LOW PROFILE ADJUSTABLE HANGER DEVICE AND SYSTEM

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ABSTRACT

The present disclosure describes and teaches a low cost, lightweight adjustable hanger and system that can be used in conjunction with any number of hangable objects. The adjustable hanger includes a hanger as the uppermost portion of the device. The mounting bracket of the adjustable hanger is attached to a wall with adhesives or mechanical means such as nails or screws. Once secured, the adjuster can be manipulated to cause the hanging and positioning bracket to move up or down depending on the user’s preference. Once the proper height is reached, a hangable object is hung from a hanging portion of the adjustable hanger. In some instances, multiple adjustable hangers may be used to precisely position a single hangable object.
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CROSS-REFERENCE TO RELATED APPLICATION

[0001] The present application claims the benefit of the filing date of U.S. Provisional Patent Application No. 61/971,883, filed Mar. 28, 2014, the disclosure of which is hereby incorporated herein by reference.

FIELD OF THE INVENTION

[0002] The field of the invention generally relates to hangers, namely hangers that can be employed to receive and support a variety of objects. In particular, the present invention relates to a device and system for a low profile adjustable hanger enabling precision placement and hanging of the user's desired object to be hung.

BACKGROUND OF THE INVENTION

[0003] The hanging of objects, such as pictures, mirrors, and the like, is typically accomplished through the use of a stationary metal hook having a vertical shank with a nail holder at the top of the shank that affixes the shank to the wall. The nail holder permits a nail to be driven into the wall thereby securing the metal hook in place. In order to obtain the exact desired position of the object (e.g. with respect to adjacent hanging objects or fixed objects on a wall) a precise alignment of the hanger is required. For example, when hanging two or more framed pictures side by side, or other objects such as mirrors or other pieces of art, precise alignment, either vertically or horizontally, of the pictures is required for aesthetic reasons. When a misalignment occurs, it is often necessary to remove and reposition the hook(s), thereby creating a new hole(s) and leaving an unsightly empty hole(s) in the wall. When hanging an object that, due to factors such as weight and width, requires multiple hangers, alignment may be even more problematic than an object requiring only a single hanger. Based on the foregoing, it should be apparent that adjustment of the position of conventional hanging devices may be cumbersome, inconvenient, prone to error, and time consuming.

[0004] In addition, many pictures and frames are now being constructed using saw tooth brackets, eyelet hardware, slots or pre-drilled holes which are almost always at the top of the frame. Some high profile hooks are constructed with a stationary nail at the top and a hanging mechanism at the bottom. The use of such hooks with frames having top-oriented hardware results in the hooks being seen above the frame. This is a result of the overall size of the hook being larger than the minute clearance between the top of the frame hardware and the top of the physical frame. Further, existing adjustable hangers can include multi-component mechanisms that are complicated to use and are costly to produce. U.S. Pat. No. 7,686,273, the disclosure of which is hereby incorporated by reference herein, describes a method and device for an adjustable hanger. Thus, there is a need for an adjustable hanger device that is easier to use and less costly to produce than existing hangers. Additionally, there is a need for an adjustable hanger that will not protrude above the frame.

SUMMARY OF THE INVENTION

[0005] The present invention teaches and describes an adjustable hanger for variably positioning a hanging object on a vertical surface that can be fastened to a wall or other vertical surface or that can employ a mounting bracket with a first end above a second end in a vertical orientation; a positioning bracket adjustable connected to the mounting bracket and having a hanger for hanging objects, the positioning bracket being vertically adjustable with respect to the mounting bracket such that the hanger extends above the first end of the mounting bracket in a vertical orientation.

[0006] The adjustable hanger according to one aspect of the disclosure desirably includes a hanger as the uppermost part of the adjustable hanger. The hanger may include a wire receiving seat having at least one wing and at least one protrusion to maintain a hanging mechanism of an object in the wire receiving seat. The adjustable hanger according to another aspect of the disclosure includes a second hanger on the positioning bracket.

