Dec. 27, 1966 M. J. SHERMAN 3,294,356

PICTURE HANGER

Filed April 30, 1965

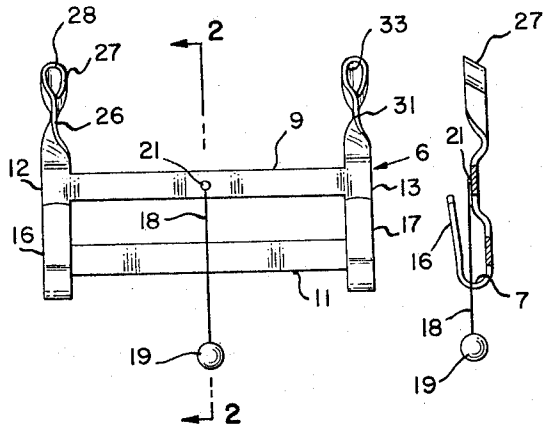


FIG. 1

FIG. 2

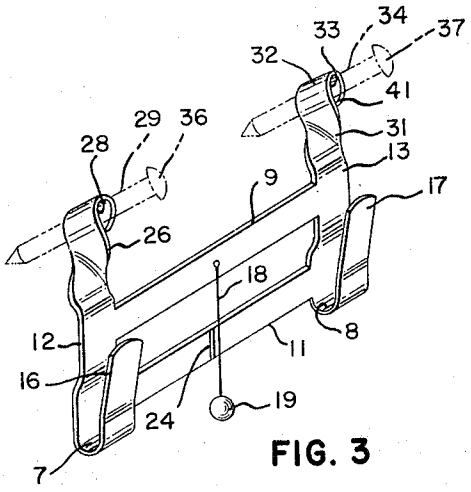


FIG. 3

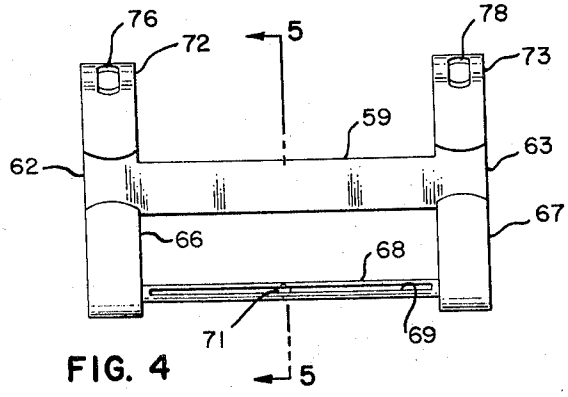


FIG. 4

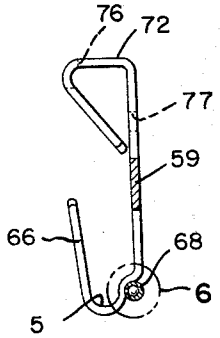


FIG. 5

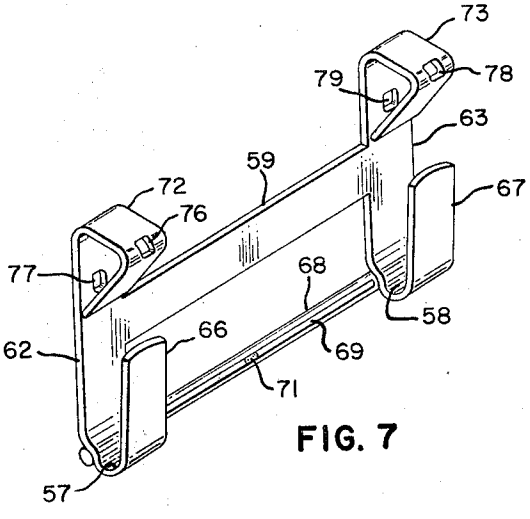


FIG. 7

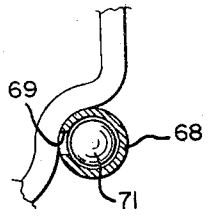


FIG. 6

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PICTURE HANGER

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The invention relates to a picture hanger and more particularly to a level indicating wall bracket.

An object of the present invention is to provide a hanger of the character above described wherein a picture or other frame may initially be accurately and easily mounted at the desired level orientation as well as to provide a mounting structure wherein this level may be easily maintained.

Another object of the present invention is to provide a bracket of the character described which may be easily and inexpensively manufactured and which is made from a few number of durable parts which will function accurately over a long period of time.

The invention possesses other objects and features of advantage, some of which of the foregoing will be set forth in the following description of the preferred form of the invention which is illustrated in the drawing accompanying and forming part of this specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claims.

Referring to said drawing (1 sheet):

FIGURE 1 is a front view of the device constructed in accordance with the present invention.

