loop and said proximal leg is approximately ninety degrees.

7. The device of claim **5**, wherein said bend between said proximal and medial legs is greater than ninety degrees.

8. The device of claim **5**, wherein said bend between said medial and distal legs is greater than ninety degrees.

9. A device for affixing a first generally flat member to a second generally flat member when said first generally flat member is laid atop said second generally flat member, comprising:

a generally flat handle tab made from a single solid piece of material, said tab defining a base portion having a face on a first side and an attachment hub extending from a second side opposing said first side and two or more pointed teeth protruding outwardly from a rear face defined by said attachment hub, said attachment hub rear face opposite said handle tab face; and

a pin portion attached to said attachment hub, and defined by a single elongate wire-shaped element terminating in a generally pointed tip, said pin portion further defined by a proximal leg extending from said attachment hub, a medial leg extending from said proximal leg, and a distal leg extending from said proximal leg, with each said leg separated by a bend in said wire-shaped element, with said proximal and medial legs being non-parallel to said attachment hub face and said distal leg being generally parallel to said attachment hub face.

10. The device of claim **9**, wherein said first side face is defined by indicia extending above said base portion.

11. The device of claim **10**, wherein said handle tab base portion defines said rear face, and said hub defines a hub face, with said hub extending outwardly from said base portion rear face such that said hub face and said base portion rear face are generally parallel, but are non-coplanar.

12. The device of claim **11**, wherein said hub is defined by a grooved wall extending between said base portion rear face

and said hub face, said grooved wall extending around the periphery of said attachment hub and defined by a concave groove formed therein.

13. The device of claim **12**, further comprising at least four said teeth protruding from said hub rear face.

14. The device of claim **13**, wherein said pin portion attaches to said grooved wall of said attachment hub.

15. The device of claim **14**, wherein said pin portion is defined by an attachment loop at a first end opposing said generally pointed tip end, said attachment loop sized to cooperate with said grooved wall such that said attachment loop captures said grooved wall therewithin in order to affix said pin portion to said handle tab.

16. A device for pinning a rug or mat to a carpet, consisting essentially of:

a generally flat handle tab made from a single solid piece of material, said tab defining a base portion having a face on a first side further defined by indicia extending upwardly therefrom, and an attachment hub extending from a second side opposing said first side and defining a hub face said hub face including a plurality of pointed teeth extending therefrom; and

a pin portion attached to said attachment hub, and defined by a single elongate wire-shaped element terminating in a generally pointed tip and an attachment loop formed at and end opposing said pointed tip, said pin portion further defined by a proximal leg extending from said attachment hub, a medial leg extending from said proximal leg, and a distal leg extending from said proximal leg, with each said leg separated by a bend in said wire-shaped element, with said proximal and medial legs being non-parallel to said attachment hub face and said distal leg being generally parallel to said attachment hub face.

17. The device of claim **16**, wherein said hub is defined by a grooved wall extending between said base portion rear face and said hub face, said grooved wall extending around the periphery of said attachment hub and defined by a concave groove formed therein, wherein said pin portion attaches to said grooved wall of said attachment hub.

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