[0007] The adjustable hanger according to one aspect of the disclosure may be attached to the first surface with an adhesive, a fastening member, or both. In some embodiments, the mounting bracket has at least one mounting hole that is used for receiving a fastening member. The fastening member can be at least one of a screw, nail, rivet, bolt, tack, and pin or any combination thereof. The mounting bracket can have a channel to receive a positioning bracket with a blocking element at an end of the channel. An adjuster which can be manipulated to change the position of the positioning bracket relative to the mounting bracket may abut the blocking element. A flexible tool is preferably provided with the adjustable hanger and can be used to manipulate the adjuster.

[0008] The adjustable hanger may have at least one fastener opening in either the top half or bottom half of the length of the mounting bracket. The fastener opening may be located in a channel, behind the vertical adjuster or behind the positioning bracket. In one embodiment, the adjustable hanger may be vertically adjusted either up or down. In another embodiment, the adjustable hanger may be horizontally adjustable.

[0009] The adjustable hanger may also have at least one measuring element integrated with the positioning bracket and mounting bracket. The measuring element is preferably used to provide a visual cue to the user to determine how the hanger should be adjusted or has been adjusted. The measuring element may have incremental markings on a scale of sixteenths of an inch, eighths of an inch, etc. There may be incremental marks on opposing sides of the hanger and positioning bracket that combine such scales.

[0010] An adjustable hanger according to one embodiment of the disclosure desirably includes a mounting bracket with a first end above a second end in a vertical orientation with an opening between the first and second end. An anchor may extend through the opening into a vertical surface. A positioning bracket, which is preferably adjustable connected to the mounting bracket, can have a hanger for hanging objects extending above the first end of the mounting bracket in a vertical orientation. The positioning bracket can be vertically adjustable with respect to the mounting bracket when the mounting bracket is in a vertical orientation or horizontally adjustable in a horizontal orientation. The anchor can abut an adjuster which can be manipulated to adjust the position of the positioning bracket with respect to the mounting bracket. One aspect of the disclosure includes the hanger as the uppermost part of the adjustable hanging device and can have an aperture extending through the hanger to allow a tool to couple to the adjuster. In one embodiment, the adjustable hanger can also have an anti-rotation member extending
through a slot in the positioning bracket. The anti-rotation member may be positioned above the anchor and prevent the mounting bracket from rotating when an object is hung on the hanger. The positioning bracket may remain adjustable in a vertical direction after the anti-rotation member is inserted through the slot. The anchor according to one aspect of the disclosure includes a collar abutting the adjuster.

[0011] A method of mounting an object on a vertical surface according to one aspect of the disclosure preferably includes securing a mounting bracket to the vertical surface, coupling a positioning bracket to the mounting bracket, and hanging an object on a hanger. The mounting bracket preferably has a first end above a second end in a vertical orientation. The positioning bracket can be adjustable with respect to the mounting bracket such that the hanger extends above the first end of the mounting bracket in a vertical orientation. Securing the mounting bracket to the vertical surface may include using a removable adhesive and may additionally include using an anchor to secure the mounting bracket to the vertical surface. The removable adhesive preferably allows a user to remove the mounting bracket from the vertical surface without permanently damaging the surface, reposition the mounting bracket, and employ the same removable, or new, adhesive to re-secure the mounting bracket to the vertical surface. In one embodiment, a method of mounting an object to a vertical surface further includes placing the hanging mechanism on a wire receiving seat of the positioning bracket. The method may include use a flexible tool to change the position of the positioning bracket with respect to the mounting bracket.

[0012] An adjustable hanger kit according to one aspect of the disclosure can include any number of mounting brackets and positioning brackets that can be used with one another. A flexible tool or tools may be included in the kit as well. In one aspect of the present invention these components—the brackets and tools or any combination of them—are frangible connected to one another so that a user can easily snap off whatever component is needed. A preferred embodiment of the kit may include two or five mounting brackets and two or five positioning brackets. The kit desirably contains a fastening member, an adhesive, or both.