FIGURE 2 is a cross section of the device shown in FIGURE 1 taken substantially along the line 2—2.

FIGURE 3 is a perspective view of the device shown in FIGURE 1.

FIGURE 4 is a front view of a modified form of the device constructed in accordance with the present invention.

FIGURE 5 is a cross section of the device shown in FIGURE 4 taken substantially along the line 5—5.

FIGURE 6 is a portion of the device shown in FIGURE 5 taken substantially along the line 6 and shown an an enlarged scale.

FIGURE 7 is a perspective view of the device shown in FIGURE 4.

The present level indicating wall bracket device consists briefly of a body member 6 having a pair of spaced supports 7 and 8 adapted for demountable connection to a frame (not shown); level means mounted on the body for indicating when the supports are horizontal; and means for connecting the body to a wall.

The body member may be constructed from a single piece of metal or plastic. The body member may have various configurations and be constructed in various ways but it here consists of cross members 9 and 11 joining generally hook shaped vertical members 12 and 13 having support portions 7 and 8 and up turned projecting members 16 and 17. Cross member 9 is offset forwardly as shown in FIGURE 2 so that the flexible member 18 of a pendulum may be connected thereto so as to swing freely when the bracket is in a substantially vertical position. Flexible member 18 may consist of a thread or light gauge wire. A weight 19 is attached at the distal end of the string. The pendulum is here attached to cross member 9 and moves about pivot point 21. The pendulum may consist also of a non-flexible elongated member which is mounted for pivotal connection such as at point 21. The pendulum, if made from a rigid material, may be connected either to cross member 9 or 11.

An indicia mark 24 is stamped, inscribed or printed on the body member for indicating horizontal alignment of

the supports when the pendulum is in alignment with the mark. Where the pendulum is made from a flexible cord 18, the indicia mark must be located beneath the point of attachment of the pendulum. Where the pendulum is made from a rigid material the indicia mark may be located either below or above the point of attachment and may indeed be located to the side of the pendulum if the pendulum is formed with an off set indicating arm.

The two point support provided by supports 7 and 8 helps to maintain the frame in a level position where the frame is supported by a wire or cord looped over the hook shaped ends 16 and 17 and resting upon supports 7 and 8.

Another essential feature of the present invention is the use of a two point connection of the bracket to the wall. In the preferred form of the invention shown in FIGURES 1, 2 and 3, vertical member 12 is formed with an elongated flat strip extension 26 formed with a half twist to give the extension lateral stability and having an end 27 forming a closed loop having an opening 28 defining an elongated guide for receiving and positioning a fastener 29.

Vertical member 13 is also formed with an extension 31 formed with a half twist to give lateral stability and having an end 32 defining an opening 33 providing an elongated guide for receiving a fastener 34.

It should be noted that one or both of the openings 28 and 33 defining guides form an angle with the vertical axis of the brackets so that one or both of the fasteners 29 and 34 enter the wall at an angle. Fasteners 29 and 34 are provided with enlarged heads or flanges 36 and 37 to prevent the bracket from sliding off the fasteners.

One of the problems in mounting any dual point supported bracket is the annoyance of the bracket pivoting about the first fastener after the fastener was driven into the wall. The present invention solves this problem in rather a unique way. As above described, one or both vertical supports 26 and 31 are formed with end openings 28 and 33 which provide elongated guides which approach the wall at an angle. Thus, for example, when fastener 34 is inserted through opening 33 and driven into a wall so that flange or head 37 bears against face 41, the bracket tends to rotate about fastener 34 in a plane parallel to the wall. Fastener 34, however, is not driven at right angles to the wall and therefore cannot serve as an axis for the pivoting of the bracket. The bracket, therefore, tends to rotate only slightly about pivot 34 and then binds and therefore generally remains near a horizontal position. It is therefore easy to adjust the bracket to the precise level position and then firmly anchor the bracket by placing the second fastener such as fastener 29 in the wall.

A modified form of the invention is shown in FIGURES 4, 5, 6 and 7. The bracket here consists of a cross member 59 joining vertical members 62 and 63 having members 66 and 67 projecting upwardly and outwardly therefrom respectively. A tubular cross member 68 formed with a slotted opening 69 is joined to vertical supports 62 and 63 as for example by tack welding. A small spherical object, such as a metal be-be, dimensioned to roll freely within the tubular cross member is inserted therein. Cross member 68 is positioned so as to be parallel to spaced supports 57 and 58. Thus, when supports 57 and 58 are horizontal the spherical member 71 will be at rest. Likewise, when the supports 57 and 58 are not horizontal, the object will roll from one end of the cross member 68 to the other, or it will remain at one end. If desired, tubular cross member 68 may be given a slight downwardly concave curvature so that ball 71 will gravitate to the center when the device is level and where an indicia mark may be placed.