**BRIEF DESCRIPTION OF THE DRAWINGS**

[0013] FIG. 1 is an exploded view of the primary components of a hanger in accordance with a first embodiment of the present invention.

[0014] FIG. 2 is a perspective view of the hanger in FIG. 1.

[0015] FIG. 3 is a front view of the hanger in FIG. 1.

[0016] FIG. 4 is a top view of the hanger in FIG. 1.

[0017] FIG. 5 is a side view of the hanger of FIG. 1 in cross-section, illustrating a manner of securing the hanger to a first surface.

[0018] FIG. 6 is a perspective view of the hanger of FIG. 1 in cross-section, illustrating the internal assembled relationship between the components of the hanger.

[0019] FIG. 7 is a perspective view of a hanger in accordance with a second embodiment of the present invention.

[0020] FIG. 8 is a perspective view of the hanger shown in FIG. 7 in a fully assembled form.

[0021] FIG. 9 is a perspective view of the hanger of FIG. 7 in cross-section, illustrating the internal relationship between the components of the hanger.

[0022] FIG. 10 is a perspective view of a kit including the components of a hanger in accordance with a third embodiment of the invention.

[0023] FIG. 11 is a front view of the kit of FIG. 10.

[0024] FIG. 12 is a top view of the kit of FIG. 10.

**DETAILED DESCRIPTION**

[0025] The preferred embodiments of the present invention will now be described with reference to the drawings. Identical elements in the various figures are identified, to the extent possible, with the same reference numerals. The preferred embodiments are disclosed to provide context for the claimed present invention, which is not limited by such embodiments. In fact, those of ordinary skill in the art may appreciate upon reading the present specification and viewing the present drawings that various modifications and variations can be made thereto without deviating from the innovative concepts of the invention. The terms “a” and “an” as used herein do not denote a limitation of quantity, but rather denote the presence of at least one of the referenced items.

[0026] Referring now to FIG. 1, there is an exploded view of the primary components of the adjustable hanger 100. Generally, the adjustable hanger 100 has a mounting bracket 102, a hanging and positioning bracket 104, an adjuster 106 in the form of a threaded screw, and fastening members 114. Also illustrated is a fastening adhesive 110. The mounting bracket 102 secures the adjustable hanger 100 to the first surface 200 (see FIG. 5). The illustrated mounting bracket 102 includes fastener openings 112 that extend through the mounting bracket 102. The fastening members 114 can pass through the fastener openings 112 thereby securing the mounting bracket 102 to the desired surface. The fastening members 114 may comprise one or any number of various fasteners, including a screw, nail, rivet, bolt, tack, or pin or any combination thereof.

[0027] Depending on the specifications (e.g., size, weight,) of the adjustable hanger 100 and the desired object to be hung, the adjustable hanger 100 may alternately or further employ an adhesive 110 for securing purposes. The adhesive 110 may be used alone or in combination with, fastening members 114. Both fastening members 114 and an adhesive 110 may be provided so that a choice could be made at the time of use. The adhesive may also be conveniently used to position the hanger 100 before the fastening members 114 are used. The adhesive 110 is preferably a removable adhesive such as the type manufactured by 3M of Saint Paul, Minn. Other adhesives are also contemplated such as glue, double-sided tape, etc.

[0028] The mounting bracket 102 has a portion 108 that extends from the basal area of the mounting bracket 102. This portion 108 serves as a guide and securing mechanism for the hanging and positioning bracket 104. Further, the mounting bracket 102 has a blocking element 116. The blocking element 116 provides a contact and support surface for the adjuster 106.

[0029] The hanging and positioning bracket 104 slidably engages and secures to the mounting bracket 102. The hanging and positioning bracket 104 has a first end 101 and a second end 103. It is intended that the leading end, or first end 101, of the hanging and positioning bracket 104 first engages the portion 108 of the mounting bracket 102 while the trailing end, or second end 103, follows. The hanging and positioning bracket 104 provides at least one hanger portion 118 (see FIG. 2). A threaded adjuster 106 passes vertically through the hanging and positioning bracket 104. There is a first end 105...
and a second end 107 of the adjuster 106. The second end 107 of the adjuster 106 abuts the blocking element 116. The first end 105 of the adjuster 106 provides the structure that enables mechanical adjustment, in this case vertical adjustment, of the positioning bracket 104 with respect to the mounting bracket 102. Of course, in other orientations, the adjuster could provide adjustment in directions other than vertical, for example, horizontal. Other expedients for adjusting these components with respect to one another may be employed, such as a ratchet and pawl arrangement.

[0030] FIG. 2 is a perspective view of the adjustable hanger 100 as assembled. Here, the interaction between the various components is shown. In this instance, the mounting bracket 102 is shown with an adhesive 110 backing. Further, there are two fastener openings 112 shown with fastening members 114 extending therefrom.

[0031] The hanger and positioning bracket 104 is engaged and secured to the mounting bracket 102 via the protruding portion 108 (see FIG. 1). More specifically, the portion 108 comprises a first rail 109 and a second rail 111. The first rail 109 and the second rail 111 engage a first and second side of the hanger and positioning bracket 104, respectively. When viewed from the top, the rails 109, 111 generally form a "C" shape with the basal area of the mounting bracket 102. Further, each of the rails 109, 111 tapers as they traverse the length of the mounting bracket 102. This enables a more secure fit for the hanger and positioning bracket 104, which limits any movement thereof transverse to the axis of adjustment. The outside edge of the rails 109, 111 have a reinforcing feature, for example, ribbing or ribs 124 struts, or the like. The ribs 124 serve to strengthen the rails 109, 111 and prevent damage resulting from torching, impacting, shearing, or other undesirable forces being applied to said rails 109, 111.

[0032] A surface of one or both of the rails 109, 111 may have a measuring element 120 such as a visual marker. The measuring element 120 may have markers signifying incremental measurements such as sixteenths of an inch or eighths of an inch or the rail 109, 111 may have equidistant markers. Each rail 109, 111 may have its own incremental measure such as, for example, the first rail 109 having markings signifying sixteenths of an inch, whereas the second rail 111 has markings signifying eighths of an inch. While reference is made to specific markings and incremental measurements, virtually any measuring guide or units of measurement may be used.

[0033] The adjuster 106 extends through the hanger and positioning bracket 104, in this case vertically. The adjuster 106 is used to change the position of the first hanging portion 118 and the second hanging portion 122 with respect to the mounting bracket 102. Each of the hanging portions 118, 122 has any number of protrusions 126 that are used to securely position and retain the hanging mechanism such as a wire, cable, hook, string, or bracket or the like of the object to be hung. Each of the hanging portions 118, 122 are generally hook shaped, although their exact specifications may vary. Further, within a single adjustable hanger 100, the first hanging portion 118 may vary in shape and function from the second hanging portion 122.

[0034] FIG. 3 is a front view of the adjustable hanger 100. The general symmetry of the adjustable hanger 100 is shown. Further, there provides for strength, stability, and equal weight distribution, thereby aiding in keeping the adjustable hanger 100 in its intended position once secured. However, other embodiments having a non-symmetrical configuration are also contemplated.

[0035] Referring now to FIG. 4, there is a top view of the adjustable hanger 100. Visible are the mounting bracket 102 and the hanging and positioning bracket 104. Fastening members 114 extend through the mounting bracket 102 for securement purposes. The adhesive backing 110 provides further stability and support for the hanger 100.

[0036] Looking through the first hanging portion 118, the adjuster 106 is visible. The first hanging portion 118 has an aperture 128 that provides access through the first hanging portion 118 to the adjuster 106. The adjuster 106 is manipulated therethrough using a tool such as a screwdriver, Allen wrench, or a tool 130 provided with the hanger 100. The specific tool required will depend on the specifications of the adjuster 106. With this tool, the adjuster 106 may be rotated either clockwise or counterclockwise, thereby changing the position of the hanging and positioning bracket 104 relative to the mounting bracket 102.