Vertical supports 62 and 63 are deformed so as to provide lugs 72 and 73. Lug 72 is formed with spaced open-

ings **76** and **77** positioned so that a fastener inserted therethrough enters the plane of the wall at an angle. In like manner, lug **73** is formed with openings **78** and **79** spaced at different vertical elevations so that a fastener enters the wall at an angle.

In operation, bracket **6** is placed at the desired elevation on a wall. One of the fasteners such as fastener **34** is then inserted through opening **33** in the bracket and the fastener is driven into the wall until flange **37** of the fastener abuts against face **41** of the bracket. In order to adjust the bracket in a precise horizontal position, the bracket is pivoted about the fastener **34** until member **18** of the pendulum is brought into alignment with an indicia mark **24** marked on cross member **11**. Fastener **29** is then inserted through opening **28** and driven into the wall so that the bracket is firmly attached thereto. Any further horizontal alignment of the bracket may be easily obtained by tapping gently on either fastener **29** or **34** until the pendulum is brought back into precise alignment with the indicia mark **24**.

The attachment of the bracket shown in FIGURES 4–7 is precisely similar to the operation above described. Leveling of the device is obtained by pivoting the bracket until the spherical object **71** comes to rest as herein above described.

When the device, either form disclosed herein, is level mounted as described it is capable of holding a picture frame mounted thereon in substantially permanently level position. I have found that one has only to drape the conventional picture frame wire over the horizontally upturned hooks and then level the picture frame by appropriately sliding the wire through the hooks and that thereafter the picture will remain level for an indefinite period of time.

I claim:

1. A level indicating wall bracket comprising:
- a body member having a pair of spaced supports adapted for demountably receiving a frame;
- a pendulum connected to said body for pendular movement between said supports;
- said body being formed with an indicia mark located between said supports and relative to said pendulum so as to be aligned therewith when said supports are horizontal relative to one another; and
- means for connecting said body to a wall.

2. A level indicating wall bracket comprising:
- a body having a pair of horizontally spaced supports adapted for demountably receiving a frame;
- said body being formed with a first opening adapted for receiving a first wall engaging fastener therethrough for pivotal movement of said bracket in a vertical plane about said fastener;
- a pendulum connected to said body for pendular movement between said supports;
- said body having an indicia mark positioned between said supports for indicating horizontal alignment of said supports when said pendulum is in alignment with said mark; and
- said body being formed with a second opening spaced horizontally from said first opening and adapted for receiving a second wall engaging fastener for securing said body against pivotal movement.

3. A level indicating wall bracket comprising:
- a body having a pair of horizontally spaced supports adapted for demountably receiving a frame;
- a fastener having an elongated shaft and said shaft being formed with a thickened flange portion;
- said body being formed with a lug having an opening defining a guide for receiving and positioning said fastener at an angle to said wall so as to permit adjustable pivotal movement of said bracket about said fastener, said guide cooperating with said fastener to prevent substantial pivotal movement when said flange engages said lug;
- a pendulum connected to said body for pendular movement between said supports;
- said body having an indicia mark positioned between said supports for indicating horizontal alignment of said supports when said pendulum is in alignment with said mark; and
- said body being formed with a second opening spaced horizontally from said lug for receiving a second wall engaging fastener for securing said body against pivotal movement.

4. A level indicating wall bracket comprising:
- a body member having a pair of spaced supports adapted for demountable connection to a frame;
- a tubular cross member mounted on said body parallel to said supports and formed with a viewing slot; and
- a circular member dimensioned to freely roll within said tubular member for indicating when said supports are level; and
- means for connecting said body to a wall.

5. A level indicating wall bracket for a frame hanging cord comprising, a pair of laterally spaced cord supporting portions formed to receive and support a frame hanging cord draped thereover for sliding support of said cord thereon and for level supporting of a frame suspended therefrom, a laterally extending section connecting said portions, wall anchoring means formed to anchor said bracket to a wall and prevent rotation of said bracket in the plane of said wall upon anchoring thereto, said transverse section having a retaining means, and gravitationally responsive levelling means comprising a circular member carried by said retaining means for free rolling action therein for indicating when said portions are level.

References Cited by the Examiner

UNITED STATES PATENTS

371,665	10/1887	Brinkerhoff	248—215
1,049,128	12/1912	Moore	248—301
1,495,485	5/1924	Jersemann	248—301
2,317,368	4/1943	Frey	248—32
2,606,730	8/1952	Bryn	248—29
2,681,194	6/1954	Halvorsen	248—29
2,723,815	11/1955	Browning	248—29
2,757,890	8/1956	Sutton et al.	248—31

FOREIGN PATENTS

302,565	12/1928	Great Britain.

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