[0037] FIG. 5 illustrates a side view of the adjustable hanger 100 in cross-section. The adjustable hanger 100 is secured to a first surface 200. The first surface 200 may be a number of generally vertical surfaces such as a wall in a home or office. While is it envisioned that the first surface 200 will adhere to these specifications, virtually any surface capable of receiving the adjustable hanger 100 may be used.

[0038] Here, the mounting bracket 102 is secured to the first surface 200 via the adhesive 110 and/or at least one fastening member 114. The fastening members 114 are shown passing through the mounting hole 112 and penetrating the first surface 200 to provide support for the adjustable hanger 100. Additionally, the mounting hole 112, and therefore the fastening member 114, is shown having a non-perpendicular orientation with respect to the adjustable hanger 100/first surface 200 interface. This orientation of the fastening member 114 provides added support and further helps to retain the precise position of the adjustable hanger 100. The orientation of the fastener openings 112 and the depth of penetration of the fastening members 114 in the first surface 200 will vary depending on the composition of the first surface 200 as well as the weight of the object to be hung. The fastener openings can be located in a top half or bottom half of the length of the mounting bracket. The fastener openings can also be located behind the vertical adjuster, in the channel, or behind the positioning bracket.

[0039] Further, this view supplies a more comprehensive view of the first hanging portion 118 and the second hanging portion 122. Each of the hanging portions 118, 122 can receive and support a number of hanging mechanisms found on hung objects such as strings, wires, cables, brackets, hooks, and the like. The first hanging portion 118 and the second hanging portion 122 may structurally be independently the same or different within the same adjustable hanger 100. There are any number of protrusions 126 that make up the structural foundation of the hanging portions 118, 122. For example, the second hanging portion 122 is generally hook shaped. The protrusion 126 curls upward providing a gap between the hanger and positioning bracket 104 and the second hanging portion 122 to retain a hanging mechanism. One skilled in the art would recognize the protrusions could be oriented in any direction to retain a hanging mechanism while the adjustable hanger is oriented other than vertically. By way of example, the adjustable hanger could be oriented
so the adjuster changes the position of the positioning bracket with respect to the mounting bracket in a horizontal direction.

The first hanging portion 118 has a number of protrusions 126 that bear similar functionality to, but comprises a different general shape than, that of second hanging portion 122. The first hanging portion 118 is shaped to retain the intended hanging mechanism and prevent any slippage of the hung object. As previously noted, the shapes of the hanging portions 118, 122 shown and described are of but one of an almost limitless pool of combinations, shapes, and sizes.

Referring now to FIG. 6, there is a perspective view, down the midline of the adjustable hanger 100 in cross-section, illustrating the internal relationship between components of the hanger.

The adjuster 106 along with both the first end 105 and the second end 107 of the adjuster 106 are readily visible in FIG. 6. The second end 107 of the adjuster 106 abuts the blocking element 116 of the mounting bracket 102. As shown, the adjuster 106 has threading which, when rotated about its central axis, causes the hanging and positioning bracket 104 to move upwards or downwards. However, as discussed previously, other expedients may be employed in the adjuster 106 such as a ball and detent structure. The first end 105 of the adjuster 106 can be accessed via the aperture 128. The measuring element 120, disposed along one or both rails 109, 111, is used as a visual guide as to how far the hanger and positioning bracket 104 has been moved upwards or downwards. Thus, if one must move the hanging portion 118, 122 up one-eighth of an inch and the measuring element 120 is marked in incremental one-eighth inch marks, a user simply moves the measuring surface 130 of the hanging and positioning bracket 104 up one mark by rotating the adjuster 106.

Also shown is the mounting bracket 102 with the adhesive 110 and at least one fastening member 114 extending through the mounting hole 112. Some of the ribs 124, which may be made from the same or different material from the rest of the adjustable hanger 100, are visible below the measuring element 120 in FIG. 6. At the first end 101 of the hanging and positioning bracket 104, there is a second hanging portion 122 on which a hanging mechanism may be retained and supported. On the opposing second end 103, there is a first hanging portion 118. Each of the hanging portions 118, 122 has protrusions 126 which comprise the structural foundation of the hanging portions 118, 122. Hanging portion 118 is shown having a wire receiving seat on the upper surface of the hanging and positioning bracket 104. The wire receiving seat can be a surface to hold a wire with protrusions 126 to prevent dislodgement of the wire from the wire receiving seat. The wire receiving seat can also have wings to prevent the wire from slipping between the adjustable hanger 100 and the vertical surface. Although the hanging portions 118, 122 are shown at the ends 101, 103 respectively, any one of the hanging portions could be positioned anywhere along the mounting and positioning bracket 104. In the disclosed embodiments, the wings are shown at end 103, but may be positioned elsewhere near that end.

FIG. 7 illustrates a hanger in accordance with a second embodiment of the present invention. As shown, the adjustable hanger 100 primarily comprises a mounting and positioning bracket 104. The mounting and positioning bracket 104 has a first end 101 and a second end 103. On the second end 103 of the mounting and positioning bracket 104 there is a first hanging portion 118. On the first end 101 of the mounting and positioning bracket 104 there is a second hanging portion 122. Each of the hanging portions 118, 122 are capable of receiving and supporting any number of hangable objects. The mounting and positioning bracket 104 has any number of apertures 128 that allow access to various parts of the adjustable hanger 100.

FIG. 8 is a perspective view of the adjustable hanger 100 shown in FIG. 7 in a fully assembled form. The adjustable hanger 100 is shown having a hanging and positioning bracket 104 with an adjuster 106 threadably engaged thereto. Fastening members 114 are used to hold the hanging and positioning bracket 104 in place. The fastening members 114 are inserted through apertures 128 in the structure of the hanging and positioning bracket 104. It is preferable to have an anchor screw or fastening member 114 towards the first end 101 of the hanging and positioning bracket 104 and an anti-rotation screw or fastening member 114 toward the second end 103 of the hanging and positioning bracket 104. Positioning the fastening members 114 adjacent the first end 101 and second end 103 provides stability and prevents rotation of the hanging and positioning bracket 104 and thus the adjustable hanger 100. The anchor screw can also have a collar which provides support for the adjuster 106.

The adjustable hanger 100 shown in FIG. 8 preferably has a first hanging portion 118 and a second hanging portion 122. This enables a greater latitude of adjustable distances to be used in hanging a hangable object, as well as enabling the adjustable hanger 100 to accommodate two different hangable objects at the same time if so desired. Of course, the mounting and positioning bracket 104 could also incorporate only one of the hanging portions 118, 122. Each of the hanging portions 118, 122 have any number of protrusions which are capable of receiving and supporting any number of hangable objects. The protrusions can also have orientations other than those depicted in the exemplary figures. For example, a protrusion may extend toward a side of the mounting and positioning bracket 104.

Referring now to FIG. 9, there is a perspective view of the hanger of FIG. 7 in cross-section, illustrating the internal relationship between the components of the hanger. The adjustable hanger 100 has a mounting and positioning bracket 104 primarily supported by at least one and preferably two fastening members 114. As shown, the hanging and positioning bracket 104 has an adjuster 106 threadably engaged to and passing vertically through the hanging and positioning bracket 104. However, other features for the adjuster 106 previously discussed could also be adopted.

When applying the adjustable hanger 100 to a surface, a user can place the fastening member 114 closer to the first end 101 of the hanging and positioning bracket 104. While fully securing the adjustable hanger 100 to the surface, initially installing only one fastening member 114 allows the adjustable hanger 100 to be rotated around the fastening member 114 if contacted and limited slideable vertical movement. Thus, a user may support the hanging and positioning bracket 104 while using the adjuster 106 to make a fine point adjustment to the position of the adjustable hanger 100. The first end 105 of the adjuster 106 is rotated to the left or right to translate the hanging and positioning bracket 104 toward the first end 101 or second end 103 of the adjustable hanger 100. The second end 107 of the adjuster 106 abuts the fastening member 114. This position gives the support necessary to change the position of the hanging and positioning bracket 104 without moving other components of the hanger 100. Preferably, the fastening member 114 located closest to the
second end 103 of the hanging and positioning bracket 104 secures the adjustable hanger 100 in place. Both of the fastening members 114 may then be tightened to prevent any movement whatsoever from occurring with the hanger 100. The fastening members 114 could later be loosened to allow further movement of the hanger 100, then retightened as desired.

[0049] In some instances, a user may elect not to employ the adjuster 106 of the adjustable hanger 100 and instead make adjustments using line of sight or measuring elements such as those previously described. In each of the embodiments described above and others not expressly described but inherently taught, an adjustable hanger 100 having a low profile structure is provided. This places the first hanging portion 118 at the second end 103 of the hanging and positioning bracket 104 furthest from the first end 101. Placing the hanging mechanism on the first hanging portion 118 allows the entire hanger to be hidden behind the hangable object if so desired, which removes the need for unsightly hooks and the like to be seen.

[0050] Referring now to FIG. 10, a perspective view of a kit including the components of the hanger in accordance with a third embodiment of the invention. As shown, the kit includes multiple mounting brackets, hanging and positioning brackets 104, and tools 130. Any number of sets of these elements are contemplated, and the sets may include less components. For instance, a tool need not be part of a set. In a preferred embodiment, the kit includes two or five sets of mounting brackets 102 and hanging and positioning brackets 104, with one or two tools 130. Other embodiments may include any number of brackets and tools. The components may be manufactured, for example, from a single injection mold, or from any other known manufacturing method, in such a way that they are frangibly connected. A user can then remove components at such connections.

[0051] The tool 130 can be used to manipulate the adjuster 106. An interface end 131 of the tool 130 is adapted to couple to the first end 105 of the adjuster 106. In the embodiment shown, the tool 130 has an allen wrench configuration at the interface end 131, although other configurations are also possible as long as the interface end 131 and first end 105 are compatible. The tool 130 is also flexible to allow manipulation of the adjuster 106 against a vertical wall when the tool 130 and the adjuster 106 are in complete axial alignment. As shown in FIG. 10, a flex portion 132 of the tool 130 has a smaller diameter than that of the rest of the tool to allow the tool to flex in that region. Other techniques for providing flexibility are also contemplated (e.g. having a tool with a uniform diameter and having relief cuts in the flex portion). Of course, a tool could also be provided that does not have a flex portion, but has an offset tool end to facilitate use close to a wall.

[0052] A user can grasp the tool 130 by the grip end 133 and insert the interface end 131 through the aperture 128 and couple the interface end 131 to the first end 105 of the adjuster 106. The user can then operate the grip end 133 of the tool 130 to manipulate the adjuster 106, thereby changing the position of the hanging and positioning bracket 104 relative to the mounting bracket 102.

[0053] The adjustable hangers shown in FIGS. 1-12 may comprise a number of materials including but not limited to metals, plastics, resins, composites, rubbers, and fiber reinforced materials. Each of the components may be independently made from the same or different materials depending on the intended functionality and weight load the adjustable hanger 100 may bear. However, the adjustable hanger 100 preferably comprises plastics including, but not limited to, polyethylene terephthalate (PET), polyethylene (PE), high-density polyethylene, polyvinyl chloride (PVC), polyvinylidene chloride (PVDC), low-density polyethylene (LDPE), propylene (PP), polystyrene (PS), high impact polystyrene (HIPS) and polycarbonate (PC), or any combination thereof and other not named acceptable plastics. If used, the composites may include but are not limited to fiber reinforced plastics, metal composites, carbon fiber, and Kevlar® and the like. Metals, if used, may comprise a number of lightweight metals such as aluminum and other acceptable pure metals, as well as various alloys such as steel, brass, and pewter. Rubbers may include but are not limited to natural rubber, SBR, Isoprene rubber, Butadiene rubber, and (poly) chloroprene rubber.

1. An adjustable hanger for positioning an object on a vertical surface, comprising:
   a. a mounting bracket having a first and second end, the first end being above the second end when the mounting bracket is in a vertical orientation;
   b. a positioning bracket adjustably connected to the mounting bracket and having a hanger for hanging objects, the positioning bracket being vertically adjustable with respect to the mounting bracket such that the hanger extends above the first end of the mounting bracket when the mounting bracket is in a vertical orientation.

2. The adjustable hanger of claim 1, wherein the hanger is the uppermost part of the adjustable hanger.

3. The adjustable hanger of claim 2, further comprising a wire receiving seat on the hanger comprising at least one wing and at least one protrusion extending from the wire receiving seat to maintain a hanging mechanism in the wire receiving seat.

4. The adjustable hanger of claim 1, further comprising a channel in the mounting bracket to receive the positioning bracket, and a blocking element at an end of the channel.

5. The adjustable hanger of claim 4, further comprising an adjuster to change a position of the positioning bracket relative to the mounting bracket in a vertical direction up or down, wherein the adjuster abuts the blocking element.

6. The adjustable hanger of claim 5, further comprising a flexible tool to manipulate the adjuster and a measuring element on at least one of the mounting bracket and positioning bracket.

7. The adjustable hanger of claim 1, further comprising fastener openings in at least one of the top half or bottom half of the length of the mounting bracket.

8. The adjustable hanger of claim 7, wherein the fastener openings extend through a channel in the mounting bracket.

9. The adjustable hanger of claim 7, wherein at least one of the fastener openings are positioned behind at least one of the vertical adjuster or positioning bracket.

10. An adjustable hanger for positioning an object on a vertical surface, comprising:
   a. a mounting bracket having a first and second end, the first end being above the second end when the mounting bracket is in a vertical orientation and an opening between the first and second end;
   b. an anchor extending through the opening into the vertical surface;
   c. a positioning bracket adjustably connected to the mounting bracket and having a hanger for hanging objects, the
positioning bracket being vertically adjustable with respect to the mounting bracket such that the hanger extends above the first end of the mounting bracket when the mounting bracket is in a vertical orientation; an adjuster abutting the anchor to adjust the position of the positioning bracket with respect to the mounting bracket.

11. The adjustable hanger of claim 10, further comprising an anti-rotation member extending through a slot in the positioning bracket into the vertical surface, wherein the slot is above the opening when the mounting bracket is in a vertical orientation.

12. The adjustable hanger of claim 11, wherein the positioning bracket is adjustable in a vertical direction after the anti-rotation member is inserted through the slot.

13. The adjustable hanger of claim 10, further comprising an aperture in the hanger to provide access for a tool to manipulate the adjuster.

14. The adjustable hanger of claim 10, further comprising a collar on the anchor to support the adjuster.

15. The adjustable hanger of claim 10, wherein the hanger is the uppermost part of the adjustable hanging device.

16. A method of mounting an object on a vertical surface, comprising:
securing a mounting bracket having a first and second end to a vertical surface, the first end being above the second end when the mounting bracket is in a vertical orientation;
coupling a positioning bracket having a hanger for hanging objects to the mounting bracket, the positioning bracket being vertically adjustable with respect to the mounting bracket such that the hanger extends above the first end of the mounting bracket when the mounting bracket is in a vertical orientation; and
hanging an object on the hanger.

17. The method of claim 16, wherein securing the mounting bracket to the vertical surface comprises employing a reusable adhesive strip to secure the mounting bracket to the vertical surface and inserting a fastening member through the mounting bracket and into the vertical surface.

18. The method of claim 17, further comprising removing the mounting bracket and adhesive strip from the vertical surface and re-attaching the mounting bracket and adhesive strip on the vertical surface at another position before inserting the fastening member through the mounting bracket.

19. The method of claim 16, further comprising placing a hanging mechanism on a wire receiving seat of the positioning bracket.

20. The method of claim 18, further comprising manipulating an adjuster with a tool to change the position of the positioning bracket with respect to the mounting bracket in a horizontal or vertical direction.